Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana

Final
Environmental Assessment
March 2025

FINAL

ENVIRONMENTAL ASSESSMENT

For

FLIGHT TRAINING ACTIVITIES IN THE BOURBON MILITARY OPERATIONS AREA

Offshore from

NAVAL AIR STATION JOINT RESERVE BASE NEW ORLEANS, LOUISIANA

March 2025

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Abstract

Designation:	Environmental Assessment
Title of Proposed Action:	Flight Training Activities in the Bourbon Military Operations Area
Project Location:	Naval Air Station Joint Reserve Base New Orleans
Lead Agency for the EA:	Department of the Navy
Cooperating Agency:	Federal Aviation Administration
Affected Region:	St. Bernard Parish, Louisiana
Action Proponent:	United States Fleet Forces Command
Point of Contact:	Attention: NOLA SUA EA Project Manager Naval Facilities Engineering Systems Command Atlantic Attn: EV21JB 6506 Hampton Boulevard Norfolk, VA 23508
Date:	March 2025

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy, proposes to request that the Federal Aviation Administration (FAA) establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base. The FAA has jurisdictional authority of the National Airspace System and is a Cooperating Agency for this action. This Environmental Assessment evaluates the potential environmental impacts associated with the Proposed Action and the No Action Alternative.

Executive Order 14172 renamed the Gulf of Mexico to Gulf of America. Since this Executive Order was effective after development and publication of this document the term Gulf of Mexico has been retained in the narrative and figures in this document. This decision prioritizes the timely implementation of the expanded MOA, a critical aspect of naval readiness, by avoiding further delays associated with document revisions.

Federal Aviation Administration

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EXECUTIVE SUMMARY

ES.1 Proposed Action

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy (hereinafter referred to as the Navy) proposes to request that the Federal Aviation Administration (FAA) establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) and adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base. The FAA has jurisdictional authority of the National Airspace System and is a Cooperating Agency for this action.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) (42 U.S. Code [U.S.C.] section 4321 et seq.), as amended by the Fiscal Responsibility Act of 2023, and as implemented by Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] parts 1500–1508), and Navy regulations for implementing NEPA (32 CFR part 775); and Chief of Naval Operations Instruction 5090.1E, Environmental Readiness Program. The EA has also been prepared in accordance with FAA airspace and NEPA policy and procedures contained in FAA Joint Order (JO) 7400.2P and FAA Order 1050.1F (FAA, 2015).

For purposes of this EA, the Navy has voluntarily elected to generally follow those CEQ regulations at 40 CFR parts 1500-1508 that were in place at the outset of this EA, in addition to the Navy's procedures/regulations implementing NEPA at 32 CFR part 775, to meet the agency's obligations under NEPA, 42 U.S.C. section 4321 et seq.

ES.2 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to more efficiently accomplish training requirements for squadrons based at NAS JRB NOLA. Efficiencies are achieved when pilots can train in Special Use Airspace (SUA) of sufficient size and proximity to the base.

The Proposed Action is needed because existing SUA is located a considerable distance from NAS JRB NOLA, resulting in prolonged transit times and reduced training time.

ES.3 Alternatives Considered

Alternatives were developed for analysis based upon the following reasonable alternative screening factors:

- Flight training should occur in SUA that provides a closer entry point for pilots based at NAS JRB NOLA than existing SUA for gains in training efficiency.
- SUA must be large enough to accommodate flight profile requirements of the training mission to include supersonic flight.
- SUA must connect to other existing SUA to provide the expanded space to support existing large scale exercises with multiple aircraft.
- SUA must offer Navy squadrons prioritized access to training space in order to alleviate existing scheduling conflicts.

- SUA must maintain aviation safety and reduce impacts to civil users to the extent practicable while supporting the military mission needs.
- SUA must be acceptable to the FAA and FAA action must be in compliance with FAA Order 1050.1F.

The Navy is considering one action alternative that meets the purpose of and need for the Proposed Action and a No Action Alternative. The action alternative is to request that the FAA establish a block of SUA east of NAS JRB NOLA to be named the Bourbon MOA/ATCAA to accommodate required flight training activities.

ES.4 Public Involvement

The Navy prepared this EA to inform the public of the Proposed Action and to allow the opportunity for public review and comment from August 22, 2024 to October 6, 2024. Through the public involvement process, the Navy notified the public of the Proposed Action and solicited their input on the EA. No public comments were received on the Draft EA.

The Draft EA 45-day review period began with the publication of a Notice of Availability of the Draft EA in *The New Orleans Advocate* on August 22, 23, and 24, 2024. The Draft EA was available on the following website: https://www.nepa.navy.mil/NOLASUA.

The Navy has also made copies of the Draft EA available at two local libraries:

- Belle Chasse Branch Library: 8442 LA-23, Belle Chasse, Louisiana 70037
- Plaquemines Parish Library: 35572 Highway 11, Buras, Louisiana 70041

The public was invited to submit comments on the Draft EA by any of the following methods:

- electronically, via the project website: https://www.nepa.navy.mil/NOLASUA
- in writing, by mail to: NOLA SUA Project Manager, Naval Facilities Engineering Systems Command Atlantic, Attn: Code EV21JB, 6506 Hampton Blvd, Norfolk, Virginia 23508

The Navy coordinated or requested consultation regarding the Proposed Action with the following entities:

- U.S. Fish and Wildlife Service (USFWS), Louisiana Ecological Services
- National Oceanic and Atmospheric Administration (NOAA) Fisheries Southeast Regional Office
- Louisiana Office of Cultural Development, Division of Historic Preservation
- Chitimacha Tribe of Louisiana
- Louisiana Department of Energy and Natural Resources (LDENR), Office of Coastal Management

ES.5 Summary of Environmental Resources Evaluated in the EA

NEPA, CEQ regulations, and Navy regulations for implementing NEPA, specify that an EA should address those resource areas potentially subject to impacts. In addition, the level of analysis should be commensurate with the anticipated level of environmental impact.

The following resource areas have been evaluated in detail in this EA: airspace management, noise, biological resources, coastal zone, visual effects, cultural resources, and environmental justice. Because potential impacts were considered to be insignificant, negligible, or nonexistent, the following resources

were not evaluated in detail in this EA: air quality and greenhouse gases (GHGs); land use; farmlands; geology, topography, and soils; hazardous materials, solid waste, and pollution prevention; natural resources and energy supply; public health and safety; socioeconomics; and water resources.

ES.6 Summary of Potential Environmental Consequences of the Proposed Action

Table ES-1 provides a summary of the potential impacts to the resources associated with the No Action Alternative and the Proposed Action Alternative (Preferred Alternative).

Table ES-1 Summary of Potential Environmental Consequences

Resource Area	*No Action Alternative*	*Proposed Action Alternative (Preferred Alternative)*
Airspace Management	Military aircraft from NAS JRB NOLA would continue to transit from NAS JRB NOLA to the existing Snake MOA/ATCAA and other nearby SUA.	Potential impacts to civil aircraft traffic could occur during the 5 hours when the MOA is active daily. During a representative month of flight data in 2023, 251 aircraft transited the proposed Bourbon MOA (105 flights) and ATCAA (146 flights). The most common aircraft transiting through the MOA and ATCAA were commercial air carriers. Impacts to rerouting traffic around the active MOA could result in 1 to 8 minutes of added travel time. Rerouting around the proposed ATCAA could add 1 to 6 minutes of travel time. No significant impact to airspace management would occur.
Noise	Military aircraft from NAS JRB NOLA would continue to transit to and from the Snake MOA/ATCAA and other nearby SUA. The current noise environment in the area proposed for Bourbon MOA/ATCAA would remain unchanged and includes noise exposure from routine overflight by various types of military and civilian aircraft at various altitudes. The subsonic noise level associated with the No Action Alternative is 35 dB DNL and there is less than one event daily that exceeds 65 dB SEL. Supersonic operations do not currently occur in the proposed airspace.	Subsonic noise levels in the proposed Bourbon MOA/ATCAA would be 52 dB DNL, a level that is compatible with all land uses. This level would not exceed significance thresholds defined by FAA; however, the 17 dB DNL increase is "reportable." The maximum sound level (i.e., loudest) during a single event that could occur in the proposed MOA is 105 dB. This would result from an F-35 at 4,000 feet MSL using highest power. This would last only a few seconds and would occur infrequently. As with the No Action Alternative, less than one daily event would exceed 65 dB SEL. Supersonic noise would range between 34–42 dB CDNL, a level that is compatible with all land use types.

Resource Area	*No Action Alternative*	*Proposed Action Alternative (Preferred Alternative)*
		No significant impacts to the noise environment would occur.
Biological Resources	Military aircraft from NAS JRB NOLA would continue to transit to and from the Snake MOA/ATCAA and other nearby SUA, generating low levels of noise. There would be no change to impacts to biological resources.	Chronic noise exposure and exposure to high noise levels would not occur and there would be no hearing loss in any species. Birds and bats, including special status species, migratory birds, and Bald Eagles, could experience minor effects from aircraft noise including temporary changes in behavior, but these are not likely to cause long-term effects or population-level impacts; therefore, these impacts are not significant. Chaff and flare residual materials could pose a minor impact to fish and sea turtles who may inadvertently ingest these materials during normal feeding activities. Existing safety procedures would continue to reduce Bird/Wildlife Aircraft Strike Hazard. No significant impacts to biological resources would occur.
Coastal Resources	There would be no change in existing conditions that would affect coastal resources in Louisiana.	Negligible impacts to coastal resources could result from use of chaff and flares. Annual usage is low, the area within which they would be used is large, and the materials that remain are small, making the potential for impacts negligible. The Proposed Action is consistent to the maximum extent practicable with the enforceable polices of the Louisiana Coastal Resources Program. No significant impacts to coastal resources would occur.
Visual Effects	There would be no change to existing military aircraft flight tempo, patterns, or other features of the study area that could result in visual effects.	The addition of training flights in the Bourbon MOA/ATCAA would result in different flight patterns and an increase in the length of time aircraft would be viewable in this area, as compared to existing conditions. Due to the lateral area and altitude range in which aircraft could operate, and the transient nature of some overflights, effects would be only mildly discernible. Chaff and flare use would result in negligible to minor visual effects.

Resource Area	*No Action Alternative*	*Proposed Action Alternative (Preferred Alternative)*
		No significant impacts to visual effects would occur.
Cultural Resources	There would be no impact to known or unknown cultural resources as a result of the No Action Alternative.	No direct impacts would occur to cultural resources. There are no known above ground archaeological sites or Traditional Cultural Properties[1]. The three identified architectural resources located within the area of potential effects would not be impacted by the Proposed Action. Fort Proctor is the only standing architectural resource beneath the proposed SUA. It is located on the western boundary of the MOA where supersonic flights would occur above 30,000 feet MSL, which would reduce the number of sonic booms. Subsonic noise is below the level that could cause damage to structures (130 dB). Visual intrusions at the Fort are also expected to be minimal and similar to what is currently experienced. No significant impacts to cultural resources would occur.
Environmental Justice	There would be no change in existing conditions that could affect environmental justice populations.	The Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority or low-income communities. There are no minority or low-income communities located in the ROI.

Note: [1] The term "Traditional Cultural Properties" was defined in National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties (Parker and King, 1990). This Bulletin was updated in December 2024 is now titled "Identifying, Evaluating, and Documenting Traditional Cultural Places" (Parker and King, 2024). The 2024 guidance term replaces the term "Traditional Cultural Properties" with "Traditional Cultural Places," but the definition remains unchanged. The original term is retained in this Final EA because the change occurred after publication of the Draft EA and was used in National Historic Preservation Act Section 106 Tribal and State consultation documents. This decision supports the timely implementation of the expanded MOA, vital to naval readiness, by avoiding delays from non-substantive document revisions.

Legend: % = percent; ATCAA = Air Traffic Control Assigned Airspace; CDNL = C-weighted Day-Night Average Sound Level; dB = decibel; DNL = Day-Night Average Sound Level; FAA = Federal Aviation Administration; MOA = Military Operations Area; MSL = mean sea level; NAS JRB NOLA = Naval Air Station Joint Reserve Base New Orleans; ROI = Region of Influence; SEL = Sound Exposure Level; SUA = Special Use Airspace

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Environmental Assessment

Flight Training Activities in the Bourbon Military Operations Area Offshore from

Naval Air Station Joint Reserve Base New Orleans, Louisiana

TABLE OF CONTENTS

List of Figures

List of Tables

Appendices

Abbreviations and Acronyms

Acronym	Definition
AGL	Above Ground Level
AHAS	Avian Hazard Advisory Safety System
APE	Area of Potential Effects
ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
BASH	Bird/Wildlife Aircraft Strike Hazard
BGEPA	Bald and Golden Eagle Protection Act
CATEX	Categorical Exclusion
CDNL	C-weighted Day-Night Average Sound Level
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CRTC	Combat Readiness Training Center
CZMA	Coastal Zone Management Act
dB	decibel
dBA	A-weighted decibel
dBC	C-weighted decibel
DNL	A-weighted Day-Night Average Sound Level
DoD	Department of Defense
DPS	Distinct Population Segment
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FICUN	Federal Interagency Committee on Urban Noise
FL	Flight Level
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
Hz	Hertz
IFR	Instrument Flight Rules
JO	Joint Order
LAANG	Louisiana Air National Guard
LCRP	Louisiana Coastal Resources Program
LDENR	Louisiana Department of Energy and Natural Resources
LDWF	Louisiana Department of Wildlife and Fish
L_{max}	Maximum Sound Level
LOA	Letter of Agreement
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
MOA	Military Operations Area
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NAS	Naval Air Station
NAS JRB NOLA	Naval Air Station Joint Reserve Base New Orleans
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NM	nautical mile
NM^2	square nautical mile
NOAA	National Oceanic and Atmospheric Administration
NOTAM	Notice to Air Missions
NRHP	National Register of Historic Places
OEIS	Overseas Environmental Impact Statement

Acronym	Definition
PDARS	Performance Data Analysis and Reporting System
R-	Restricted Area
ROI	Region of Influence
SEL	Sound Exposure Level
SHPO	State Historic Preservation Office(r)
SUA	Special Use Airspace
U.S.	United States
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VFC-111	Fighter Squadron Composite 111
VFC-204	Fighter Squadron Composite Two Zero Four
VFR	Visual Flight Rules
VORTAC	Very High Frequency Omnidirectional Range/Tactical Aircraft Control
W-	Warning Area

1 Purpose of and Need for the Proposed Action

1.1 Introduction

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy (hereinafter referred to as the Navy) proposes to request that the Federal Aviation Administration (FAA) establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base. The FAA has jurisdictional authority of the National Airspace System and is a Cooperating Agency for this action.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) (42 U.S. Code [U.S.C.] section 4321 et seq.), as amended by the Fiscal Responsibility Act of 2023, and as implemented by Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] parts 1500–1508), and Navy regulations for implementing NEPA (32 CFR part 775). The EA is also being prepared in accordance with FAA airspace procedures contained in FAA Joint Order (JO) 7400.2P and FAA NEPA procedures contained in and FAA Order 1050.1F (FAA, 2015).

For purposes of this EA, the Navy has voluntarily elected to generally follow those CEQ regulations at 40 CFR parts 1500-1508 that were in place at the outset of this EA, in addition to the Navy's procedures/regulations implementing NEPA at 32 CFR part 775, to meet the agency's obligations under NEPA, 42 U.S.C. section 4321 et seq.

1.2 Background

The mission of NAS JRB NOLA is to provide a high-quality training environment for active duty and reserve components of all branches of the armed services. The base hosts fixed-wing and helicopter squadrons. The primary tenant commands have a mission to train and maintain combat ready squadrons and servicemembers. NAS JRB NOLA offers over-land and over-water training environments to include training airspace, known as Special Use Airspace (SUA), over the Gulf of Mexico.

Navy Fighter Squadron Composite Two Zero Four (VFC-204) is one of the tenants at NAS JRB NOLA and is part of the Navy Reserve's Tactical Support Wing. VFC-204 provides critical adversary air support in simulated fighter combat as well as large multi-plane strike exercises to increase combat readiness. VFC-204 recently (2022–2023) transitioned from F/A-18 aircraft to F-5N aircraft. The aircraft transition did not in and of itself necessitate a requirement for new SUA, but the Navy is requesting changes to existing offshore SUA to provide a training environment closer to NAS JRB NOLA to improve training efficiency. The F-5N aircraft have different fuel storage specifications than their predecessor aircraft (F/A-18). The existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times to reach flight training areas. The F-5N requires SUA closer to NAS JRB NOLA to accomplish training requirements and functional check flights more efficiently as well as provide Fleet Operational Support and Fleet Replacement Squadron Support. Combat readiness depends on the continued availability of training areas which provide realistic, mission-oriented training.

The nearest existing SUA is 40 nautical miles (NM) from NAS JRB NOLA. Traveling to the existing SUA squanders valuable training time spent in transit, reducing training effectiveness and inefficiently using fuel resources. The Louisiana Air National Guard (LAANG) has scheduling authority for the existing SUA and prioritizes its use by Air National Guard units. Accordingly, the Navy must make efficient use of the

SUA to avoid training delays caused by other uses of the airspace. The establishment of SUA closer to NAS JRB NOLA would offer several benefits to the Navy, including increased airspace size to better meet fleet training requirements; increased time in training airspace due to shorter transits, which makes more efficient use of fuel resources; and an additional training area which could be prioritized for Navy use.

1.3 Cooperating Agency

Congress has charged the FAA with administering all navigable airspace in the public interest as necessary to ensure the safety of aircraft and the efficient use of such airspace. The FAA is the agency with jurisdiction by law and special expertise with respect to changes in the configuration of the National Airspace System. In accordance with the *Memorandum of Understanding Between the Federal Aviation Administration and the Department of Defense for Environmental Review of Special Use Airspace Actions*, dated September 23, 2019, the FAA is a Cooperating Agency for this EA. Copies of the Cooperating Agency correspondence are provided in **Appendix A**.

As a Cooperating Agency, the FAA will independently review the environmental documents prepared by the Navy and assess whether they meet the agency's standards for adequacy under NEPA. If the FAA determines that this EA meets its standards, it will adopt the document in whole or in part to fulfill its NEPA obligations for its independent proposed airspace action.

1.4 Special Use Airspace

The National Airspace System is the airspace, navigation facilities, and airports of the U.S., along with their associated information, services, rules, regulations, policies, procedures, personnel, and equipment. It includes components shared jointly with the military.

The primary purpose of the FAA SUA program is to establish/designate airspace in the interest of national defense, security, and/or welfare. Charted SUA identifies to other airspace users where these activities occur. SUA is airspace of defined dimensions wherein activities must be confined because of their nature or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Types of SUA include: Prohibited Areas, Restricted Areas (R-), MOAs, Warning Areas, Alert Areas, Controlled Firing Areas, and National Security Areas (FAA Order JO 7400.2P). MOAs and ATCAAs are the primary types of airspace analyzed in this document and are described as follows:

- **Military Operations Area (MOA)**: MOAs consist of airspace with defined vertical and lateral limits established for the purpose of separating certain military training activities from Instrument Flight Rules (IFR) traffic. Whenever a MOA is being used, non-participating IFR traffic may be cleared through a MOA if IFR separation can be provided by Air Traffic Control (ATC). Otherwise, ATC reroutes or restricts non-participating IFR traffic. Visual Flight Rules (VFR) traffic, which is permitted up to 18,000 feet, is not prohibited from flying within an active MOA and does so at their own risk.
- **Air Traffic Control Assigned Airspace (ATCAA)**: ATCAA is airspace of defined vertical and lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR traffic. ATCAAs are not classified as SUA and are not published on aeronautical charts, but rather designated in a Letter of Agreement (LOA) with the FAA. An ATCAA can be used for the same types of activities as a MOA and usually overlays a MOA within Class A airspace (18,000–60,000 feet). Non-military

aircraft may fly in an ATCAA during military training so long as ATC can maintain IFR separation from military aircraft; only non-hazardous military activities may be undertaken in an ATCAA. VFR traffic is not permitted at or above 18,000 feet.

1.5 Location

NAS JRB NOLA is located in Plaquemines Parish, Louisiana, approximately 7 miles southeast of New Orleans, Louisiana (**Figure 1.5-1**), between the Mississippi River to the southeast and the Intracoastal Waterway to the northwest. The installation is approximately 3,345 acres in size, which includes 1,695 developed acres and 1,650 undeveloped acres.

The location of the proposed Bourbon MOA/ATCAA is east of NAS JRB NOLA and the city of New Orleans as depicted in **Figure 1.5-2**. The figure includes a 2-dimensional and 3-dimensional representation of the airspace. The proposed vertical segmentation of the MOA/ATCAA is detailed on the 3-dimensional graphic and will be described in more detail in Chapter 2 of this EA. Below the proposed MOA/ATCAA are primarily open waters of Breton Sound, Chandeleur Sound, Lake Borgne, the bayous and marshes of Biloxi State Wildlife Management Area and other bayous, and marshes of St. Bernard Parish. Due to the limited amount of land above sea level, relatively few residential or commercial structures underlie the proposed MOA/ATCAA. Sparsely inhabited areas are found underlying the western point of the MOA/ATCAA boundary, primarily concentrated at the communities of Shell Beach, Yscloskey, Hopedale, and in close proximity to State Routes 624 and 46. The ruins of Fort Proctor underlie the proposed MOA/ATCAA north of Shell Beach.

1.6 Purpose of and Need for the Proposed Action

The Navy has a statutory requirement to train and equip combat-capable naval forces ready to deploy worldwide. The Proposed Action furthers the Navy's execution of its congressionally mandated roles and responsibilities under 10 U.S.C. section 8062.

The purpose of the Proposed Action is to more efficiently accomplish training requirements for squadrons based at NAS JRB NOLA. Efficiencies are achieved when pilots can train in SUA of sufficient size and proximity to the base.

The Proposed Action is needed because existing SUA is located a considerable distance from NAS JRB NOLA, resulting in prolonged transit times and reduced training time.

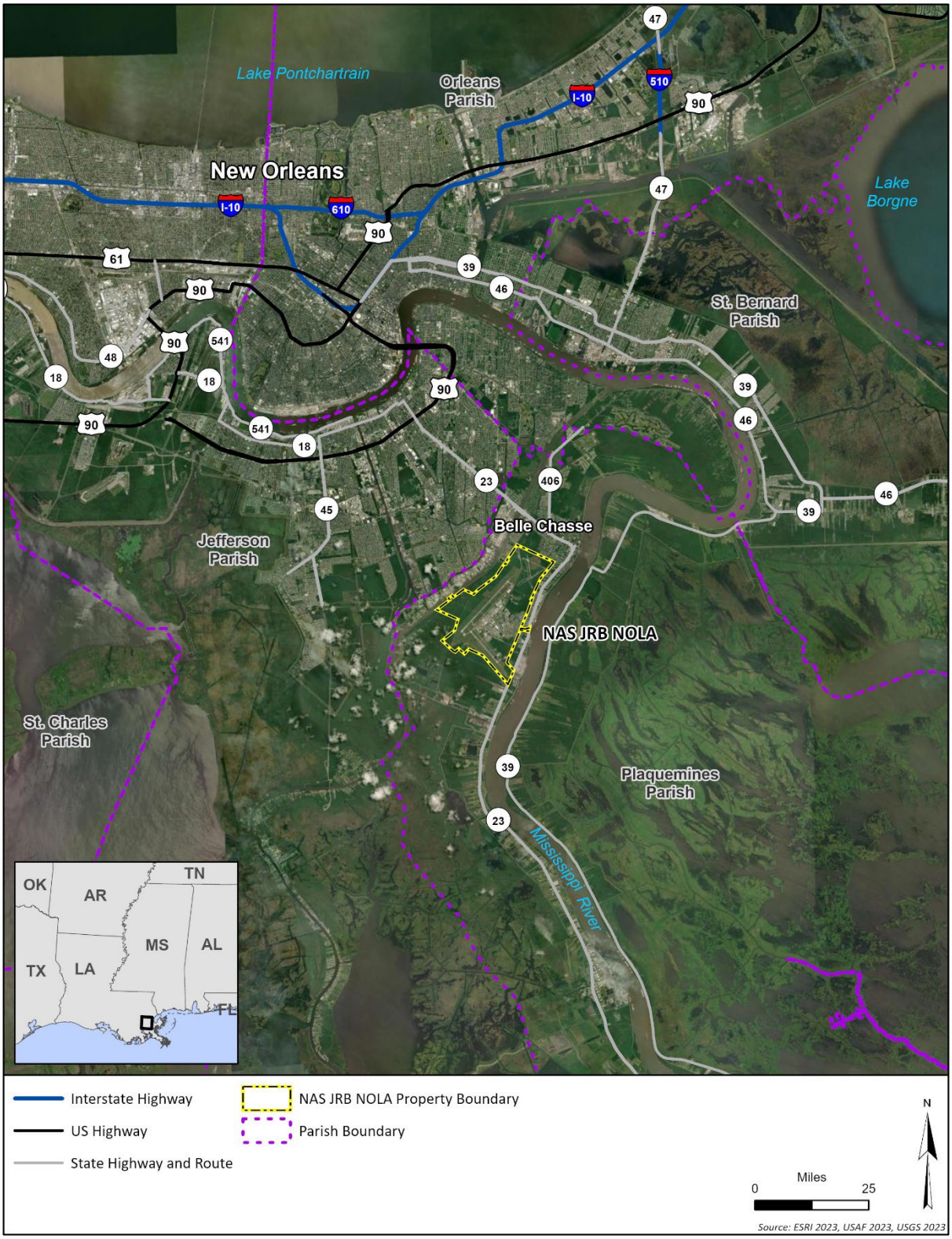

Figure 1.5-1 Naval Air Station Joint Reserve Base New Orleans

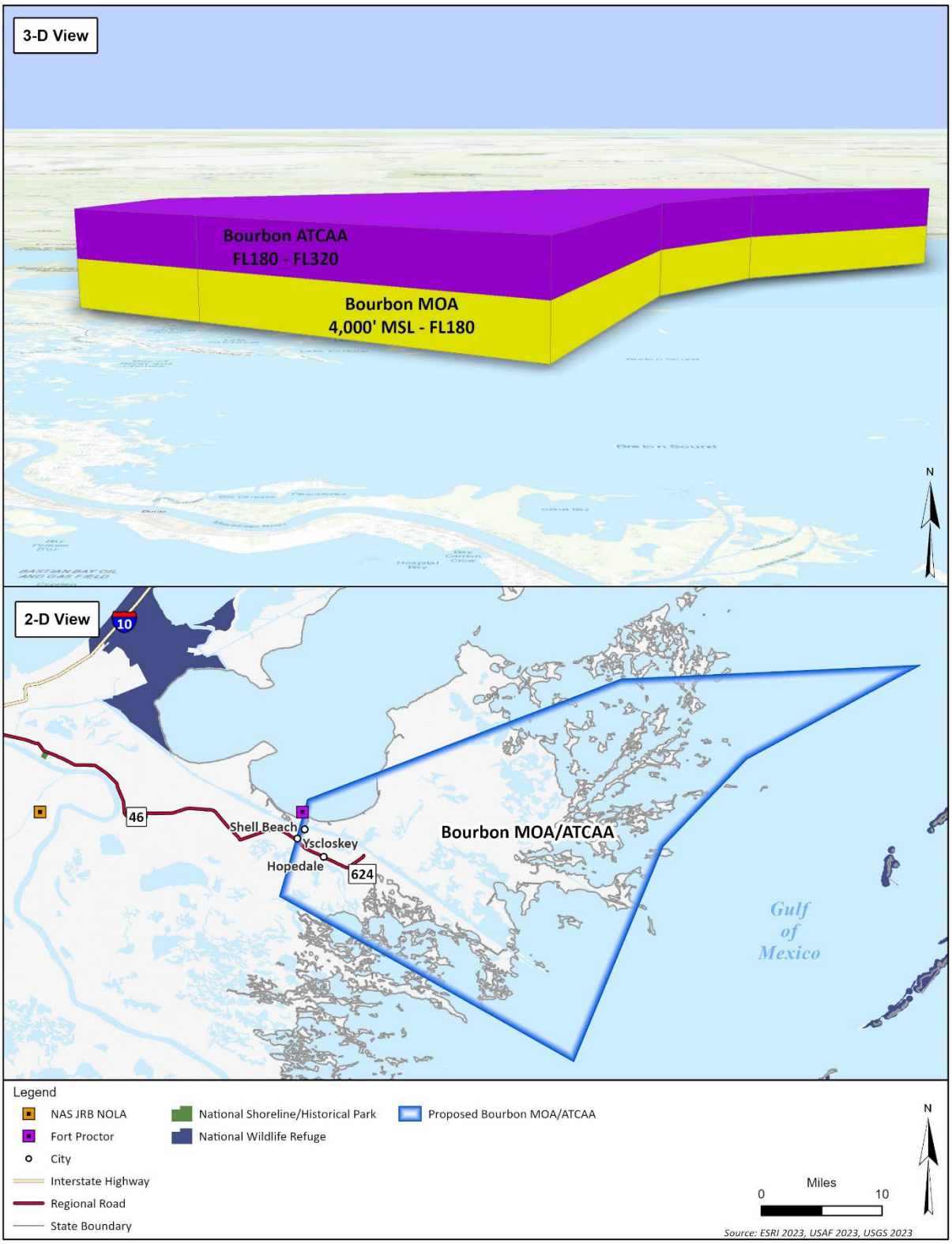

Figure 1.5-2 Location Map of Proposed Bourbon MOA/ATCAA

1.7 Key Documents

Key documents are sources of information considered to be key because of similar actions, analyses, or impacts that may apply to this Proposed Action. Key documents include:

- **Record of Categorical Exclusion for Adversary Aircraft Transitions at Naval Air Station Fallon, Nevada and Naval Air Station Joint Reserve Base New Orleans, Louisiana.** On July 22, 2021, Commander, U.S. Fleet Forces Command signed a Record of Categorical Exclusion for the adversary aircraft transitions at Naval Air Station (NAS) Fallon and NAS JRB NOLA. At NAS JRB NOLA, 12 F/A-18 aircraft were replaced by 12 F-5N/F aircraft. The adversary aircraft are operated by VFC-204. The aircraft transition took place in 2022 and 2023. The transition was not expected to result in an increase in air operations at NAS JRB NOLA. In recent years, NAS JRB NOLA operations have ranged between 16,000 to 22,000 total annual operations.
- **Atlantic Fleet Training and Testing Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS)** (Navy, 2018). The 2018 Atlantic Fleet Training and Testing Final EIS/OEIS analyzed impacts from conducting at-sea training and testing along the east coast of the U.S. and Gulf of Mexico. The Gulf of Mexico Range Complex (within the larger Atlantic Fleet Training and Testing Study Area) includes approximately 20,000 square nautical miles (NM^2) of SUA. Flight altitudes range from the surface to unlimited altitudes. Six Warning Areas are located within the Gulf of Mexico Range Complex. Restricted airspace associated with the Pensacola Operating Area, designated Restricted Area (R-) 2908, extends from the shoreline to approximately 3 NM offshore. The Record of Decision was issued on October 23, 2018.
- **Gulf of Mexico Range Complex EIS/OEIS** (Navy, 2010). The 2010 Gulf of Mexico Range Complex EIS/OEIS analyzed unit level training by VFC-204 to include the conduct of bombing exercises (air-to-surface) in a Warning Area in the Gulf of Mexico. The Record of Decision was issued on February 24, 2011.
- **Environmental Assessment for Modification of Combat Readiness Training Center (CRTC)-Used Airspace** (Air National Guard, 2008). In May 2008, the U.S. Air Force completed an EA for Modification of Airspace managed by the Mississippi Air National Guard's CRTC, Gulfport, Mississippi. The EA evaluated modifications to over-land Northern Blocks of airspace and over-water Southern Blocks of airspace. Within the Southern Block, among other changes, the proposed action reclassified the airspace west of Warning Area (W-) 453 (Eagle Gulf ATCAA) from 3,000 feet Mean Sea Level (MSL) up to, but not including 18,000 feet MSL as Snake MOA. The Eagle Gulf ATCAA west of W-453 from 18,000 feet MSL to Flight Level (FL) 600 was reclassified as the Skit ATCAA. No changes were proposed for airspace utilization. The Southern Blocks, consisting of the Snake MOA, Skit ATCAA, and W-453A, are used for air-to-air training, search and rescue missions, and Joint Force exercises. The Southern Block is scheduled from time-to-time by NAS JRB NOLA-based VFC-204. A Finding of No Significant Impact (FONSI) was signed on July 1, 2008.
- **Environmental Assessment for Deployment of Chaff and Flares in Military Training Airspace (Phase II)** (Air National Guard, 2002). In June 2003, the Air National Guard completed an EA to evaluate the potential environmental and socioeconomic effects of the use of chaff and flares during training exercises in 16 MOAs or other military training airspace. The programmatic level EA included evaluation of chaff and flare continued use in W-453 in the Gulf of Mexico, which is managed by Gulfport CRTC, an Air National Guard unit based in Gulfport, Mississippi. The chaff

and flare usage analyzed in W-453 and the associated ATCAA was 29,500 chaff and 15,500 flares annually. A FONSI was signed on July 8, 2003.

1.8 Relevant Laws and Regulations

The Navy has prepared this EA in accordance with federal and state laws, statutes, regulations, and policies pertinent to the implementation of the Proposed Action. A description of the Proposed Action's consistency with these laws, policies, and regulations, as well as the names of regulatory agencies responsible for their implementation, is presented in Chapter 5 (**Table 5.1-1**).

1.9 Public and Agency Participation and Intergovernmental Coordination

CEQ regulations direct agencies to involve the public in preparing and implementing their NEPA procedures.

The Navy prepared this EA to inform the public of the Proposed Action and to allow the opportunity for public review and comment. The Draft EA was released for public comment for 45 days (August 22, 2024 to October 6, 2024). Through the public involvement process, the Navy coordinated with the public and notified the public of the Proposed Action. No comments were received from the public.

The Draft EA 45-day review period began with the publication of a Notice of Availability of the Draft EA for three consecutive days in *The New Orleans Advocate* on August 22, 23, and 24, 2024 (**Appendix B**). The notice described the Proposed Action, solicited public comments on the Draft EA, provided dates of the public comment period, and announced that a copy of the EA would be available for download/review on the Navy's website and local libraries. The Draft EA was available on the following website: https://www.nepa.navy.mil/NOLASUA.

The Navy also made copies of the Draft EA available at two local libraries as follows:

- Belle Chasse Branch Library: 8442 LA-23, Belle Chasse, Louisiana 70037
- Plaquemines Parish Library: 35572 Highway 11, Buras, Louisiana 70041

The public was invited to submit comments on the Draft EA by any of the following methods:

- electronically, via the project website: https://www.nepa.navy.mil/NOLASUA
- in writing, by mail to: NOLA SUA Project Manager, Naval Facilities Engineering Systems Command Atlantic, Attn: Code EV21JB, 6506 Hampton Blvd, Norfolk, Virginia 23508

The Navy coordinated or requested consultation regarding the Proposed Action with the following entities:

- U.S. Fish and Wildlife Service (USFWS), Louisiana Ecological Services
- National Oceanic and Atmospheric Administration (NOAA) Fisheries Southeast Regional Office
- Louisiana Office of Cultural Development, Division of Historic Preservation
- Chitimacha Tribe of Louisiana
- Louisiana Department of Energy and Natural Resources (LDENR), Office of Coastal Management

1.10 Procedure to Establish SUA

The FAA is responsible for the safe and efficient use of all navigable airspace. The FAA processes requests to establish SUA in accordance with FAA Order JO 7400.2P, *Procedures for Handling Airspace*

Matters. The Navy submitted an airspace proposal to the FAA, which defined the proposed Bourbon MOA/ATCAA (dimensions and altitudes), times of use, and activities that would occur in the MOA/ATCAA. In accordance with FAA Order JO 7400.2P, the FAA publicly circulated the detailed airspace proposal for 45 days to all known aviation interested persons and groups such as national and state aviation agencies; local flight schools, local airport owners, managers, and fixed base operators; and local air taxi and charter flight offices. The public circular included an FAA address and email to receive comments or information to assist in determining what effect the proposed airspace would have to navigable airspace. That circularization was a separate process but occurred concurrently with the Navy's public and agency participation described in Section 1.9 above. No comments were received during the circularization. If the MOA is approved by FAA, it would be published in the current issue of FAA Order JO 7400.10, *Special Use Airspace* (published annually) and illustrated on sectional aeronautical charts (updated every 56 days). Once published, the SUA would be available for military use.

1.11 Changes Between Draft EA and Final EA

The following substantive updates have been made in the Final EA based on input from tribal governments, the public, and agencies.

Executive Summary

- The NOA publication dates have been added to ES.4, *Public Involvement* on page ES-4.

Chapter 1. Purpose of and Need for the Proposed Action

- Section 1.1, *Introduction*, was revised to include language addressing the Navy's election to follow the CEQ regulations that were in place at the outset of this EA.
- Section 1.7, *Key Documents,* was revised to include citations for the listed documents.
- Section 1.9, *Public and Agency Participation and Intergovernmental Coordination*, page 1-7 was revised to provide the NOA publication dates and to indicate that no public comments were received. The newspaper advertisement was added to Appendix B.
- Section 1.10, *Procedures to Establish SUA*, page 1-8 was revised to indicate that no public comments were received during the circularization of the airspace proposal.

Chapter 3. Affected Environment and Environmental Consequences

- Biological Resources. Section 3.3.2.1, *ESA Protected Species*, page 3-14 and Table 3.3-1 were revised to include the giant manta ray based on consultation with NOAA Fisheries. Section 3.3.3, *Environmental Consequences*, page 3-18 was revised to indicate that concurrence on the Navy's findings to protected species was received from USFWS and NOAA Fisheries. Copies of correspondence from both agencies was added to Appendix E.
- Coastal Zone. Section 3.4.3, *Environmental Consequences*, page 3-25 was revised to indicate that the Navy received concurrence on the Coastal Consistency Determination from the LDENR Office of Coastal Management. A copy of the correspondence was added to Appendix F.
- Cultural Resources. Section 3.6.2, *Affected Environment* and Section 3.6.3, *Environmental Consequences*, pages 3-32 and 3-33 were revised to indicate that the Navy received concurrence from Louisiana SHPO and that no reply was received from the Chitimacha Tribe. Correspondence was added to Appendix G.

2 Proposed Action and Alternatives

2.1 Proposed Action

The Navy proposes to request that the Federal Aviation Administration (FAA) establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base.

2.2 Screening Factors

Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) provide guidance on the consideration of alternatives to a federally proposed action and require rigorous exploration and objective evaluation of reasonable alternatives. Only those alternatives determined to be reasonable and meet the purpose and need for the Proposed Action require detailed analysis.

Potential alternatives that meet the purpose and need were evaluated against the following screening factors:

1. Flight training should occur in Special Use Airspace (SUA) that provides a closer entry point for pilots based at NAS JRB NOLA than existing SUA for gains in training efficiency. (Note: The existing SUA entry point is 40 nautical miles [NM] from NAS JRB NOLA.) Training efficiency is defined as increased time in SUA.
2. The SUA must be large enough (e.g., greater than 450 square nautical miles [NM^2]) to accommodate flight profile requirements of Fighter Squadron Composite Two Zero Four's (VFC-204's) training mission to include supersonic flight.
3. The SUA must connect to other existing SUA to provide the expanded space to support existing large scale exercises with multiple aircraft.
4. The SUA must offer Navy squadrons prioritized access to training space in order to alleviate existing scheduling conflicts.
5. The SUA must maintain aviation safety and reduce impacts to civil users to the extent practicable while supporting the military mission needs.
6. The SUA must be acceptable to the FAA and FAA action must be in compliance with FAA Order 1050.1F.

Various action alternatives were evaluated against the screening factors. The alternatives considered include:

- Request that FAA establish new SUA to the east of NAS JRB NOLA to accommodate required flight training activities.
- Request that FAA establish new SUA southwest of NAS JRB NOLA to accommodate required flight training activities.
- Conduct flight training in existing SUA offshore from Naval Air Station (NAS) Key West.
- Conduct simulated flight training.

2.3 Alternatives Carried Forward for Analysis

Based on the reasonable alternative screening factors, the Navy identified one action alternative to be analyzed in this Environmental Assessment (EA). The Navy will also analyze the No Action Alternative as required by NEPA.

2.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur. Squadrons located at NAS JRB NOLA, to include VFC-204, would continue to have longer transits to existing SUA (e.g., Snake Low MOA, Snake High MOA, and Snake ATCAA) which causes inefficient use of training time and fuel resources and does not resolve airspace scheduling conflicts. The No Action Alternative does not meet the purpose of and need for the Proposed Action; however, the No Action Alternative is used to analyze the consequences of not undertaking the Proposed Action and provides a benchmark for comparative analysis to enable decision makers to compare the magnitude of environmental effects of the action alternatives. The No Action Alternative is carried forward for analysis as required by NEPA regulations and Navy and FAA policy.

2.3.2 Conduct Flight Training in New SUA to the East of Naval Air Station Joint Reserve Base New Orleans (Preferred Alternative)

The Navy proposes to request that the FAA establish a new MOA/ATCAA east of NAS JRB NOLA to accommodate required flight training activities. The new MOA and associated ATCAA would be directly adjacent to the existing Snake High MOA, Snake Low MOA, and Snake ATCAA east of NAS JRB NOLA (**Figure 2.3-1**). The new MOA/ATCAA would be named the Bourbon MOA/ATCAA. The Proposed Action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The entry point for the new Bourbon MOA/ATCAA would be less than 25 NM from NAS JRB NOLA, offering closer airspace for VFC-204 to safely and more efficiently conduct training activities described in **Section 2.3.2.2**. Defensive countermeasure devices (described in **Section 2.3.2.2**) would be used; however, no weapons testing or ordnance expenditure would occur within the new MOA/ATCAA.

The publication of the Bourbon MOA on a sectional aeronautical chart would notify, advise, and alert other pilots of where military training activity could be occurring. The Bourbon MOA and associated ATCAA, when activated, would confine or segregate non-hazardous military flight activities from Instrument Flight Rules (IFR) aircraft and identify for Visual Flight Rules (VFR) aircraft where these activities are conducted. Itinerant (non-local) or other aircraft not familiar with Navy training activities would now be made aware of the military flight activity by the existence of the Bourbon MOA on the sectional aeronautical chart. The Bourbon MOA would be mapped on the New Orleans Sectional Chart and knowledge of its activation would prompt all pilots to take notice of military flight activity, resulting in better awareness and coordination. Non-participating IFR aircraft would not be allowed in the MOA when activated.

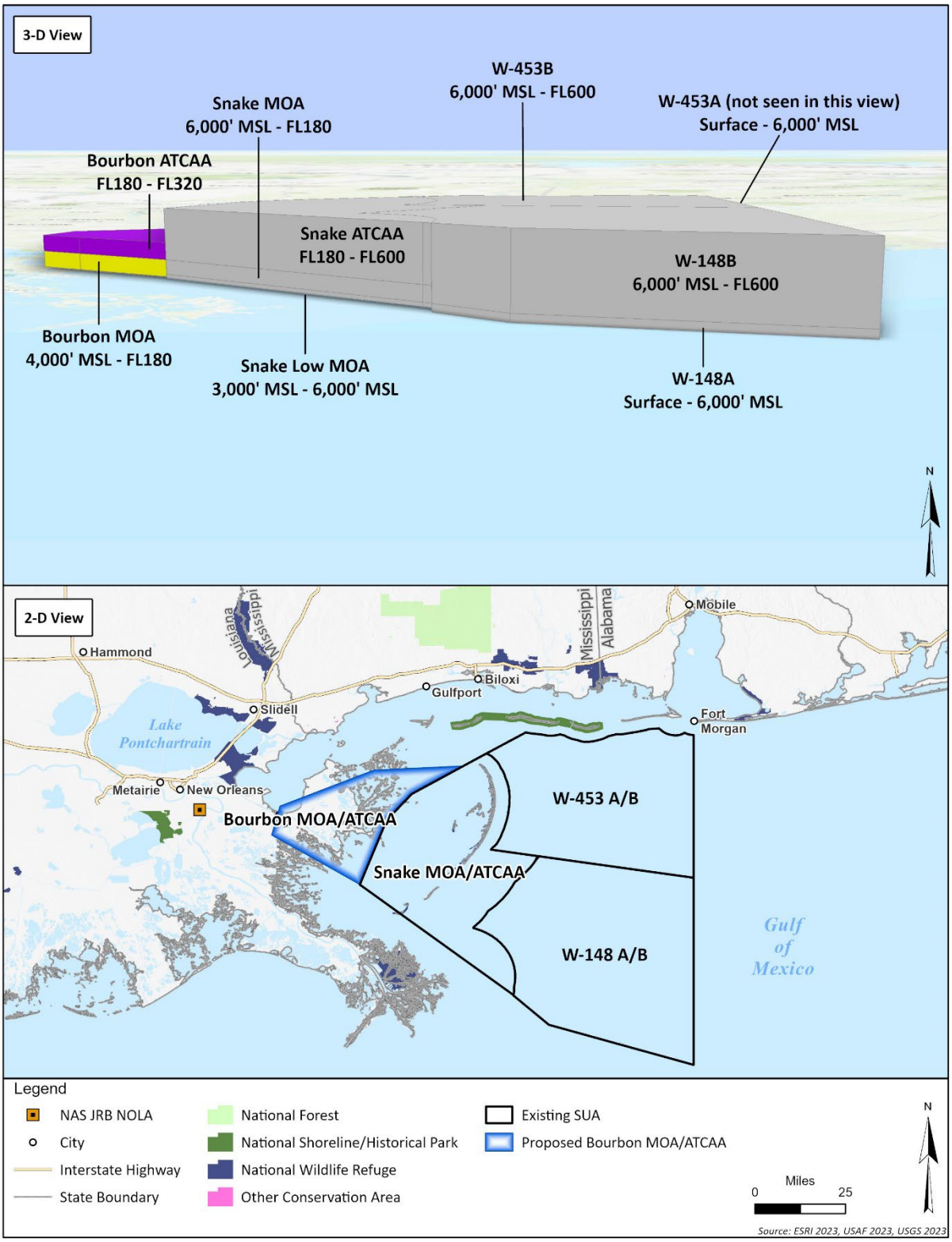

Figure 2.3-1 Proposed Bourbon MOA/ATCAA and Existing Adjacent SUA

The FAA and the Navy would sign a Letter of Agreement (LOA) to ensure that radio communications provide adequate coverage to provide service to both participants and nonparticipants; publish area navigation waypoints for use in circumnavigating the MOA; and establish recall procedures for weather, emergencies, and medivac aircraft.

2.3.2.1 Proposed Airspace Structure

The proposed Bourbon MOA/ATCAA would create a linkage to the Snake High MOA, Snake Low MOA, and Snake ATCAA and cover an area of approximately 480.7 NM^2. The proposed MOA/ATCAA would be located partially over St. Bernard Parish, and partially over the waters of the Gulf of Mexico. A description of the proposed Bourbon MOA/ATCAA is provided below.

- Designated Altitudes:
  - MOA – 4,000 feet mean sea level (MSL) up to, but not including Flight Level (FL) 180 (approximately 18,000 feet MSL)
  - ATCAA – FL180 to FL320. Upon request and FAA coordination, the ATCAA may be authorized up to FL500 for 15-minute functional check flights.
- Times of Use: 0800–1700 local time Monday through Friday; other times by Notice to Air Missions (NOTAM). Estimated airspace usage would be approximately 5 hours a day, 240 days a year.
- Controlling Agency: FAA, Houston Air Route Traffic Control Center (ARTCC).
- Using Agency: U.S. Navy, VFC-204, NAS JRB NOLA

2.3.2.2 Proposed Training Operations

Annual operations would be conducted within the Bourbon MOA/ATCAA up to 240 days per year, which is the current operations tempo for the adjacent existing SUA (5 days/week over 48 weeks/year). The airspace proposed for the Bourbon MOA/ATCAA is currently used to transition from NAS JRB NOLA to the current SUA (Snake MOA/ATCAA and Warning Areas). The number of aircraft using the airspace would be the same as current conditions, but instead of straight transition flights (lasting approximately 10–12 minutes depending on the aircraft), the airspace would be used for training flights (lasting approximately 30–60 minutes). Primary users of the Bourbon MOA/ATCAA would be VFC-204 and the Louisiana Air National Guard (LAANG), but other military users may include Navy, Air Force, and other Service aircraft. The user units and aircraft types vary widely in the existing SUA and the same aircraft variability would be expected within the Bourbon MOA/ATCAA. **Table 2.3-1** provides the existing sorties transiting the airspace and the proposed annual training sorties that would occur within the Bourbon MOA/ATCAA. A sortie is the takeoff, operation, and landing of one aircraft. The total is based on operations during the last 3 years (2021, 2022, and 2023) and interviews conducted with the expected primary users of the MOA/ATCAA. Operations would fluctuate year-to-year depending on the training mission, deployments, etc. Use of the new Bourbon MOA/ATCAA would not change existing airfield operations at NAS JRB NOLA.

Table 2.3-1 Existing and Proposed Annual Sorties[1] in Bourbon MOA/ATCAA

Aircraft	*Existing Sorties (Transit)*		*Proposed Sorties (Training)*	
	Sorties (Number)	*Time per Sortie (minutes)*	*Sorties (Number)*	*Time per Sortie (minutes)*
F-5	1,195	10	1,195	60
F-15	1,553	10	1,553	30
F-35	360	10	360	10–30[2]
F-18	353	10	353	10–30[2]
Other[3]	708	10-12	708	30
TOTAL	**4,169**	**718 hours**	**4,169**	**2,565 hours**

Notes: [1]A sortie is the takeoff, operation, and landing of one aircraft.
[2]About half of the F-35 and F-18 sorties are expected to transit through the new Bourbon MOA/ATCAA as they do currently to access the existing SUA (10 minutes); the other half would remain in the new MOA/ATCAA for training (30 minutes).
[3]Other aircraft could include various jets, cargo aircraft, helicopters, and unmanned aircraft.

Training operations in the Bourbon MOA/ATCAA would typically be scheduled for 1- to 1.5-hour blocks. The airspace would be activated 15 minutes prior (coordinated with FAA Houston ARTCC). While the airspace would typically be scheduled for 1- to 1.5-hour blocks, operations generally last less than 1 hour. The daily total of scheduled blocks is estimated to be up to 5 hours per day. Once training is complete, the airspace would be returned to the controlling agency (FAA Houston ARTCC).

Mission scenarios for aircraft utilizing the Bourbon MOA/ATCAA would be similar to those occurring in the existing adjacent SUA and include functional check flights, currency, basic fighter maneuvers, Fleet Replacement Squadron training/tactical intercepts, familiarization training, and participation in large scale exercises that would include multiple aircraft and use the connected SUA. Supersonic flight within the proposed MOA/ATCAA would be required for certain training scenarios. Within certain zones of the Bourbon MOA/ATCAA, supersonic flight would be restricted to certain altitudes as illustrated on **Figure 2.3-2**. Within a zone defined by an arc (shaded gray on **Figure 2.3-2**) extending 12 NM from latitude 29°49’23”N, longitude 089°36’30”W, supersonic flight would only be authorized above FL300 (in the ATCAA). Beyond this arc to the east, supersonic flight would be authorized at all altitudes of the Bourbon MOA/ATCAA (4,000 feet MSL to FL320). The authorization east of the arc would be consistent with the adjacent SUA in which the Navy authorizes supersonic operations without restrictions. Supersonic speed does not occur for the duration of the sortie, but rather one or more short intervals of approximately 30 seconds. In the Bourbon MOA/ATCAA, 3 percent of the total F-5 sorties (approximately 36 sorties) and 10 percent of the total F-15 sorties (approximately 155 sorties) would include supersonic speed.

Some training events may include the expenditure of chaff and flares, consistent with the adjacent SUA. Chaff and flares are the principal defensive countermeasures dispensed by military aircraft to avoid detection or attack by enemy air defense systems and keep aircraft from being successfully targeted by weapons. When pilots detect threats from these weapons, they must respond instantly and instinctively using appropriate countermeasures. Pilots must become proficient at using these countermeasures through training to establish these critical response patterns.

Figure 2.3-2 Proposed Authorized Supersonic Airspace

Each chaff cartridge measures 1-inch by 1-inch by 8-inches and remains on the aircraft after its contents are ejected. A cartridge contains a "bundle" of approximately 5 to 5.6 million chaff fibers (aluminum-coated silica) along with two 1-inch square by 0.125-inch-thick plastic end caps and a 1-inch by 1-inch felt spacer. Individual chaff fibers are approximately half the thickness of a very fine human hair and range in length from 0.3 to 1 inch or more. To put one strand of chaff in perspective, if a 1-inch-long strand of chaff were laid on this page, most readers would not be able to see the strand. When dispensed from aircraft, the bundle breaks apart to form an electronic "cloud" that interferes with the radar signal and temporarily hides the maneuvering aircraft from radar detection. The light fibers drift in the prevailing wind and ultimately settle on the surface where they readily degrade in soil or water. The plastic end caps and felt spacer fall to the ground as debris after being released from the aircraft. Representative chaff types include RR-180 and RR-188, which are training chaff that do not interfere with radar. A maximum of 10,000 chaff cartridges would be expended annually in the Bourbon MOA/ATCAA (the cartridge itself remains on the aircraft). Actual quantities are dependent on the type of training scenario being performed. The annual totals would fluctuate and likely be less than 10,000.

2.4 Alternatives Considered but not Carried Forward for Detailed Analysis

The following alternatives were considered, but not carried forward for detailed analysis in this EA as they did not meet the purpose and need for the project or satisfy the reasonable alternative screening factors presented in Section 2.2.

2.4.1 Conduct Flight Training in New SUA to the Southwest of NAS JRB NOLA

The Navy considered requesting that FAA establish a new block of SUA southwest of NAS JRB NOLA near the city of Houma in Terrebonne Parish that would have offered a closer entry point of 13 NM from NAS JRB NOLA, but it did not connect to existing offshore SUA (screening factor #3). Since this block of airspace would not connect to other SUA, it would need to be sized large enough to accommodate not only the VFC-204 mission profile but also large enough to support large scale exercises that include multiple aircraft. Given the amount of existing civil traffic in this area, establishing a new larger MOA in this location would conflict with civil aviation (screening factor #5) and thus would not be supported by FAA (screening factor #6). Also, being over land, a MOA in this area would have higher altitude restrictions for supersonic flight activity (screening factor #2). A new block of SUA to the southwest of NAS JRB NOLA large enough to accommodate individual and large scale exercises would not meet the reasonable alternative screening factors. Therefore, this alternative was considered but is not being carried forward for detailed analysis in the EA.

2.4.2 Conduct Flight Training in Existing SUA Offshore from Naval Air Station Key West

The Navy considered the use of existing SUA offshore from NAS Key West. This alternative would require pilots to travel to NAS Key West and conduct their training from that location rather than from their home air station. Fighter Squadron Composite 111 (VFC-111), a Navy Reserve adversary squadron, is based at NAS Key West and operates F-5N/F aircraft similar to those operated by VFC-204 out of NAS JRB NOLA. NAS Key West is surrounded on three sides by large expanses of SUA (i.e., W-465A/B/C and W-174A/B/C/D/E/F/G) that accommodate large operations, air-to-air combat training, air combat maneuvers, and air-to-air gunnery operations. Traveling to NAS Key West for training would increase transit time, increase fuel costs, and not offer a long-term training solution. This alternative is not carried forward for detailed analysis in the EA because it does not meet the reasonable screening factor of providing a closer entry point for SUA in order to increase training efficiency (screening factor #1).

2.4.3 Conduct Simulated Flight Training

The use of flight simulators are an essential part of the aircrew's flight training program. Flight simulators can provide training efficiencies (no transits required), and there are no airspace scheduling conflicts associated with simulated training. Simulators are currently used to the maximum extent possible and provide good skills training that cannot be replicated accurately and/or safely in the aircraft, such as engine-out training. However, the complete substitution of simulator training for flight training is not a viable alternative to the Proposed Action. Though simulation technology has provided increased realism over the years, simulators still lack the external environment realism, and the necessary level of fidelity or interoperability that provides pilots with airmanship, critical thinking, and seasoning under real-world flight conditions. Therefore, a simulated training alternative is not carried forward for detailed analysis in the EA because it does not meet the reasonable screening factor for the establishment of SUA for training to the VFC-204 mission profiles (screening factor #2).

3 Affected Environment and Environmental Consequences

This chapter presents a description of the environmental resources and baseline conditions that could be affected from implementing any of the alternatives and an analysis of the potential direct and indirect effects of each alternative.

All potentially relevant environmental resource areas were considered for analysis in this Environmental Assessment (EA). In compliance with the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, and Department of Navy and Federal Aviation Administration (FAA) guidelines, the level of detail used in describing a resource is commensurate with the anticipated level of potential environmental impact. In considering whether the effects of the Proposed Action are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action (40 Code of Federal Regulations [CFR] part 1501.3). "Significantly," as used in NEPA, requires consideration of both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests, and the locality. Significance varies with the setting of a proposed action. Intensity refers to the severity or extent of the potential environmental impact, which can be thought of in terms of the potential amount of the likely change.

This section includes a detailed discussion of airspace management, noise, biological resources, coastal zone, visual effects, cultural resources, and environmental justice.

The potential impacts to the following resource areas are considered to be negligible or non-existent so they were not analyzed in further detail in this EA:

Air Quality and Greenhouse Gases (GHGs): Air quality is defined by the concentration of various pollutants in the atmosphere. Criteria pollutants include ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, lead, inhalable particulate matter and fine inhalable particulate matter that are regulated under the Clean Air Act. The mixing height is the altitude at which the lower atmosphere will undergo mechanical or turbulent mixing. Pollutants that are released above the mixing height typically will not disperse downward and thus will have little or no effect on ground level concentrations of pollutants. For air quality assessments for aircraft operations, United States (U.S.) Environmental Protection Agency (USEPA) defines 3,000 feet above ground level (AGL) as an acceptable value for the mixing height (40 CFR part 93.153(c)(2)(xxii)). Aircraft from Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) currently transit through the proposed airspace at approximately 10,000–18,000 feet AGL to access the existing Special Use Airspace (SUA) to the east of the base (Snake Military Operations Area (MOA)/Air Traffic Control Assigned Airspace [ATCAA] and Warning Areas). The creation of the Bourbon MOA/ATCAA would allow the aircraft to fly as low as 4,000 feet mean sea level (MSL), which is approximately 4,000 feet AGL in this area. Therefore, pollutant emissions from existing and proposed aircraft activity would have no interaction with the lower atmosphere below the mixing height and there would be no effect to ground level concentrations of pollutants from the Proposed Action. Therefore, air quality was eliminated from further consideration.

GHGs are pollutants that specifically impact our climate by trapping heat in the lower atmosphere, resulting in global warming that contributes to climate change. GHG emissions result from the combustion of fossil fuels, and these gases reside throughout the altitude profile of the troposphere (up to about 11 miles at the New Orleans latitude). Therefore, consideration of impacts from GHGs include evaluation of the entire flight profile, not just those occurring below the mixing height (3,000 feet AGL).

The projected number of sorties would not change as compared to those occurring currently (see **Table 2.3-1**) meaning the number of transits to and from the airspace would not change, either. As shown in **Table 2.3-1**, the time spent in the Bourbon MOA/ATCAA would increase but this time is currently spent training in the adjacent SUA and would not represent an overall increase in training time in the region. There would be negligible change in the GHG emissions and the social cost of carbon associated with training operations in the region. Thus, GHGs were eliminated from further consideration.

Land Use: The proposed MOA/ATCAA would primarily overlie open waters, bayous, and marshes. Due to the limited amount of land above sea level, relatively few residential or commercial land uses underlie the proposed MOA/ATCAA. The anticipated noise from aircraft training activities would not be at a level that would be incompatible with existing land use (see **Section 3.2**, *Noise*). Therefore, this resource was eliminated from further consideration.

Farmlands: The Farmland Protection Policy Act regulates Federal actions with the potential to convert farmland to non-agricultural uses. There are no mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance below the proposed MOA/ATCAA nor would the Proposed Action result in conversion of any agricultural land. Therefore, there would be no impact to farmlands and the resource was eliminated from further consideration.

Geology, Topography, and Soils: The Proposed Action would be limited to flight training only and would not include any project components that would directly disturb soil. Therefore, there would be no impact on geology, topography, or soil resources associated with the Proposed Action and the resource was eliminated from further consideration.

Hazardous Materials, Solid Waste, and Pollution Prevention: The type of training that would occur in the proposed Bourbon MOA/ATCAA would be the same types of training that currently occur in adjacent SUA. There would be no change in the types or quantities of hazardous materials or solid waste or the storage and handling of these materials at NAS JRB NOLA. Therefore, there would be no impact on hazardous materials, solid waste, and pollution prevention associated with the Proposed Action and the resource was eliminated from further consideration.

Natural Resources and Energy Supply: A discussion of natural resources and energy supply is required under FAA NEPA guidance to determine a proposal's consumption of natural resources (such as water, asphalt, aggregate, wood, etc.) and use of energy supplies (such as coal for electricity, natural gas for heating, etc.). Consumption of natural resources and use of energy supplies would typically result from construction, operation, and maintenance activities. The Proposed Action would not involve extractive activities or changes in the energy supply. Energy supplies in the form of jet fuel would be consumed during training operations; however, the Navy does not anticipate an increase in fuel consumption as a result of the proposed action. Therefore, there would be no impact on natural resources and energy supply associated with the Proposed Action and the resource was eliminated from further consideration.

Public Health and Safety: The health and safety analysis includes consideration of any activities, occurrences, or operations that have the potential to affect the safety, well-being, or health of members of the public. A safe environment is one in which there is no, or optimally reduced, potential for death, serious bodily injury or illness, or property damage. The primary goal is to identify and prevent potential accidents or impacts on the general public and ensure there are no disproportionately high health and safety risks to children per Executive Order (EO) 13045. The proposed MOA/ATCAA would be directly adjacent to an existing SUA complex. As described in Section 1.5, due to the limited amount of land

above sea level, relatively few residential or commercial structures underlie the proposed MOA/ATCAA. Sparsely inhabited areas are only found underlying the very western point of the MOA/ATCAA boundary. The proposed use of the new MOA/ATCAA would include the same types of non-hazardous training activities that currently occur in the adjacent Snake MOA/ATCAA. Continued adherence to existing rules and operating procedures designed to ensure safety of flight and minimize risk to people and property on the ground would result in a negligible change in safety risk. The noise exposure from the proposed flight training in the new MOA/ATCAA would not be at a level that would result in noise-induced hearing loss (see **Section 3.2**, *Noise*). Completion of the FAA aeronautical analysis of the airspace proposal ensures the proposed MOA/ATCAA would be compliant with airspace regulations and the safe and efficient use of the navigable airspace. Therefore, there would be no change to public health and safety and the resource was eliminated from further consideration.

Socioeconomics: Socioeconomics is defined as the basic attributes and resources associated with the human environment (i.e., population, employment, income, and housing). There would be no change in personnel associated with the Proposed Action that would result in a change to population, employment, income, housing, schools, or public services. The main concern for socioeconomics resources would be the potential for economical impacts to recreational and commercial airspace users from the establishment of the new MOA/ATCAA. Potential impacts to non-participating Instrument Flight Rules (IFR) aircraft from restricted access to the MOA/ATCAA during activation periods would be negligible since the restricted access would be localized and temporary, last only for the duration of the training, and would be returned to the controlling agency once training is complete. The number of other users of the airspace that would be impacted and the additional flight time to avoid the active MOA/ATCAA would be minimal, see **Section 3.1**, *Airspace Management*. Publication of the Bourbon MOA on a sectional aeronautical chart would provide recreational and commercial airspace users the expected times of use allowing these users to plan their activities accordingly and further reduce the potential for socioeconomic impacts.

Water Resources: The Proposed Action would be limited to flight training activities only and would not have any impact on surface water, groundwater, or wetland resources. Floodplains are protected by EO 11988, *Floodplain Management*, which requires that each Federal agency "…take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains." The proposed MOA/ATCAA would not impact floodplain management. The use of chaff and flares in the new MOA/ATCAA would be consistent with the use in the adjacent SUA. Flares are fully consumed within the airspace within approximately 5 seconds of release. Chaff fibers are widely distributed with prevailing wind conditions and ultimately settle to the surface. The fibers are non-toxic and readily degrade in water and do not alter water quality. The potential effects of chaff and flares and the residual materials (i.e., end caps and felt spacers) have been studied in previous analyses with the overall conclusion that the chemical components of chaff and flares and the presence of residual materials do not impact water resources, particularly in insignificant quantities of these components (Department of the Air Force, 1997, 2011, 2023; Air National Guard, 2002). Therefore, water resources were eliminated from further consideration.

3.1 Airspace Management

The FAA manages all airspace within the U.S. and the U.S. territories. Airspace, which is defined in vertical and horizontal dimensions and by time, is considered to be a finite resource that must be managed for the benefit of all aviation sectors including commercial, general, and military aviation.

3.1.1 Regulatory Setting

Specific aviation and airspace management procedures and policies to be used by the Navy are provided in Commander, Naval Air Forces Manual 3710.7, *Naval Air Training and Operating Procedures Standardization General Flight and Operating Instructions*. The proposed MOA/ATCAA would be available to all Department of Defense (DoD) aircraft. Users would follow Service-specific policy for airspace management and procedures. Other applicable regulations regarding SUA management include specific FAA Orders.

FAA Order 1050.1F (issued July 16, 2015), *Environmental Impacts: Policies and Procedures*, provides FAA policy and procedures to ensure agency compliance with the requirements set forth in the CEQ regulations for implementing the provisions of the NEPA; Department of Transportation Order 5610.1C, *Procedures for Considering Environmental Impacts* (2012); and other related statutes and directives.

FAA Joint Order (JO) 7400.2P (issued April 20, 2023), *Procedures for Handling Airspace Matters*, provides procedures for administration of the airspace program. Specifically, Part 5, Chapter 21, prescribes specific policies and procedures to establish/designate airspace in the interest of national defense, security, and/or welfare. SUA is published annually in FAA JO 7400.10F, *Special Use Airspace* (current effective publication is February 16, 2024).

3.1.2 Affected Environment

The airspace proposed for the Bourbon MOA/ATCAA is currently used by military aircraft transiting from NAS JRB NOLA to existing SUA located east of the base. These military flights constitute over 4,000 flights (or sorties) per year (see **Table 2.3-1**) or approximately 330 flights per month. In addition to the military aircraft transiting the airspace, civil aircraft also use the airspace. FAA's Performance Data Analysis and Reporting System (PDARS) data was used to determine the existing civil traffic in the proposed MOA/ATCAA that could be potentially affected if the MOA/ATCAA is established. A review of the PDARS data determined that over the course of one month in 2023, 251 total civil flights traversed the airspace in the proposed Bourbon MOA (105 civil flights) and associated ATCAA (146 civil flights) during the proposed times of use of the MOA/ATCAA. Commercial air carriers were the most common aircraft transiting through the proposed MOA and ATCAA.

Within the proposed MOA, the most common direct flights were: Orlando International, Florida to/from Louis Armstrong New Orleans International, Louisiana; Fort Lauderdale, Florida to/from Louis Armstrong New Orleans International, Louisiana; Palm Beach International, Florida to/from Lakefront Airport, Louisiana; and Miami International, Florida to/from Louis Armstrong New Orleans International, Louisiana. Within the proposed ATCAA, only three direct flights occurred in the dataset: Cancun International, Mexico to/from Minneapolis Saint Paul, Minnesota; Fort Lauderdale International, Florida to/from Dallas Fort Worth, Texas; and Orlando International, Florida to/from Louis Armstrong New Orleans International, Louisiana.

3.1.3 Environmental Consequences

The analysis of airspace use considers the potential impact to civilian aircraft users from the establishment of SUA where there was not any previously. A detailed Airspace Impact Analysis is provided in **Appendix C**. That analysis describes the potential impacts to air carrier traffic and other non-military traffic (Air Taxi and General Aviation); the results of that analysis are summarized here. The impact to non-military users is described in terms of the additional travel time that would be required to avoid an active MOA/ATCAA. The Airspace Impact Analysis is based on 30 days of radar data from February 20 through March 22, 2023 (see **Appendix C** for methodology).

3.1.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing military aircraft overflight tempo, patterns, or use of the airspace. The area proposed as the Bourbon MOA/ATCAA would continue to be used by military aircraft transiting to existing SUA east of NAS JRB NOLA and civilian users as described in **Section 3.1.2**. There would be no change to existing airspace management.

3.1.3.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

Table 3.1-1 provides the military usage of the proposed Bourbon MOA/ATCAA. As shown, the expected activation of the MOA/ATCAA would be 5 hours during the published days of use. Potential impacts to civil traffic would only occur when the MOA/ATCAA is active.

Table 3.1-1 Military Usage of Proposed Bourbon MOA/ATCAA

Metric	*Bourbon MOA/ATCAA*	*Assumptions*
Number of Proposed Sorties[1]	4,169	Average sorties in adjacent Snake MOA/ATCAA
Hours per Year – Activation	1,200	Total activation time
Hours per Day – Activation	5	240 days per year
% Time Military Aircraft Present	~55%	Monday to Friday, 8:00 a.m.–5:00 p.m. Local

Note: [1]One sortie includes the takeoff, mission, and landing of one aircraft.
Legend: ~ = approximately; % = percent; ATCAA = Air Traffic Control Assigned Airspace; MOA = Military Operations Area

As shown in **Table 3.1-1**, the expected activation of the Bourbon MOA and ATCAA would be 5 hours during the published days of use. Potential impacts to civil traffic would only occur when the MOA is active. Impacts to civil aircraft operations are discussed for the MOA and ATCAA.

Commercial air carriers were the most common aircraft transiting through the proposed MOA and ATCAA. Impacts to rerouting civil traffic around the MOA would result in 1 to 8 minutes of additional travel time depending on the route. Impacts to rerouting civil traffic around the ATCAA would result in less than 1 minute to 6 minutes of additional travel time.

The numerous existing SUAs along the Gulf Coast make rerouting around the proposed MOA and ATCAA to the north impractical without incurring excessive route deviations. The Airspace Impact Analysis (**Appendix C**) concluded that the low count of civil traffic in the proposed Bourbon MOA/ATCAA is because civil traffic is already bound by the existing Snake High MOA/ATCAA, Snake Low MOA, and a large complex of Warning Areas to the east, and most traffic would likely already be routed to circumnavigate existing SUA. Thus, the establishment of the Bourbon MOA/ATCAA adjacent to this existing large complex would not have a significant impact on civil users or result in a change to airspace management.

3.2 Noise

Noise is unwanted sound that interferes with normal activities or otherwise diminishes the quality of the environment. Noise may be intermittent or continuous, steady or impulsive, stationary or transient. Stationary sources are normally related to specific land uses, e.g., housing tracts or industrial plants. Transient noise sources move through the environment, either along relatively established paths (e.g., highways, railroads, and aircraft flight tracks around airports), or randomly. There is wide diversity in responses to noise according to the type of noise and the characteristics of the sound source, the sensitivity and expectations of the receptor, the time of day, and the distance between the noise source (e.g., an aircraft) and the receptor (e.g., a person or animal).

The physical characteristics of noise and sound include its intensity, frequency, and duration. Sound is created by acoustic energy, which produces minute pressure waves that travel through a medium, like air, and are sensed by the eardrum, much like how ripples in water move when a stone is dropped into it. As the acoustic energy increases, the intensity or amplitude of these pressure waves increase, and the ear senses louder noise. The unit used to measure the intensity of sound is the decibel (dB). Sound intensity varies widely (from a soft whisper to a jet engine) and is measured on a logarithmic scale. Human hearing ranges from 0 dB (barely audible) to 120 dB, where physical discomfort is caused by the sound.

The frequency of sound is measured in cycles per second, or hertz (Hz). This measurement reflects the number of times per second the air vibrates from the acoustic energy. Low frequency sounds are heard as rumbles or roars, and high frequency sounds are heard as screeches. Sound measurement is further refined by "weighting." The normal human ear can detect sounds that range in frequency from about 20 Hz to 15,000 Hz, with the human ear most sensitive to frequencies in the 1,000 to 4,000 Hz range. Sound measurements are "A-weighted," and are indicated in terms of A-weighted decibels (dBA). A-weighting accounts for the frequency sensitivity of the human ear. The dBA is also appropriate for measuring continuous sounds. "C-weighting" is typically applied to impulsive sounds such as a sonic boom or ordnance detonation and indicated as C-weighted decibels (dBC).

3.2.1 Noise Metrics and Modeling Software

The word "metric" is used to describe a standard of measurement. Many different types of noise metrics have been developed to represent the effects of environmental noise.

The metrics supporting the assessment of noise from aircraft operations used in this EA are the A-weighted and C-weighted Day-Night Average Sound Level (DNL and CDNL, respectively), Maximum Sound Level (L_{max}), and Sound Exposure Level (SEL). Each metric is briefly explained below. As is done in many environmental documents, the "A" in dBA is dropped for brevity to refer to A-weighted sound levels. All sound levels presented in this document are A-weighted unless otherwise denoted as C-weighted or dBC.

The DNL is a cumulative noise metric that measures subsonic aircraft noise based on annual average daily aircraft operations. DNL is the DoD standard metric for modeling the cumulative noise exposure and assessing community noise impacts (DoD Instruction 4715.13, *Operational Noise Program*). DNL uses two time periods: daytime (acoustic day) and nighttime (acoustic night). Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m. local time. Based on the higher sensitivity to noise and associated annoyance during nighttime hours, a 10 dB penalty is assigned to single event sound levels that occur during acoustical nighttime. CDNL is a similar cumulative noise

metric to DNL with regards to acoustic day- and night-time periods and a nighttime 10 dB addition to single event sound levels; however, CDNL weighting focuses on the lower frequencies of sound levels associated with supersonic noise.

A common metric used to describe a single aircraft noise event is the maximum sound level, or L_{max}, measured in dB. L_{max} is the highest A-weighted sound level that occurs during the aircraft overflight. L_{max} describes the maximum level of a noise event but does not take into account its duration. The SEL, measured in dB, is a composite metric that represents both the magnitude and duration of an aircraft overflight. The SEL is a measure of the total acoustic energy in the event, but does not directly represent the sound level heard at any given time. The SEL is the building block for calculating DNL.

3.2.1.1 Relationship Between Noise and Annoyance

Annoyance, which is based on perception, represents the primary effect associated with aircraft noise. Generally, the louder the noise, the more annoyance it causes. Attitudinal surveys conducted over several decades show a consistent relationship between DNL and the percentages of groups of people who express various degrees of annoyance. This relationship was originally suggested by Schultz (1978). The updated relationship by Finegold et al. (1994) which does not differ substantially from the original, is the current federally-accepted form and is shown in **Table 3.2-1**. The Committee on Hearing, Bioacoustics, and Biomechanics (1981) developed the equivalent relationship between annoyance and CDNL from sonic booms. The relationship of annoyance to DNL and CDNL is presented in **Table 3.2-1**. While not a determination of significance, the calculated DNL and CDNL for the MOA/ATCAA addressed in this EA can be compared against **Table 3.2-1** to provide an estimate of the percentage of the population that would be "highly annoyed" by the noise. These data provide a perspective on the level of annoyance that might occur. The study results summarized in **Table 3.2-1** are based on outdoor noise levels.

Table 3.2-1 Relationship of Annoyance to DNL and CDNL

DNL (dB)	*Estimated Percentage of Population "Highly Annoyed"*	*CDNL (dB)*
45	.083	42
50	1.66	46
55	3.31	51
60	6.48	56
65	12.29	60
70	22.10	65

Note: Noise impacts on individuals vary as do individual reactions to noise. This is a general prediction of the percentage of the population potentially highly annoyed based on environmental noise surveys conducted around the world.
Legend: dB = decibel; DNL = A-weighted Day-Night Average Sound Level; CDNL = C-weighted Day-Night Average Sound Level
Sources: Department of Defense Noise Working Group (DNWG), 2009; Committee on Hearing, Bioacoustics, and Biomechanics, 1981; Finegold et al., 1994

3.2.1.2 Noise Induced Hearing Loss

Noise induced hearing loss risk has been extensively studied, with the consensus that populations exposed to noise greater than 80 dB DNL are at the greatest risk of potential hearing loss (DoD, 2009). Because no person or place would be exposed to noise levels greater than 80 dB DNL from the Proposed Action activities, noise induced hearing loss is not discussed further in this analysis.

3.2.1.3 Noise Modeling Software

The noise associated with aircraft operations can be subsonic or supersonic. Subsonic noise is noise generated by an aircraft's engines and airframe. This is the most familiar form of noise. Supersonic noise is the noise generated when an aircraft flies faster than the speed of sound and has the potential to create sonic booms. A sonic boom is the sound associated with shock waves generated when the aircraft travels at supersonic speeds.

Subsonic noise analysis is performed using the accepted Noisemap suite of noise modeling programs (Wyle, 1998; Wasmer Consulting, 2006). MR_NMAP is the specific program used to define noise levels within SUA associated with military aircraft operations (DoD, 2020). Military training within a MOA/ATCAA is dispersed throughout the confines of the MOA/ATCAA; as such, the software assumes an even distribution of noise across the entire airspace modeled and calculates a single DNL value. Therefore, noise contour results are not illustrated for aircraft noise in MOAs/ATCAAs.

Supersonic noise analysis is performed using the accepted noise modeling program BooMap (Blue Ridge Research and Consulting, 2021; DoD, 2020). This software is used to develop noise levels associated with military aircraft supersonic operations. Long-term military air combat training analysis shows that military aircraft typically operate in elliptical areas within the boundaries of the airspace when performing supersonic operations (Plotkin et al., 1992).

3.2.2 Regulatory Setting

The analysis of the acoustic environment involves consideration of many factors including the types, locations, and frequency of aerial operations, the classification of existing airspace, and the amount of air traffic using or transiting through a given area. This analysis quantifies the anticipated subsonic and supersonic noise from military aircraft activity within the existing and proposed airspace.

The USEPA has identified 55 dB DNL as a level that protects public health and welfare with an adequate margin of safety (USEPA, 1982). This means that 55 dB DNL is a threshold below which adverse noise effects are not expected to occur. According to the Federal Interagency Committee on Urban Noise (FICUN), noise exposure greater than 65 dB DNL is considered generally incompatible with residential, public use (i.e., schools), or recreational and entertainment areas (FICUN, 1980).

The U.S. Army Public Health Command indicates that 62 dB CDNL is the level at which one could expect a rise in annoyance similar to that of a DNL level of 65 dB for subsonic noise. Areas with less than 62 dB CDNL are considered compatible with residential and noise sensitive areas (U.S. Army Center for Health Promotion and Preventive Medicine, 2005).

Per FAA Order 1050.1F, a noise sensitive area is defined as an area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife and waterfowl refuges, and cultural and historical sites.

For airspace actions, FAA requires that an action proponent identify where noise will change by the following specified amounts in noise sensitive areas (FAA Order 1050.1F):

- For DNL 65 dB and higher: +/- DNL 1.5 dB (significant)
- For DNL 60 dB to <65 dB: +/- DNL 3 dB (reportable)
- For DNL 45 dB to <60 dB: +/- DNL 5 dB (reportable)

3.2.3 Affected Environment

Existing military operations in the airspace proposed as the Bourbon MOA/ATCAA are composed of transit flights from several types of aircraft from NAS JRB NOLA to the existing SUA in the east (Snake MOA/ATCAA and Warning Areas). The current subsonic noise exposure from these flights is low, estimated at 35 dB DNL with less than one daily event exceeding 65 dB SEL (**Table 3.2-2**). Based on this DNL, the Finegold (1994) analysis (see **Table 3.2-1**) predicts less than 0.83 percent of the population underlying the proposed Bourbon MOA/ATCAA is highly annoyed with the existing aircraft activity. There is currently no supersonic flight in the airspace proposed as the Bourbon MOA/ATCAA.

Table 3.2-2 DNL for Annual Military Aircraft Operations – Existing Conditions

Operations	*Airspace*	*DNL (dB)*	*Estimated Percentage of Population "Highly Annoyed"*	*Number of Daily Events >65 SEL*
Subsonic	Existing, uncharted	35	< 0.83	< 1

Legend: < = less than; > = greater than; dB = decibel; DNL = A-weighted Day-Night Average Sound Level; SEL = Sound Exposure Level

Source: Stantec 2024a,b,c

Land use under the airspace proposed as the Bourbon MOA/ATCAA consists primarily of uninhabitable swamp and marsh lands and intertidal waters. Single- and multi-family residences are present along rural areas of State Routes 46 and 624. Additionally, various recreational vehicle parks, marinas, lodging, and charter services are located along these highways. An historic property, Fort Proctor, is located beneath the proposed MOA/ATCAA. Both roadway and waterway vehicle operations would be the dominate noise source of the area, with the occasional military and civilian aircraft overflight.

3.2.4 Environmental Consequences

A detailed description of the methodology for determining noise impacts and a detailed noise assessment for this Proposed Action is provided in **Appendix D**. A summary of the results is provided in this section.

3.2.4.1 No Action Alternative

Under the No Action Alternative, a new permanent MOA/ATCAA would not be established; however, military aircraft from NAS JRB NOLA would continue to use the airspace during transit to and from the Snake MOA/ATCAA and other existing SUA. The current noise environment in the area proposed for the Bourbon MOA/ATCAA would remain unchanged and includes noise exposure from roadway and waterway vehicle operations and overflight by various types of military and civilian aircraft at various altitudes. The subsonic military aircraft noise level associated with the No Action Alternative would be the same as existing conditions presented in **Section 3.2.3** and **Table 3.2-2.**

3.2.4.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

The noise analysis used approved software to predict the DNL in the proposed MOA/ATCAA to compare against the USEPA, FICUN, and FAA thresholds described in **Section 3.2.2**. The Proposed Action includes both subsonic and supersonic activity from aircraft within the proposed MOA/ATCAA. While not a determination of significance, an estimate of the percentage of the population that would be "highly annoyed" by the noise from the resulting DNL and CDNL is also provided (see **Table 3.2-1**).

While DNL is the DoD standard metric for assessing noise impacts (DoD Instruction 4715.13, *Operational Noise Program*), supplemental metrics are used to provide more detailed noise exposure information for

the decision process and to improve communication with the public and stakeholders. Supplemental metrics are not intended to replace the DNL metric as the primary descriptor of cumulative noise exposure and anticipated significance of impacts, but rather are useful tools to supplement the impact information disclosed by the DNL metric. Thus, the noise analysis includes supplemental data for single events to better describe the "loudness" of individual aircraft overflights for the aircraft proposed to operate in the MOA/ATCAA at various power settings at the lowest possible altitudes (i.e., the floor of the MOA). These metrics are different from DNL and therefore, cannot be compared against **Table 3.2-1** to predict annoyance.

Cumulative Noise Metrics (DNL and CDNL)

Under the Preferred Alternative, the Bourbon MOA/ATCAA would be established and used for training Monday through Friday. **Table 3.2-3** shows the modeled DNL and CDNL for annual military aircraft operations within the proposed MOA/ATCAA. The subsonic noise level from aircraft operations within the proposed MOA/ATCAA would be 52 dB DNL. This level would not exceed 65 dB DNL, the significance threshold defined by FAA. Additionally, the noise level from aircraft operations within the proposed MOA/ATCAA would not exceed the USEPA's identified threshold of 55 dB DNL, a level below which adverse noise effects are not expected to occur. From a land use perspective and according to the FICUN, the FAA, the USEPA, and the Defense Centers for Public Health (formerly the U.S. Army Public Health Command), this level would be compatible with all land use types to include residential, public use (i.e., schools), recreational, and entertainment areas. Based on this DNL, the Finegold (1994) analysis (see **Table 3.2-1**) predicts less than 3.31 percent of the population would be highly annoyed by the subsonic noise within the proposed Bourbon MOA/ATCAA (**Table 3.2-3**), and less than one daily event would exceed 65 SEL.

Table 3.2-3 Proposed Noise Levels within Proposed Bourbon MOA/ATCAA

Operations	*Airspace*	*Noise Level (dB)*	*Estimated Percentage of Population "Highly Annoyed"*	*Number of Daily Events >65 SEL*
Subsonic	Bourbon MOA/ATCAA	52 DNL	< 3.31	< 1
Supersonic	Bourbon MOA/ATCAA[1]	34 CDNL	< 0.83	n/a
Supersonic	Bourbon MOA/ATCAA[2]	42 CDNL	0.83	n/a

Notes: [1]Supersonic operations within Bourbon MOA/ATCAA West (inside) of the 12 NM arc above 30,000 feet MSL.
[2]Supersonic operations within Bourbon MOA/ATCAA East (outside) of the 12 NM arc above 4,000 feet MSL.

Legend: < = less than; > = greater than; ATCAA = Air Traffic Control Assigned Airspace; CDNL = C-weighted Day-Night Average Noise Level; dB = decibel; DNL = A-weighted Day-Night Average Noise Level; MOA = Military Operations Areas; n/a = not applicable; SEL = Sound Exposure Level

Source: Stantec 2024a,b,c

The projected DNL for the proposed subsonic aircraft activity would increase by 17 dB DNL over the No Action Alternative, which would be a reportable increase in some noise sensitive areas in accordance with FAA Order 1050.1F. As noted previously, the majority of the MOA/ATCAA is located over water, swamps, and marshes. There are some residences, recreational businesses, and an historic property beneath the proposed MOA/ATCAA, but these are all located along the western boundary of the proposed MOA/ATCAA where training operations would be infrequent. There are no wilderness areas, religious, or educational facilities. Biological resources and cultural resources beneath the MOA/ATCAA are addressed specifically in **Sections 3.3 and 3.6**, respectively; however, no significant impacts to any of these resources were identified.

Supersonic aircraft operations within the proposed MOA/ATCAA would operate below 62 dB CDNL and be compatible with all land use types according to the standards published by the U.S. Army Public Health Command. Further, supersonic aircraft operations would not directly occur over residences or businesses along State Route 46 or 624 at an altitude below 30,000 feet MSL. Based on these CDNL values, the Committee on Hearing, Bioacoustics, and Biomechanics (1981) (see **Table 3.2-1**) predicts approximately 0.83 percent of the population would be highly annoyed by the noise from supersonic operations within the proposed Bourbon MOA/ATCAA. Refer to **Figure 2.3-2** for an illustration of authorized supersonic altitudes; inside of the arc shown, supersonic operations would be above 30,000 feet MSL and outside of the arc shown, supersonic operations would be above 4,000 feet MSL.

Single Event Metrics

The noise analysis calculated single event metrics (i.e., a single overflight directly overhead) for each of the military fighter aircraft that would use the proposed MOA/ATCAA. These metrics were calculated for each aircraft at afterburner at the lowest possible altitude within the proposed MOA/ATCAA, that is, the floor of the MOA. In general, during training events, aircraft do not travel substantial distances on the floor of the MOA, but rather start at the floor and quickly climb to higher altitudes. It is estimated that fighter aircraft would operate in the lowest altitude band (4,000 to 5,000 feet MSL) approximately 5 percent of the full sortie duration and of that time only 1 percent would be at afterburner power (see **Appendix D**, *Noise Report*, for the aircraft operation assumptions by aircraft). **Table 3.2-4** provides only the loudest possible event within the proposed MOA/ATCAA to provide additional perspective on what an observer on the ground may experience (see **Appendix D** for the full results). An F-15, F-18, or F-35 in afterburner at 4,000 feet MSL results in an L_{max} of 105 dBA. At 4,000 feet MSL, a direct overflight by any of the aircraft that would be using the airspace would be noticeable but would typically last only a few seconds. These noise levels are estimated for an observer being outdoors at the time of the overflight. Being indoors with windows closed would account for a 25 dB reduction in sound level (15 dB reduction for open windows) which would lessen noise exposure for a direct overflight. Experiencing such an overflight would be infrequent given the number of proposed sorties, the fact that aircraft would spend very little time at these low altitudes during the training scenarios, and the limited land area beneath the MOA/ATCAA. Additionally, military aircraft observe a 5 NM standoff distance from the internal edge of the MOA/ATCAA boundary to ensure they remain within the MOA/ATCAA during training. All residences, businesses, and Fort Proctor are within the 5 NM standoff distance which further reduces the possibility of direct military aircraft overflight.

Table 3.2-4 Maximum Sound Level for Single Overflight within Proposed Airspace

Aircraft	*Lowest Altitude*	*Maximum Sound Level (L_{max}) (dBA)*
F-5E with afterburner	4,000 feet MSL	98
F-15C with afterburner	4,000 feet MSL	105
F-18E/EA-18[1] with afterburner	4,000 feet MSL	105
F-35B with afterburner	4,000 feet MSL	105

Note: [1]F-18E used as aircraft surrogate to model EA-18.
Legend: dBA = A-weighted decibels; L_{max} = Maximum Sound Level; MSL = mean sea level
Source: Stantec 2024a,b,c

Normally, the most sensitive components of a structure to noise are the windows and, infrequently, the plastered walls and ceilings. Conservatively, only sound lasting more than 1 second above a sound level of 130 dB is potentially damaging to structural components (Committee on Hearing, Bioacoustics, and Biomechanics, 1977). Noise-induced structural vibration may also cause annoyance to dwelling

occupants because of induced secondary vibrations or rattling of objects within the dwelling. Windowpanes may also vibrate noticeably when exposed to high levels of airborne noise. Sound levels from normal aircraft operations are typically much lower than 130 dB. Even sound from low-altitude flyovers of heavy aircraft do not reach the potential for damage (Sutherland et al., 2000). Since the highest L_{max} of a single overflight under this proposal would be 105 dB, structural damage and secondary vibration impacts are not expected to occur with this Proposed Action.

In summary, subsonic aircraft operations and the resulting cumulative noise (DNL) within the proposed Bourbon MOA/ATCAA would be below the significance level established by the FAA. The projected increase in DNL would be a reportable increase for noise sensitive receptors according to FAA significance criteria; however, the few noise sensitive receptors that exist beneath the MOA/ATCAA are located along the western boundary of the MOA within the standoff distance. It would be rare for any of these receptors to experience a low-level direct overflight. The DNL is also below the level defined by USEPA (55 dB DNL) to protect public health and is at a level defined by FICUN as compatible with all land uses. The percentage of the population predicted to be highly annoyed by the cumulative subsonic noise based on the Finegold (1994) analysis would be low (<3.31 percent). Direct overflights at lower altitudes (4,000 feet MSL), while noticeable, would be rare and typically last for only a few seconds or less. Structural damage or secondary vibration impacts are not expected to occur based on the maximum sound exposure. An individual location is not expected to experience a low-level direct overflight on a routine basis since aircraft operations would be distributed over a wide area.

Supersonic aircraft operations and resulting cumulative noise within the Proposed Bourbon MOA/ATCAA would be below 62 dB CDNL, compatible with all land uses and sensitive receptors pursuant to U.S. Army Public Health Command standards. Based on the CDNL value, the Committee on Hearing, Bioacoustics, and Biomechanics predicts a low percentage of the population (<0.83) would be highly annoyed. As such, there would be no significant impacts due to noise from the Proposed Action flight operations within the Bourbon MOA/ATCAA. The noise from the proposed aircraft operations could impact other resource areas such as biological resources, cultural resources, and environmental justice. Those impacts are addressed in their respective sections of this document.

3.3 Biological Resources

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to generally as vegetation, and animal species are referred to generally as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal. For the Proposed Action, biological resources are limited to wildlife species that may be impacted by aircraft operations in the proposed MOA/ATCAA.

3.3.1 Regulatory Setting

Special status species, for the purposes of this assessment, are those species listed as threatened or endangered under the federal Endangered Species Act (ESA) and species afforded special protection under the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA).

The purpose of the ESA is to conserve the ecosystems upon which threatened and endangered species depend and to conserve and recover listed species. Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration (NOAA) Fisheries also known as National Marine Fisheries Service, as appropriate, to ensure that any action the agency (i.e., the Navy or FAA) authorizes, funds, or carries out is not likely to

jeopardize the continued existence of any federally-listed threatened or endangered species, or result in the destruction or adverse modification of critical habitat.

The MBTA protects native bird species by prohibiting the take of migratory birds. EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, requires federal agencies to take actions to promote the conservation of migratory bird populations. Under the MBTA, it is unlawful by any means or in any manner to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, [or] possess migratory birds or their nests or eggs at any time, unless permitted by regulation. The 2003 National Defense Authorization Act gave the Secretary of the Interior authority to prescribe regulations to permit the Armed Forces to incidentally take migratory birds during approved military readiness activities without violating the MBTA. The final rule authorizing the DoD to take migratory birds in such cases includes a requirement that the Armed Forces must confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate adverse effects of the proposed action if the action has a significant negative effect on the sustainability of a population of a migratory bird species.

In addition to the MBTA, bald and golden eagles are protected under the BGEPA (16 U.S. Code [U.S.C.] section 668). The Act states that no one, without a permit issued by the Secretary of the Interior, may take bald or golden eagles, including their parts, nests, or eggs. Take is defined as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." In addition, BGEPA further defines disturbance as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. section 1801 et seq) provides for the conservation and management of fisheries. Under the Act, essential fish habitat consists of the waters and substrate needed by fish to spawn, breed, feed, or grow to maturity.

The Marine Mammal Protection Act (MMPA) (16 U.S.C. section 1361 et seq) prohibits any person or vessel from taking marine mammals in the U.S. or the high seas without authorization. The MMPA defines take to mean "to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill any marine mammal."

3.3.2 Affected Environment

The affected environment for this EA includes the protected species potentially occurring beneath the proposed Bourbon MOA/ATCAA.

3.3.2.1 ESA Protected Species

Federally ESA-listed wildlife species with the potential to occur below the Bourbon MOA/ATCAA are presented in **Table 3.3-1**. This list was generated from the USFWS Information for Planning and Consultation tool (USFWS, 2024a) (**Appendix E**). The table provides the USFWS listing status, presence of critical habitat beneath proposed airspace, and description of general habitat for these species.

Table 3.3-1 Federally Listed Species Beneath the Proposed Bourbon MOA/ATCAA

Species	*USFWS Status*	*Critical Habitat*	*Habitat*
Fish			
Gulf Sturgeon *Acipenser oxyrinchus desotoi*	Threatened	Yes	Gulf sturgeons are anadromous fish and migrate from saltwater to large coastal rivers to spawn during the warmer months. This species spends most of its life in freshwater rivers (USFWS and Gulf States Marine Fisheries Commission, 1995). Gulf sturgeons and critical habitat are located along the estuaries and coast of Louisiana under the MOA/ATCAA.
Giant manta ray *Mobula birostris*	Threatened	No	The species has been observed in estuarine waters near oceanic inlets. They may occur in water depths from less than 10 meters to over 1,000 meters. They use sandy bottom habitat and seagrass beds, as well as shallow reefs, and the ocean surface both inshore and offshore.
Reptiles			
Hawksbill Sea Turtle *Eretmochelys imbricata*	Endangered	No	In the U.S., hawksbill sea turtles are found off the coast in the Gulf of Mexico from southern Texas to southern Florida. This species nests on sandy beaches globally in the subtropics and tropics and migrates among coastal waters (USFWS, 2013).
Loggerhead Sea Turtle *Caretta caretta*	Threatened	No	In the U.S., loggerhead sea turtles occur along the coast of the Gulf of Mexico and the Atlantic coast. The population that occurs in Louisiana is the Northwest Atlantic Ocean DPS (USFWS, 2024b). Females lay eggs on sandy beaches.
Leatherback Sea Turtle *Dermochelys coriacea*	Endangered	No	The leatherback sea turtle may be found off the coast of most of the continental U.S., including Louisiana. This species nests on beaches and shorelines with a variety of substrate (USFWS, 2020).
Kemp's Ridley Sea Turtle *Lepidochelys kempii*	Endangered	No	Kemp's ridley sea turtles are found along the Gulf coast, including Louisiana, as well as the Atlantic coast from Georgia to Maryland. Major nesting beaches are mainly found in Mexico, Texas, Alabama, and Florida (USFWS, 2011, 2015).
Green Sea Turtle *Chelonia mydas*	Threatened	No	The green sea turtle is found globally in subtropical and temperate waters but may be found as far north as southern Alaska. The population that occurs off the coasts of Louisiana is the North Atlantic DPS (USFWS, 2024f). Major nesting beaches of this DPS are found in Florida, and smaller nesting sites occur in the U.S. Virgin Islands, Puerto Rico, Georgia, South Carolina, and North Carolina (NOAA Fisheries, 2024)

Species	*USFWS Status*	*Critical Habitat*	*Habitat*
Birds			
Rufa Red Knot *Calidris cantus rufa*	Threatened	No	The rufa red knot migrates from coastal marine environments to the northern Arctic. During the nonbreeding season, red knots are found in coastal marine environments like coastal Louisiana where they forage along sandy beaches, lagoons, saltmarshes, eelgrass beds, and mangrove swamps (Cornell University, 2024a).
Piping Plover *Charadrius melodus*	Threatened	No	Piping plovers are found on bare shorelines and beaches of rivers, lakes, and coasts with little vegetation or disturbance and spend the nonbreeding season along the Gulf Coast, including Louisiana (Cornell University, 2024b).
Eastern Black Rail *Laterallus jamaicensis* ssp. *jamaicensis*	Threatened	No	The eastern black rail may be found year-round along the Gulf Coast of Louisiana. This species is elusive but may be found in dense marshes (Cornell University, 2024c).
Mammals			
Tricolored Bat *Perimyotis subflavus*	Proposed Endangered	No	The tricolored bat roost in caves, abandoned mines, and culverts and forages for insects during warm nights. In the spring through fall, this species is found in forested habitats, and it hibernates during winter in caves and abandoned mines (USFWS, 2024c).
West Indian Manatee *Trichechus manatus*	Threatened	No	The West Indian manatee is found along the Gulf of Mexico and Atlantic coasts as well as in the Caribbean. This species grazes on sea grasses and other aquatic plants in warm coastal waters. Manatees require access to freshwater habitat to stay hydrated and are therefore found near freshwater outlets (LDWF, 2024a).
Invertebrates[1]			
Monarch Butterfly *Danaus plexippus*	Candidate	No	Monarch butterflies migrate from central Mexico through Louisiana to the northern U.S. annually. Monarchs may pass through the low airspace beneath the MOA during migration.

Note: [1]Due to the nature of the Proposed Action, no effects to invertebrates are anticipated. Therefore, the monarch butterfly is not carried forward for analysis.

Legend: ATCAA = Air Traffic Control Assigned Airspace; DPS = Distinct Population Segment; LDWF = Louisiana Department of Wildlife and Fisheries; MOA = Military Operations Area; NOAA = National Oceanic and Atmospheric Administration; U.S. = United States; USFWS = United States Fish and Wildlife Service

Sources: Cornell University, 2024a,b,c; LDWF, 2024a; USFWS and Gulf States Marine Fisheries Commission, 1995; NOAA Fisheries 2024; USFWS 2011, 2013, 2020, 2024a-f

Gulf Sturgeon (Acipenser oxyrinchus desotoi). The gulf sturgeon was listed as threatened under the ESA on September 30, 1991 (56 *Federal Register* 49653). Gulf sturgeons and its critical habitat are located along the estuaries and coast of Louisiana under the MOA/ATCAA. Gulf sturgeons are anadromous fish and migrate from saltwater to large coastal rivers to spawn during the warmer months. This species spends most of its life in freshwater rivers, can grow up to 9 feet in length and weigh up to 300 pounds (USFWS and Gulf States Marine Fisheries Commission, 1995).

Giant manta ray (*Mobula birostris*). The giant manta ray was listed as threatened under the ESA on January 22, 2018 (83 *Federal Register* 2916). NOAA Fisheries determined that there are currently no identifiable physical or biological features that are essential to conservation of the giant manta ray within areas under U.S. jurisdiction, and therefore there are no areas that meet the definition of critical habitat for the species. Giant manta rays are considered seasonal visitors to productive coastlines.

Hawksbill Sea Turtle (Eretmochelys imbricata). The hawksbill sea turtle was listed as endangered under the ESA on June 2, 1970 (35 *Federal Register* 8491). Hawksbill sea turtles are found off the coast in the Gulf of Mexico from southern Texas to southern Florida in the U.S., and tropical waters around the world. This species nests on sandy beaches globally in the subtropics and tropics and migrates among coastal waters (USFWS, 2013). Hawksbill sea turtles eat mollusks, sea urchins, fish, algae, and crustaceans.

Loggerhead Sea Turtle (Caretta caretta). The loggerhead sea turtle was originally listed as threatened on July 28, 1978 (43 *Federal Register* 32800) and in 2011, the USFWS determined that the loggerhead sea turtle exists in nine distinct population segments (DPS) (76 *Federal Register* 58868). The DPS that occurs off the Louisiana coast is the Northwest Atlantic Ocean DPS, and this DPS was kept listed as threatened. Other DPS are listed as endangered. Loggerhead sea turtles occur along the coast of the Gulf of Mexico and the Atlantic coast. Females lay eggs on sandy beaches and this species uses its large beak to eat crustaceans and hard-shelled prey (USFWS, 2024b). Mean straight carapace length of adults in the southeastern U.S. is approximately 36 inches and average weight is about 250 pounds (USFWS, 2024b).

Leatherback Sea Turtle (Dermochelys coriacea). The leatherback sea turtle was listed as endangered under the ESA on June 2, 1970 (35 *Federal Register* 8491). This species is found off the coast of most of the continental U.S., including Louisiana. Leatherback sea turtles nest on beaches and shorelines with a variety of substrate (USFWS, 2020). The leatherback sea turtle is the largest sea turtle and can reach up to 8 feet in length and weigh up to 2,000 pounds. This species is also the most migratory sea turtle and is found all over the world.

Kemp's Ridley Sea Turtle (Lepidochelys kempii). The Kemp's Ridley sea turtle was listed as endangered under the ESA on December 2, 1970 (35 *Federal Register* 18319). The Kemp's Ridley sea turtle is the smallest sea turtle and reaches only about 2 feet in length and weighs up to 100 pounds. Females come onshore to nest while males, after hatching, spend their entire life in the ocean. This species eats crustaceans, clams, jellyfish, and fish. This species is found along the Gulf coast, including Louisiana, as well as the Atlantic coast from Georgia to Maryland. Major nesting beaches are mainly found in Mexico, Texas, Alabama, and Florida (USFWS, 2011, 2015).

Green Sea Turtle (Chelonia mydas). The green sea turtle North Atlantic DPS was listed as threatened on April 6, 2016 (81 *Federal Register* 20058). The green sea turtle is herbivorous, consuming seagrasses and algae, and is the largest hard-shelled sea turtle (NOAA Fisheries, 2024). They occur throughout the world and are split into 11 DPS. In the U.S., this species is primarily found nesting in the Hawaiian Islands, the U.S. Pacific Island territories, Puerto Rico, the Virgin Islands, and Florida. Small nesting areas also occur in Georgia, South Carolina, North Carolina, and Texas (NOAA Fisheries, 2024).

Rufa Red Knot (Calidris cantus rufa). The rufa red knot was listed as threatened under the ESA on January 12, 2015 (79 *Federal Register* 73705). The red knot migrates from coastal marine environments, such as the shores of Louisiana, to the northern Arctic where they nest on tundra slopes. During migration and overwintering, red knots are found in coastal marine environments where they forage along sandy beaches, lagoons, saltmarshes, eelgrass beds, and mangrove swamps. Rufa red knots have

been recorded around the estuaries and islands off the coast of New Orleans (Cornell University, 2024a) during the nonbreeding season and are likely to pass through the low airspace beneath the MOA floor.

Piping Plover (Charadrius melodus). The piping plover (Atlantic Coast and Northern Great Plains populations) was listed as threatened on December 11, 1985 (50 *Federal Register* 50726). The piping plover nests along shores in the Northeast as well as along lakeshores, rivers, and wetlands in the Great Lakes and northern Great Plains. Piping plovers nest in sandy areas with sparse vegetation and forage along beaches, mudflats, and sandflats. This species has been recorded along the Gulf Coast of Louisiana during the nonbreeding season (Cornell University, 2024b) and is likely to pass through the low airspace beneath the MOA floor.

Eastern Black Rail (Laterallus jamaicensis ssp. *Jamaicensis).* The eastern black rail was listed as threatened under the ESA on October 8, 2020 (85 *Federal Register* 63764). The eastern black rail may be found year-round along the Gulf Coast of Louisiana. This species is elusive and rare but may be found in dense marshes. The eastern black rail forages in shallow water in marshes, wet meadows, salt marshes, and impounded wetlands where they prey on small aquatic invertebrates (Cornell University, 2024c). This species is highly vulnerable to climate change and changing water levels as well as destruction of wetlands and natural shorelines (USFWS, 2024d).

Tricolored Bat (Perimyotis subflavus). The tricolored bat was proposed to be listed as an endangered species on September 14, 2022 (87 *Federal Register* 56381). The tricolored bat was once a common species in the eastern and central U.S., but populations have been decimated due to white-nose syndrome which has resulted in an estimated 90 percent decline in affected colonies (USFWS, 2024c). During the winter, tricolored bats roost in caves, abandoned mines, and culverts near roads. During the spring through fall, this species is found in forested habitats where they roost in hardwood trees, pine trees, and Spanish moss, as well as some human-built structures (USFWS, 2024c). Tricolored bats forage around tree-top height often over waterways and forest edges at night for insects (Davis and Mumford, 1962; USFWS, 2021) and are found throughout Louisiana including the shoreline (USFWS, 2024c).

West Indian Manatee (Trichechus manatus). The West Indian manatee was originally listed as an endangered species under the ESA on March 11, 1967 (32 *Federal Register* 4001) but was downlisted to threatened in 2017 (82 *Federal Register* 16668). The West Indian manatee is found along the Gulf of Mexico, Atlantic coasts, and the Caribbean. This species grazes on sea grasses and other aquatic plants in warm coastal waters. West Indian manatees require access to freshwater habitat to stay hydrated and are therefore found near freshwater outlets in ocean habitats, such as river estuaries (Louisiana Department of Wildlife and Fish [LDWF], 2024a). This species often freely ranges between marine and freshwater habitats that provide warm water and can often be found near industrial sites that expel warm water (USFWS, 2024d). Manatee populations are generally stable but experience human-related threats including watercraft, habitat destruction, and climate change (USFWS, 2024d).

3.3.2.2 MBTA and BGEPA Protected Species

The migratory bird species potentially occurring beneath the proposed Bourbon MOA/ATCAA are listed in **Table 3.5-2**. This list also includes the bald eagle (*Haliaeetus leucocephalus)* that is protected by the BGEPA. Not all the migratory bird species breed in this area and the breeding timeframe for those that do varies greatly throughout the year.

Table 3.5-2 Migratory Birds Beneath the Proposed Bourbon MOA/ATCAA

Bird	***Breeding Season***
American Oystercatcher (*Haematopus palliates*)	April 15 to August 31
Bald Eagle (*Haliaeetus leucocephalus)*	September 1 to July 31
Black Skimmer (*Rynchops niger*)	May 20 to September 15
Brown Pelican (*Pelecanus occidentalis*)	January 15 to September 30
Chimney Swift (*Chaetura pelagica*)	March 15 to August 25
Common Loon (*Gavia immer*)	April 15 to October 31
Gull-billed Tern (*Gelochelidon nilotica*)	May 1 to July 31
King Rail (*Rallus elegans*)	May 1 to September 5
Lesser Yellowlegs (*Tringa flavipes*)	Breeds elsewhere
Magnificent Frigatebird (*Fregata magnificens*)	Breeds elsewhere
Marbled Godwit (*Limosa fedoa*)	Breeds elsewhere
Painted Bunting (*Passerina ciris*)	April 25 to August 15
Prothonotary Warbler (*Protonotaria citrea*)	April 1 to July 31
Red-breasted Merganser (*Mergus serrator*)	Breeds elsewhere
Reddish Egret (*Egretta rufescens*)	March 1 to September 15
Ring-billed Gull (*Larus delawarensis*)	Breeds elsewhere
Royal Tern (*Thalasseus maximus*)	April 15 to August 31
Ruddy Turnstone (*Arenaria interpres*)	Breeds elsewhere
Sandwich Tern (*Thalasseus sandvicensis*)	April 25 to August 31
Short-billed Dowitcher (*Limnodromus griseus*)	Breeds elsewhere
Swallow-tailed Kite (*Elanoides forficatus*)	March 10 June 30
Willet (*Tringa semipalmata*)	April 20 to August 5
Wilson's Plover (*Charadrius wilsonia*)	April 1 to August 20

Legend: ATCAA = Air Traffic Control Assigned Airspace; MOA = Military Operations Area
Source: USFWS, 2024a

3.3.3 Environmental Consequences

3.3.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing military aircraft overflight tempo. Military flights from NAS JRB NOLA would continue to transit the airspace to access existing SUA to the east. There would be no change in impacts to biological resources.

3.3.3.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

Under the Proposed Action, the new Bourbon MOA/ATCAA would be established to accommodate required flight training activities for squadrons stationed at NAS JRB NOLA. The Proposed Action could have potential impacts to ESA protected species, migratory birds and bald eagles from the use of chaff and flares and noise disturbance. Flight training activities also present a Bird/Wildlife Aircraft Strike Hazard (BASH) risk.

The Navy completed informal consultation with the USFWS and NOAA Fisheries concerning the potential impacts to species protected under ESA, MBTA, and BGEPA. The Navy received concurrence on the findings described in this section from the USFWS on October 21, 2024 and from NOAA Fisheries on February 27, 2025. Correspondence and documentation associated with these consultations are provided in **Appendix E**.

Potential Impacts from Chaff and Flares

Potential impacts from chaff and flares could occur from the introduction of chaff fibers into the environment, distribution of residual materials in the form of debris, and potential for wildfire from flare usage. Chaff is made of aluminum coated silica fibers. The chaff concentrations that animals could be exposed to following the release of multiple cartridges (e.g., following a single day of training) depends on several variable factors. Specific release points are not recorded and tend to be random, and chaff dispersion in air depends on prevailing atmospheric conditions. Chaff fibers would drift in prevailing winds and ultimately land on the ground or water beneath the MOA/ATCAA. Chaff fibers expended over water would be expected to float on the sea surface for some period, depending on wave and wind action. The individual chaff fibers would be dispersed by sea currents as they float and slowly sink toward the bottom. Residual materials from chaff and flares include plastic end caps, felt spacers, and plastic pistons (see **Section 2.3.2.2**). These materials land on the ground or sink to the bottom of aquatic environments.

Under the Proposed Action, up to 10,000 chaff cartridges and 10,000 flare cartridges would be expended annually in the MOA/ATCAA. Based on these annual totals, approximately one piece of residual material would occur per 5 acres of area on average. This is assuming even distribution of residual materials, and likely there would be some grouping of residual material. However, the overall number of chaff and flare residual material reaching the ground and ocean would be small and would be scattered in a large area.

Critical habitat for the gulf sturgeon occurs under the MOA/ATCAA. Residual materials from chaff and flare use could land in critical habitat, but these materials would be widely distributed throughout the MOA/ATCAA as described above and are not expected to collect in any substantial quantity in a single location. The materials themselves are benign and would not impact water or sediment quality. Therefore, this critical habitat would experience no effect from the Proposed Action.

Toxicity of Chaff

There have been no observed toxicological effects of chaff on terrestrial or aquatic organisms, even when subject to higher concentrations than would occur under this Proposed Action (Department of the Air Force, 1997, 2011, 2023). Chaff fibers in an aquatic environment have not been found to significantly increase the concentration of any toxic aluminum constituents in sediments (Department of the Air Force, 1997). Concentrations of chaff in test environments were not found to result in a significant change in mortality to a variety of marine organisms in the Chesapeake Bay area; no effect was seen in marine organisms exposed to concentrations of 10 times and 100 times the expected environmental exposure (Department of the Air Force, 2023).

Potential Impacts from Strike

The relatively slight force of a small piece of plastic (residual materials) striking any animal would not be expected to have any effect (Department of the Air Force, 2011). The wide distribution of these materials throughout the MOA/ATCAA would further reduce the likelihood that any animal would be struck by residual materials.

Potential Impacts from Ingestion

Terrestrial animals, to include domestic animals, have not been observed ingesting chaff or residual materials. In a study on cattle, the animals were only found ingesting chaff after it was coated in molasses, and it passed through the digestive system without harm (Department of Air Force, 1997).

Selective ingestion of chaff filaments or residual materials by aquatic animals is not likely, but inadvertent consumption could occur during normal feeding activities (Department of the Air Force, 1997). The primary concern would be disruption of digestive processes such as blockage of the system. Like with terrestrial animals, no reports were found documenting ingestion of chaff or residual materials by aquatic organisms in nature.

Birds have not been documented using chaff filaments or residual materials as nesting material or food, but residual materials still pose an ingestion risk to birds. Chaff does not accumulate to any great degree and the fibers, if found, are often mistaken for natural elements such as animal fur or plant material. The fibers generally dissipate within a few days due to mechanical breakdown from wind, sediment erosion, and rain or snow.

Potential Impacts from Wildfire

The possibility of a wildfire from flare usage would be remote considering the reliability of flares and the amount of surface water beneath the MOA/ATCAA. Flares would not be released below the MOA floor (4,000 feet MSL) which is above the standard minimum release altitude of 2,000 feet AGL, ensuring the flare has substantial time to burn out before contacting the ground or treetops. Flares are designed to burn completely.

Chaff and Flare Conclusions

As described above, the occurrence of residual material from chaff and flares and the distributed chaff fibers result in small potential negative impacts to marine and terrestrial species. Therefore, chaff and flare use in the Proposed Action may affect, but is not likely to adversely affect the gulf sturgeon, giant manta ray, hawksbill sea turtle, loggerhead sea turtle, leatherback sea turtle, Kemp's Ridley sea turtle, green sea turtle, rufa red knot, piping plover, eastern black rail, and the West Indian manatee. Chaff and flare use would have no effect on the tricolored bat or critical habitat for gulf sturgeon.

Potential Impacts from Noise

Aquatic Animals

Marine mammals, turtles, and fish (and other aquatic animals) would experience minimal impacts from noise resulting from the Proposed Action due to the increased distance of these animals from the sound source and the muffling effects on in-air sound translating to underwater. When exposed to in-air noise or sonic booms, aquatic species typically at most show a slight startle response. For reptiles, instances have been documented of "freezing" (brief cessation of activity), but most of these studies examined noise exposure over much longer periods of time than would occur for an overflight (Bowles, 1995a; Sun and Narins, 2005). Noise disturbance is not expected to harass or agitate these animals. Aircraft overflights are not expected to cause chronic stress as it is extremely unlikely that individual turtles or sturgeon would be repeatedly exposed to low altitude overflight noise. Sea turtles and manatees are unlikely to be affected by aircraft noise while at the surface and while submerged, due to infrequent exposure. Exposure would be brief (a matter of seconds as aircraft passed overhead) and infrequent, given the dispersed nature of flights over such a large area.

Terrestrial Animals

Continuous, intense noise exposure has been shown to cause health effects in laboratory experiments, but some research shows that intermittent noise, such as what would occur with the Proposed Action, may not, because some animals' ears can recover between the intermittent exposures and intermittent

exposures result in lower total noise (Bowles, 1995a,b; Pienkowski and Eggermont, 2010). The proposed training is episodic, and would not create a consistent, significant noise source in any one location. In addition, the DNL throughout the MOA/ATCAA from the proposed aircraft operations would be low (52 dB DNL, see **Table 3.2-3**). While an infrequent event due to size of the MOA/ATCAA and flight altitude and annual number of sorties, there is the possibility that wildlife could be subjected to a very brief direct overflight and experience a maximum noise level (L_{max}) of up to 105 dB. Exposure to maximum noise levels would last only a few seconds and the animal would need to be directly beneath the flight path to experience this level of noise as the noise reduces the further the animal is from the flight path. Even at 105 dB, no harm to hearing capacity is anticipated as damage to hearing only occurs at levels over 140 to 150 dB (Bowles, 1995a).

Bats

Tricolored bats use echolocation to forage for insects at night from the spring through the fall (USFWS, 2021). Although noise would result from the flights of the Proposed Action, these flights are only scheduled to occur from 0800–1700 Local Time and would therefore generally not occur during the nocturnal foraging period of the tricolored bat. There may be small instances of overlap in dusk hours during the winter when daylight hours are fewer, but tricolored bats mostly hibernate during the winter (USFWS, 2021) and would therefore not be foraging during this time. Short, intermittent flight noise above foraging or roosting locations would be unlikely to cause significant disturbances to this species. A study in Wisconsin analyzed the effect of underground mine blasting on nearby bat roosts during hibernation, and the results indicated that blasting and vibrations from the blasting did not cause significant increases of bat activity (Summers et al., 2023). Although studies have demonstrated that bats are sensitive to disturbance during hibernation (Haarsma and de Hullu, 2012), other studies have demonstrated that bats are not sensitive to non-tactile disruptions, such as noise or light (Speakman et al., 1991), which would indicate that aircraft noise is unlikely to be significantly disruptive to bat hibernation. While the proposed operations within the MOA/ATCAA would create a noise disturbance for bats, this disturbance is expected to be intermittent and minor. Therefore, the aircraft activity within the proposed MOA/ATCAA may affect but is not likely to adversely affect the tricolored bat.

Birds

Most concerns related to the effects of noise on birds involve the masking of communications among members of the same species, reducing the detectability of biologically relevant signals including the sounds of predators and prey, and temporarily or permanently decreasing hearing sensitivity (Dooling and Popper, 2007; Vincelette et al., 2020). These effects range from temporary pauses or elevated noise from birds after an aircraft disturbance (Vincelette et al., 2020), to disruptions of bird behavior and mating (Habib et al., 2007). In a study of ovenbirds, Habib et al. (2007) found chronic noise exposure near compressor stations affected pairing success, attributable to masking and distorting the song of breeding males on territories. Noise exposure under the Proposed Action would be intermittent and loud but would not represent continuous hours of noise disruptions at a time in one location.

In a literature review including bird responses to military aircraft noise, Manci et al. (1988) found that most raptors did not show a negative response to overflights. When negative responses were observed, they were predominantly associated with rotor-winged aircraft or jet aircraft that were repeatedly passing within 0.5 mile of a nest. Ellis et al. (1991) analyzed the effects of low-level military jet aircraft and mid- to high-altitude sonic booms (both actual and simulated) on nesting peregrine falcons and seven other raptors (common black hawk, Harris' hawk, zone-tailed hawk, red-tailed hawk, golden

eagle, prairie falcon, bald eagle). Re-occupancy and productivity rates were within or above expected values for self-sustaining populations (Ellis et al., 1991). In a 1997 helicopter overflight study, Mexican spotted owls did not flush from a nest or perch unless a helicopter was as close as 330 feet (Delaney et al., 1999). Researchers in Colorado found that Mexican spotted owl responses to F-16 overflights were often less significant than responses to naturally occurring events such as thunderstorms. Similarly, Delaney et al. (1999) found that Mexican spotted owls quickly returned to normal day-roosting behavior after being disturbed by helicopters. A 6-year study in the Gila National Forest found that low-level aircraft overflight had no effect on occupancy of Mexican spotted owl activity centers and found no correlations among measures of aircraft exposure and nesting success (Air Combat Command, 2008).

A study performed on black ducks and wood ducks showed that ducks habituated to both visual and auditory aircraft activity over the course of 17 days (Conomy et al., 1998), suggesting that waterfowl may initially react to aircraft activity, but the disturbances would be unlikely to represent significant harm over time. In a study evaluating the impacts of military and civilian overflights on water birds, including least terns, beneath a MOA in North Carolina, no evidence was found that visual or acoustic stimuli from military aircraft flying between 2,100 feet AGL and 3,500 feet AGL elicited behavioral stress responses that would negatively impact nesting colonial waterbird demographic rates (Hillman, 2012). Flights within the Bourbon MOA/ATCAA would not be below 4,000 feet MSL (which in this area is approximately the same as 4,000 feet AGL).

Animal responses to sonic booms have been suggested to be similar to responses to thunder and have been shown to be brief with animals returning to normal behavior quickly thereafter (Lynch and Speake, 1978), and research has suggested that animals may habituate to sonic booms after successive exposures (Workman et al., 1992).

In summary, bird and bat responses to aircraft are influenced by many variables, including size, speed, proximity (both height above the ground and lateral distance), engine noise, flight profile, and radiated noise. The type of aircraft (e.g., fixed-wing [jets] versus rotary-wing [helicopters]) and type of flight mission may also produce different levels of disturbance, and thus varying responses.

Noise Impact Conclusions

The Proposed Action would result in random, intermittent loud sounds across the area, but would not represent long-term continuous loud sound in any one area. Minor, temporary effects from aircraft noise are possible, but these effects are unlikely to pose long-term or population-level impacts to any species. Therefore, the noise exposure associated with the Proposed Action may affect, but is not likely to adversely affect the gulf sturgeon, giant manta ray, hawksbill sea turtle, loggerhead sea turtle, leatherback sea turtle, Kemp's Ridley sea turtle, green sea turtle, rufa red knot, piping plover, eastern black rail, tricolored bat, and West Indian manatee.

MBTA and BGEPA

Based on the impact discussions described above for birds, the Proposed Action would not have significant impacts to migratory birds or bald or golden eagles. Migratory birds and eagles may experience brief disruptions from noise when flights pass overhead which may elicit startle responses, briefly mask intraspecific vocalizations, or result in the individual temporarily leaving the area, as discussed above. However, these disturbances would not represent long term or significant effects on migratory birds or eagles. The Proposed Action would not result in the take of species protected under MBTA or BGEPA.

Bird/Wildlife Aircraft Strike Hazard

Bird/Wildlife aircraft strikes are a substantial concern due to the risk of damage to aircraft, injury, or loss of life to aircrews or the local population in the event of an aircraft crash, as well as the risk to the bird species in collisions.

Migratory waterfowl (ducks, geese, and swans, etc.) are the most hazardous birds to low flying aircraft because of their size and their inclination for migrating in large flocks at a variety of elevations and times of day. Migrations happen during spring and fall, and waterfowl usually pose as hazards only during migratory seasons. The altitudes of migrating birds vary with weather, wind, terrain elevations, clouds, and other variables. Over 90 percent of reported bird strikes occur at or below 3,000 feet AGL but strikes at higher altitude are possible during migration. Ducks and geese have been observed up to 7,000 feet AGL (FAA, 2021); however, these birds typically migrate at night and generally fly between 1,500 to 3,000 feet AGL during the fall migration, and from 1,000 to 3,000 feet AGL during the spring migration.

Raptors, shorebirds, gulls, herons, songbirds, and other birds are also at risk for strikes. Peak migration periods for raptors, especially eagles, occur from October to mid-December and from mid-January to the beginning of March. Generally, flights above 1,500 feet AGL would be above most migrating and wintering raptors, and flights in the proposed Bourbon MOA/ATCAA would occur above this altitude. Songbirds have nocturnal migration periods and frequently navigate along major rivers, typically between 500 to 3,000 feet AGL.

The tricolored bat would potentially be found flying underneath the airspace of the MOA/ATCAA; however, it is highly unlikely that this species would pose a BASH risk. Tricolored bats forage mostly at night and at treetop, or similar, level (Davis and Mumford, 1962; USFWS, 2021). Aircraft would not be flown at treetop level and most sorties would occur during daylight hours and would therefore be unlikely to overlap with tricolored bat flight occurrences in both space and time.

The Avian Hazard Advisory Safety System (AHAS) is managed by the Department of the Air Force and available to all services to detect and assess the risk of a bird strike. AHAS is informed by various sources to include data from Next Generation Radar and NOAA (Air Force Safety Center, 2015). AHAS uses multiple risk assessment methods to identify the risk for a given flying area that contains biological activity. AHAS, together with specific procedures defined in a unit's BASH Management Plan, can be used to evaluate local and enroute bird strike risks and manage flight operations on low level routes, training ranges, and special use areas.

Aircrews operating in the Bourbon MOA/ATCAA would be required to follow applicable procedures outlined in the NAS JRB NOLA BASH Reduction Plan (Navy, 2017) as they do currently. Adherence to BASH programs has minimized bird/aircraft strikes. When safety procedures identify an increased risk, limits are placed on low-altitude flights and some types of training. Special briefings are provided to pilots whenever the potential exists for greater bird-strike risks within airspace.

The overall potential for BASH would not be significantly different than the current risk in the region. The Proposed Action would have no measurable increase in potential for and therefore no significant effect on bird/aircraft strikes due to the high altitude, intermittent flights, and implementation of BASH prevention measures.

3.4 Coastal Zone

The coastal zone is the interface between land and water and is vital to the well-being of the nation. It supports half of the nation's population and supports ecologically important habitat and natural resources.

3.4.1 Regulatory Setting

Through the Coastal Zone Management Act (CZMA) of 1972, Congress established national policy to preserve, protect, develop, restore, or enhance resources in the coastal zone. This Act encourages coastal states to properly manage use of their coasts and coastal resources, prepare and implement coastal management programs, and provide for public and governmental participation in decisions affecting the coastal zone. To this end, the CZMA imparts an obligation upon federal agencies whose actions or activities affect any land or water use or natural resource of the coastal zone to be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of federally approved state coastal management programs.

In accordance with the CZMA, the State and Local Coastal Resources Management Act of 1978 (Act 361, La. R.S. 49:214.21 et seq.) is the state of Louisiana's legislation creating the Louisiana Coastal Resources Program (LCRP). The LCRP establishes policy for activities in the coastal zone, defines and updates the coastal zone boundary, and creates regulatory processes. The LCRP is under the authority of the Louisiana Department of Energy and Natural Resources (LDENR) Office of Coastal Management. Per the CZMA, all proposed federal projects within the coastal zone must undergo a Consistency Determination by the Office of Coastal Management for that project's consistency with the state's Coastal Resources Program (i.e., LCRP). The Louisiana coastal zone boundary is established in Louisiana Revised Statutes Article 49, Section 214.24 (Louisiana Department of Energy and Natural Resources, 2015).

3.4.2 Affected Environment

Louisiana has 15,000 miles of meandering shoreline that extends from the Pearl River westward to the Sabine River. The Louisiana coastal zone is located in twenty southern parishes and habitats include a variety of ecological systems. Covering 8.5 million acres, the Louisiana coastal zone includes large open bays and lakes, barrier islands, cheniers, and natural levee forests. The marshes, swamps, and bottomland hardwoods that sprawl inland from the Gulf of Mexico comprise 41 percent of the continental U.S. coastal wetlands. Almost one-third of Louisiana's people live in the coastal area (Louisiana Department of Energy and Natural Resources, 2015).

The proposed SUA is located mostly over St. Bernard Parish with a small portion of the airspace entering Plaquemines Parish. The entirety of the proposed SUA is within Louisiana's coastal zone boundary. **Figure 3.4-1** shows where the Bourbon MOA/ATCAA overlaps the parishes and coastal zone of Louisiana.

3.4.3 Environmental Consequences

3.4.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to the existing land use within the coastal zone of Louisiana. Military flights from NAS JRB NOLA would continue to transit the area as they do currently. Therefore, no changes to impacts to the coastal zone would occur with implementation of the No Action Alternative.

3.4.3.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

The noise exposure associated with flight training activities in the Bourbon MOA/ATCAA are at a level considered compatible with all land uses (see **Section 3.2.4**). The Proposed Action would not change any existing land use or prohibit access to any coastal resources. Individuals recreating on the land or waters beneath the MOA/ATCAA may see or hear an overflight. The maximum noise level from a direct overflight lasts only a few seconds but given the recreation activity or situation the sound may be annoying or startling to a person, may mask natural sounds like bird calls or rustling leaves, or temporarily interrupt outdoor conversation. This experience is not expected to be much different from existing flight activities in the area. The use of chaff and flares would result in the distribution of residual materials on the land and water beneath the MOA/ATCAA. As described in Section 2.3.2.2, up to 10,000 chaff cartridges and 10,000 flare cartridges would be expended annually in the MOA/ATCAA (the cartridges remain on the aircraft, only the contents are expended). Based on these annual totals, approximately one piece of residual material (end caps, spacers, and pistons) would occur per 5 acres of area on average. This is assuming even distribution of residual materials, and likely there would be some grouping of residual material. However, the overall number of chaff and flare residual material reaching the ground and ocean would be small and would be scattered in a large area. Flight operations are widely dispersed throughout the MOA/ATCAA which reduces the potential for the accumulation of this debris in any location. These materials do not impact the soil or water quality and have been found to not impact terrestrial or aquatic wildlife (see **Section 3.3.3**).

There would be no significant impacts to coastal resources. The proposed project would be consistent to the maximum extent practicable with the enforceable policies of Louisiana's federally approved Coastal Resources Program.

Due to the overlap of the proposed SUA with the Gulf of Mexico and its location within the coastal zone, a Coastal Consistency Determination for the Preferred Alternative was prepared, as required under Section 307 of the CZMA. The Navy received concurrence from the LDENR Office of Coastal Management on August 22, 2024. A copy of the Coastal Consistency Determination and associated correspondence is provided in **Appendix F.**

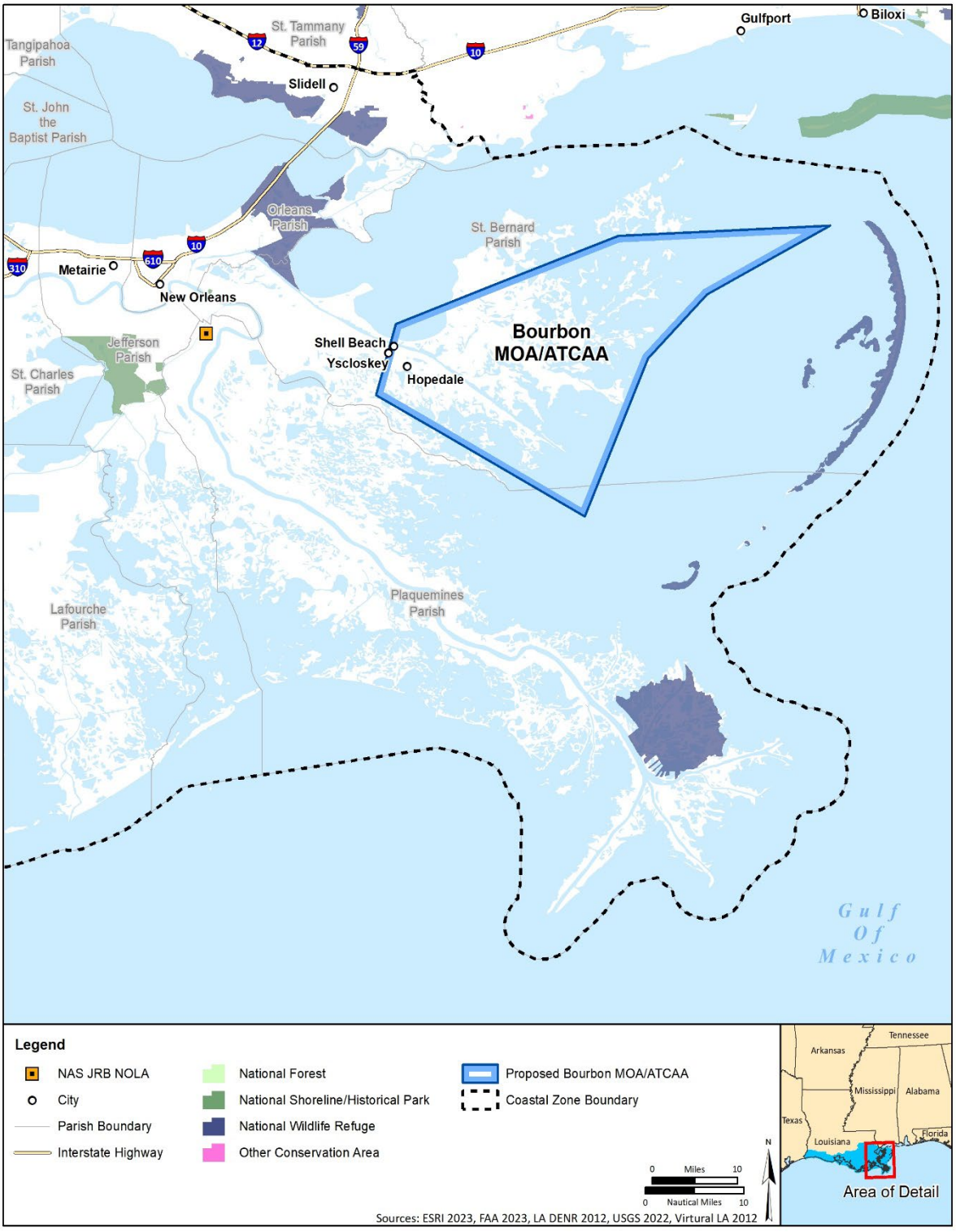

Figure 3.4-1 Bourbon MOA/ATCAA Location within the Coastal Zone

3.5 Visual Effects

Visual effects deal broadly with the extent to which the Proposed Action would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment. The proposed times of use for the Bourbon MOA/ATCAA are 8:00 a.m. to 5:00 p.m., thus nighttime operations are unlikely and light emissions will not be further discussed. This analysis will focus on visual resources which include buildings, sites, traditional cultural properties[1], and other natural or manmade landscape features that are visually important or have unique characteristics.

3.5.1 Regulatory Setting

There are no special-purpose laws or required permits or approvals specific to visual resources (FAA, 2023). However, some visual resources may be protected under federal, state, or local regulations. Examples include National Scenic Areas, historic properties, and wildlife refuges. Visual resources are also protected on federal resource lands, including lands under U.S. Forest Service Land Management Plans and the Bureau of Land Management Visual Resource Management System. However, no national forests or Bureau of Land Management-administered lands occur near the proposed airspace.

3.5.2 Affected Environment

The study area for visual resources consists of the proposed Bourbon MOA/ATCAA airspace, as well as land and water surface areas from which aircraft operations in the airspace could be viewed. These land and water areas primarily occur underneath the proposed MOA/ATCAA but extend beyond the boundary for a distance from which aircraft could be observed. The affected environment consists of the visual resources and visual character of the study area. Visual resources include the natural landforms, vegetation, water features, panoramic views, cultural properties, and other man-made features that are visually important or have unique characteristics. These features collectively determine a landscape's visual aesthetic quality. Visual character refers to the overall existing visual makeup of the affected environment (urban, forest, etc.).

[1] The term "Traditional Cultural Properties" was defined in National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties (Parker and King, 1990). This Bulletin was updated in December 2024 is now titled "Identifying, Evaluating, and Documenting Traditional Cultural Places" (Parker and King, 2024). The 2024 guidance term replaces the term "Traditional Cultural Properties" with "Traditional Cultural Places," but the definition remains unchanged. The original term is retained in this Final EA because the change occurred after publication of the Draft EA and was used in NHPA Section 106 Tribal and State consultation documents. This decision supports the timely implementation of the expanded MOA, vital to naval readiness, by avoiding delays from non-substantive document revisions.

The study area is located within the Louisiana coastal plain and is associated with the Mississippi River delta. The area is flat overall, with an elevation near sea level. Except for limited development near the Mississippi River Gulf Outlet Canal, the study area is characterized as a remote, expansive mosaic of marsh vegetation and open water. Marsh vegetation is dense but relatively low and generally does not block views of the sky. Trees are limited to a few ridges (Louisiana Department of Wildlife and Fish [LDWF], 2024b). Open water includes small portions of Lake Borgne and Chandeleur Sound, as well as many lakes, sloughs, bays, and man-made channels interspersed throughout the marsh. Part of one protected area, the Biloxi Wildlife Management Area, occurs under the northern portion of the proposed Bourbon MOA/ATCAA (**Figure 3.5-1**). Typical activities in this secluded area, which is managed by the LDWF, include fishing, hunting, boating, and wildlife viewing (LDWF, 2024b). Wildlife in the managed area is considered representative of the study area in general and includes ducks, geese, racoons, rabbits, nutria, muskrats, and alligators, among others (Hunting Land Rentals by Owner, 2016). Waterfowl are particularly abundant during migratory seasons. Military aircraft currently transit the study area between NAS JRB NOLA and the existing Snake MOA/ATCAA and Warning Areas. Civilian aircraft associated with commercial and general aviation airports in the region, such as Louis Armstrong New Orleans International Airport (flightconnections.com, 2024), also transit the study area (see **Section 3.1**). The study area includes Shell Beach, Yscloskey, and Hopedale, which are narrow developed areas along the Mississippi River Gulf Outlet Canal and smaller adjoining canals. Development is mostly limited to elevated houses, boat docks, and other structures related to boat storage and maintenance. Disturbed ground, concrete and gravel parking areas, trees and shrubs, and turf grass occur within the developed areas. Trees also line the canals in some locations.

3.5.3 Environmental Consequences

Neither the Navy nor the FAA has established significance criteria for visual resource impacts but FAA has identified factors to consider when evaluating the context and intensity of potential impacts. These factors consist of the extent to which an action would have the potential to: (1) affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources; (2) contrast with the visual resources or visual character of the study area; or (3) block or obstruct views of visual resources (FAA, 2015, 2023).

3.5.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing military aircraft overflight tempo, patterns, or other features of the study area that could affect the visual aesthetic quality. There would be no significant impact on visual resources.

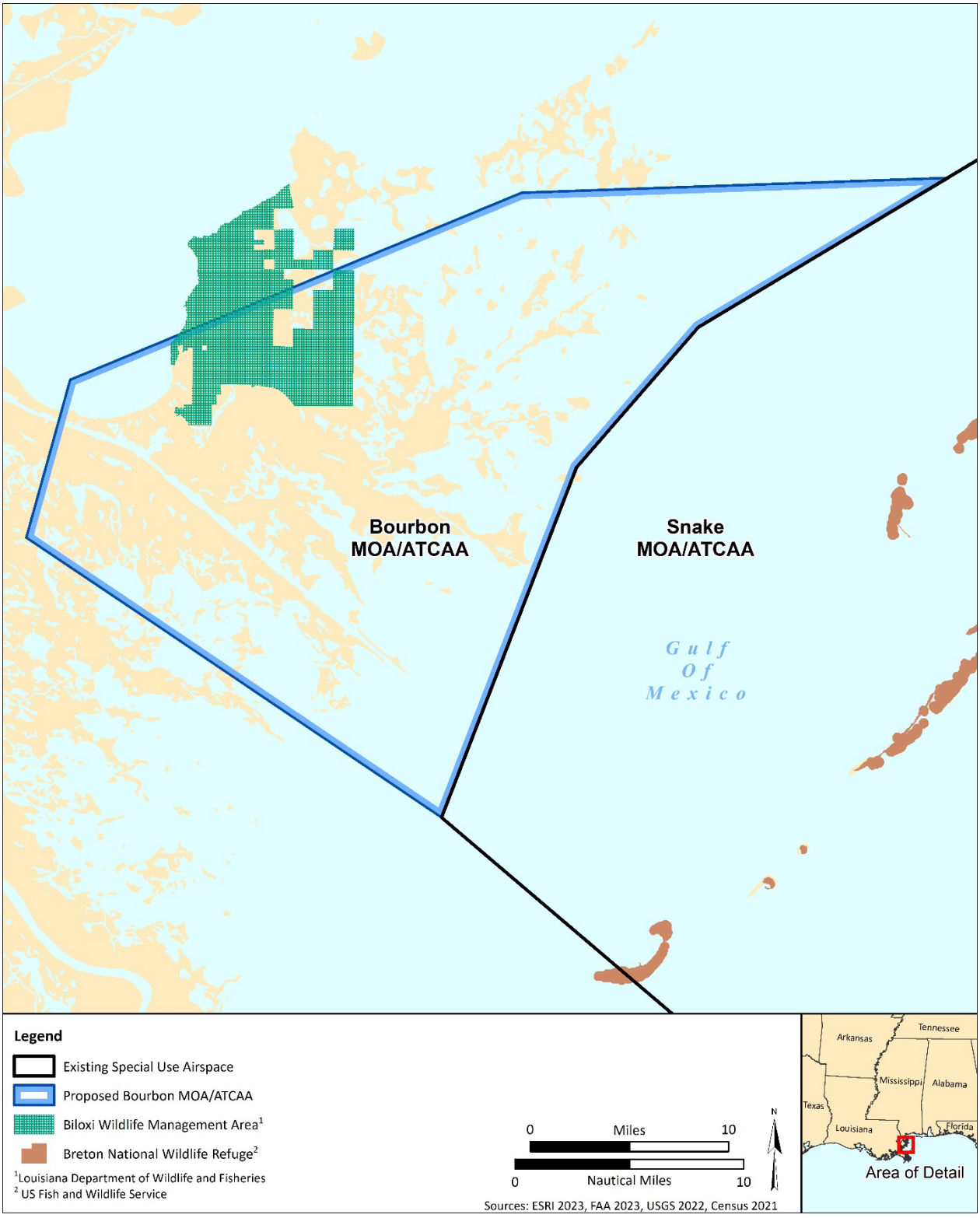

Figure 3.5-1 Biloxi Wildlife Management Area

3.5.3.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

The Proposed Action would not involve development, construction, or any other physical changes to landform or water features in the study area. No project elements would block or obstruct views of visual resources. Therefore, the overall visual character of the study area would remain the same. Potential impacts on visual resources would consist of changes to military aircraft operations that affect panoramic views when, from the perspective of an observer, those views include the sky. Compared to existing conditions, the annual number of aircraft and operations in the airspace would not change and, therefore, the proposed activities would generally be consistent with ongoing military, commercial, and private aircraft operations in the area. However, instead of straight transit flights, military aircraft would conduct various types of training flights in the Bourbon MOA/ATCAA. This would change the flight patterns and increase the length of time aircraft would be present and viewable in the study area and could represent some level of contrast with the visual resources of the existing environment.

A relatively small number of the persons with potential to view aircraft would be residents along the Gulf Outlet Canal and smaller adjoining canals. Most would be those participating in various recreational activities in the marsh and open water areas, including the Biloxi Wildlife Management Area. Recreationists may view the panoramic landscape as part of their leisure experience. The number of people present in the study area is low overall due to the area's remoteness. The marsh area is expansive and only accessible by boat.

The Bourbon MOA/ATCAA would typically be used on weekdays between 8:00 a.m. and 5:00 p.m. during most weeks of the year, and operations could occur up to 5 hours per day. Therefore, for a person present in the study area on a weekday, there is a reasonable chance that a training operation would occur at the same time. Viewers could notice aircraft maneuvers that are different from those conducted under existing conditions. Some viewers could perceive such an overflight as a negative impact on the natural landscape and solitude of the study area, while others could potentially perceive it as a neutral or positive experience. Sensitivity would likely be lower for overflights that do not interfere with a viewer's activity (e.g., hunting or fishing). There would be no operations on weekends when recreational activity level would presumably be higher.

The potential for a viewer to notice an aircraft overflight and perceive it as a negative experience would be influenced by the aircraft's altitude and lateral distance. Generally, objects at greater altitude and lateral distance are less noticeable than objects near the horizon or near an observer, although the potential to observe a moving object is generally greater in open landscapes such as that of the study area. Operational altitude of training missions would range from 4,000 to 32,000 feet MSL. There is no generally accepted threshold altitude above which aircraft are considered unnoticeable. However, as a comparison point, analysis of commercial aircraft operations near San Antonio, Texas, concluded that views of aircraft operating above 3,000 feet would not usually be considered intrusive (FAA, 2022). The analysis presumably only considered straight transit flight paths. Similarly, analysis of a proposed new commercial airport in Sydney, Australia concluded that commercial aircraft at 3,000 feet are not prominent visual features, and that at 7,000 feet they are likely difficult to discern from ground level and are not visually obtrusive (Commonwealth of Australia, 2016). Additional factors that would influence the probability of viewing an aircraft include weather (e.g., cloud cover), location of the sun relative to the aircraft and viewer, camouflaging color of the aircraft, and a viewer's level of focus on activities near ground level.

The specific flight patterns, altitudes of those patterns, and length of time that an aircraft would be viewable from a relatively stationary point in the study area would vary depending on the training scenario. However, flights would be dispersed vertically and horizontally in the MOA/ATCAA, decreasing the likelihood of visual obtrusion from any given location. Also, observation would be temporary for overflights other than those that involve maneuvers in a relatively small area.

It would be unlikely for persons in the study area to observe a chaff or flare release due to the dispersed area of operations, altitude of release, and size of the items. Analysis of chaff and flare use in military training areas concluded that chaff fibers have low visibility and generally do not accumulate in quantities noticeable to most people (National Guard Bureau, 2002). Chaff debris is usually noticed only in open locations such as cleared, maintained, or sparsely vegetated areas. Chaff would not likely be noticed in the dense vegetation of the study area. Similarly, chaff and flare debris (e.g., end caps) could cause, at most, a minor visual impact. The wide distribution area of these items would significantly reduce the likelihood of seeing these materials. It is not expected that they would accumulate in a small area.

In summary, the proposed activities would not substantially affect the visual character of the study area. The addition of training flights in the Bourbon MOA/ATCAA would result in different flight patterns and potentially the length of time aircraft would be viewable. These changes would contrast with the existing environment and could be perceived negatively by some viewers. Due to the lateral area and altitude range in which aircraft could operate, and the transient nature of some overflights, effects would probably be only mildly discernible. Airspace operations do not commonly cause adverse visual effects (FAA, 2023). Chaff and flare expenditures would likely result in negligible to minor effects on the visual aesthetics of the study area. Implementation of the Preferred Alternative would not result in significant impacts on visual resources.

3.6 Cultural Resources

Cultural resources consist of prehistoric and historic sites, structures, artifacts, and any other physical or traditional evidence of human activity considered relevant to a particular culture or community for scientific, traditional, religious, or other reasons. For the purposes of this analysis, cultural resources are assessed to determine if they are significant and exhibit integrity, in accordance with the National Register criteria (36 CFR part 63) to qualify for listing in the National Register of Historic Places (NRHP).

3.6.1 Regulatory Setting

Cultural resources are governed by federal laws and regulations, including the NHPA, Archaeological and Historic Preservation Act, American Indian Religious Freedom Act, Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1990. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. For the purposes of this analysis, the term “cultural resource” refers to all resources of cultural importance protected by these federal laws.

Federal agencies’ responsibility for protecting historic properties is defined primarily by Sections 106 and 110 of the NHPA. Section 106 requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. Through consultation with interested parties, the federal agency identifies historic properties potentially affected by the undertaking, assesses effects, and seeks ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Section 110 of NHPA requires federal agencies to establish – in conjunction with the Secretary of the Interior – historic preservation programs for the identification, evaluation, and protection of historic properties.

3.6.2 Affected Environment

The Area of Potential Effects (APE) for this Proposed Action includes areas directly or indirectly affected beneath the airspace. For this Proposed Action, the Navy determined that the APE is the land and water under the newly proposed airspace shown in **Figure 2.3-1**.

A search of the National Register database was conducted with one NRHP structure identified under the proposed airspace (National Park Service, 2024). The historic property is Fort Proctor located in St. Bernard Parish, north of Shell Beach on Lake Borgne. The fort's construction commenced in 1856 with building materials of granite, brick, and cast iron I-beams. Even though the fort was not complete, the unique construction with the use of iron prior to the Civil War and the expanded living quarters for the soldiers, including bathrooms, deemed the property significant for recommendation to the NRHP. The National Register form for Fort Proctor, which was submitted and approved for listing on the NRHP in 1978, noted that the land has receded and Lake Borgne has partially engulfed approximately two-thirds of the outer earthworks. Currently, Fort Proctor is surrounded by water at least a foot deep and modern aerial imagery confirms the site is still heavily inundated.

A search of the Louisiana National Register was conducted for all NRHP-listed or eligible districts and individual properties under or adjacent to the proposed airspace (Louisiana Division of Historic Preservation, 2024). In addition to Fort Proctor, two other properties were identified: the Samuel Proctor House and an unnamed residential property. The Samuel Proctor House was described in a 1982 standing structural survey form to the Louisiana State Historic Preservation Office (SHPO) as an unoccupied, deteriorated, four bay cottage built circa 1840 (Louisiana Division of Historic Preservation, 2024). Current aerial images from the SHPO database do not show evidence that the structure is still standing (Louisiana Division of Historic Preservation, 2024). The second structure was described in the same 1982 standing structural survey form as a deteriorated residential structure with an unknown construction date (Louisiana Division of Historic Preservation, 2024). Current aerial images from the SHPO database clearly show this building is no longer extant and has been replaced by a larger, more modern structure.

A search of the NOAA Automated Wreck and Obstruction Information System database (NOAA, 2024) noted two shipwrecks under the proposed airspace: the Queen Mary II, a half-submerged 36-foot cabin cruiser, and an unknown shipwreck. Both are in shallow water, and neither are noted as significant.

The Navy requested consultation with the Chitimacha Tribe of Louisiana to determine whether there are traditional cultural properties and/or sacred sites, or other historic properties that the Navy has not identified within the APE, and to see if they have other concerns with the proposed action. No response correspondence was received from the Tribe (**Appendix G**).

3.6.3 Environmental Consequences

Analysis of potential harm to cultural resources considers both direct and indirect impacts. A direct effect to a historic property would include the physical destruction of, or damage to, all or part of a historic property; alteration of a historic property in a way that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties and applicable guidelines; or the

removal of the property from its historic location. Indirect impacts are activities that may change the character of the property's use or of physical features within the property's setting that contribute to its historic significance, or introduce visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.

3.6.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing military aircraft overflight tempo or the noise exposure within the region. Military flights would continue to transit the area to access existing SUA. Current subsonic noise exposure is very low, 35 dB DNL. There is not currently any supersonic operation in this area, thus no supersonic noise exposure. Therefore, no significant impacts to cultural resources would occur with implementation of the No Action Alternative.

3.6.3.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

Under the Preferred Alternative, defensive countermeasure devices would be used; however, no weapons testing, or ordnance expenditure would occur within the new MOA/ATCAA. Chaff and flare residual materials (i.e., end caps) would be widely distributed beneath the MOA/ATCAA and would not be readily visible on the ground or accumulate in a substantial quantity in any given location. It would be possible, but unlikely, that a piece of residual material or chaff fibers would land directly on any of the cultural resources in the APE given the limited amount of these materials and the limited cultural resources beneath the MOA/ATCAA. If a piece of residual material did land on a resource, it is not large enough to cause physical damage and would likely be quickly dispersed by wind. As such, no direct impacts from the use of chaff and flares would occur to cultural resources in the APE.

Previous studies have found it is unlikely that noise and vibration associated with air operations would cause structural damage to buildings. In fact, several studies of the effects of noise on historic properties located in high aircraft-noise zones have found that vibration resulting from the activities of tour groups, and even vacuuming, generated more structural vibration than that generated by aircraft noise (NASA, 1976, 1978; National Research Council, 1977). Subsonic sound of less than 130 dB is highly unlikely to damage structural elements. Noticeable vibration of windowpanes and objects within buildings may occur at sound levels of 110 dB or greater (Wyle Laboratories, 1988). Overflights in the MOA/ATCAA would not exceed these levels (see **Section 3.2.4**).

There are no known aboveground archaeological sites or traditional cultural properties, and the one existing architectural resource located within the APE would not be impacted by the Proposed Action. Fort Proctor is located on the western boundary of the MOA/ATCAA where supersonic flights would occur above 30,000 feet MSL, which would reduce the number of sonic booms. In the eastern portion of the MOA/ATCAA, supersonic flights could occur as low as 4,000 feet MSL; however, most of the area beneath the MOA/ATCAA in the east is open water or marsh with little to no development. Visual intrusions are also expected to be minimal (see **Section 3.5**, *Visual Effects*). Implementation of the Preferred Alternative would not result in significant impacts to cultural resources.

The Navy conducted NHPA Section 106 compliance for the proposed undertaking and the results are included in **Appendix G**. The Navy consulted with the Louisiana SHPO and the Chitimacha Tribe of Louisiana. The Navy received concurrence with the findings described in this section from Louisiana SHPO on August 12, 2024. No reply was received from the Chitimacha Tribe.

3.7 Environmental Justice

EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All* (April 21, 2023) defines environmental justice as the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, tribal affiliation, or disability, in agency decision making and other federal activities that affect human health and the environment.

3.7.1 Regulatory Setting

Consistent with EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), the Navy's policy is to identify and address any disproportionately high and adverse human health or environmental effects of its actions on minority and low-income populations.

EO 14096 supplements EO 12898 to address environmental justice. EO 14096 establishes a policy to pursue a whole-of-government approach to environmental justice. With respect to environmental reviews under NEPA, EO 14096 directs federal agencies to: (1) analyze direct, indirect, and cumulative effects of federal actions on communities with environmental justice concerns; (2) consider best available science and information on any disparate health effects (including risks) arising from exposure to pollution and other environmental hazards, such as information related to the race, national origin, socioeconomic status, age, disability, and sex of the individuals exposed; and (3) provide opportunities for early and meaningful involvement in the environmental review process by communities with environmental justice concerns potentially affected by a proposed action.

The Navy followed the steps outlined in the USEPA's 2016 report, *Promising Practices for EJ Methodologies in NEPA Reviews* (USEPA, 2016), to determine whether there would be disproportionately high and adverse impacts to minority and low-income populations from the Proposed Action. These steps are summarized as follows:

- **Define the Affected Environment.** The environment of the area(s) to be affected or created by the alternatives under consideration was described.
- **Identify the presence or absence of minority and low-income populations.** The presence of minority and low-income populations was determined if the percentage of low-income or minority individuals residing within the selected geographic units of analysis (block groups) was equal to or greater than the percentage of individuals residing within the reference community (St. Bernard Parish). The low-income analysis used the Census Bureau data showing the poverty status of households in the past 12 months. The Census Bureau uses income thresholds that vary by family size and composition to determine who is in poverty.
- **Perform impact analysis.** The potential direct, indirect, and cumulative impacts on minority populations and low-income populations were compared to the non-minority populations and non-low-income populations in the affected environment. This included both human health and environmental impacts from the agency's programs, policies, or activities.
- **Determine if there would be disproportionately high and adverse effects on minority and low-income populations.** Impacts to resource areas from the Proposed Action were analyzed to determine whether there would be any disproportionately high and adverse effects to minority and low-income populations when compared to non-minority and non-low-income populations in the affected environment.

3.7.2 Affected Environment

The affected environment for environmental justice is defined using demographic data that identifies low-income populations and minority populations relative to locations that would be affected by the Proposed Action. The area that makes up the region of influence (ROI) consists of the census tracts where the project is located or where effects of the Proposed Action are felt (see **Figure 3.7-1**). The only populated census tract in the ROI is St. Bernard Parish Census Tract 301.05, Block Group 2. Block groups are a statistical division of census tracts that typically have between 600 and 3,000 people. These are the smallest geographical units for which the U.S. Census Bureau publishes survey data. The U.S. Census Bureau provides estimates of the population that are minority or below the poverty level.

The reference community selected to determine the presence of minority or low-income populations (environmental justice populations) within the larger community is St. Bernard Parish because it represents the smallest geographic unit that incorporates the affected population.

Census block groups that have a minority population or have households with low income (in this case, households with incomes below the poverty level) at a higher percentage than the reference community (St. Bernard Parish) would be considered environmental justice communities, as defined by the CEQ (CEQ, 1997). There are no environmental justice communities in the ROI (**Table 3.7-1**).

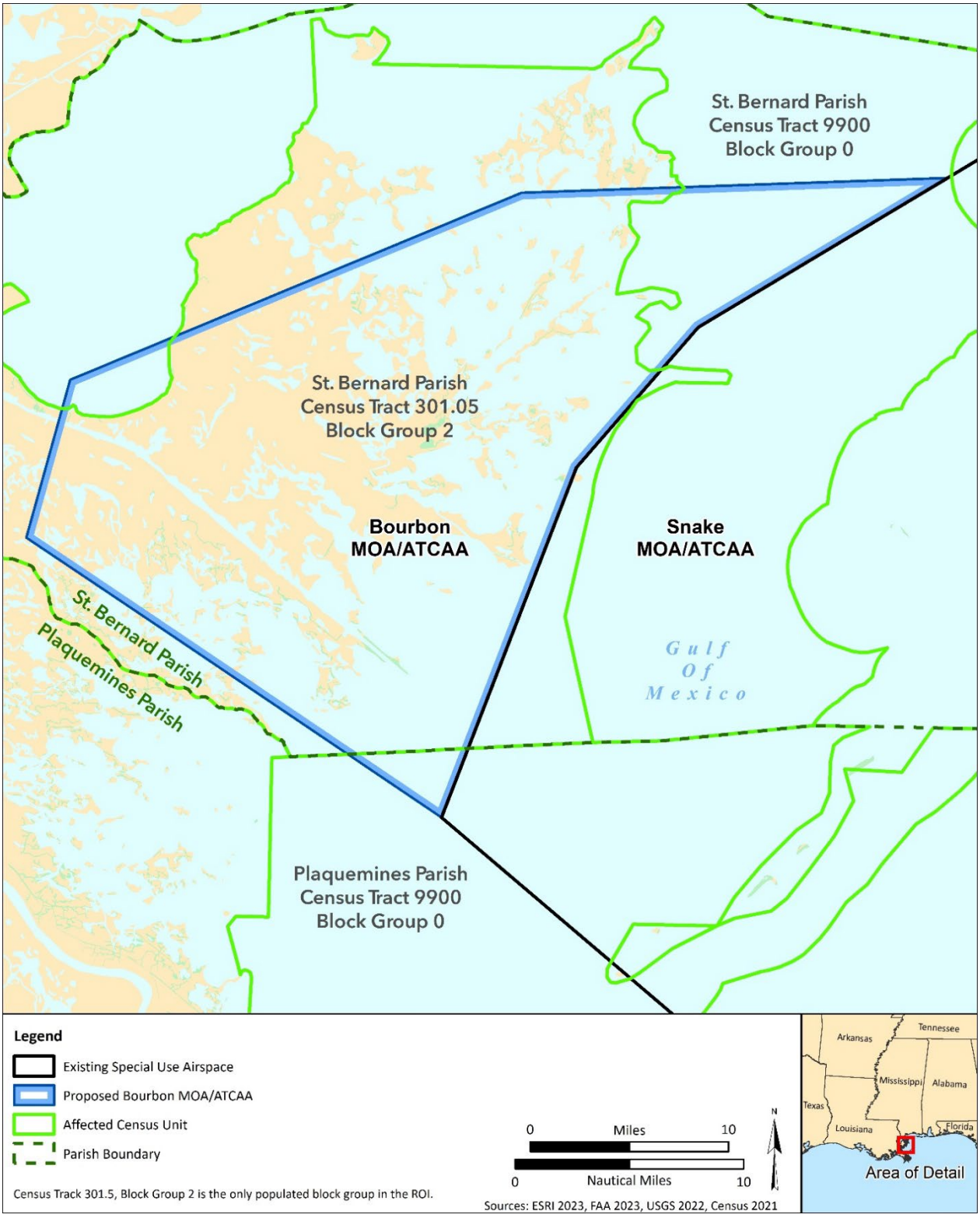

Figure 3.7-1 Environmental Justice ROI

Table 3.7-1 Environmental Justice Communities

Area	*Population*	*Percent of Population that Is Minority*	*Population for Whom Poverty Is Calculated*[1]	*Percentage of Households Whose Income in the Past 12 Months Is Below the Poverty Level*
Reference Community				
St. Bernard Parish; Louisiana	44,038	30	15,732	22
Census Tract Block Groups Within the Affected Environment[2]				
Census Tract 301.05, Block Group 2	230	22	116	9

Notes: [1]"Population for Whom Poverty is Calculated" is from the U.S. Census Bureau American Community Survey Five-Year Estimate and does not take into consideration institutionalized persons, persons in military group quarters and in college dormitories, and unrelated individuals under 15 years old, and therefore, may differ from the total population.
[2]Two other block groups are located in the Affected Environment. Census Tract 9900, Block Group 0 in Plaquemines Parish and Census Tract 9900, Block Group 0 in St. Bernard Parish. Both these block groups are over water with no recorded population.
Sources: U.S. Census Bureau, 2024a,b

Characteristics of the ROI were evaluated using the USEPA screening tool EJScreen. The screening tool identifies the extent to which selected areas are currently impacted by various environmental pollutants and contaminants or the extent to which selected areas are at risk of environmental impacts or have demographic populations that could be at greater risk of impacts, relative to other areas statewide or nationally. This review compared the 12 EJScreen Environmental Justice Indexes and Supplemental Indexes for the ROI to the characteristics of the state and country. A filter of the Environmental Justice Indexes and Supplemental Indexes for the project area using the 80th percentile filter recommended by USEPA (USEPA, 2024) indicated no indexes that exceeded the threshold when compared to the state or country.

3.7.3 Environmental Consequences

This analysis focuses on the potential for a disproportionately high and adverse exposure of specific off-base population groups to the projected adverse consequences discussed in the previous sections of this chapter.

3.7.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing military aircraft overflight tempo. Because there would be no changes, existing conditions for environmental justice communities would not change, and there would be no additional environmental justice impacts relative to baseline conditions.

3.7.3.2 Conduct Flight Training in New SUA to the East of NAS JRB NOLA (Preferred Alternative)

Implementation of the Preferred Alternative would not result in disproportionately high and adverse human health or environmental effects on minority or low-income communities. There are no minority or low-income communities located in the ROI and therefore no potential for these communities to be impacted by the Proposed Action.

4 Cumulative Impacts

This section (1) defines cumulative impacts; (2) describes past, present, and reasonably foreseeable future actions relevant to cumulative impacts; (3) analyzes the incremental interaction the Proposed Action may have with other actions; and (4) evaluates cumulative impacts potentially resulting from these interactions.

4.1 Definition of Cumulative Impacts

The approach taken in the analysis of cumulative impacts follows the objectives of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, and CEQ guidance. Cumulative impacts are defined in 40 Code of Federal Regulations (CFR) part 1508.1(g)(3) as "effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time."

To determine the scope of environmental impact analyses, agencies shall consider cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact analysis document.

In addition, CEQ and United States (U.S.) Environmental Protection Agency (USEPA) have published guidance addressing implementation of cumulative impact analyses—*Guidance on the Consideration of Past Actions in Cumulative Effects Analysis* (CEQ, 2005) and *Consideration of Cumulative Impacts in EPA Review of NEPA Documents* (USEPA, 1999). CEQ guidance entitled *Considering Cumulative Effects Under NEPA* (1997) states that cumulative impact analyses should "…determine the magnitude and significance of the environmental consequences of the proposed action in the context of the cumulative impacts of other past, present, and future actions...identify significant cumulative impacts…[and]…focus on truly meaningful impacts."

Cumulative impacts are most likely to arise when a relationship or synergism exists between a proposed action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in close proximity to the proposed action would be expected to have more potential for a relationship than those more geographically separated. Similarly, relatively concurrent actions would tend to offer a higher potential for cumulative impacts. To identify cumulative impacts, the analysis needs to address the following three fundamental questions.

- Does a relationship exist such that affected resource areas of the proposed action might interact with the affected resource areas of past, present, or reasonably foreseeable actions?
- If one or more of the affected resource areas of the proposed action and another action could be expected to interact, would the proposed action affect or be affected by impacts of the other action?
- If such a relationship exists, then does an assessment reveal any potentially significant impacts not identified when the proposed action is considered alone?

4.2 Scope of Cumulative Impacts Analysis

The scope of the cumulative impacts analysis involves both the geographic extent of the effects and the timeframe in which the effects could be expected to occur. For this Environmental Assessment (EA), the study area delimits the geographic extent of the cumulative impacts analysis. In general, the study area will include those areas previously identified in Chapter 3 for the respective resource areas. The timeframe for cumulative impacts centers on the timing of the Proposed Action.

Another factor influencing the scope of cumulative impacts analysis involves identifying other actions to consider. Beyond determining that the geographic scope and timeframe for the actions interrelate to the Proposed Action, the analysis employs the measure of "reasonably foreseeable" to include or exclude other actions. For the purposes of this analysis, public documents prepared by federal, state, and local government agencies form the primary sources of information regarding reasonably foreseeable actions. Documents used to identify other actions include notices of intent for Environmental Impact Statements (EISs) and EAs, management plans, land use plans, and other planning related studies.

4.3 Past, Present, and Reasonably Foreseeable Actions

This section will focus on past, present, and reasonably foreseeable future projects with the potential to affect the same resources as the Proposed Action. In determining which projects to include in the cumulative impacts analysis, a preliminary determination was made regarding the past, present, or reasonably foreseeable action. Specifically, using the first fundamental question included in **Section 4.1**, it was determined if a relationship exists such that the affected resource areas of the Proposed Action (included in this EA) might interact with the affected resource area of a past, present, or reasonably foreseeable action. If no such potential relationship exists, the project was not carried forward into the cumulative impacts analysis. In accordance with CEQ guidance (CEQ, 2005), these actions considered but excluded from further cumulative effects analysis are not catalogued here as the intent is to focus the analysis on the meaningful actions relevant to informed decision-making. Projects included in the cumulative impacts analysis are listed in **Table 4.3-1** and briefly described in the following subsections.

Table 4.3-1 Cumulative Action Evaluation

Action	*Level of NEPA Analysis Completed*	*Potential Cumulative Resource Areas Affected*
Past Actions		
Adversary Aircraft Transitions at Naval Air Station Fallon, Nevada and Naval Air Station Joint Reserve Base New Orleans, Louisiana.	CATEX (2021)	Airspace Management
Federal Aviation Administration VORTAC Facility Vegetation Clearing at Naval Air Station Joint Reserve Base New Orleans, Louisiana	CATEX (2019)	Biological, Coastal, Visual, and Cultural Resources
Runway Approach Obstructions, Bird/Animal Aircraft Strike Hazard, and Vegetation Control at Naval Air Station Joint Reserve Base New Orleans, Louisiana	EA (2020)	Biological, Coastal, Visual, and Cultural Resources
Airfield Bird/Animal Aircraft Strike Hazard Wetlands Fill Project at Naval Air Station Joint Reserve Base New Orleans, Louisiana	EA (2014)	Biological, Coastal, Visual, and Cultural Resources
Runway Extension at Naval Air Station Joint Reserve Base New Orleans, Louisiana	EA (2003)	Biological, Coastal, Visual, and Cultural Resources
Present and Reasonably Foreseeable Future Actions		
Air National Guard F-15EX Eagle II & F-35A Lightning II Operational Beddowns	EIS, Ongoing	Airspace Management, Noise, Biological, Coastal, Visual, and Cultural Resources
Atlantic Fleet Training and Testing	SEIS/OEIS, Ongoing	Biological, Coastal, and Visual Resources

Legend: CATEX = Categorical Exclusion; EA = Environmental Assessment; EIS = Environmental Impact Statement; NEPA = National Environmental Policy Act; OEIS = Overseas Environmental Impact Statement; SEIS = Supplemental Environmental Impact Statement; VORTAC = Very High Frequency Omnidirectional Range/Tactical Aircraft Control

4.3.1 Past Actions

Record of Categorical Exclusion for Adversary Aircraft Transitions at Naval Air Station Fallon, Nevada and Naval Air Station Joint Reserve Base New Orleans, Louisiana. On July 22, 2021, Commander, U.S. Fleet Forces Command signed a Record of Categorical Exclusion for the adversary aircraft transitions at Naval Air Station (NAS) Fallon and Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA). At NAS JRB NOLA, 12 F/A-18 aircraft were replaced by 12 F-5N/F aircraft. The adversary aircraft are operated by Fighter Squadron Composite Two Zero Four (VFC-204). The aircraft transition took place in 2022 and 2023.

Federal Aviation Administration Very High Frequency Omnidirectional Range/Tactical Aircraft Control (VORTAC) Facility Vegetation Clearing at NAS JRB NOLA, Louisiana. The Federal Aviation Administration (FAA) and NAS JRB NOLA collaborated on preparing a Record of Categorical Exclusion to evaluate the effects of establishing a 1,000-foot clear zone around the VORTAC Facility at NAS JRB NOLA. Located in the northern part of the airfield, near the proposed Runway 22 project area, the VORTAC is situated on an abandoned former runway. This initiative involved clearing approximately 72 acres of land surrounding the facility. While vegetation growth in the cleared area had been managed since 1963, lack of maintenance had led to vegetation becoming overgrown by 2019 (Navy, 2019). The vegetation clearing has been completed.

Runway Approach Obstructions, BASH, and Vegetation Control at NAS JRB NOLA, Louisiana. The Navy conducted an EA to evaluate the impacts of two main actions at NAS JRB NOLA: removing air navigation obstructions along runway approaches and implementing new vegetation to reduce Bird/Aircraft Strike Hazard (BASH) risks. These actions spanned four separate project areas covering approximately 527 acres, including 205 acres of wetlands. Safety enhancements for runway approaches involved tasks like clearing trees, adjusting drainage systems, and introducing new vegetation (Navy, 2020).

Airfield BASH Hazard Wetlands Fill Project at NAS JRB NOLA, Louisiana. The Navy conducted an EA to examine the potential effects of grading and filling 44 acres of land adjacent to the airfield at NAS JRB NOLA, aiming to mitigate BASH risks. Among these acres, 15 were wetlands under U.S. Army Corps of Engineers jurisdiction. The EA evaluated both the proposed action—grading and filling the 44 acres—and a No Action Alternative. Following this assessment, the Navy concluded in December 2014 that the proposed action would not result in significant environmental impacts, leading to the issuance of a Finding of No Significant Impact (FONSI). This determination allowed the Navy to proceed with the project as planned (Navy, 2014).

Runway Extension at NAS JRB NOLA, Louisiana. The Navy conducted an EA to assess the impacts of extending the main runway at NAS JRB NOLA. Four alternatives, including a No Action Alternative, were examined. Alternatives 1 and 2, involving extensions of 4,000 feet and 2,000 feet, respectively, to the southwest, were identified as the only feasible options meeting evaluation criteria. The wetland fill associated with the project was estimated at 53 acres for Alternative 1 and 40 acres for Alternative 2. Alternative 2 was selected as the preferred option. A FONSI for the action was issued in 2003, and the project has since been completed (Navy, 2003).

4.3.2 Present and Reasonably Foreseeable Future Actions

Air National Guard F-15EX Eagle II & F-35A Lightning II Operational Beddowns Environmental Impact Statement. The National Guard Bureau proposes to replace F-15C/D aircraft with F-15EX or F-35A aircraft at Westfield-Barnes Regional Airport (Massachusetts), Fresno Yosemite International Airport (California), and NAS JRB NOLA. No fighter wing would receive both aircraft. The legacy F-15C/D aircraft would be retired from the inventory due to their age and resulting maintenance costs. The Proposed Action also includes personnel needed to operate and maintain the F-15EX and F-35A, and construction of new facilities and/or modification of existing facilities to support the beddowns (National Guard Bureau, 2024).

Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement Atlantic Fleet Training and Testing. Atlantic Fleet Training and Testing activities are located in the seaspace and airspace over the Atlantic Ocean, eastern coast of North America, portions of the Caribbean Sea, and the Gulf of Mexico. These activities account for force structure (organization of ships, weapons, and personnel) changes and include training with new aircraft, vessels, unmanned/autonomous systems, and weapon systems. The third (Phase III) comprehensive review of potential environmental effects of military readiness activities was published in September 2018 (Navy, 2018). Supplemental NEPA analysis began in fall 2023 to support renewal of current federal regulatory permits and authorizations that expire in November 2025 (88 *Federal Register* 80286).

4.4 Cumulative Impact Analysis

Where feasible, the cumulative impacts were assessed using quantifiable data; however, for many of the resources included for analysis, quantifiable data is not available and a qualitative analysis was

undertaken. In addition, where an analysis of potential environmental effects for future actions has not been completed, assumptions were made regarding cumulative impacts related to this EA where possible. The analytical methodology presented in Chapter 3, which was used to determine potential impacts to the various resources analyzed in this document, was also used to determine cumulative impacts.

4.4.1 Airspace Management

The action to replace adversary aircraft at NAS JRB NOLA is inherently included in the Proposed Action and would not be a cumulative impact. A reasonably foreseeable action affecting the cumulative effect on airspace management includes the proposed *Louisiana Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement* assessing the Louisiana Air National Guard (LAANG) replacement of the existing F-15C aircraft with either the F-15EX or F-35A aircraft. There were no established requirements for an increase in airspace capacity, lateral or vertical changes, or changes to published times of use for local Special Use Airspace (SUA) within the proposed beddown action. The resulting impacts to airspace from the beddown were determined to be the same as those in existing conditions. The proposed F-15EX and F-35A operations under the Beddown Action were based on LAANG aircraft operations. These proposed operations were accounted for in the assessment of impacts to airspace with the establishment of the Bourbon Military Operations Area (MOA) and Air Traffic Control Assigned Airspace (ATCAA). While the sorties from LAANG may increase slightly from the sorties proposed in this EA, this is not expected to have a cumulative impact to airspace management since the times of use and expected activation of the MOA/ATCAA would stay the same regardless of the number of users. Additional sorties would likely be distributed among this and other regional SUA. A portion of these sorties would only use the Bourbon MOA/ATCAA to transit to adjacent SUA. The potential increase in sorties would not impose restrictions to access for Visual Flight Rules (VFR) aircraft and the Bourbon MOA/ATCAA times of use and activation would remain the same, resulting in comparable impacts to civil traffic as in the Proposed Action. The activation of the MOA/ATCAA drives impacts to civil traffic, not the number of sorties. Thus, implementation of the Proposed Action, together with reasonably foreseeable future actions, would not result in significant cumulative impacts to airspace management since utilization of the Bourbon MOA/ATCAA would remain unchanged with implementation of cumulative actions.

4.4.2 Noise

The proposed *Louisiana Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement* could interact with noise impacts from the Proposed Action to create cumulative impacts within the study area. The replacement of the existing F-15C aircraft would result in additional sorties in the Bourbon MOA/ATCAA from those assessed in the Proposed Action. The total military operations originating from NAS JRB NOLA and utilizing the proposed Bourbon MOA/ATCAA would increase based on the LAANG aircraft operations. The LAANG has stated the preferred alternative is to replace the F-15C with the F-15EX at NAS JRB NOLA. However, since a Record of Decision has not been signed for that action, the noise analysis of both aircraft types is included in this cumulative analysis. The beddown would not include both replacement aircraft types. The noise levels within Proposed Bourbon MOA/ATCAA from implementation of the LAANG action, with either aircraft selection (F-35A or F-15EX), would increase and are presented in **Table 4.4-1**.

Table 4.4-1 Cumulative Noise Levels for Annual Aircraft Operations in Proposed Bourbon MOA/ATCAA

Cumulative Scenario (Sorties)	*Operations*	*Airspace*	*Noise Level (dB)*	*Estimated Percentage of Population "Highly Annoyed"*	*Number of Daily Events >65 SEL*
F-15EX (3,000)	Subsonic	Bourbon MOA/ATCAA	54 DNL	< 3.31	< 1
	Supersonic	Bourbon MOA/ATCAA[1]	34 CDNL	< 0.83	n/a
	Supersonic	Bourbon MOA/ATCAA[2]	45 CDNL	< 1.66	n/a
F-35A (3,000)	Subsonic	Bourbon MOA/ATCAA	55 DNL	3.31	< 1
	Supersonic	Bourbon MOA/ATCAA[1]	34 CDNL	< 0.83	n/a
	Supersonic	Bourbon MOA/ATCAA[2]	44 CDNL	< 1.66	n/a

Notes: [1]Operations within Bourbon MOA/ATCAA West of the 12 NM arc above 30,000 feet MSL.
[2]Operations within Bourbon MOA/ATCAA East of the 12 NM arc above 4,000 feet MSL.

Legend: > = greater than; < = less than; ATCAA = Air Traffic Control Assigned Airspace; CDNL = C-weighted Day-Night Average Noise Level; dB = decibel; DNL = A-weighted Day-Night Average Noise Level; MOA = Military Operations Areas; n/a = not applicable; SEL = Sound Exposure Level

Source: Stantec 2024a,b,c

Subsonic aircraft operations under both cumulative scenarios, either implementation of the F-15EX or F-35A, and when combined with the Proposed Action but without the F-15C operations, the resulting cumulative noise within the proposed Bourbon MOA/ATCAA would be below the significance level of 65 decibels (dB) A-weighted Day-Night Average Sound Level (DNL) established by the FAA. The addition of F-15EX or F-35A aircraft to the Proposed Action without F-15C aircraft operations would result in 54 dB DNL and 55 dB DNL, respectively and below and equal to the Federal Interagency Committee on Urban Noise (FICUN) and USEPA levels compatible with all land use types to include residential, public use (i.e., schools), recreational, and entertainment areas. The DNL increase of 19 dB and 20 dB would fall under the "reportable" level according to the FAA as there is a 5 dB increase between 45 dB DNL and 60 dB DNL, when compared to the No Action Alternative. The percentage of the population expected to be highly annoyed by the cumulative noise from subsonic aircraft operations would be low (3.31 percent) and less than 1.0 daily event would exceed 65 dB Sound Exposure Level (SEL).

Structural damage or secondary vibration impacts are not expected to occur based on the maximum sound exposure. An individual location is not expected to experience direct low-level overflights on a routine basis since aircraft operations would be distributed over a wide area. Supersonic aircraft operations and resulting cumulative noise within Proposed Bourbon MOA/ATCAA would be below 62 dB C-weighted Day-Night Average Sound Level (CDNL), compatible with all sensitive resources when applying U.S. Army Public Health Command standards, and a low percentage of the population (less than 1.66 percent) would be expected to be highly annoyed. The addition of F-15EX or F-35A aircraft to the Proposed Action without F-15C aircraft operations would result in 45 dB CDNL and 44 dB CDNL, respectively. As such, the Proposed Action along with other reasonably foreseeable actions would not have significant cumulative impacts from noise.

4.4.3 Biological Resources

The study area considered in the cumulative analysis for biological resources consists of the surface water, ground, and low airspace around the MOA/ATCAA. Because the Proposed Action would not result in direct surface water or ground impacts, the only impacts considered are noise impacts to wildlife, chaff and flare impact to wildlife, and BASH. The projects that could contribute noise and chaff

and flares impacts are the *Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement Atlantic Fleet Training and Testing* and *Louisiana Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement.* The proposed activities assessed in these projects could introduce noise in the environment that would disturb wildlife in the area. The LAANG beddown project would slightly increase the noise exposure within the Bourbon MOA/ATCAA (see **Section 4.4.2**, *Noise*); however, the noise exposure would remain relatively low and would not exceed significance thresholds for noise. Changes in Atlantic Fleet Training and Testing activities would result in fewer overall aircraft overflights in the Gulf of Mexico Range Complex and Gulf of Mexico Range Complex Inshore locations, thus reducing the long-term potential for noise exposure in this general vicinity. The changes in noise exposure from reasonably foreseeable projects would not present long-term, consistent noise disruptions to wildlife.

Use of chaff and flares from the Proposed Action is not expected to contribute significantly to cumulative chaff and flare use. Chaff and flares are part of both contributing projects, but the levels of chaff and flare deployment would not be expected to cause harm to biological resources in any individual projects. The operations areas addressed in those documents are substantially larger than the Bourbon MOA/ATCAA. Thus, the distribution of chaff and flares and their residual materials would be widespread and not expected to overlap with the Bourbon MOA/ATCAA area.

Several past projects have implemented measures to reduce BASH concerns in the runway environment at NAS JRB NOLA (VORTAC facility, Runway Approach Obstruction project, Airfield BASH Wetlands Fill project, and Runway Extension). The extensive BASH safety measures discussed in **Section 3.3.3** reduce the BASH risk from the Proposed Action. The other projects have cumulatively improved BASH concerns and reduced the risk as much as possible. Therefore, the Proposed Action when combined with other past and reasonably foreseeable actions is not expected to have a significant cumulative impact with respect to BASH risk.

4.4.4 Coastal Zone

The cumulative analysis study area for the coastal zone is located in the region below and around the proposed MOA/ATCAA. The cumulative actions outlined in **Section 4.3.1** encompass past ground disturbing activities within Louisiana's coastal zone (VORTAC facility, Runway Approach Obstruction project, Airfield BASH Wetlands Fill project, and Runway Extension). The Proposed Action solely involves airspace operations above this zone. Consequently, the impacts on the coastal zone from the Proposed Action are disparate and only anticipated to have minimal impacts on coastal resources from chaff and flare deployment. Present and foreseeable future actions linked to the proposed project, described in **Section 4.3.2**, entail aircraft training, potentially occurring near or within the coastal zone beneath the proposed airspace. All these cumulative projects have established consultation with the Louisiana Department of Energy and Natural Resources (LDENR) to ensure consistency with the Louisiana Coastal Resources Program (LCRP). Under the Preferred Alternative, the Navy would adhere to all applicable state and federal regulations regarding the implementation of the new MOA/ATCAA. The proposed project and cumulative actions would be consistent, to the maximum extent practicable, with the enforceable policies of Louisiana's federally approved Coastal Resources Program. Therefore, implementation of the Preferred Alternative combined with past, present, and reasonably foreseeable future projects, would not result in significant cumulative impacts to the coastal zone.

4.4.5 Visual Effects

The past actions included in cumulative impacts analysis involved wetland fill, vegetation removal, and changes to vegetation composition in areas on and near NAS JRB NOLA. These actions have caused some change to views of the natural landscape, which observers may perceive as a negative effect on the visual aesthetic quality of the region. However, the affected areas are likely not viewed or accessed often for recreational activities because of their proximity to the installation. The Air National Guard action to replace F-15C/D aircraft would not substantially change the number of aircraft potentially viewable from the study area. Changes in Atlantic Fleet Training and Testing activities would result in fewer overall aircraft overflights in the Gulf of Mexico Range Complex and Gulf of Mexico Range Complex Inshore locations (which include Gulfport, Mississippi, Lake Borgne, and the Pascagoula River). Vessel use would also decrease overall in these areas, although there is a small increase associated with Gulfport and Pascagoula specifically. The increase would probably not be noticeable in the context of existing vessel traffic and would not change the visual character of the region, including the study area. U.S. Coast Guard activities involving vessels and aircraft would not change to the extent that they contrast with the existing environment. The Proposed Action, if combined with past, present, and reasonably foreseeable actions, would not contribute to significant cumulative impacts on the visual resources or visual character of the study area.

4.4.6 Cultural Resources

The region of influence (ROI) for cumulative impacts to cultural resources is the Area of Potential Effects (APE) underneath the Bourbon MOA/ATCAA. Cumulative impacts to cultural resources from past, present, and future actions within the APE would be less than significant because no historic properties would be directly or indirectly impacted within the project APE. Implementation of the Preferred Alternative would not affect archaeological sites or architectural resources. The noise exposure from the proposed training activity in the Bourbon MOA/ATCAA when combined with the expected additional noise from the *Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement* would remain below significant levels (see **Section 4.4.2**, *Noise*).

The past, present, and future projects also did not result in individual significant impacts. All projects discussed under cumulative effects would comply with federal laws and regulations concerning the protection of cultural resources. NAS JRB NOLA Integrated Cultural Resources Management Plan (Crowell, 2008) includes Standard Operating Procedures that governs the management and protection of any cultural resources discovered during operations or project implementation. Therefore, implementation of the Proposed Action when combined with the past, present, and reasonably foreseeable future projects would not result in significant cumulative impacts to cultural resources.

5 Other Considerations Required by the National Environmental Policy Act

5.1 Consistency with Other Federal, State, and Local Laws, Plans, Policies, and Regulations

In accordance with 40 Code of Federal Regulations (CFR) part 1502.16(c), analysis of environmental consequences shall include discussion of possible conflicts between the Proposed Action and the objectives of federal, regional, state and local land use plans, policies, and controls. **Table 5.1-1** identifies the principal federal and state laws and regulations that are applicable to the Proposed Action and describes briefly how compliance with these laws and regulations would be accomplished.

5.2 Irreversible or Irretrievable Commitments of Resources

Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis. This includes the use of non-renewable resources such as metal and fuel, and natural or cultural resources. These resources are irretrievable in that they would be used for this project when they could have been used for other purposes. Human labor is also considered an irretrievable resource. Another impact that falls under this category is the unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment.

Implementation of the Proposed Action would allow for more efficient use of fuel resources by establishing Special Use Airspace (SUA) closer to Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) for Navy training activities. The Proposed Action is not expected to increase use of fuels. There would be no unavoidable destruction of natural resources. There would be no irreversible or irretrievable commitments of resources.

5.3 Unavoidable Adverse Impacts

The National Environmental Policy Act (NEPA) requires a description of any significant impacts resulting from implementation of a proposed action, including those that can be mitigated to a less than significant level. Based on the analysis in this Environmental Assessment (EA), the Proposed Action would not result in any significant or unavoidable adverse impacts to any resource area. As such, no mitigation actions are required.

5.4 Relationship between Short-Term Use of the Environment and Long-Term Productivity

NEPA requires an analysis of the relationship between a project's short-term impacts on the environment and the effects that these impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. Impacts that narrow the range of beneficial uses of the environment are of particular concern. This refers to the possibility that choosing one development site reduces future flexibility in pursuing other options, or that using a parcel of land or other resources often eliminates the possibility of other uses at that site.

The Proposed Action would involve the establishment of SUA closer to NAS JRB NOLA to support Navy training activities. While establishing these areas would limit non-military use of the airspace during times the Military Operations Area (MOA) is active, this impact is not expected to be significant (see **Section 3.1.3**, *Airspace Management Environmental Consequences* and **Appendix C**) or impact the long-term productivity of the area.

Table 5.1-1 Principal Federal and State Laws Applicable to the Proposed Action

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	*Status of Compliance*
NEPA (42 U.S.C. section 4321 et seq.); CEQ NEPA implementing regulations; Navy and FAA procedures for implementing NEPA	This EA has been prepared in accordance with NEPA and complies with Navy and FAA NEPA procedures.
Clean Air Act (42 U.S.C section 7401 et seq.)	The Proposed Action would be implemented in accordance with the Clean Air Act. There are no expected impacts to air quality since all operations would occur above the mixing height. The General Conformity Rule does not apply. There would be no change to GHGs from existing conditions.
Coastal Zone Management Act (16 U.S.C. section 1451–1465)	The Proposed Action would be consistent with the enforceable policies of the LCRP. LDENR provided concurrence on the Coastal Consistency Determination on August 22, 2024.
National Historic Preservation Act (16 U.S.C. section 470 et seq.)	The Proposed Action would have no adverse effect on historic properties. Louisiana SHPO provided concurrence on August 12, 2024. No response was received from the Chitimacha Tribe of Louisiana.
Endangered Species Act (16 U.S.C. sections 1531–1544)	The Proposed Action may affect, but is not likely to adversely affect species listed under the ESA. There would be no effect to critical habitat. USFWS provided concurrence on October 21, 2024. NOAA Fisheries provided concurrence on February 27, 2025.
Migratory Bird Treaty Act (16 U.S.C. sections 703–712)	The Proposed Action would result in brief noise disturbances to migratory birds but would not result in take of any of these species.
Bald and Golden Eagle Protection Act (16 U.S.C. section 668)	The Proposed Action would result in brief noise disturbances to bald eagles but would not result in take of any eagles.
Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations	There are no environmental justice communities within the Project Area. Therefore, the Proposed Action is compliant with this order.
Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All	The Proposed Action complies with this order because a review of census data revealed that there are no environmental justice communities in the project area.
Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks	The Proposed Action would comply with this order.
Executive Order 13175, Consultation and Coordination with Indian Tribal Governments	The Navy sent a letter describing the undertaking and known historic properties in the Area of Potential Effects to the Chairman of the Chitimacha Tribe of Louisiana on July 24, 2024. The letter also requested their assistance in the identification of any traditional cultural properties or any other concerns with the undertaking. No response was received from Chitimacha Tribe of Louisiana.

Legend: CEQ = Council on Environmental Quality; EA = Environmental Assessment; ESA = Endangered Species Act; FAA = Federal Aviation Administration; GHG = greenhouse gas; LCRP = Louisiana Coastal Resources Program; LDENR = Louisiana Department of Energy and Natural Resources; MBTA = Migratory Bird Treaty Act; Navy = United States Navy; NEPA = National Environmental Policy Act; NOAA = National Oceanic and Atmospheric Administration; SHPO = State Historic Preservation Office(r); U.S.C. = United States Code; USFWS = United States Fish and Wildlife Service

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This EA was prepared collaboratively between the Navy, FAA, and contractor preparers.

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Appendix A
Cooperating Agency Correspondence

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DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
Ser N46/016
September 14, 2023

Mr. Christopher L. Southerland
Manager, Operations Support Group, ATO Central Service Center, AJV-C2
Department of Transportation, Federal Aviation Administration
10101 Hillwood Parkway
Fort Worth, TX 76177

Dear Mr. Southerland:

SUBJECT: SOUTHEASTERN LOUISIANA SPECIAL USE AIRSPACE ENVIRONMENTAL ASSESSMENT – COOPERATING AGENCY REQUEST

In accordance with the National Environmental Policy Act (NEPA), the Department of the Navy (Navy) is initiating an Environmental Assessment (EA) for the Proposed Establishment of Special Use Airspace (SUA [Military Operations Area {MOA}/ATC Assigned Airspace {ATCAA}]) in Louisiana (FAA Central Service Center). U.S. Fleet Forces Command (USFFC) will serve as the Navy's Lead Agency for the EA. The EA will analyze an airspace requirement articulated by Strike Fighter Squadron TWO ZERO FOUR (VFC-204) located at Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) in connection with the squadron's transition to the F-5N Tiger II aircraft. To meet current and emerging training needs and maximize effective use of the airspace structure, USFFC proposes to establish a new block of SUA (MOA/ATCAA) east of NAS JRB NOLA adjoining the existing Snake MOA.

As prescribed in the President's Council on Environmental Quality NEPA Regulations, 40 C.F.R. § 1501.8, and in accordance with the joint memorandum of understanding between the Federal Aviation Administration (FAA) and the Department of Defense signed on October 17, 2019, the Navy requests the FAA formally participate as a Cooperating Agency in the preparation of the EA.

Consistent with the joint memorandum, USFFC will serve as and complete all the requirements of the Lead Agency on behalf of the Navy, and the FAA will be responsible for all prescribed actions of the Cooperating Agency.

In addition, USFFC will act as the Lead Agency for purposes of compliance with Section 7, Endangered Species Act (16 U.S.C. § 1536); Section 106, National Historic Preservation Act (54 U.S.C. § 306108); and similar regulatory consultation or coordination requirements.

To avoid unnecessary delays in the NEPA process, USFFC will provide appropriate information and related materials in a timely fashion and establish timelines for your agency to complete its review and respond promptly. The goal is for each agency to accommodate the environmental compliance needs and review proposed timelines of the other early enough in the project planning process to provide the necessary data for efficient adoption or preparation of a joint NEPA document. The Lead and Cooperating Agency shall independently evaluate all information or analysis before using it to support a NEPA review. The intent of the Lead and Cooperating Agency relationship is to ensure mutually adequate documentation that complies with both the Lead and Cooperating Agencies' NEPA implementing procedures.

5090
Ser N46/016
September 14, 2023

As the Lead Agency, the Navy is responsible for overseeing preparation of the EA that includes, but is not limited to, the following:

a. Gathering all necessary background information and preparing the EA.

b. Determining the scope of the EA including the alternatives evaluated.

c. Working with the FAA to ensure compliance with Order 1050.1F, Environmental Impacts: Policies and Procedures as well as the 1050.1F version 2 Desk Reference.

d. Circulating the appropriate NEPA documentation to the general public and any other interested parties.

e. Scheduling and supervising meetings held in support of the NEPA process, and compiling any comments received.

f. Maintaining an administrative record and responding to Freedom of Information Act requests relating to the EA.

As a Cooperating Agency, USFFC requests the FAA to support the Navy in the following manner:

a. Providing timely comments throughout the EA process, to include working drafts of the EA documents.

b. Participating, as necessary, in meetings hosted by the Navy for discussion of EA related issues.

c. Adhering to the project's overall schedule as set forth by the Navy.

d. Participating in public meetings, if held, during the Draft EA review phase.

Should you or your staff have further questions regarding this matter, our point of contact in the USFFC Environmental Compliance and Planning Branch is Mr. Greg Thompson, 757-836-6938, Gregory.S.Thompson2.civ@us.navy.mil.

Sincerely,

AGUAYO.MARIA.LORETO.1157276731
Digitally signed by AGUAYO.MARIA.LORETO.1157276731
Date: 2023.09.12 07:37:49 -04'00'

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

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Copy to:
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NAS JRB NEW ORLEANS LA

2

U.S. Department of Transportation
Federal Aviation Administration

Air Traffic Organization
FAA Headquarters, Washington, DC

800 Independence Avenue, S.W.
Washington, DC 20591

September 15, 2023

Maria L. Aguayo, Director
Fleet Installations and Environment and Deputy Chief of Staff
Department of the Navy
U.S. Fleet Forces Command
1562 Mitscher Avenue, Suite 250
Norfolk, Virginia 23551-2487

Dear Director Aguayo,

Thank you for your letter dated September 14, 2023 requesting that Federal Aviation Administration (FAA) participate as a cooperating agency in the Department of the Navy's U.S. Fleet Forces Command's (USFFC) Environmental Assessment (EA) for its proposed Establishment of Special Use Airspace (SUA) Military Operations Area (MOA) and Air Traffic Control Assigned Airspace (ATCAA) in Louisiana. The USFFC is the Navy's Lead Agency for the EA.

The EA will analyze USFFC's proposed activities within SUA as articulated by Strike Fighter Squadron Two Zero Four (VFC-204) located at Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) in connection with the squadron's transition to the F-5N Tiger II aircraft. To meet current and emerging training needs and maximize effective use of the airspace structure, USFFC proposes that the FAA establish a new MOA/ATCAA east of NAS JRB NOLA adjoining the existing Snake MOA.

The FAA appreciates the Navy's recognition of our role as a cooperating agency in the establishment of SUA and evaluation of the USFFC's proposed use of SUA. FAA's role includes approval of requested SUA and review of the Navy's environmental analyses of potential impacts to airspace associated with this Navy project as required by the National Environmental Policy Act (NEPA) and its implementing regulations at 40 CFR Part 1500. Since this Navy proposal involves the FAA's establishment and Department of Defense's (DoD) use of SUA, FAA accepts the Navy's request to act as a cooperating agency.

Having *jurisdiction by law* over the National Air Space (NAS), the FAA performs its role as a cooperating agency for the establishment and designation of SUA in accordance with the NEPA implementing regulations at 40 CFR Section 1501.8 on cooperating agencies; FAA's NEPA implementing Order 1050.1F, paragraph 8-2 – *Adoption of Other Agencies' NEPA Documents*; and FAA Order 7400.2P, Chapters 21 and 32, Appendix 8 – *FAA Special Use Airspace Environmental Processing Procedures*, which outlines the process by which the FAA works with the DoD on projects involving DoD use of SUA, and the guidelines set forth in the October 2019 Memorandum of Understanding (MOU) between FAA and DoD *Concerning Environmental Review of Special Use Airspace Actions*

(Appendix 7 to FAA Order 7400.2P, Chapter 32), and. See,
https://www.faa.gov/documentLibrary/media/Order/7400.2P_Basic_dtd_4-20-23--COPY_FINAL.pdf
and
https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.current/documentnumber/1050.1

While Appendix 8 of FAA Order 7400.2 indicates that the airspace review and approval process and environmental impacts review should be conducted concurrently as much as possible, they are still separate processes. FAA's approval of either the DoD's aeronautical (SUA) request or the DoD's NEPA analysis does not automatically confer approval of the entire proposal. See FAA Order 7400.2, Chapter 21 (Sections 3, 4, 5, and 6), and Appendices 7 and 8 for additional details on the SUA request and approval process, and coordination of NEPA documentation for projects involving the use of SUA between FAA and DoD. https://www.faa.gov/documentLibrary/media/Order/7400.2P_Basic_dtd_4-20-23--COPY_FINAL.pdf

The FAA's participation in the development of the Navy's EA and related NEPA documentation for this proposed action resides under the jurisdiction of the FAA's Central Service Center, Operations Support Group (OSG) in Fort Worth, Texas. Karol Archer is the OSG's Environmental Team Manager. Kristi Regotti is the designated Environmental Protection Specialist who will coordinate with the Navy and USFFC on both the USFFC's EA and FAA's Adoption EA as they are being developed. The Central Service Center's environmental specialist will be the primary point of contact for matters related to the development and review of the Navy's NEPA documentation for this project, including related airspace issues that will be tracked and coordinated by FAA Headquarters Airspace Environmental Policy Team (AJV-P23).

A copy of the Navy's request for the FAA's cooperating agency status and this reply are being forwarded to the Environmental Team Manager, Karol Archer of the Central Service Center's Operations Support Group. Ms. Archer can be contacted at karol.archer@faa.gov for further review of the NEPA document(s). Ms. Regotti can be contacted at kristi.regotti@faa.gov. For general questions regarding NEPA document processing and coordination with the DoD, FAA's Service Centers, or FAA headquarters, please contact me, Paula Miller in the ATO/AJV-P23, Airspace Environmental Policy Team at paula.miller@faa.gov.

Sincerely,

9/13/2023

X Paula M. Miller

Paula M. Miller

Signed by: PAULA M. MILLER

Paula M. Miller, JD, EPS
Airspace Environmental Policy Team, AJV P-23
Air Traffic Organization, Mission Support Services

Federal Aviation Administration

cc:
Karol Archer, FAA/Central Service Center
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Gregory S. Thompson, USFFC Environmental Compliance and Planning Branch, 757-836-6938, Gregory.S.Thompson2.civ@us.navy.mil

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Appendix B
Public Involvement

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DISPUTES

Continued from page 1A

HGI, will become the first point of contact for aggrieved customers, with authority to adjust customer bills after reviewing cases.

Both the S&WB and customers can trigger arbitration if dissatisfied with HGI's decision.

The ordinance is the City Council's second foray into regulating the S&WB since state lawmakers gave it the authority to do so in 2022. The first set of regulations, which are in effect, give the council final say over billing disputes that aren't resolved after an S&WB investigation and administrative hearing.

HGI is currently working on a $600,000 contract to review and make recommendations to the council in those cases.

"This issue has heightened as S&WB has ultimately failed to fix its billing practices," City Council member Joe Giarrusso said in an email. "To again address the lingering billing problem, the Council decided to move HGI intervention from the back end of the appellate process to an earlier part."

The "back end" appeals that HGI is now handling have tapered off, with just 18 cases in the second quarter of 2024 — less than half its first caseload last year. But there are far more winding through the process: nearly 1,600 accounts are in "open investigation" status, and nearly 850 are awaiting a hearing, according to the S&WB.

Council Vice President JP Morrell said there are an untold number of customers who haven't even been able to initiate appeals because of S&WB's poor customer service. The idea is for those customers to now contact HGI, bypassing the S&WB altogether.

"We do not know how many customers are currently in a black hole somewhere, asking for an investigation, asking for an appeal, that just get nothing," Morrell said at a committee meeting last week.

Morrell spoke at the S&WB billing advisory committee, which includes council members, state lawmakers and S&WB officials. The committee unanimously approved the draft ordinance, although there were some disagreements over finer points, including how to calculate fixed bills. The ordinance was initially expected to be voted on Thursday, but has been deferred to the Sept. 5 council meeting.

The new appeal procedures are intended to garner quicker dispute resolutions. They are designed to be temporary and to provide immediate relief while the S&WB plugs away at the smart meter project.

Utility officials have said that nearly all 144,000 smart meters, which use radio signals to make accurate meter reads much easier, should be in place by the end of next year. Installation is already underway across the city, with more than 50,000 installed as of last month.

"This issue has heightened as S&WB has ultimately failed to fix its billing practices. To again address the lingering billing problem, the Council decided to move HGI intervention from the back end of the appellate process to an earlier part."

JOE GIARRUSSO, New Orleans City Council member

But in the interim, city and state officials say correcting the S&WB's notorious billing problems is the only hope for restoring confidence from weary residents, who will be asked to vote to renew one of three drainage taxes in 2026.

S&WB officials have said the existing drainage millages, which generate about $70 million annually, are inadequate to keep the city's pipes, pumps and canals working, and losing any funding already in place could be a disaster.

"We keep coming back to billing because as elected officials, as council members, we see on a daily basis where people are at on this," Morrell said at the recent committee meeting. "There's no media campaign you can run next year that's going to help you pass a millage in the city of New Orleans. And once that millage falls, it's a domino effect."

Morrell announced HGI's new role last week in a shift from previously announced plans to work with the S&WB to solicit competitive proposals for the work.

The council announced in June that they would pay for an accounting firm to "oversee and handle" all S&WB billing, as well as complaints, suggesting the chosen firm would work alongside S&WB personnel to ensure bills are issued properly.

The S&WB would issue the request for proposals, and the council would budget $3.5 million for the accounting firm's fee, according to a council news release. Those plans were apparently scrapped after the council voted last month to keep the money rather than transfer it to the S&WB. It will now be used to pay HGI, assuming a separate vote on a contract extension passes.

Giarrusso said HGI's tasks won't differ much from what it is currently doing, though it could earn more for the work based on the larger role it will play.

"HGI is still acting in an appellate role. It's now doing so earlier. Because the timing of the work but not the relevant substance has changed, the council is permitted to fund it at a higher level to ensure performance," Giarrusso said.

HGI officials did not respond to inquiries.

In a statement, the S&WB said HGI's new role is different from its original request for the council's help, which included assistance with revising bills before they are sent out, hearings, credits and collections.

"We continue to share the common goal of reducing time imposed on customers to reach a resolution of disputed bills and keep their accounts in good standing, and we are grateful to any support that brings credibility and neutrality to our billing process," the statement said.

HGI, a third-party program manager and claims administrator, holds other contracts with the city and Regional Transit Authority to handle insurance claims, and the council has also tapped it to hear property tax appeals.

Some of the firm's other work has been controversial, most recently its handling of Jefferson Parish's emergency rental assistance program. The parish terminated HGI in May 2021, just three months after it was hired, claiming the firm had failed to timely process applications and communicate with renters.

Other local officials had trouble with the federally funded program, which was meant to prevent a tide of pandemic-related evictions, but Jefferson Parish officials said HGI's failures had caused it to become one of the slowest rental aid distributors in the state.

Some Jefferson Parish renters had been evicted even after submitting proper documentation, and others were either unable to reach HGI about their status or given false information, according to the parish's termination letter.

HGI is now suing Jefferson Parish, claiming the parish's program rules prevented it from addressing concerns. The firm says it is owed more than $500,000 in unpaid invoices.

One of the housing advocates who initially raised alarms, HousingNOLA Executive Director Andreanecia Morris, said HGI and the parish government were both to blame. But Morris said some of the problems, like communication failures with applicants, were obviously the contractor's fault.

"(The parish) got complaints from people, these very specific complaints that people got evicted after contacting you. They never got followup calls," Morris said.

OUTAGES

Continued from page 1A

again why Entergy can't reliably keep customers' lights on.

District A Council member Joe Giarrusso, who has helped craft the city's energy-related policy, said those trends could lead the council to tighten a set of "reliability standards" it drafted to hold Entergy to account. The Council drafted those rules amid a protracted legal fight over the utility's ability to keep residents' power running, a fight that only recently concluded.

"Something just seems to be different this year again," Giarrusso said.

Council member JP Morrell, who chairs the Utilities Committee, said council staff are reviewing all of the year's outages to chart a path forward. He declined to say what steps lawmakers might take toward the utility.

"We're reviewing all the data since the beginning of the year regarding reliability issues, in particular fair-weather outages, and we'll have further comments in the future," Morrell said.

In a statement, an Entergy spokesperson said the problems can be attributed to two trends: an old grid whose age has spurred debate over who should build a new one, and, despite no "hand of God"-type storms striking the city yet this year, a series of other wash-related factors.

"We didn't have a storm last night, but we did have equipment that was hit by severe weather last week — and many times before that," said Beau Tidwell, the Entergy spokesperson. "Lightning strikes are up 130% year-to-date. Extreme heat has broken records for two years running."

Entergy continues to work on repairs of broken poles and other equipment, Tidwell said, but also acknowledges the need for more investments in "resilience."

The latest outages have touched all corners of the city, from New Orleans East to Giarrusso's Mid City-area district. Their causes include mylar balloons, defective jumpers, lightning, a driver who stuck a power pole then fled the scene and damaged lightning arrestors, according to the Utilities Committee.

When he returned to his Mid City home after a day at work in the French Quarter earlier this month, Richard-Lael Lillard was perturbed to find the temperature slightly warmer than he'd left it. Lillard collects antiques as a hobby and needs to keep his house at a steady, chilled temperature to preserve his old books, taxidermies and other antique artifacts.

His air conditioning had fallen victim to one of the outages that have plagued Mid City businesses and homes in recent weeks.

Lillard, who moved to New Orleans a year ago, has already grown weary of what feels like constant problems with services he pays for through taxes or fees to private companies like Entergy.

"Why are there power outages when we pay our bills?" he said.

Mid-way through what experts say will end up being a historically potent Atlantic hurricane season, New Orleans has been spared serious impacts from any major storms. Still, the outages persist.

The Alliance for Affordable Energy, a pro-consumer advocacy group, has urged the city to act more aggressively to ding the utility and protect residents from potentially dangerous loss of air conditioning that can ensue from outages.

One way to do that would be to tighten the city's reliability standards for Entergy, which Giarrusso said the council could review in light of the recent outages, said Jesse George, the alliance's New Orleans policy director. George also urged the council to swiftly take up a swath of pending pro-consumer energy-related legislation.

City officials have tangled with Entergy over such problems in the past.

In April, they reached a deal with Entergy to settle long-standing allegations that the utility mismanaged its massive Grand Gulf nuclear plant that delivers large amounts of power to the city.

The city won a $250 million payout in that deal, which also resolved a battle over a $1 million fine over Entergy's poor reliability performance. The city got another $500,000 to end that battle.

At the same time, bolstering the grid has been a front-burner topic since Hurricane Ida left thousands across south Louisiana, including many New Orleanians, without power for days — and, in some cases, weeks — in late August of 2021. Consumer advocates and Entergy have agreed that climate change, which is strengthening storms, makes preparing the region's infrastructure imperative.

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Trump makes campaign stop at border in Arizona

BY JONATHAN J. COOPER and ADRIANA GOMEZ LICON
Associated Press

SIERRA VISTA, Ariz. – On a dirt road below the shrub-dotted hills of Arizona, Donald Trump used a stretch of wall and a pile of steel beams to draw a visual contrast between his approach to securing the border and that of his Democratic opponent, Vice President Kamala Harris.

Trump brought along grieving mothers, the sheriff of Cochise County and the head of the Border Patrol union to echo his tough-on-border security message at Thursday's visit, which was themed "Make America Safe Again."

"To my right is what we call Trump wall. This was wall that was built under President Trump," said Paul Perez, the president of the Border Patrol union. "To my left, we have what we call Kamala wall. It's just sitting there doing nothing, lying down."

The visit was the fourth in a series of events held in battleground states this week to try to draw the focus away from Democrats' celebration of Harris' presidential nomination in Chicago. Speakers at the convention on Wednesday night accused Trump of using the border to stir up his base by demonizing immigrants.

ASSOCIATED PRESS PHOTO BY EVAN VUCCI

Republican presidential nominee former President Donald Trump speaks Thursday during a tour of the southern border with Mexico in Sierra Vista, Ariz., as Alexis Nungaray, mother of Jocelyn Nungaray, listens as Joamel Guevara holds a shirt with a photo of Jocelyn.

Joining Thursday's border visit were the mothers of children who were killed during the Biden administration in cases where the suspects are immigrants in the country illegally. Trump frequently highlights attacks involving immigrants to fuel concerns about the Biden administration policies, though some studies have found that people living in the U.S. illegally are less likely than native-born Americans to have been arrested for violent, drug and property crimes.

"I just really, really, really want everybody to please take into consideration how important border control is because we're losing very innocent people to heinous crimes," said Alexis Nungaray, the mother of 12-year-old Jocelyn Nungaray, who was strangled to death in Houston in June.

At the Arizona event, snipers stood nearby at an elevated position, their eyes and weapons pointed toward Mexico, a day after Trump held his first outdoor rally since an assassination attempt last month. Security forces were also visible on the Mexican side of the border, including several men with rifles and tactical gear. Others wore uniforms identifying them as members of the Mexican state police.

"What Biden and Kamala have done to the families here with me and so many others, thousands and thousands of others, not only killed, but also really badly hurt, badly hurt to a point where they'll never lead a normal life again. It's shameful, and it's evil," Trump said.

The Biden administration did not immediately respond to a request for comment on the wall materials that were lying there at the site during the visit.

In his tour of battleground states this week, Trump has traveled to Pennsylvania, Michigan and North Carolina and will hold events in Las Vegas and the Phoenix suburb of Glendale on Friday. His running mate, Sen. JD Vance of Ohio, spoke at the same location near the border a few weeks ago.

Elected Democratic officials argued Wednesday night at the convention that their party is the one offering real leadership on border issues.

"When it comes to the border, hear me when I say, 'You know nothing, Donald Trump,'" said U.S. Rep. Veronica Escobar, who represents the border city of El Paso, Texas. "He and his Republican imitators see the border and immigration as a political opportunity to exploit instead of an issue to address."

U.S. Sen. Chris Murphy, a Connecticut Democrat, spoke after a video played showing Republican opposition to a bipartisan border deal earlier this year. Murphy was the top Democrat negotiating the proposal with conservative senators and said the bill would have had unanimous support if it weren't for Trump.

Trump was asked about the deal, and he called it "weak" and "ineffective," adding a bill was not needed for President Joe Biden to take action.

"He didn't need a bill. He knows that," he said. "You know I didn't have a bill. I said 'close the border.'"

Gomez Licon reported from Fort Lauderdale, Fla. Associated Press writer Farnoush Amiri contributed to this report from Chicago.

FBI chief: U.S. faces many elevated threats

BY MICHAEL GOLDBERG
Associated Press

BROOKLYN CENTER, Minn. – The country is facing heightened threats from many corners at a time when law enforcement agencies are struggling, FBI Director Christopher Wray said in an exclusive interview, adding that he is "hard pressed to think of a time in my career where so many different kinds of threats are all elevated at once."

Wray spoke Wednesday with The Associated Press while visiting the Minneapolis field office to talk about partnerships between law enforcement agencies and also with other entities. His remarks come as the FBI confronts heightened concerns over terrorism, both domestic and international, as well as Chinese espionage and intellectual property theft and foreign election interference.

"I worry about the combination of that many threats being elevated at once, with the challenges facing the men and women in law enforcement more generally," Wray said at the office in the suburb of Brooklyn Center. "And the one thing that I think helps bridge those two challenges is partnerships. That's how we get through. It is by all working together."

Wray's assessment of an elevated threat landscape is consistent with alarm bells he has sounded for months. Soon after the Oct. 7 attack by Hamas in Israel, Wray began warning that the rampage could serve as an inspiration to militants, "the likes of which we haven't seen since ISIS launched its so-called caliphate years ago."

The FBI has also scrambled to deal with security concerns related to the United States' southern border, with officials revealing in June that eight people from Tajikistan with suspected ties to the Islamic State group were arrested and were being held on immigration violations.

Officials are also dealing with the specter of foreign election interference. The FBI and other federal agencies announced Monday that Iran was responsible for a hack targeting the Trump campaign and for an attempted breach of the Biden-Harris campaign, part of what officials portrayed as a brazen and aggressive effort to interfere in American politics.

Wray declined to talk about any specific investigation or threat but said investigations into cyberattacks, including against election infrastructure, candidates or campaigns, require help from the private sector.

"One of the things that we have been doubling down on with every passing day is, is on partnerships, because ultimately you're talking about the ability to connect the dots, whether it's against some kind of election influence threat or some other kind of threat," Wray said. "You need to have partners sharing information with each other to put the two pieces together to see the bigger picture."

Law enforcement officers are being killed in the line of duty at a rate of about one every five days, Wray said, noting that four first responders have died in Minnesota alone in 2024. They include a Minneapolis officer killed in May while trying to help someone, and two officers and a paramedic who died in Burnsville in February when a heavily armed man opened fire.

Such violence "breaks my heart every single time," the director said.

The FBI has not been spared such attacks: Days after agents searched Donald Trump's Florida estate, Mar-a-Lago, to recover classified documents, a gunman who called on social media for federal agents to be killed "on sight" died in a shootout after trying to get inside the FBI's Cincinnati office.

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Body of British tech magnate among those recovered from yacht wreckage

By The Associated Press

PORTICELLO, Sicily – The Italian coast guard said Thursday the body of British tech magnate Mike Lynch is among those recovered off the coast of Sicily from the wreckage of a superyacht whose builders had called unsinkable.

One woman remains missing. She has not been identified, but Hannah Lynch, Lynch's 18-year-old daughter, is reportedly unaccounted for. The family had been celebrating his recent acquittal on fraud charges with the people who defended him at trial in the United States.

Five others were recovered by rescue crews following Monday's tragedy.

The Bayesian, a 184-foot British-flagged yacht, went down in a storm early Monday as it was moored about half a mile offshore. Civil protection officials said they believe the ship was struck by a tornado over the water, known as a waterspout, and sank quickly.

Termini Imerese Public Prosecutor's Office investigators were collecting evidence for a criminal investigation, which they opened immediately after the tragedy despite no formal suspects having been publicly identified.

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After convention, real test for Harris campaign begins

BY STEVE PEOPLES and ZEKE MILLER
Associated Press

CHICAGO – Over and over, from the massive stage in the electric convention hall, the Democrats this week predicted that Kamala Harris would defeat Donald Trump. They described her as a historic figure, the embodiment of hope, "the president of joy."

But amid the extraordinary optimism, former first lady Michelle Obama offered a sober warning: "No matter how good we feel tonight or tomorrow or the next day, this is going to be an uphill battle."

The word of caution was quickly drowned out by the excitement that overwhelmed the standing-room-only 17,000-person arena in downtown Chicago. But as activists, operatives and party leaders leave the Democratic National Convention and fan out across America, a stark reality exists: The real test for Harris has only just begun.

More than a month after President Joe Biden stepped aside and endorsed her, Harris has barely started to outline detailed plans she would pursue as president to address the nation's biggest challenges — immigration, crime and climate change, among them. She has yet to sit down for even one comprehensive media interview to face difficult questions about her flip-flops on policy in recent years, her leadership style and the focus on race and gender that looms over her historic candidacy.

"We can't put our heads in the sand. She's a Black woman. The bar is going to be higher for everything," said John Anzalone, a pollster who has served the last three Democratic presidential nominees. "And guess what? That means, even mistakes. Mistakes are going to be magnified."

At the same time, Harris' allies acknowledge she remains largely undefined in the minds of many voters, having operated in Biden's shadow for much the last four years. The relative anonymity offers both opportunity and risk.

"The bad thing about vice presidents is that nobody knows who you are. The good thing about vice presidents is nobody knows who you are," said David Axelrod, who served as former President Barack Obama's chief strategist.

Harris now has just over two weeks to prepare for what could be her only presidential debate against Trump, a Sept. 10 showdown that could dramatically shift the direction of the race. The first presidential debate, of course, effectively forced Biden to drop out of the race.

For now, Harris' team feels no urgency to roll out a comprehensive policy platform or sit for media interviews that might jeopardize the positive vibes that have defined her nascent campaign and produced a flood of campaign donations and a growing army of swing-state volunteers.

During a series of meetings throughout the convention week, her advisers cast her policy agenda as a continuation and expansion on Biden's first term achievements, particularly on economic matters, even if it may look and sound different in some cases.

Harris has notably dropped her opposition to fracking and her support for Medicare for All, which were defining features of her 2019 presidential campaign. Her aides insist her values remain the same, but she's embraced more centrist policies out of pragmatism.

Meanwhile, Harris' allies believe it's only a matter of time before Trump settles on an effective line of attack.

In recent days, the Republican former president has adopted a kitchen-sink approach against Harris that includes attacks about her racial identity, her laugh, her record as vice president and her history as a "San Francisco liberal."

"He'll figure out how to get a message and land a political punch," Pennsylvania Gov. Josh Shapiro, who delivered a prime-time convention speech this week, said of Trump.

Polling reveals that voters' views of Harris have shifted relatively rapidly in the month since Biden stepped aside and she became the de facto nominee.

In a June AP-NORC poll, just 39% of Americans said they had a favorable opinion of Harris and 42% said they didn't know enough to say.

After Biden stepped aside, an August AP-NORC poll found that 48% of Americans had a favorable opinion of Harris with just 6% saying they didn't know enough to have an opinion. The latest poll also showed that 27% of adults have a "very" favorable opinion of Harris, up from 14% in June.

The sharp shift raises the possibility that public opinion could change again as voters learn more.

It also raises the possibility that Harris' momentum has less to do with her candidacy than a sense of relief among Democrats that Biden stepped aside. Shortly before he left the race, an AP-NORC poll found that nearly two-thirds of Democrats said they didn't want Biden to run again, and about half said they'd be dissatisfied if he was the nominee.

Young Democrats of America president Quentin Wathum-Ocama said his enthusiasm is based on a combination of relief that Biden stepped aside and excitement about Harris. Given her relatively low profile over the last four years, he conceded that even he does not know much about her governing plans.

As a public school teacher, he said he'd like to hear more about her education policy, for example.

"Do people know her? People are aware of her," Wathum-Ocama said. "I can be excited, but I still want more."

AP writers Josh Boak in Chicago and Michelle L. Price in Asheboro, North Carolina, contributed.

ASSOCIATED PRESS PHOTO BY J. SCOTT APPLEWHITE

Democratic presidential nominee Vice President Kamala Harris waves while surrounded by balloons on Thursday at the Democratic National Convention in Chicago.

Secret Service agents put on modified duty after Trump attack

BY MICHAEL BALSAMO
Associated Press

At least five Secret Service agents have been placed on modified duty after the assassination attempt on former President Donald Trump in July, a law enforcement official told The Associated Press.

They include the special agent in charge of the Pittsburgh field office and three other agents assigned to that office, which was responsible for the security planning ahead of the July 13 rally in Butler, Pennsylvania, according to the law enforcement official who had direct knowledge of the matter. One of the five agents was assigned to Trump's protective detail, the official said.

The official was not authorized to publicly disclose details of the personnel investigation and spoke to The Associated Press on condition of anonymity.

The agents are on administrative leave, meaning they cannot do investigative or protective work.

Multiple investigations have been launched as officials probe a complicated law enforcement failure that allowed a man with an AR-style rifle to get close enough to shoot and injure Trump at the rally.

Trump was struck in the ear but avoided serious injury. One spectator was killed and two others were injured.

The shooting was a devastating failure of one of the agency's core duties and led to the resignation of the Secret Service's then-director, Kim Cheatle.

At a congressional hearing after the assassination attempt, Cheatle acknowledged that the Secret Service was told about a suspicious person two to five times before the shooting. She also revealed that the roof from which Thomas Matthew Crooks opened fire had been identified as a potential vulnerability days before the rally.

Acting Secret Service Director Ronald Rowe Jr., who took over after Cheatle's resignation, has said he "cannot defend why that roof was not better secured."

Associated Press writer Rebecca Santana contributed to this report.

2nd ex-Memphis officer pleads guilty in Tyre Nichols' death

BY JONATHAN MATTISE and TRAVIS LOLLER
Associated Press

MEMPHIS, Tenn. – Federal prosecutors agreed to recommend a prison sentence of no more than 40 years for a former Memphis police officer who pleaded guilty Friday to federal civil rights violations in the 2023 fatal beating of Tyre Nichols.

Emmitt Martin is the second former officer to plead guilty in the killing that sparked outrage and renewed calls for police reform. Three former officers still face trial in federal court next month, and two of their former colleagues could testify against them.

Martin entered his change of plea before U.S. District Judge Mark Norris in Memphis under an agreement with prosecutors, pleading guilty to excessive force and witness tampering charges. Sentencing is set for Dec. 5.

Nichols' mother, RowVaughn Wells, was in the courtroom. She nodded her head and smiled when the judge accepted Martin's change of plea.

In a news conference with civil rights attorney Ben Crump after the hearing, Wells said it was "very emotional" and "bittersweet." She said the latest plea is a step in the right direction, but that she won't be content until all of the officers are brought to justice.

"Tyre was just coming home. He was just minding his own business," she said.

Nichols died in a hospital on Jan. 10, 2023, three days after he was kicked, punched and hit with a police baton after a traffic stop.

The officers said they pulled Nichols over because he was driving recklessly, but Police Chief Cerelyn "CJ" Davis has said no evidence was found to support that allegation.

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AIRSPACE IMPACT ANALYSIS TO SUPPORT PROPOSED BOURBON MOA

March 2025

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AIRSPACE IMPACT ANALYSIS TO SUPPORT PROPOSED BOURBON MOA

TABLE OF CONTENTS

List of Figures

List of Tables

ACRONYMS AND ABBREVIATIONS

ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
ATS	Air Traffic Service
DoD	Department of Defense
EA	Environmental Assessment
FAA	Federal Aviation Administration
FL	Flight Level
GPS	Global Positioning System
IFR	Instrument Flight Rules
JO	Joint Order
MSL	mean sea level
MOA	Military Operations Area
MTR	Military Training Route
NAS JRB NOLA	Naval Air Station Joint Reserve Base New Orleans
NAVAID	navigational aid
NM	nautical mile
PDARS	Performance Data Analysis and Reporting System
RNAV	Area Navigation
ROI	Region of Influence
SUA	Special Use Airspace
U.S.	United States
U.S.C.	United States Code
VFR	Visual Flight Rules
VORTAC	VHF Omni-directional Range/ Tactical Air Navigation

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1.0 INTRODUCTION

This airspace impact analysis is in support of an Environmental Assessment (EA) and a proposal to the Federal Aviation Administration (FAA) to establish new Special Use Airspace (SUA) near Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) to support training requirements of the Navy. The current SUA does not meet the criterion to ensure naval strike warfare readiness training and certification requirements. This analysis provides a detailed assessment of the potential impacts to civil aviation associated with the proposed Bourbon Military Operations Area (MOA) and Air Traffic Control Assigned Airspace (ATCAA).

1.1 NATIONAL AIRSPACE SYSTEM

The National Airspace System is a network of both controlled and uncontrolled airspace, both domestic and oceanic. It includes air navigation facilities, equipment and services, airports and landing areas, aeronautical charts, information and services, rules and regulations, procedures and technical information, and manpower and material (FAA 2023a). Airspace management and use considers how airspace is designated, used, and administered in a manner that best accommodates the individual and common needs of military, commercial, general aviation, and other users of the airspace.

In the United States (U.S.), airspace is managed and controlled by the FAA. The FAA is solely responsible for developing plans and policy for the use of airspace and for managing airspace in such a manner that it ensures the safety of flight and that all users of the National Airspace System can operate in a safe, secure, and efficient manner (49 U.S. Code [U.S.C.] 40103(b)). The FAA considers multiple and sometimes competing demands for airspace in relation to airport operations, Air Traffic Service (ATS) routes, military training airspace, and other special needs to determine how the National Airspace System can best be structured to address all user requirements.

The Department of Defense (DoD) requests airspace from the FAA and schedules and uses airspace in accordance with the processes and procedures detailed in DoD Directive 5030.19, *DoD Responsibilities on Federal Aviation*, and FAA regulations. SUA identified for military and other governmental activities is charted and published by the National Aeronautical Charting Office in accordance with FAA Order Joint Order (JO) 7400.2P, *Procedures for Handling Airspace Matters* (FAA 2023b). Descriptions of approved SUA, except temporary areas and controlled firing areas, are compiled and published once a year in FAA JO 7400.10E, *Special Use Airspace* (FAA 2023c). Airspace designated for military use is released to the FAA when the airspace is not needed for military requirements (DoD 2023).

1.2 AIRSPACE CLASSIFICATION

Airspace is a three-dimensional resource defined by latitude, longitude, and altitude. There are six classes of airspace-A, B, C, D, E (controlled), and G (uncontrolled)-that are available to all users (civilian and military) (**Figure 1.2-1**). The airspace classes dictate pilot qualification requirements, rules of flight that must be followed, and the type of equipment necessary to operate within that airspace (**Table 1.2-1**).

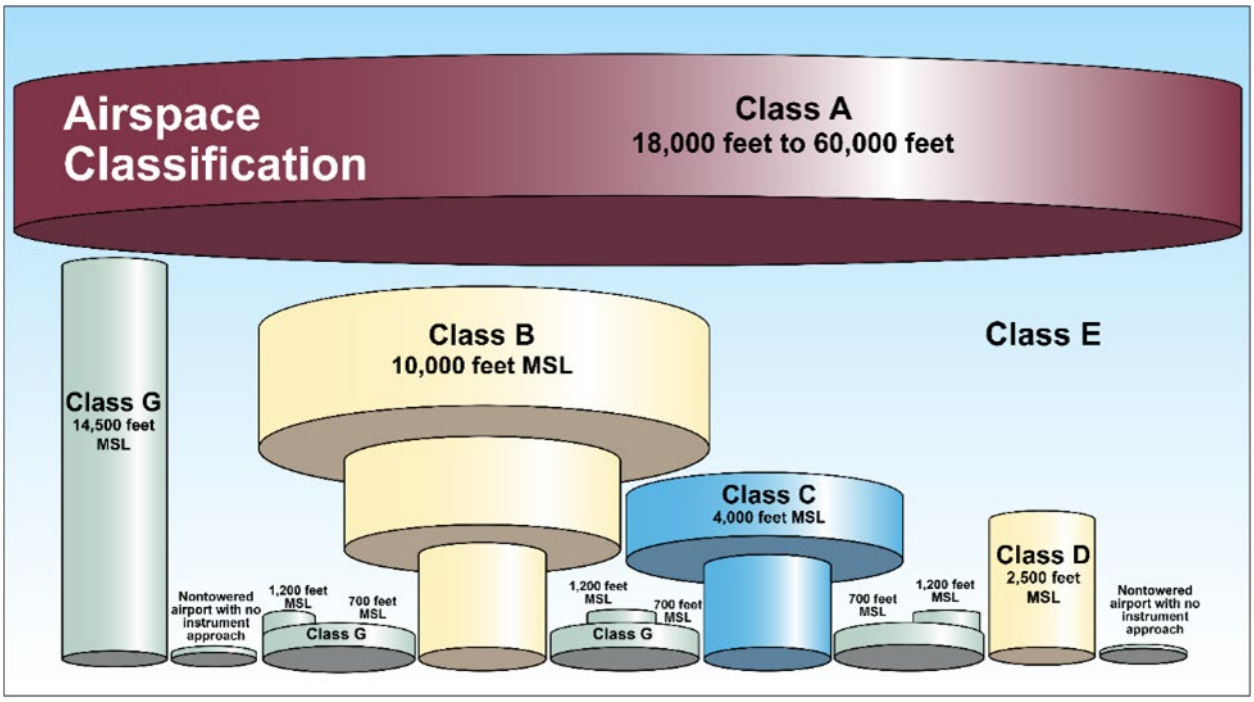

Figure 1.2-1 Airspace Classification

Controlled airspace is airspace of defined dimensions within which Air Traffic Control (ATC) service is provided (FAA 2023d). Controlled airspace is categorized into five separate classes, A through E. Controlled airspace is airspace that supports airport operations and includes airways supporting en-route transit from place-to-place.

Uncontrolled airspace is designated as Class G airspace. Within the continental U.S. and out to 12 nautical miles (NM) offshore, Class G airspace includes all airspace up to 14,500 feet mean sea level (MSL) that has not been designated as Class A, B, C, D, or E. Class G airspace has no specific prohibitions associated with its use. Class G airspace is described as uncontrolled because there are no entry requirements and ATC service is not guaranteed.

Table 1.2-1 Airspace Classification Requirements

Airspace	Class A	Class B	Class C	Class D	Class E	Class G
General Definition	Controlled airspace from 18,000 feet MSL up to and including FL600	Controlled airspace from the surface to 10,000 feet MSL surrounding the nation's busiest airports	Controlled airspace from the surface to 4,000 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower and are serviced by radar approach control	Controlled airspace that extends upward from the surface to 2,500 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower	Controlled airspace designated to serve a variety of terminal or en-route purposes. Class E airspace is often designated for an airport where instrument procedures exist without the presence of a control tower and as extensions to Class B, C, D, and E surface areas.	Uncontrolled airspace that has not been designated as Class A, B, C, D, or E.
Entry Requirements	Air Traffic Control Clearance	Air Traffic Control Clearance	Air Traffic Control Clearance for IFR. Two-way radio communication with Air Traffic Control required	Air Traffic Control Clearance for IFR. All require radio contact	None for VFR. Air Traffic Control Clearance and two-way radio for IFR.	None
Two-Way Radio Communication	Required	Required	Required	Required	Required only under IFR flight plan[1]	Not required[1]

Table 1.2-1 Airspace Classification Requirements

Airspace	Class A	Class B	Class C	Class D	Class E	Class G
VFR Visibility Minimum[2]	NA	3 SM	3 SM	3 SM	Below 10,000 feet MSL: 3 SM At or above 10,000 feet MSL: 5 SM	Below 1,200 feet AGL (regardless of MSL): Day: 1 SM; Night: 3 SM; Above 1,200 feet AGL and less than 10,000 feet MSL: Day: 1 SM; Night: 3 SM At or Above 10,000 MSL:5 SM.
Traffic Advisories	Yes	Yes	Yes	Workload Permitting	Workload Permitting	Workload Permitting

Notes: [1]Unless a temporary tower is present.
[2]Minimum distance from clouds vary by airspace class and altitude.
Legend: AGL = above ground level, FL = Flight Level, IFR = Instrument Flight Rules; MSL = mean sea level; NA = Not Applicable; SM = Statute Mile; VFR = Visual Flight Rules; .
Source: FAA 2023d.

Airspace in the National Airspace System is divided into two categories, regulatory and non-regulatory. The airspace described above and in **Figure 1.2-1** (except Class G airspace) is regulatory. Non-regulatory airspace includes MOAs, Warning Areas, alert areas, controlled firing areas, and national security areas. Within these two categories of airspace, there are four subcategories: controlled, uncontrolled, SUA, and other airspace (FAA 2023d).

1.3 General Flight Rules and Resources

There are specific operational requirements for each class of airspace. Some airspace, such as Class A, requires users to operate under instrument flight rules (IFR), while other airspace allows for visual flight rules (VFR), and in many cases IFR/VFR operate within the same space. The FAA produces charts and publications to guide civil and military flights within the National Airspace System. Aviators can find specific information on airspace and regulatory requirements in VFR/IFR Navigation Charts, Planning Charts, and a variety of supplementary charts and publications (FAA 2023d). These aeronautical charts depict information necessary for flight operations such as ATS routes (victor airways and jet routes), military training routes (MTRs), aerial refueling tracks, public and private airports, and available aids to navigation.

FAA JO 7110.65A, *Air Traffic Control*, establishes procedures for personnel who provide ATC services within the National Airspace System (FAA 2023e). The primary purpose of the ATC system is to prevent a collision involving aircraft operating in the system. The ATC system is designed to give first priority (duty priority) to separating aircraft and issuing safety alerts, and provide support to national security and homeland defense activities. Behind duty priority is the ATC system's operational priority, which provides service to aircraft on a "first come, first served" basis with the following exceptions (list is not

all inclusive): air ambulance flights, presidential aircraft and support elements, active air defense scrambles, and aircraft engaged in navigation aid checks (FAA 2023e).

1.4 SPECIAL USE AIRSPACE

SUA is airspace of defined dimensions identified by an area where activities must be confined due to their nature, and/or where limitations are imposed on aircraft operations that are not a part of those activities (non-participating aircraft). This airspace is defined by designated altitude ceilings and floors and horizontal boundaries described in geographic coordinates. Information on SUA is contained in aeronautical charts and in FAA JO 7400.10E (FAA 2023c).

1.5 SUA SCHEDULING AND ACTIVATION

Several different terms are used to describe the use of the SUA at various times during the day. The definitions are below and reference **Figure 1.5-1**, which shows a notional depiction for part of a fictional day regarding use of a particular SUA. The FAA annually publishes a listing of regulatory and non-regulatory airspace, to include the times of use and the using and scheduling agency, in this case the Navy.

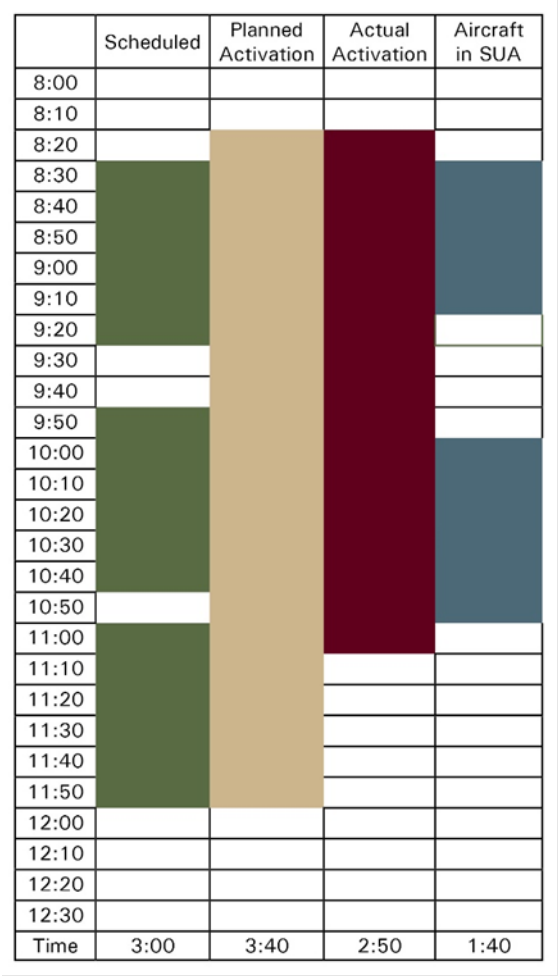

Figure 1.5-1 Notional Partial-Day Schedule for SUA

Scheduled. When a military flying unit wants to use a particular SUA, it will be scheduled ahead of time with central scheduling for discreet time blocks. For instance, in order to accomplish a particular training event, a squadron may schedule SUA for 1 hour, with the intent to have multiple aircraft use it for that hour. In **Figure 1.5-1**, the green bars show three separate 1-hour periods.

Planned Activation. When military users schedule a particular SUA for discreet blocks of time, with only short times in between, the airspace will generally be considered "active" during this down period. The process of returning airspace for a short period of time would generate more work for controllers while not providing appreciable benefit to potential airspace users. In the example shown in **Figure 1.5-1**, there are two short "gap" times between military scheduled use, one of 20 minutes, and one of 30 minutes. In cases like these, the planned activation time (shown as tan in color) will include those small gaps. It is generally more efficient for all users of the airspace to plan for airspace activation times that cover these small discreet gaps. The activation typically begins slightly before the arrival of the first military user so as to avoid delay when entering into the SUA. In the example shown in **Figure 1.5-1**, the planned activation would begin 10 minutes prior to the first user, and last until the last user leaves the airspace, per the schedule. SUA activation times can be retrieved from the FAA's SUA website, https:/sua.faa.gov.

Actual Activation. This is the amount of time that the SUA is activated in real-time, and accounts for any changes from the plan. In the example shown in **Figure 1.5-1**, the actual activation time is shown in maroon. The airspace is activated as planned at 8:20, 10 minutes prior to the first scheduled user's arrival in the airspace. It is kept activated (per the plan) until it is apparent that the third user, scheduled to begin at 11:00, will not be using the airspace, at which time the SUA is deactivated, and is therefore available for other uses. A cancellation of scheduled SUA time can happen for a multitude of reasons, including maintenance problems with the aircraft or weather conditions that preclude the aircraft from either flying or completing the training as planned. Actual activation of a SUA is what would restrict VFR/IFR aircraft from flying through that section of airspace.

Aircraft in SUA. This is simply the time that military aircraft are present in the activated SUA. In the example shown in **Figure 1.5-1**, aircraft presence in the SUA is shown with the blue bars. The first scheduled user arrives on time at 8:30 and departs about 10 minutes early at 9:20 (perhaps from training being complete, being low on fuel, or some other reason). The second event shown is scheduled from 9:50 until 10:50, but the aircraft arrives to the airspace late (at 10:00) and leaves per their schedule. The third event is cancelled and will not use the airspace as scheduled. When the Using Agency learns that the SUA will not be used as scheduled, the FAA is informed through internal coordination procedures, and the SUA deactivated. Once deactivated, ATC will allow aircraft to travel through the confines of the SUA. Non-participating aircraft will be rerouted or vectored by ATC to ensure approved separation exits. Aircraft using a MEDEVAC call sign are afforded priority handling where the SUA would be required to go "cold" to allow a transition through. Emergency aircraft have the right-of-way over all other air traffic and would also have the SUA go "cold" to allow a transition. The pilots of civil aircraft should always plan for deviations around active SUA.

In summary, **Figure 1.5-1** shows four different schedule terms commonly used when discussing the use of SUA. In this example, the hypothetical SUA was scheduled for 3 hours. It was planned to be activated for a single long block of 3 hours, 40 minutes. Its actual activation time (in real-time) was just 2 hours and 50 minutes. During actual activation, there were military aircraft actively present in the SUA for an hour and 40 minutes. Aircraft are not present for the full published times of use. Aircraft presence will vary on any given day depending on the training event.

1.6 GENERAL OPERATING PROCEDURES

Operations within SUA are generally conducted under VFR and with some exceptions IFR. MOAs are established to separate certain military activities from IFR traffic; non-participating IFR traffic may be cleared through the airspace if ATC can provide IFR separation. Pilots operating under VFR are not prohibited from transiting an active MOA but should exercise extreme caution when military activity is being conducted. Pilots can request the status of a MOA by contacting the flight service stations within 100 miles of the area or by contacting the using or controlling agency (FAA 2023d). Additionally, the FAA maintains an informational SUA website to assist pilots and aircrews with flight planning and familiarization (FAA 2023f).

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2.0 METHODOLOGY

2.1 DATA SOURCE

FAA's Performance Data Analysis and Reporting System (PDARS) data was used to analyze the existing civil traffic in the project's area of influence. The PDARS continuously collects flight plan and radar track data from systems located at Air Route Traffic Control Centers (ARTCCs), Terminal Radar Approach Control Facilities, and ATC towers. The dataset in this study is based on recorded flight data in the area proposed for the Bourbon MOA/ATCAA from February 20 through March 22, 2023 (PDARS 2023). Houston ARTCC confirmed this dataset was representative of average operations in this area and was sufficient for this analysis (Personal communication, October 3, 2023).

2.2 FILTERING OF FLIGHT TRACKS

All historical flight tracks from the 30-day radar data that passed through the proposed lateral boundaries and within the proposed altitudes and proposed times of operation were identified. The intent of this was to determine the number of civil aircraft that would potentially be impacted by activation of the proposed airspace. The magnitude of the impact will be determined based on the changes required to avoid the proposed airspace during times of activation.

One characteristic of the PDARS dataset is that there are many aircraft for which the category is listed as "Unknown," indicating there are one or more data fields missing to properly identify them. In this analysis, the unknowns were further filtered to determine if some were identifiable based on other data fields. The following filters were used to categorize as many unknown flight tracks as possible:

1. All aircraft with an "unknown" aircraft type were compared to known military aircraft with the same call sign and classified as such.
2. Aircraft that both originated and terminated at a military airfield were considered military and removed from the dataset.

2.3 IMPACTS TO FLIGHTS AND REROUTING METHODOLOGY

For each of the civil flight tracks that crossed the proposed SUA, the origin and destination airport were identified and counted – providing a list of the number of flights in the dataset traveling to and from each airport. There are more than 240 unique combinations of origin and destination airports with many combinations occurring only once or very infrequently. The list was reduced to focus on the most frequently occurring airport origin-destination pairings (once per week or more), to represent the majority of traffic potentially affected by the proposed airspace and produce a manageable and meaningful analysis. Impacts to military aircraft are not considered – the assumption is that DoD activation of the proposed SUA indicates acceptance of the impacts to other DoD aircraft for the duration of the airspace activation. Impacts are counted for non-military aircraft only.

The distance between each of the most common origin-destination pairings was calculated point-to-point in a straight line. Though this is not likely the actual routing used, it represents a best-case, straight-line distance directly from the origin airport to the destination airport. In certain cases, when straight-line routing would result in a flight going through areas with other active SUA, the baseline distance was calculated using a common routing typically used to avoid that SUA. These cases are discussed in the individual sections.

To determine the potential impact to these common flights which cross the proposed MOA, an alternative routing was calculated using a navigational aid (NAVAID) or intermediate "fix" which would route these flights outside the proposed SUA. Routes were identified from origin to the intermediate fix, and from the intermediate fix to the destination, and added together to produce the total distance that would result from rerouting flights around the proposed SUA. The change in distance was calculated by comparing the baseline straight-line routing to the alternative routing using NAVAIDs. The change in flight time (i.e., "extra minutes" needed to navigate around proposed SUA) was determined using a speed estimate. For aircraft crossing the MOA, the assumed true airspeed was 330 knots. This airspeed number is based on the average types of aircraft in the dataset for the particular altitude bands. All calculations assume no wind. While pilots operating under VFR are permitted to transit through a MOA, this analysis assumes VFR aircraft will not enter the MOA when it is active and would require alternative routings to avoid the MOA.

An example comparing a direct flight path and the route deviation methodology is depicted in **Figure 2.3-1**. The green line shows the direct routing between Orlando (KMCO) and Louis Armstrong New Orleans International Airport (KMSY). This line intersects the proposed Bourbon MOA, depicted with blue shaded edges. The intermediate navigation fixes required to ensure an aircraft remains clear of the Bourbon MOA would be CHRGE and REDFN. These two fixes would also provide the required lateral separation from the wide complex of Warning Areas and the MOA along that route. The course shown in yellow is the flight track that goes from KMCO – CHRGE – REDFN – KMSY as an alternative to flying through the proposed Bourbon MOA and adjacent Warning Areas. This alternative routing is conservative given that it also avoids the Warning Areas (which pilots operating VFR may already choose to avoid) but is assumed for the sake of analysis. If that was not a factor, avoidance of just the proposed Bourbon MOA/ATCAA would require an even smaller deviation. This route change adheres to existing separation requirements for SUA. Internal ATC coordination procedures would allow for various deconfliction measures to ensure non-participating aircraft and restricted airspace separation. This methodology is representative of the approach taken for all sections of the MOA in this study. In this way, a flight plan that allows for avoidance of the proposed airspace can be compared in distance and time to the best/shortest possible routing available in the absence of the proposed airspace.

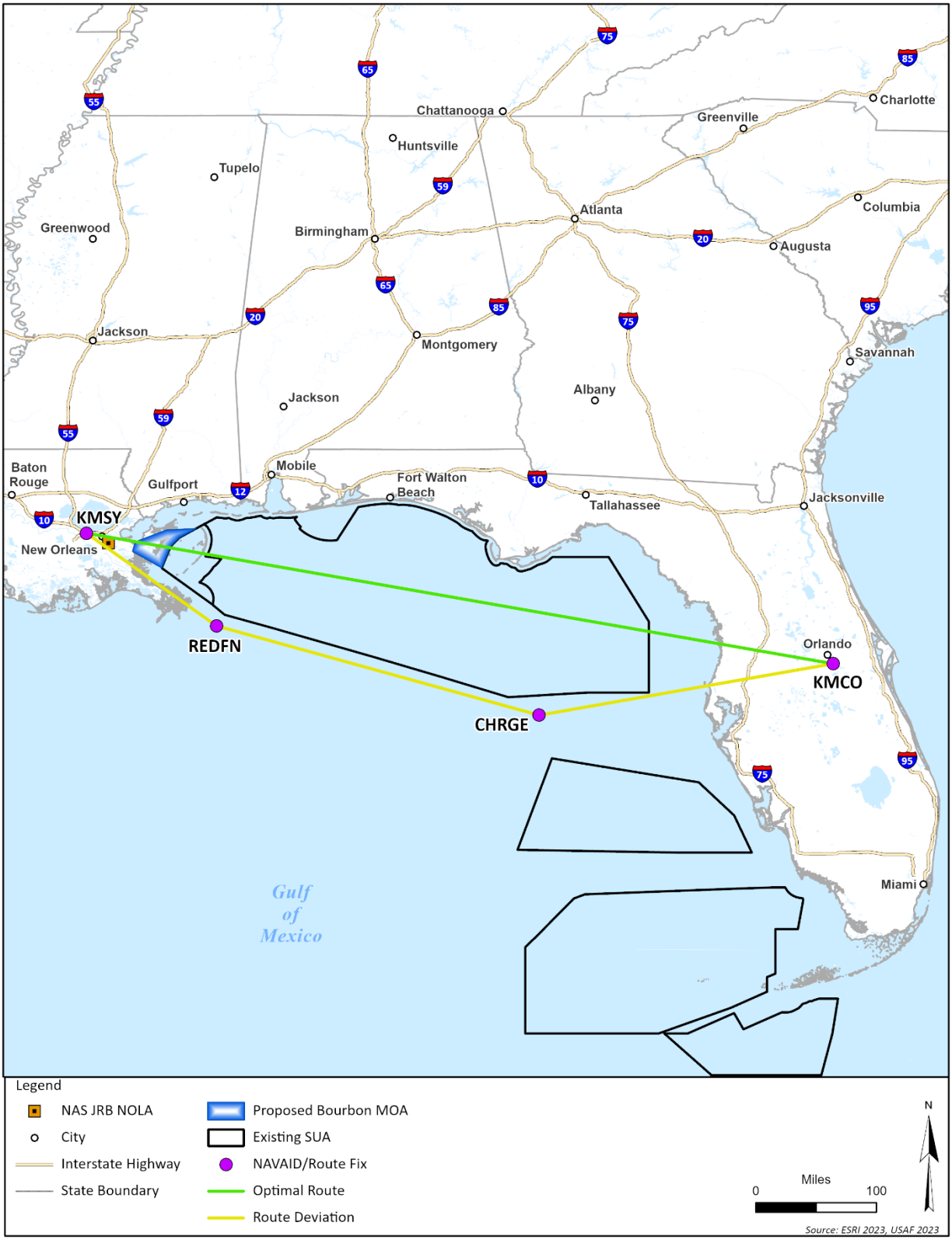

Figure 2.3-1 Example of Direct Flight Plan Compared to Route Deviation to Avoid SUA

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3.0 ANALYSIS

3.1 REGION OF INFLUENCE

As shown in **Figure 3.1-1**, the proposed Bourbon MOA/ATCAA analyzed in this assessment is contiguous to existing SUA (Snake MOA, Snake Low MOA, Snake ATCAA, Warning Area 148 [A & B], and Warning Area 453 [A & B], collectively known as the WHODAT Airspace).

3.1.1 Description of Proposed Bourbon MOA/ATCAA

The proposed Bourbon MOA/ATCAA would be located approximately 19 miles east of NAS JRB NOLA Alvin Callender Field (Airport ID: KNBG). The altitudes of the Bourbon MOA would be 4,000 feet MSL up to but not including Flight Level (FL) 180 or 18,000 MSL. A proposed ATCAA would overlay the MOA with the same horizontal boundary. The altitudes for the ATCAA would be FL180–FL320. On a limited basis, there may be a need for ATCAA altitudes up to FL500 to conduct aircraft post maintenance check flights. During these post maintenance check flights, the time above FL320 would be limited to approximately 15 minutes after coordination with the controlling agency. The expanded ATCAA altitudes (FL320–FL500) would be requested by exception and are excluded from further analysis. For reference, the proposed Bourbon MOA has been overlaid on the VFR Sectional chart and IFR Low chart (**Figures 3.1-2 and 3.1-3**).

The Bourbon MOA would be west and immediately adjacent to the existing Snake and Snake Low MOAs that exist from 3,000 feet MSL–FL180, collectively referred to as the Snake MOA in this report. The western boundary of the proposed MOA would be approximately 14 miles outside of the New Orleans Class B Airspace. The MOA/ATCAA would support operations from various military aircraft to include FA-18s, F-5s, F-15s, and F-35s. The MOA would be open to use by all aircraft in the DoD inventory.

The published times of use would be Monday–Friday, 0800–1700 local and other times by Notice to Air Missions. The Controlling Agency would be Houston ARTCC and the Using Agency would be U.S. Navy, Fighter Squadron Composite 204 (VFC-204), NAS JRB NOLA.

3.1.2 Proposed Usage of Bourbon MOA

Table 3.1-1 shows that the proposed Bourbon MOA would be used for up to 4,169 sorties per year. This results in a requirement for airspace activation of the Bourbon MOA for 5 hours per day for up to 240 days annually. The 1,200 hours of total annual activation (which includes gaps anticipated between flights) represent about 55 percent of the total time available between Monday and Friday, 0800–1700 Local (proposed times of use for the Bourbon MOA).

Table 3.1-1 Military Usage of Proposed Bourbon MOA

Metric	Bourbon MOA	Assumptions
Number of Proposed Sorties[1]	4,169	Average sorties in adjacent Snake MOA
Hours per Year – Activation	1,200	Total activation time
Hours per Day - Activation	5	240 days per year
% Time Military Aircraft Present	~ 55%	Monday to Friday, 0800–1700 Local

Note: [1] One sortie includes the takeoff, mission, and landing of one aircraft averaging 1.3 hours each.
Legend: % = percent; ~ = approximately; MOA = Military Operations Area

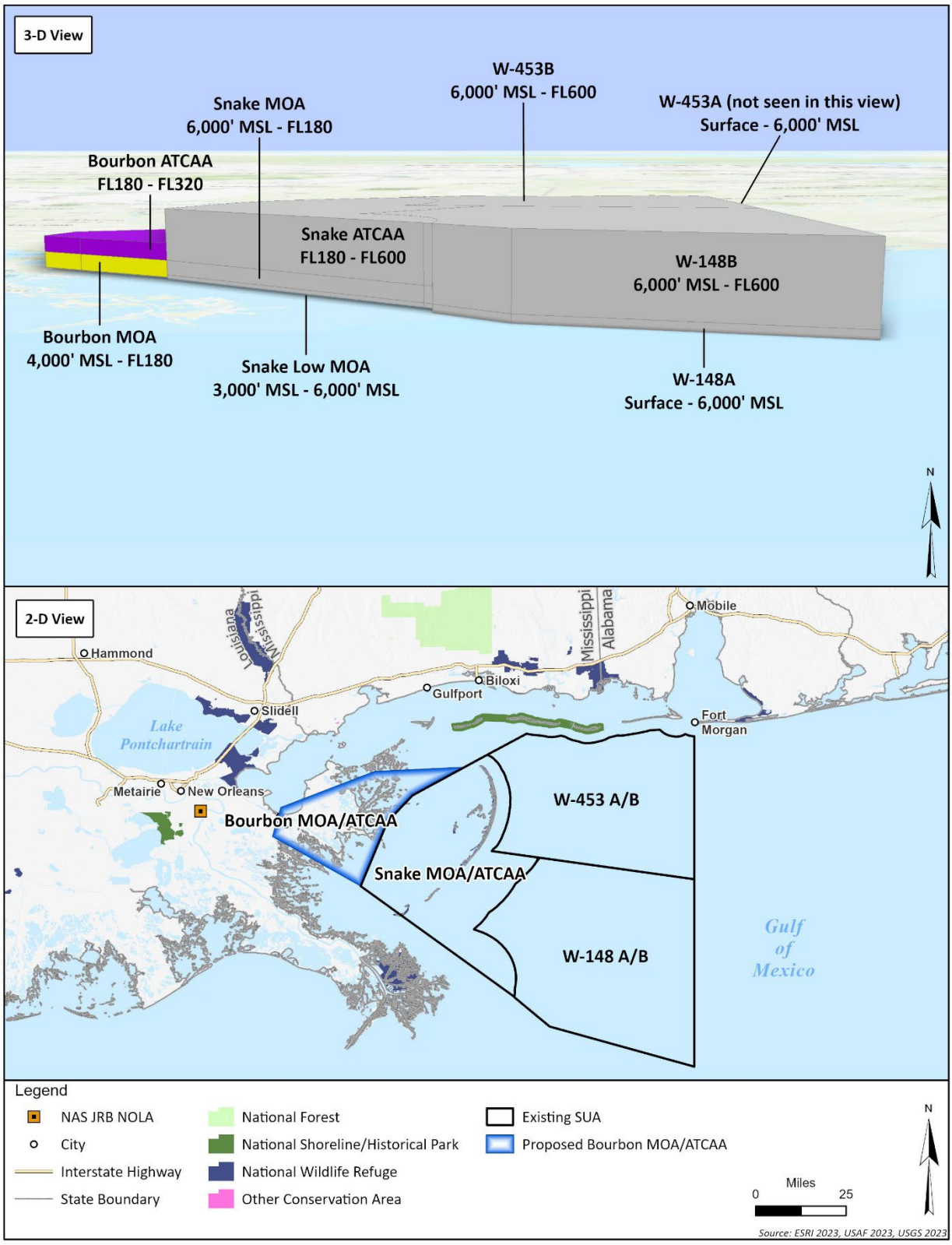

Figure 3.1-1 Overview of Proposed Bourbon MOA/ATCAA

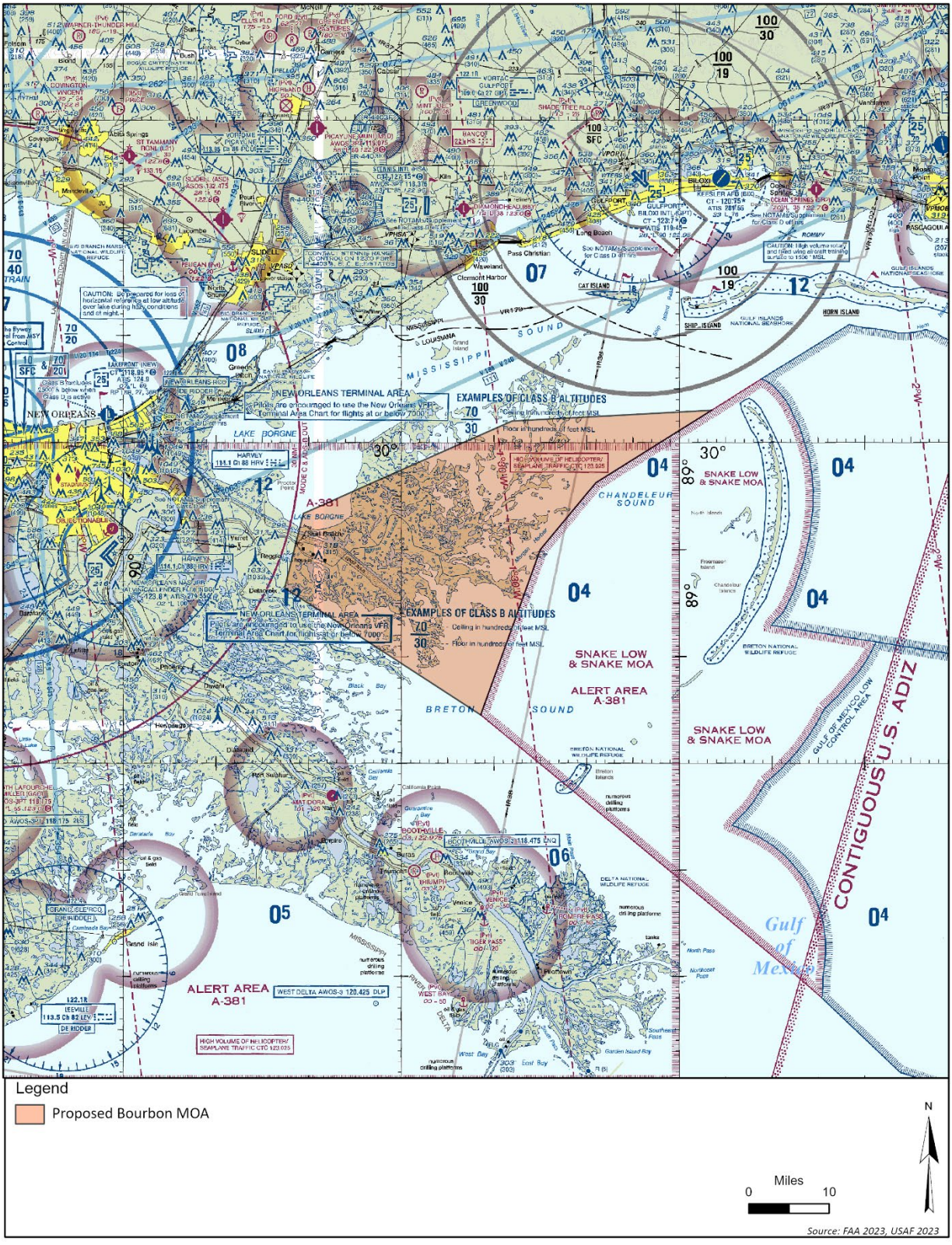

Figure 3.1-2 Proposed Bourbon MOA (VFR Sectional Chart View)

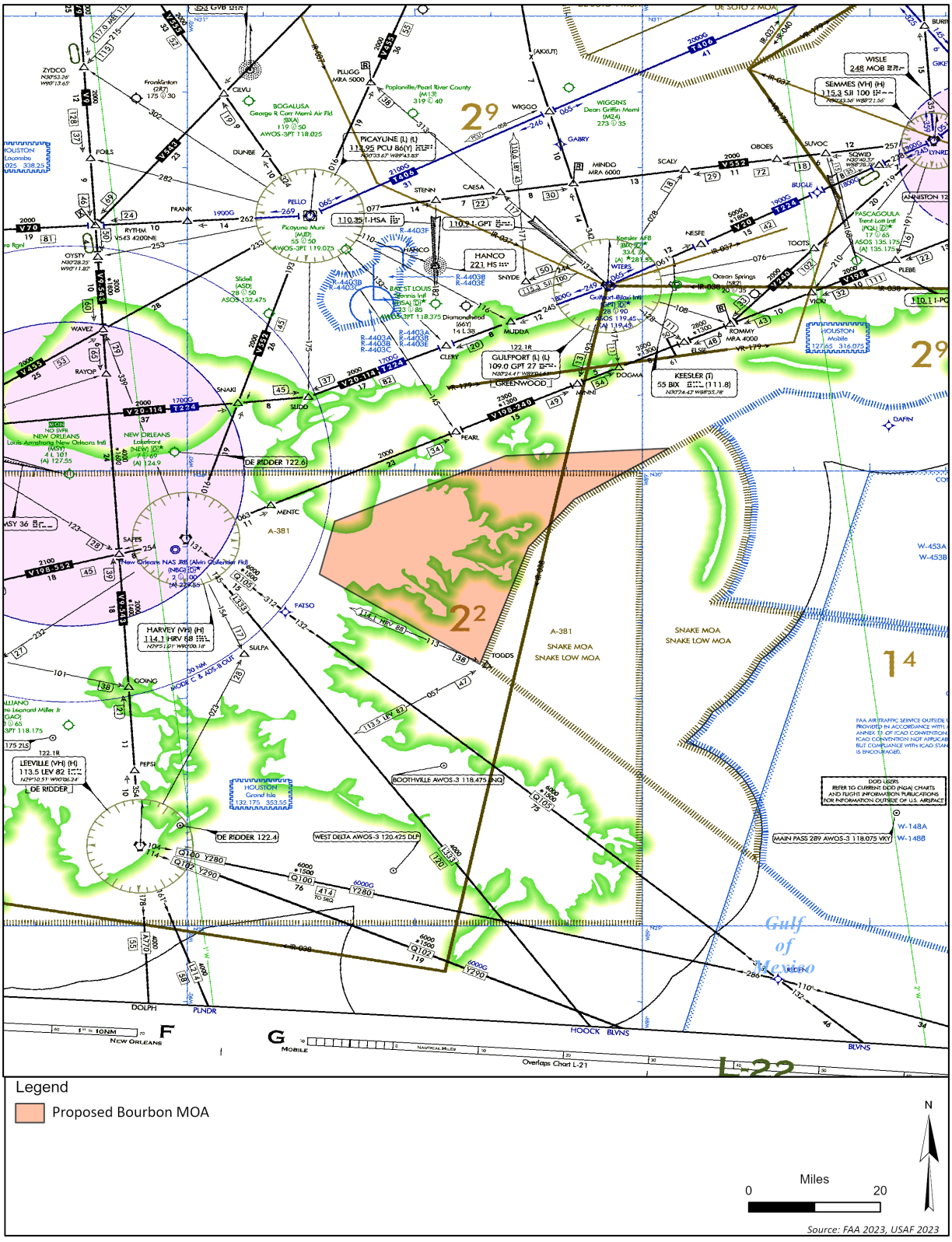

Figure 3.1-3 Proposed Bourbon MOA (IFR Low Chart View)

3.2 POTENTIAL IMPACTS

3.2.1 Obstructions and Airports

An obstruction analysis of the proposed airspace configuration revealed there are no obstructions which would impact the proposed MOA. There is one tower 315 feet above ground level on the west side of the MOA, well beneath the proposed floor of 4,000 feet MSL. This obstruction does not require further analysis.

Table 3.2-1 provides information for each of the public airports in the Region of Influence (ROI) of the proposed Bourbon MOA. The airport operations data provided in **Table 3.2-1** was obtained from data reported to the FAA. **Figure 3.2-1** provides the location of these airports. In addition, there are two military airports in the ROI (NAS JRB NOLA Alvin Callender Field and Biloxi Air Force Base), five private airports, and four seaplane bases. Operations data is not available for the private airports and seaplane bases and these are excluded from further analysis.

Table 3.2-1 Public Airports in the Bourbon MOA ROI

Airport Name (Airport Code)	Airport Ownership	Based Aircraft	Annual Operations
Diamondhead Airport (K66Y), Diamondhead, Mississippi	Public	Single Engine = 3	Air Taxi = 0 GA Local = 4,630 GA Itinerant = 1,158 Military = 0
Ocean Springs Airport (K5R2), Ocean Springs, Mississippi	Public	Single Engine = 2 Ultralight = 3	GA Local = 880 GA Itinerant = 120
Slidell Airport (KASD), Slidell, Louisiana	Public	Single Engine = 46 Multi-engine = 10 Jet = 1 Helicopter = 2	GA Local = 78,000 GA Itinerant = 30,000 Military = 4,000
South Lafourche Leonard Miller Jr. Airport (KGAO), Galliano, Louisiana	Public	Single Engine = 3 Jet = 3 Helicopter = 38	GA Local = 18,956 GA Itinerant = 5,083 Military = 50
Gulfport-Biloxi Airport (KGPT), Gulfport, Mississippi	Public	Single Engine = 31 Multi-Engine = 2 Jet = 5 Helicopter = 3	Commercial = 6,966 Air Taxi = 3,548 GA Local = 9,396 GA Itinerant = 12,125 Military = 24,952
Stennis International Airport (KHSA), Bay St Louis, Mississippi	Public	Single Engine = 27 Multi-Engine = 7 Jet = 2 Helicopter = 1	Commercial = 10 Air Taxi = 769 GA Local = 6,354 GA Itinerant = 7,886 Military = 24,515
Lakefront Airport (KNEW), New Orleans, Louisiana	Public	Single Engine = 88 Multi-Engine = 20 Jet = 21 Helicopter = 9	Commercial = 2 Air Taxi = 6,305 GA Local = 28,181 GA Itinerant = 40,522 Military = 3,160
Louis Armstrong New Orleans International Airport (KMSY), New Orleans, Louisiana	Public	Single Engine = 2 Multi-Engine = 2 Jet = 13 Helicopter = 7	Commercial = 85,205 Air Taxi = 7,375 GA Itinerant = 9,322 Military = 514

Legend: GA = General Aviation; MOA = Military Operations Area; ROI = Region of Influence.
Source: SkyVector 2023.

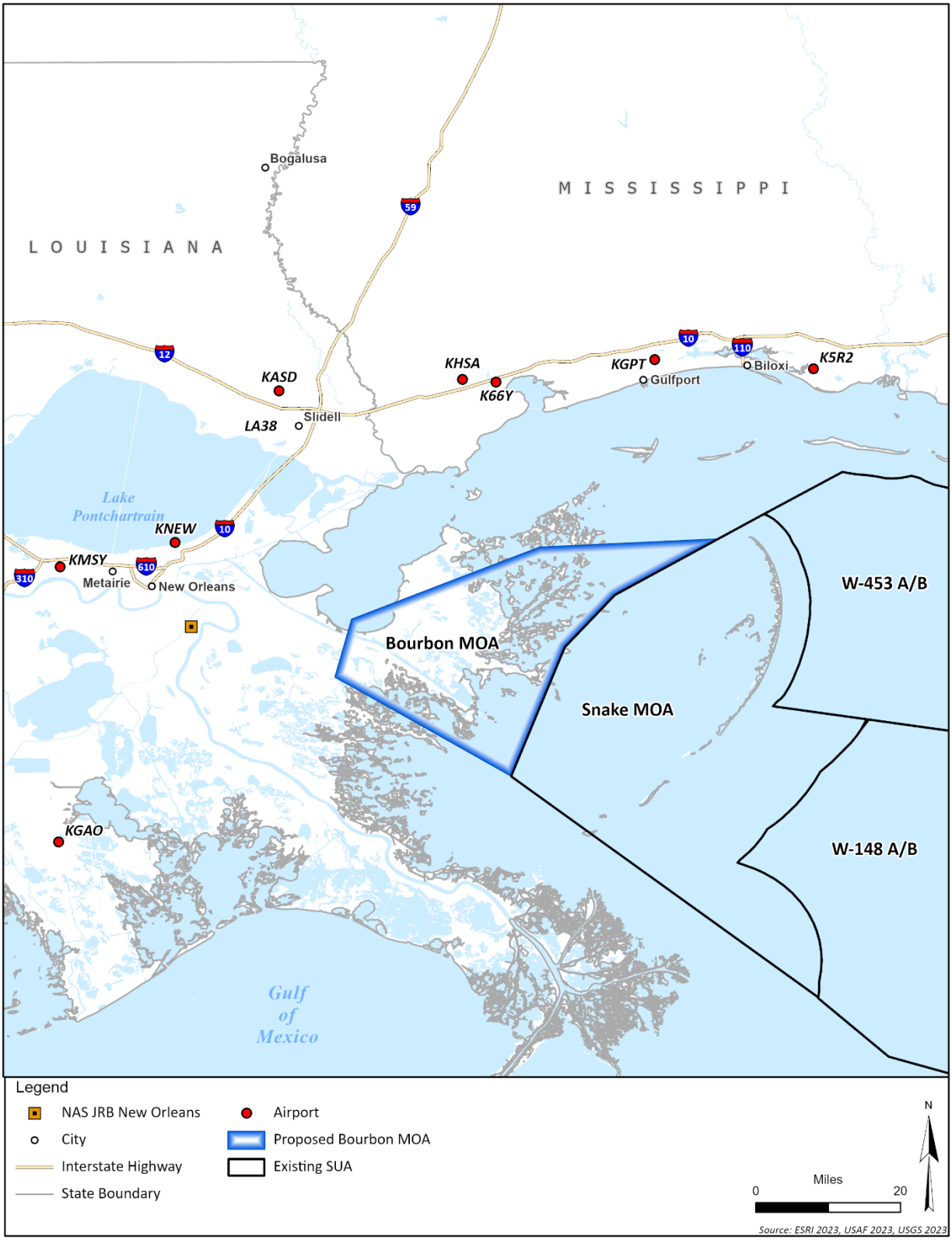

Figure 3.2-1 Public Airports in ROI for Proposed Bourbon MOA

Instrument approach procedures to NAS JRB NOLA may be impacted when the Bourbon MOA is active. The HI-TACAN Y Runway 22 full procedure approach has two fixes on the arc (ZABIR and OLEZO) which come within 3 miles from the MOA boundary (**Figure 3.2-2**). The crossing altitude for ZABIR is *at or above* 2,000 feet MSL, and the crossing altitude at OLEZO is *at* 2,000 feet MSL. The Area Navigation (RNAV) (Global Positioning System [GPS]) Runway 22 has an initial approach fix (KOCEL) which is within 3 miles from the MOA boundary (**Figure 3.2-3**). Though the crossing altitude for KOCEL is 2,000 feet MSL, aircraft in a descent to the fix would need to be monitored for separation from the boundary. If these procedures are required during times when the MOA is active, ATC would need to issue alternate instructions to ensure separation from the MOA. The impact to these approaches is expected to be minimal.

There are two instrument approaches to Gulfport-Biloxi International Airport which could interact with the Bourbon MOA when it is active, the HI ILS Y or LOC Runway 32 and the RNAV (GPS) Runway 36. These approaches have fixes sufficiently separated from the proposed MOA boundary, but close enough that deviations from the approach procedure could bring aircraft in close proximity to the MOA. The impact to these approaches is unlikely and included only for awareness.

3.2.2 ATS Routes / MTRs / Aerial Refueling Tracks / Existing SUA

There are four ATS routes near the proposed Bourbon MOA: V-198, V-240, Q-105, and Q-56 (**Figure 3.2-4**). None of the ATS or high-altitude ("J" or "Q") routes transition through the proposed MOA or ATCAA. The distance between the routes and the boundary of the proposed MOA is sufficient and navigation via these ATS routes would not be impacted by the proposed MOA. There is one MTR which traverses the proposed MOA, IR-038 (see **Figure 3.2-4**). IR-038 is managed and scheduled by Training Air Wing Six at Naval Air Station Pensacola, Florida and schedule deconfliction would occur between the two installations; no impact is expected. There are no aerial refueling tracks beneath or near the proposed MOA.

The east boundary of the Bourbon MOA would be located immediately west, adjacent to the existing Snake MOA. The proposed MOA would impede access to the waypoints from the Harvey (HRV) and Gulfport (GPT) VHF Omni-directional Range/Tactical Air Navigation (VORTACs) currently used to enter and exit the Snake MOA. Existing letters of agreement would need to be modified to change entry/exit procedures into the Snake MOA and WHODAT Airspace. This would not be considered an impact.

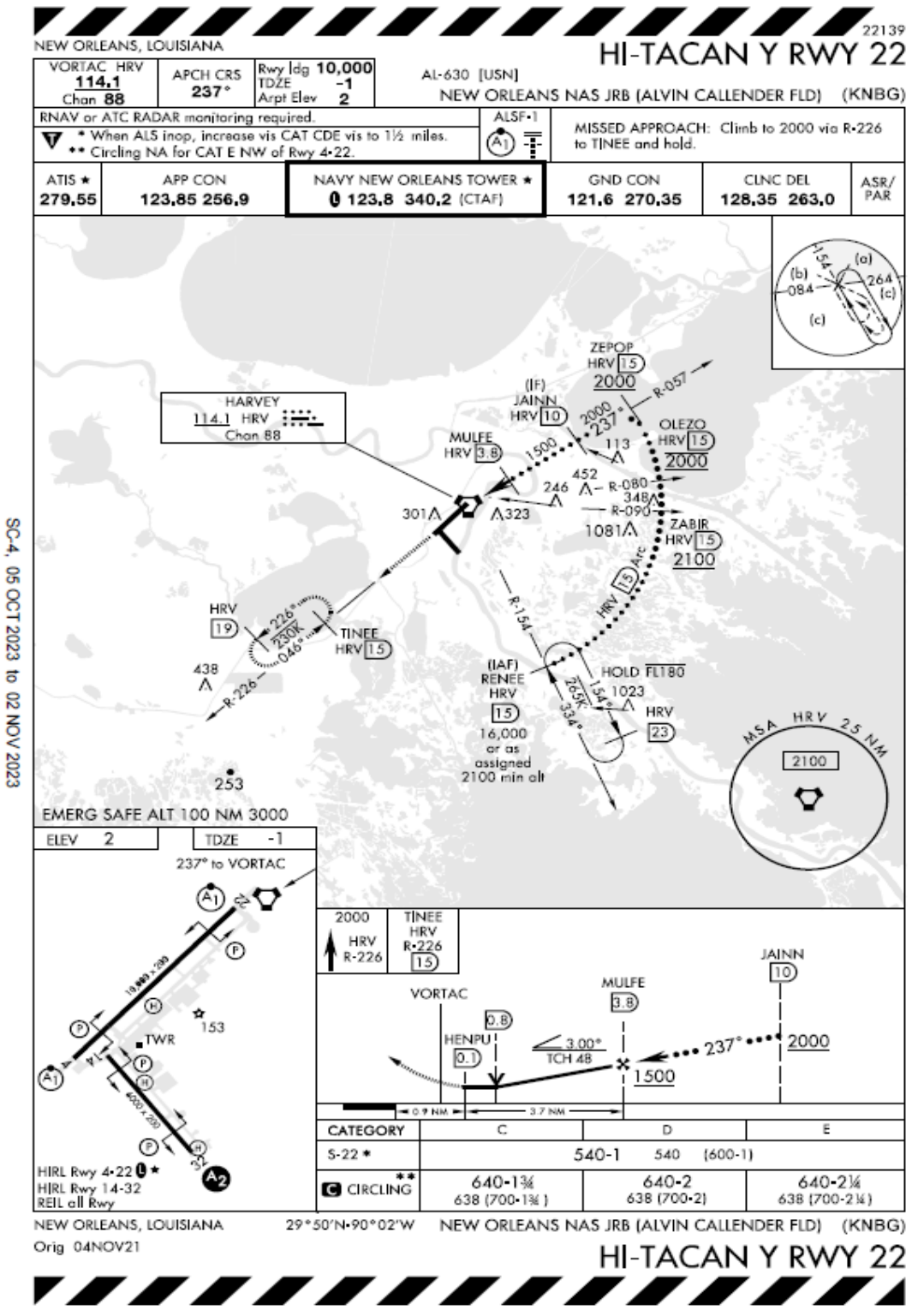

Figure 3.2-2 NAS JRB NOLA: HI-TACAN Y Runway 22

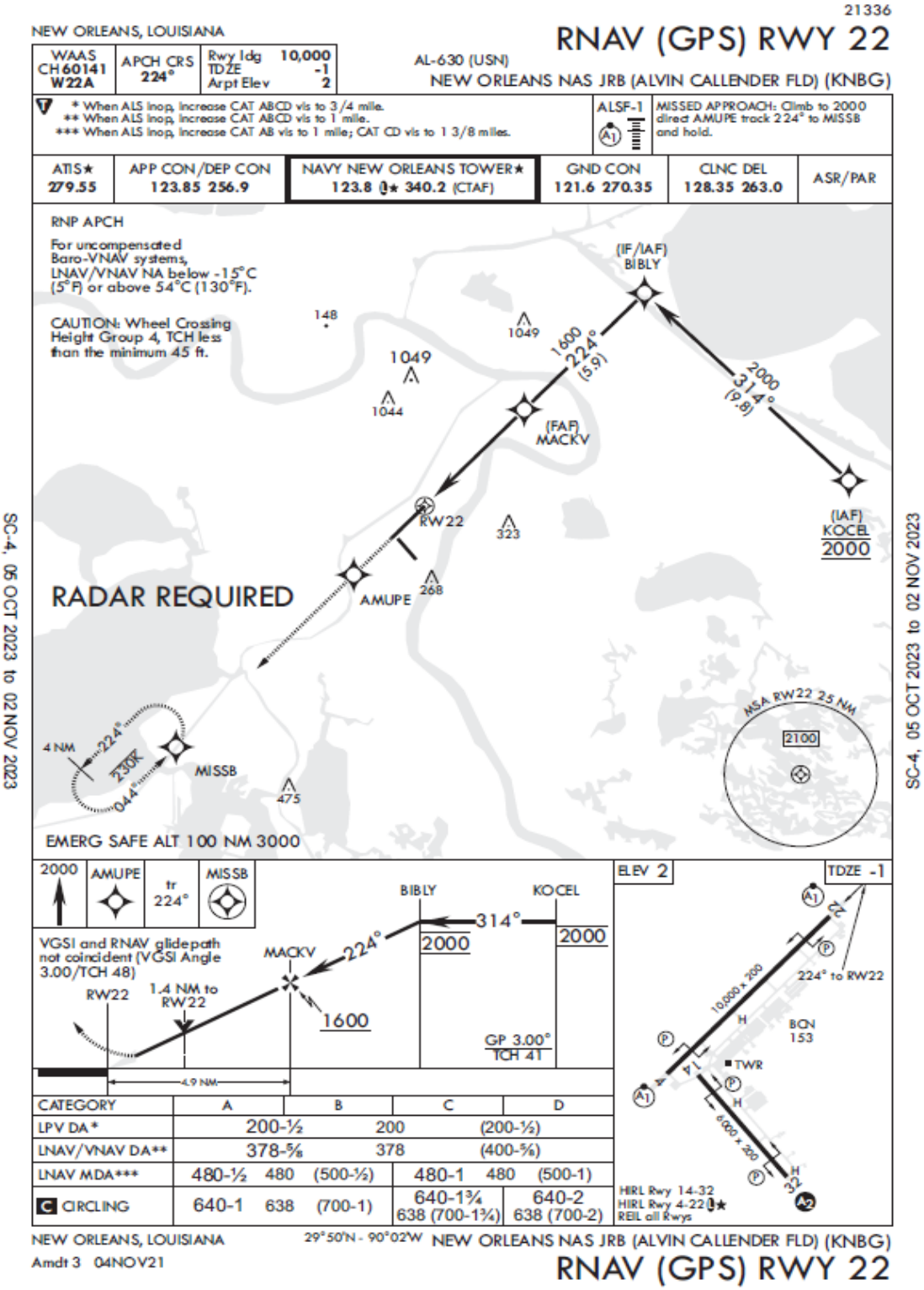

Figure 3.2-3 NAS JRB NOLA: RNAV (GPS) Runway 22

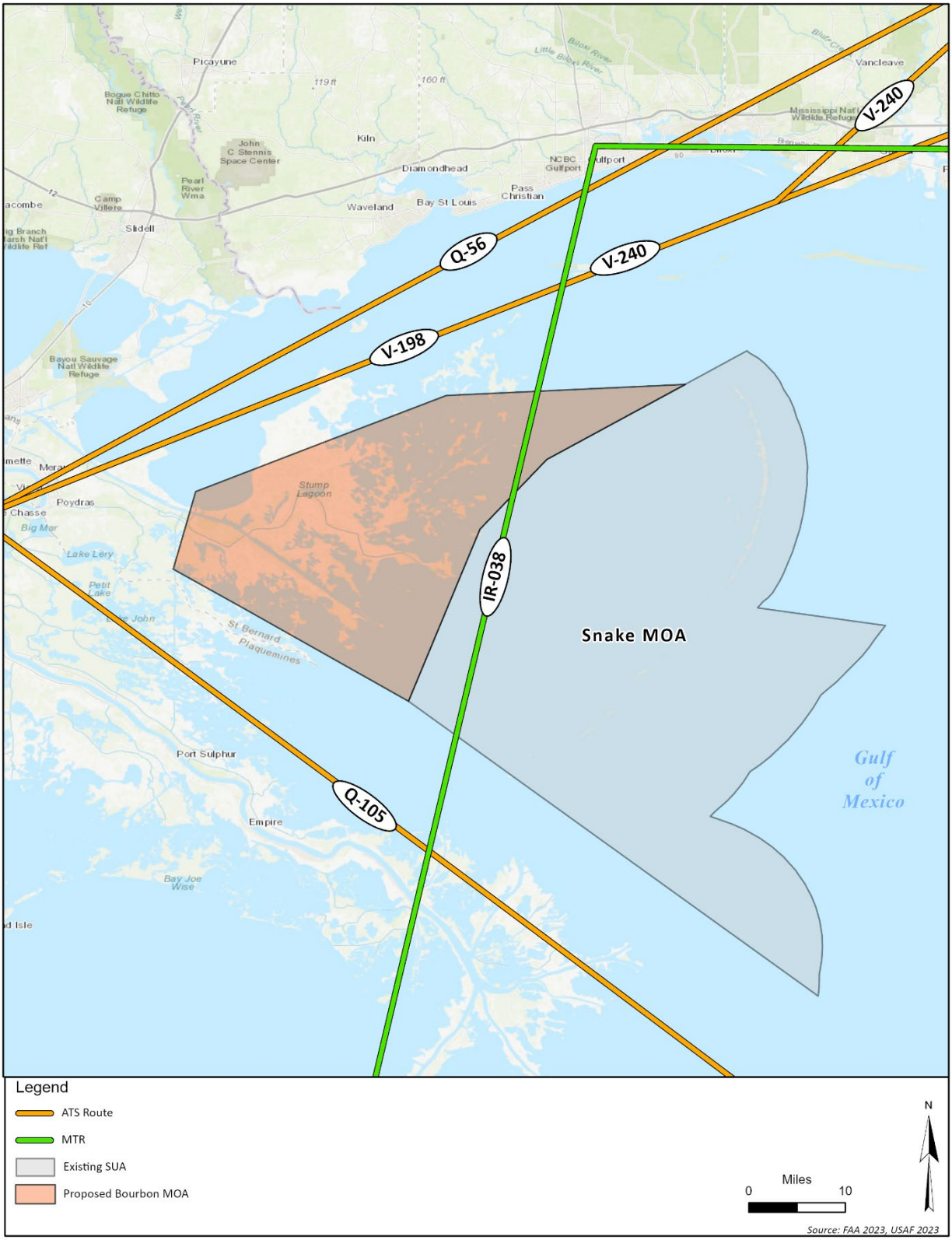

Figure 3.2-4 MTR and ATS Routes

3.2.3 Civil Traffic

During the 30 days of PDARS data analyzed, approximately 251 civil aircraft flights traversed the area encompassing the proposed Bourbon MOA/ATCAA during the proposed times of use (0800–1700, Monday–Friday) (105 flights in the MOA space and 146 flights in the ATCAA space). **Table 3.2-2** lists the most common types of civil aircraft included in the PDARS dataset for this area. The most common in this list are Airbus and Boeing variants. All of these aircraft are commercial or air carrier types. The assumption for converting distance to time was these aircraft at higher altitudes travel at approximately 330 knots.

Table 3.2-2 Aircraft Types Intersecting Proposed Bourbon MOA/ATCAA

Aircraft Type	% Transited
Airbus	23%
Boeing	20%
CN35	2%
C525	2%
Beechcraft	2%
Embraer	2%
Honda Jet	2%

Legend: ATCAA = Air Traffic Control Assigned Airspace; MOA = Military Operations Area; % = percent

3.2.3.1 Bourbon MOA (4,000 feet MSL – FL180)

Over the course of a month, approximately 105 civil flights traversed the proposed Bourbon MOA (4,000 feet MSL – FL180) during the proposed hours of use. The most frequent pairings (occurring once per week or more) were used to represent the impacts to the largest number of flights and account for approximately 27 percent of the total flights (**Table 3.2-3**). One of these pairings was a "Round-Robin" flight, with the aircraft taking off and landing at the same location (KBFM, Mobile International). It is assumed that this "Round-Robin" flight would not be burdened (by additional flight time or fuel cost) by activation of a new MOA. The existence of a new MOA does not impede "Round Robin" flights from arriving to their destination since the MOA does not lie between the origin and destination airport. Note that the Bourbon MOA is in a location adjacent to the Snake MOA and a large complex of Warning Areas, and the low numbers of flights in this area in the PDARS dataset during the proposed times of use are likely due to civil aircraft routinely avoiding the surrounding SUA.

Table 3.2-3 Most Frequent Airport Pairings for Civil Flights Through Proposed Bourbon MOA

Origin	Destination
KMCO	KMSY
KFLL	KMSY
KPBI	KNEW
KBFM	KBFM
KMIA	KMSY

Legend: KBFM = Mobile International, AL; KFLL = Fort Lauderdale, FL; KMIA = Miami International, FL; KMCO = Orlando International, FL; KMSY = Louis Armstrong New Orleans International, LA; KNEW = Lakefront Airport, LA; KPBI = Palm Beach International, FL; MOA = Military Operations Area

Table 3.2-4 shows the potential impact (in terms of distance and time) to each of these airport pairings (or flight tracks) when the MOA is activated. Each row in Table 3.2-4 shows an origin airport and destination airport (the return routes would be the opposite). In each row, there is the straight-line optimum route length (rounded to nearest NM). Then listed are one or two intermediate fixes or NAVAIDs that would be required to avoid the proposed MOA, and the distance for the route through those fixes (**Figures 3.2-5 through 3.2-8**). The difference in distance and time are in the final two columns. These most common routes vary in length from approximately 480 NM to over 580 NM. The average required change in distance would be 22 NM, and the average additional required time of travel is 4 minutes. This additional travel time is expected to have a minimal impact. As shown on the figures, the straight-line flight for most of these flights goes through existing Warning Areas and they are likely already rerouted to avoid this large complex. The numerous existing MOAs along the Gulf Coast make routing to the north impractical without incurring excessive route deviations.

Table 3.2-4 Potential Impacts to Civil Operations Due to Proposed Bourbon MOA

Airport Pair	Straight Line Distance (NM)	Intermediate Fix	Distance via Intermediate Fix (NM)	%Change in Distance	Extra Minutes
KMCO-KMSY	478	CHRGE-REDFN	510	7%	6
KFLL-KMSY	585	CHRGE-REDFN	591	1%	1
KPBI-KNEW	562	CHRGE-LEV	604	7%	8
KMIA-KMSY	586	BAGGS-REDFN	592	1%	1

Legend: BAGGS = fix; CHRGE = fix; KFLL = Fort Lauderdale, FL; KMIA = Miami International, FL; KMCO = Orlando International, FL; KMSY = Louis Armstrong New Orleans International, LA; KNEW =Lakefront Airport, LA; KPBI = Palm Beach International; LEV = Leeville VORTAC; MOA = Military Operations Area; NM = nautical miles; REDFN = fix; VORTAC = Very High Frequency Omni-Directional Range/Tactical Air Navigation; % = percent

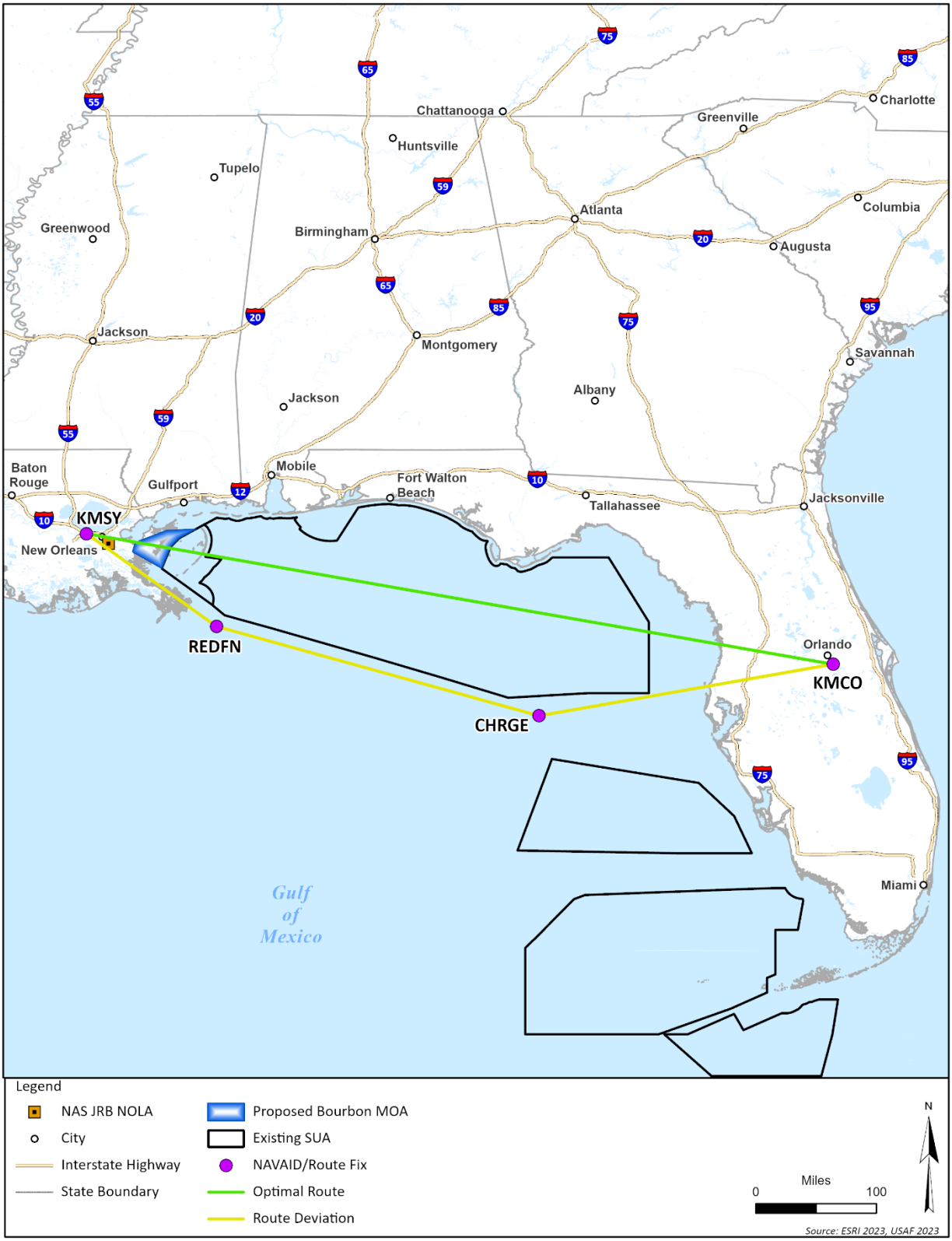

Figure 3.2-5 Potential Reroute for Orlando International, Florida to/from Louis Armstrong New Orleans International, Louisiana (KMCO – KMSY)

Figure 3.2-6 Potential Reroute for Fort Lauderdale, Florida to/from Louis Armstrong New Orleans International, Louisiana (KFLL – KMSY)

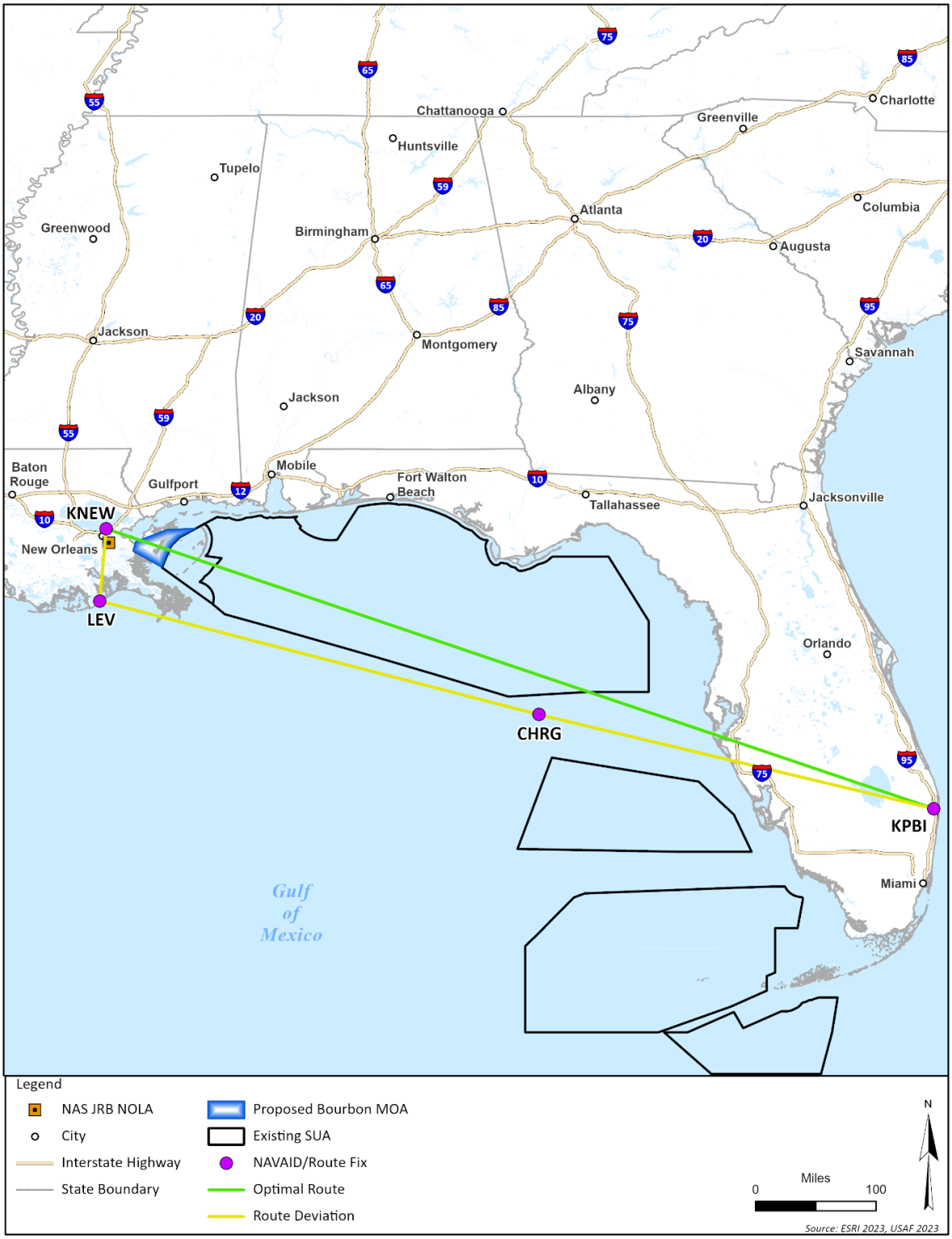

Figure 3.2-7 Potential Reroute for Palm Beach International, Florida to/from Lakefront Airport, Louisiana (KPBI – KNEW)

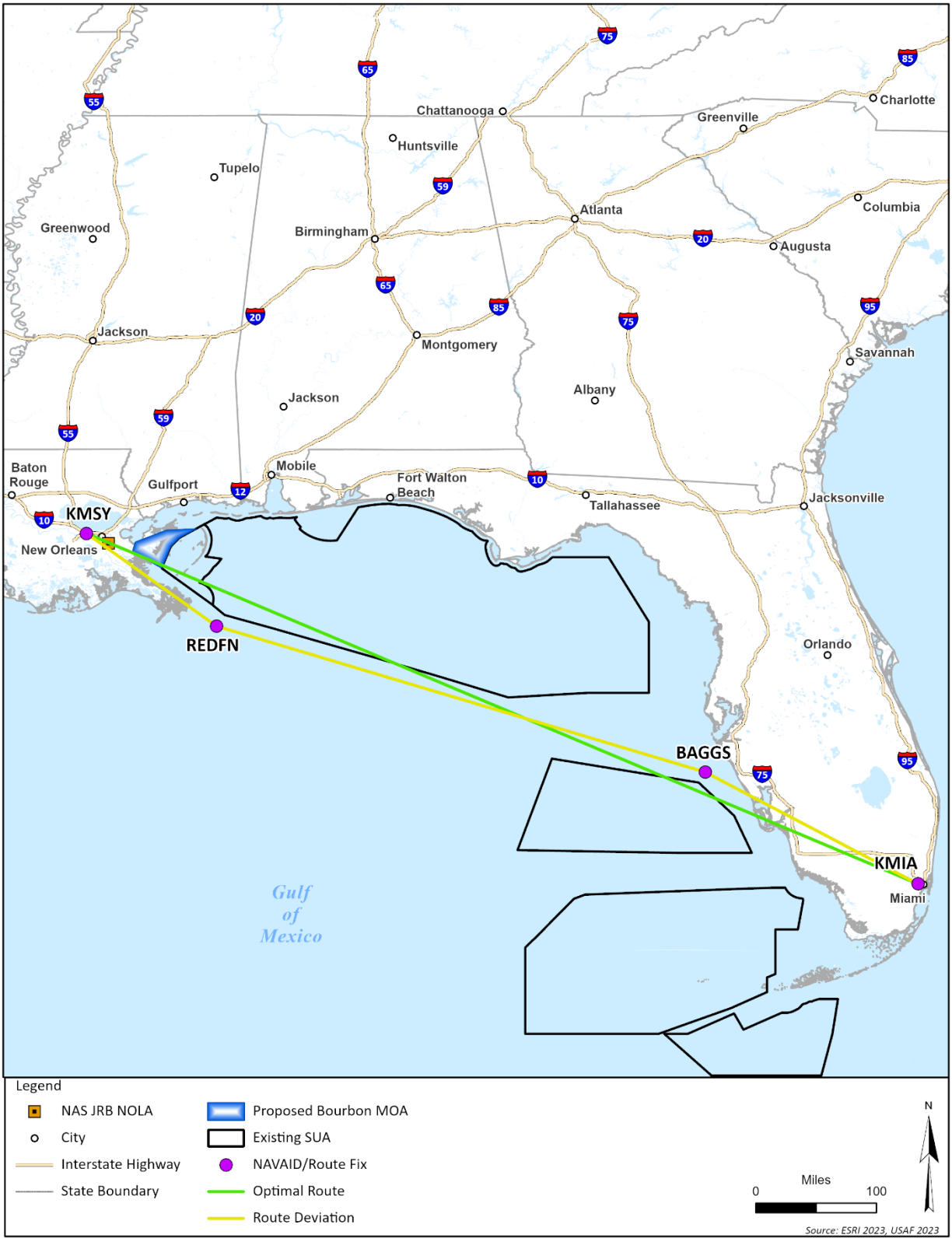

Figure 3.2-8 Potential Reroute for Miami International, Florida to/from Louis Armstrong New Orleans International, Louisiana (KMIA – KMSY)

3.2.3.2 Bourbon ATCAA (FL180 – FL320)

Over the course of a month, approximately 146 civil flights traversed the proposed Bourbon ATCAA during the proposed hours of use. **Table 3.2-5** shows the origin-destination airport pairings accounting for the most frequent flights in the proposed ATCAA area. Note that the proposed Bourbon MOA/ATCAA are in a location adjacent to the Snake MOA and a large complex of Warning Areas to the east, and the low numbers of flights in this area during this 30-day time period may be due to aircraft avoiding the surrounding SUA.

Table 3.2-5 Airport Pairings for Civil Flights Through Proposed Bourbon ATCAA

Origin	Destination
MMUN[1]	KORD
KTPA[1]	KDEN
MMUN	KMSP
KMCO[1]	KDEN
KMIA[1]	KDEN
KTPA[1]	KDFW
KFLL	KDFW
KMSY[2]	KMCO

Note: [1]Pairings do not have direct routing through the proposed SUA.
[2]The impact of this pairing is captured in Table 3.2-4 under the Bourbon MOA.

Legend: ATCAA = Air Traffic Control Assigned Airspace; KDEN = Denver International, CO; KDFW = Dallas Fort Worth International, TX; KFLL = Fort Lauderdale International, FL; KMCO = Orlando International, FL; KMIA = Miami International, FL; KMSP = Minneapolis-Saint Paul International, MN; KMSY = Louis Armstrong New Orleans International, LA; KORD = Chicago O'Hare International, IL; KTPA = Tampa International, FL; MMUN = Cancun International, Mexico; MOA = Military Operations Area; SUA = Special Use Airspace

Table 3.2-6 shows the potential impact (in terms of distance and time) to each of these airport pairings (or flight tracks) when the ATCAA is activated. Note that five of these pairings do not have direct routes that go through this airspace and would not require a longer route if the proposed ATCAA was activated. The fact that they flew through this area in the past may be due to a combination of factors, ranging from VFR operations (or cancellation of IFR), non-optimal routing due to weather or traffic, or other reasons.

For the two flight tracks that do have direct routes through the ATCAA, the intermediate fix used in the analysis is over the Gulf of Mexico to the south to conservatively avoid the large complex of existing Warning Areas and the Bourbon ATCAA. The numerous MOAs along the Gulf Coast made routing to the north impractical without incurring excessive route deviations. As shown, the additional rerouting for these two tracks adds no more than 6 NM and results in 1 minute or less of additional travel time. This additional travel time is expected to have a minimal impact.

Table 3.2-6 Potential Impacts to Civil Operations Due to Proposed Bourbon ATCAA					
Airport Pair	**Straight Line Distance (NM)**	**Intermediate Fix**	**Distance via Intermediate Fix (NM)**	**%Change in Distance**	**Extra Minutes**
MMUN-KORD	1,258	N/A	-	0	0
KTPA-KDEN	1,308	N/A	-	0	0
MMUN-KMSP	1,465	FATSO	1,469	0	<1
KMCO-KDEN	1,343	N/A	-	0	0
KMIA-KDEN	1,484	N/A	-	0	0
KTPA-KDFW	806	N/A	-	0	0
KFLL-KDFW	972	REDFN	978	1%	1

Legend: % = percent; ATCAA = Air Traffic Control Assigned Airspace; KDEN = Denver International ; KDFW = Dallas Fort Worth International, TX; KFLL = Fort Lauderdale International, FL; KMCO = Orlando International, FL; KMIA = Miami International, FL; KMSP = Minneapolis-Saint Paul International, MN; KORD = Chicago O'Hare International, IL; KTPA = Tampa International, FL; N/A = Not Applicable; MMUN = Cancun International, Mexico; NM = nautical miles

3.3 BOURBON MOA/ATCAA SUMMARY

If established prior to 2023, the Bourbon MOA/ATCAA would have resulted in up to 251 civil flights potentially being affected over the course of a 30-day period. That is **eight affected flights per day** during all the hours from Monday–Friday, between 0800–1700 Local. The affected flights could have impacts of up to 8 minutes, but often the impact would be 1 minute or less to avoid the active MOA/ATCAA. Because the airspace is not proposed to be active for the entire time, the actual number of affected flights would be much lower. The Bourbon MOA/ATCAA are expected to be used for only up to 5 hours per day and up to 240 days per year (not the full 9 hours per day [0800–1700] for 260 days per year [all Monday–Friday days]) that are included in the proposed window for use. The proposed total hours of activation are only 51 percent of the full window analyzed, meaning that on average, **four to five flights per day** would be affected from activation of the Bourbon MOA/ATCAA.

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Noise Analysis

Environmental Assessment for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana

March 2025

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Noise Analysis
Environmental Assessment
Flight Training Activities in the Bourbon Military Operations Area
Offshore from
Naval Air Station Joint Reserve Base New Orleans

TABLE OF CONTENTS

List of Figures

List of Tables

Abbreviations and Acronyms

Acronym	Definition
<	less than
>	greater than
%	percent
AGL	above ground level
ATCAA	Air Traffic Control Assigned Airspace
ARTCC	Air Route Traffic Control Center
BASEOPS	Base Operations
CDNL	C-weighted Day-Night Average Sound Level
dB	decibel
dBA	A-weighted decibel
dBC	C-weighted decibel
DNL	A-weighted Day-Night Average Sound Level
DoD	Department of Defense
EA	Environmental Assessment
FAA	Federal Aviation Administration
FL	Flight Level
FRS	Fleet Replacement Squadron
Hz	Hertz
LAANG	Louisiana Air National Guard

Acronym	Definition
L_{max}	maximum sound level
MOA	Military Operations Area
MSL	mean sea level
NAS JRB NOLA	Naval Air Station Joint Reserve Base New Orleans
NEPA	National Environmental Policy Act
NM	nautical miles
SEL	Sound Exposure Level
SUA	Special Use Airspace
U.S.	United States
USEPA	U.S. Environmental Protection Agency
VHF	Very High Frequency
VFC-204	Fighter Squadron Composite Two Zero Four
VORTAC	VHF Omni-directional Radio Range Tactical Air Navigation
W-	Warning area

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1 Introduction

1.1 Background

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy (hereinafter referred to as the Navy) proposes to request that the Federal Aviation Administration (FAA) establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base. The FAA has jurisdictional authority of the National Airspace System and is a Cooperating Agency for this action. The proposed Special Use Airspace (SUA) would address several training deficiencies by providing a closer contiguous, over-land and over-water airspace with appropriate altitudes to allow a more efficient and realistic training environment.

The existing area is non-scheduled airspace and is used by military aircraft to transit to Snake MOA and ATCAA, and Warning Areas (W-) 148 and 453, all of which are collectively referred to as the WHODAT airspace complex (**Figure 1-1**). Proposed Bourbon MOA and ATCAA would provide training airspace that is closer to NAS JRB NOLA resulting in more efficient training (**Figure 1-2**).

1.2 Proposed Special Use Airspace

The Proposed Action is to accommodate required flight training activities for squadrons stationed at NAS JRB NOLA. Efficiencies are achieved when pilots can train in SUA of sufficient size and proximity to the base. Existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

The FAA, as a cooperating agency, is responsible for making a determination on whether to establish the SUA as requested by the Navy.

The altitude floor and ceiling[1] and the published times of use for the proposed Bourbon MOA/ATCAA are detailed in **Table 1-1**.

Table 1-1 Proposed Bourbon MOA/ATCAA

Name	*Floor*	*Ceiling*	*Proposed Published Times of Use*
Bourbon MOA	4,000 feet MSL	Up to but not including FL180	Monday through Friday 0800–1700, other times by NOTAM
Bourbon ATCAA	18,000 feet MSL	Up to but not including FL320	Simultaneously with Bourbon MOA Monday through Friday 0800–1700, other times by NOTAM

Legend: ATCAA = Air Traffic Control Assigned Airspace; FL = Flight Level; MOA = Military Operations Area; MSL = Mean Sea Level; NOTAM = Notice to Air Missions

[1] Altitude references for aircraft operations are presented in several units of measure: above ground level (AGL), above mean sea level (MSL), and Flight Level (FL):

- AGL references are usually used at lower altitudes (almost always below 10,000 feet), when clearance from terrain is more of a concern for aircraft operation.
- MSL altitudes are used most across aviation when operating at or below 18,000 feet when clearance from terrain is less of a concern for aircraft operation.
- FL is used to describe the cruising altitudes for aircraft traveling long distances above 18,000 feet. Flight Levels are given in hundreds of feet, e.g., FL300 is 30,000 feet.

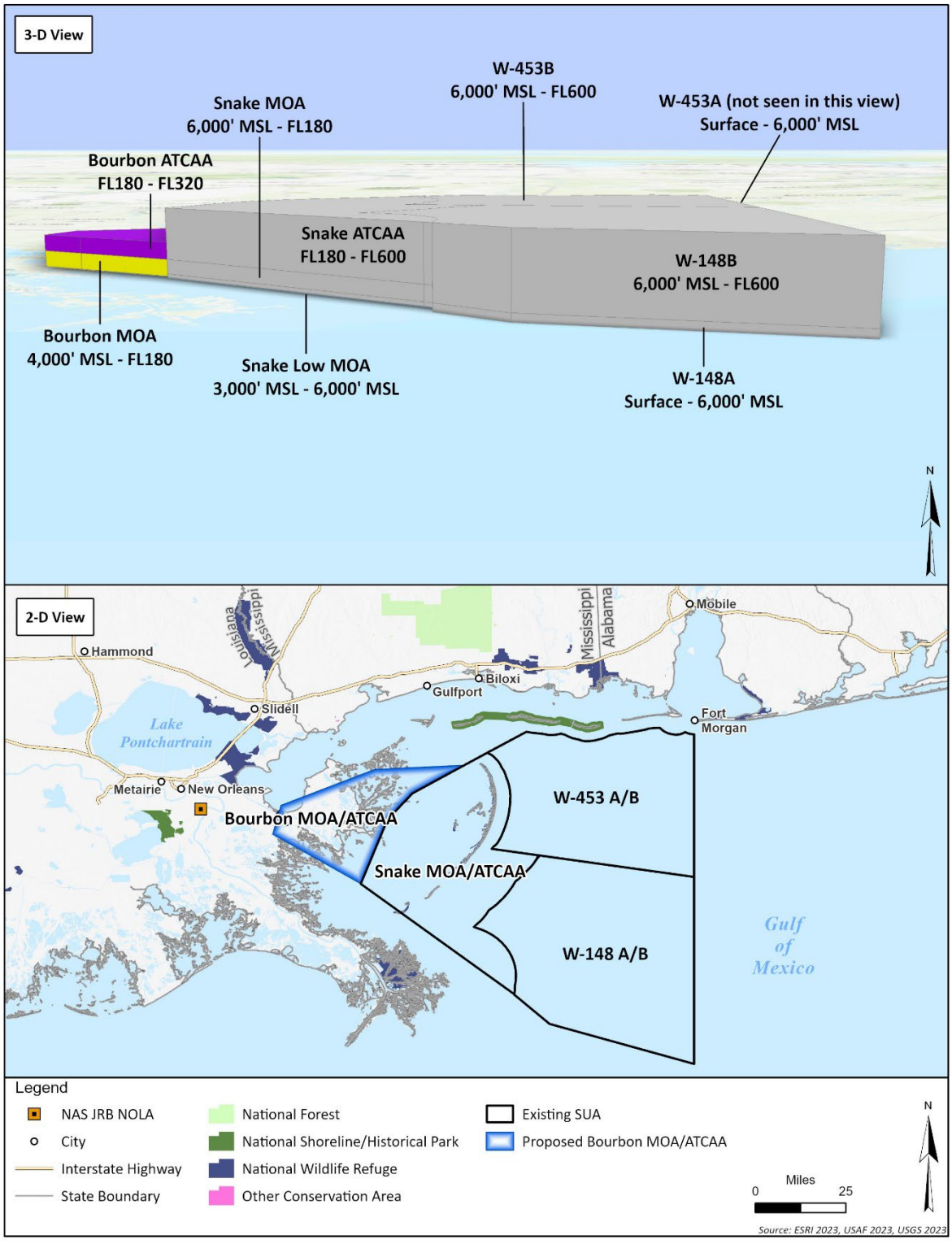

Figure 1-1 Proposed Bourbon MOA/ATCAA and Adjacent SUA

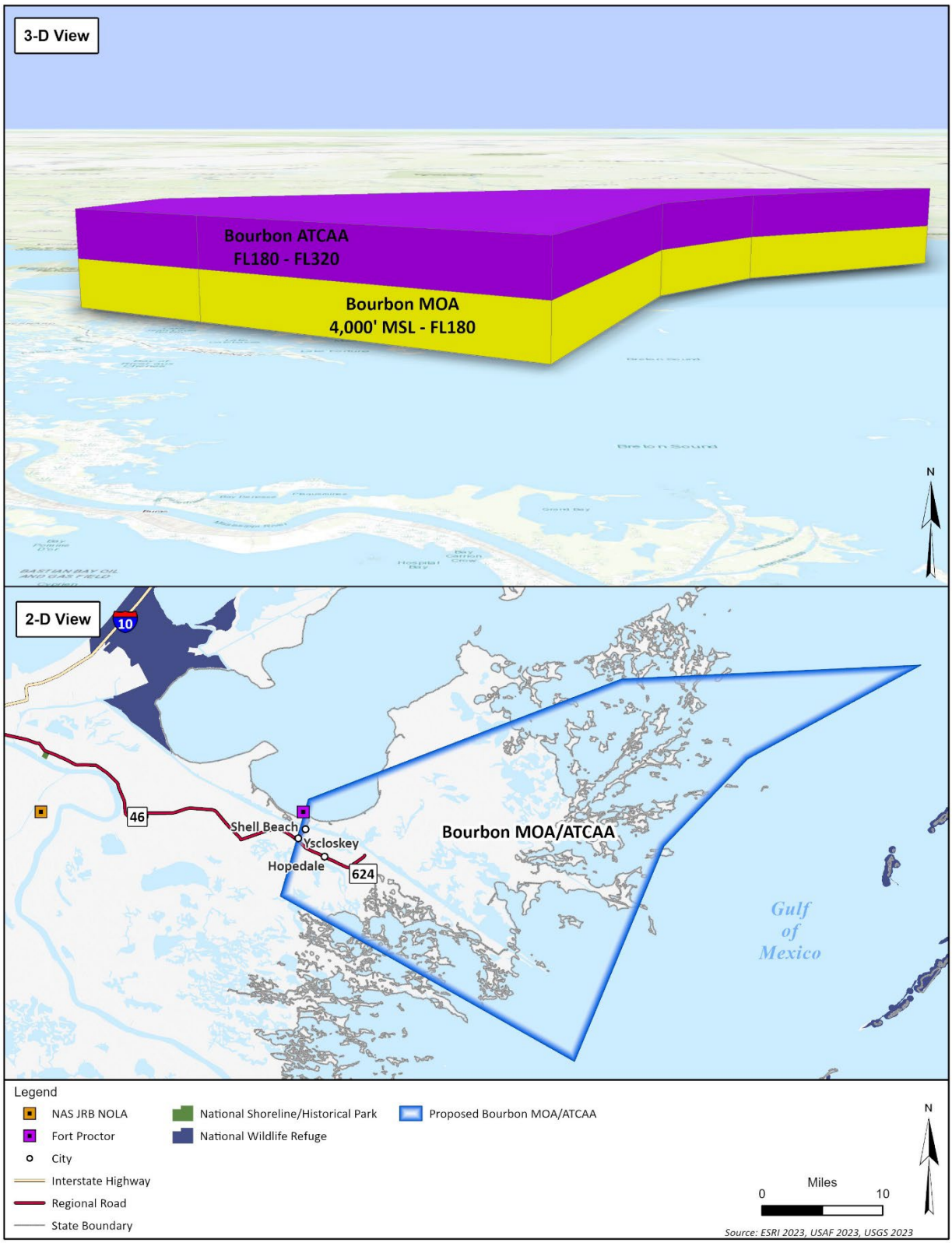

Figure 1-2 Proposed Bourbon MOA/ATCAA

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2 Methodology

2.1 Noise Analysis

For the purposes of this analysis, three noise metrics are used to describe the noise exposure from the Proposed Action:

- A measure of the greatest sound level generated by single aircraft events: Maximum Sound Level (L_{max}),
- A combination of the sound level and duration: Sound Exposure Level (SEL), and
- A cumulative measure of multiple flight and engine maintenance activity: Day-Night Average Sound Level (Ldn, also written as DNL) (Federal Interagency Committee on Noise 1978).

Human hearing sensitivity to differing sound pitch, measured in cycles per second or hertz (Hz), is not constant. To account for this effect, environmental noise measurements usually employ an "A-weighted" decibel (dB) scale, denoted as dBA, which de-emphasizes very low and very high frequencies to better replicate human sensitivity. "C-weighting" is typically applied to impulsive sounds such as a sonic boom or ordnance detonation. As is done in many environmental documents, the "A" in dBA is dropped for brevity to refer to A-weighted sound levels. All sound levels presented in this document are A-weighted unless otherwise denoted as C-weighted or dBC.

The noise associated with aircraft operations can be subsonic or supersonic. Subsonic noise is generated by an aircraft's engines and airframe. This is the most familiar form of noise. Supersonic noise is the noise generated when an aircraft flies faster than the speed of sound and has the potential to create sonic booms. A sonic boom is the sound associated with shock waves generated when the aircraft travels at supersonic speeds. This Proposed Action includes both subsonic and supersonic activity within the proposed MOA/ATCAA.

Environmental analysis of noise impacts from the Proposed Action often requires prediction of future conditions that cannot be easily measured until after implementation. Accordingly, computer software is used to simulate future conditions, as detailed in the following sections.

2.2 Operational Assumptions

Annual operations would be conducted within the Bourbon MOA/ATCAA up to 240 days per year, which is the current operations tempo for the existing SUA. The current airspace proposed for the Bourbon MOA/ATCAA is used to transition from NAS JRB NOLA to the current SUA (Snake MOA/ATCAA and Warning Areas). The number of aircraft using the space would be relatively the same, but instead of straight transition flights, the space would be used for training flights. The 240 days are estimated based on typical use (5 days/week over 48 weeks/year). Primary users of the Bourbon MOA/ATCAA would be Fighter Squadron Composite Two Zero Four (VFC-204) and the Louisiana Air National Guard (LAANG), but other military users may include Navy, Air Force, and other Service aircraft.

Mission scenarios for aircraft utilizing the Bourbon MOA/ATCAA would be similar to those occurring in the existing SUA and include functional check flights, currency, basic fighter maneuvers, Fleet Replacement Squadron (FRS) training/tactical intercepts, familiarization training, and participation in large scale exercises that would include multiple aircraft and use the connected SUA. Flight activities may occur as either subsonic or supersonic. Within certain zones of the Bourbon MOA/ATCAA, supersonic flight would be restricted to certain altitudes. Operations in the Bourbon MOA/ATCAA would

typically be scheduled for 1- to 1.5-hour blocks. The airspace would be activated 15 minutes prior (coordinated with FAA Houston Air Route Traffic Control Center [ARTCC]).

While the airspace would typically be scheduled for 1- to 1.5-hour blocks, operations generally last less than (<) 1 hour. The daily total of scheduled blocks is estimated to be up to 5 hours per day. Over a given year, assuming 240 days of use, the total hours of use are estimated to be 1,200 hours. Once training is complete, the airspace would be returned to the controlling agency (FAA Houston ARTCC).

MOAs, unlike Military Training Routes, allow for these types of training scenarios and aircraft activity at varying altitudes and trajectories within the designated boundaries of the MOA. For these reasons, there are no "normal" or "common" routes or headings aircraft would follow, aircraft activity could occur anywhere within the MOA. This allows maximum flexibility in the training scenarios which significantly improves the effectiveness of the training. **Appendix A** provides the specific altitude bands, power settings, and type of aircraft used in the modeling assumptions for the proposed MOA/ATCAA based on the operations described in the paragraphs above.

2.3 Noise Modeling and Primary Noise Metrics

The Department of Defense (DoD) prescribes use of the NOISEMAP suite of computer programs (Wyle 1998; Wasmer Consulting 2006) containing the core computational programs called "NMAP," version 7.3, and "MRNMap," version 3.0 for environmental analysis of aircraft noise. For this noise study, the NOISEMAP suite of programs refers to Base Operations (BASEOPS) as the input module and MRNMap as the noise model used to predict noise exposure in the SUA from subsonic aircraft operations (DoD 2020). Additionally, BooMap version 1.0.0 (Blue Ridge Research Corporation, LLC 2021) is used to predict noise levels associated with supersonic aircraft operations (DoD 2020). As indicated in **Table 2-1**, the grid spacing used for calculating noise exposure for each model was 500 feet.

Table 2-1 Noise Modeling Parameters

Software	***Analysis***	***Version***
MR_NMAP	Airspace Noise – subsonic	3.0
BooMap	Airspace Noise – supersonic	1.0.0.0
Parameter	***Description***	
Receiver Grid Spacing	500 ft in x and y	
Metrics	DNL and CDNL (primary) SEL, L_{max} (secondary)	
Basis	AAD Operations (NMAP)	
Modeled Weather (Standard Conditions)		
Temperature	59°F	
Relative Humidity	70%	
Barometric Pressure	29.92 in Hg	

Legend: % = percent; °F = degrees Fahrenheit; AAD = Average Annual Day; CDNL = C-weighted Day-Night Average Sound Level; DNL = A-weighted Day-Night Average Sound Level; ft = feet; in Hg = inches Mercury; L_{eq} = Equivalent Sound Level; L_{max} = maximum sound level; SEL = Sound Exposure Level

Source: Cardno 2021a.

The word "metric" describes a standard of measurement. Researchers developed many different types of noise metrics in the attempt to represent the effects of environmental noise. Each metric used in environmental noise analysis has a different physical meaning or interpretation.

The metrics supporting the assessment of noise from aircraft operations for this Environmental Assessment (EA) are the DNL, C-weighted Day-Night Average Sound Level (CDNL), L_{max}, and SEL. Each metric is briefly discussed below.

2.3.1 DNL

The DNL is an A-weighted cumulative noise metric that measures noise based on annual average daily aircraft operations. DNL is the DoD standard metric for modeling cumulative noise exposure and assessing community noise impacts from subsonic aircraft operations (DoD Instruction 4715.13*, Operational Noise Program*). DNL uses two time periods: daytime (acoustic day) and nighttime (acoustic night). Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m. local time. Based on the higher sensitivity to noise and associated annoyance during nighttime hours, a 10 dB penalty is assigned to single event sound levels that occur during acoustical nighttime. This study analyzes DNL on an annual average daily basis which means the airspace operations have been divided by 365 days per year to reflect an average day.

2.3.2 CDNL

CDNL is a C-weighted cumulative noise metric that measures noise based on annual average daily aircraft operations. CDNL is used for modeling low frequency cumulative noise exposure, like supersonic aircraft operations, using two time periods: daytime (acoustic day) and nighttime (acoustic night). Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m. local time. CDNL weights operations occurring during its nighttime period by adding 10 dB to their single event sound level.

2.3.3 L_{max} and SEL

Individual time-varying noise events have two main characteristics—a sound level, which changes throughout the event and a period of time during which the event is heard. L_{max} is the maximum sound level experienced by a receptor during a noise event. The SEL combines L_{max} with the total duration in which the sound is heard. The SEL takes this sound energy from a single event and compresses it into 1 second. SEL is always greater in value than L_{max} because it compresses all sound energy into a 1-second timeframe.

2.3.4 Noise-Induced Hearing Loss

Noise-induced hearing loss risk has been extensively studied, with the consensus that populations exposed to noise greater than (>) 80 dB DNL are at the greatest risk of potential hearing loss (DoD 2009). Because no person or place would be exposed to noise levels >80 dB DNL, noise induced hearing loss is not discussed further in this analysis.

2.4 Noise Impact thresholds

2.4.1 Primary Regulatory Criteria

The U.S. Environmental Protection Agency (USEPA) has identified 55 dB DNL as a level that protects public health and welfare with an adequate margin of safety (USEPA 1982). This means that 55 dB DNL is a threshold below which adverse noise effects are not expected to occur.

According to the Federal Interagency Committee on Urban Noise, noise exposure greater than 65 dB DNL is considered generally incompatible with residential, public use (i.e., schools), or recreational and entertainment areas (Federal Interagency Committee on Urban Noise 1980).

The U.S. Army Public Health Command defines impulsive noise <62 dB CDNL as Noise Zone 1. Noise Zone 1 is generally compatible with any residential or noise sensitive uses. Zone 1 (<62 dB CDNL) is the level at which one could expect a rise in annoyance similar to that of a DNL level of 65 dB for subsonic noise (U.S. Army Center for Health Promotion and Preventive Medicine 2005).

FAA Order 1050.1F (issued July 16, 2015), *Environmental Impacts: Policies and Procedures*, provides FAA policy and procedures to ensure agency compliance with the requirements set forth in the Council on Environmental Quality regulations for implementing the provisions of the National Environmental Policy Act (NEPA); Department of Transportation Order 5610.1C, *Procedures for Considering Environmental Impacts*; and other related statutes and directives.

Per FAA Order 1050.1F, a noise sensitive area is defined as an area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife and waterfowl refuges, and cultural and historical sites.

For airspace actions, FAA requires that an action proponent prepare noise exposure tables to identify where noise will change by the following specified amounts in noise sensitive areas (FAA Order 1050.1F):

- For DNL 65 dB and higher: +/- DNL 1.5 dB (significant)
- For DNL 60 dB to <65 dB: +/- DNL 3 dB (reportable)
- For DNL 45 dB to <60 dB: +/- DNL 5 dB (reportable)

The FAA defines a threshold for significant noise impacts as "[t]he action 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." (FAA Order 1050.1F).

2.4.2 Secondary Criteria

Annoyance, which is based on perception, represents the primary effect associated with aircraft noise. Generally, the louder the noise, the more annoyance it causes. Attitudinal surveys conducted over several decades show a consistent relationship between DNL and the percentages of groups of people who express various degrees of annoyance. This relationship was originally suggested by Schultz (1978). The updated relationship by Finegold et al. (1994) which does not differ substantially from the original, is the current federally-accepted and is shown in **Table 2-2**. The Committee on Hearing, Bioacoustics, and Biomechanics (1981) developed the equivalent relationship between annoyance and CDNL from sonic booms. The relationship of annoyance to DNL and CDNL is presented in **Table 2-2**. While not a determination of significance, the calculated DNL and CDNL for the Bourbon MOA/ATCAA can be compared against **Table 2-2** to provide an estimate of the percentage of the population that would be "highly annoyed" by the noise. These data provide a perspective on the level of annoyance that might occur. The study results summarized in **Table 2-2** are based on outdoor noise levels.

Table 2-2 Relationship of Annoyance to DNL and CDNL

DNL (dB)	*Percent of Population Highly Annoyed*	*CDNL (dB)*
45	0.83	42
50	1.66	46
55	3.31	51
60	6.48	56
65	12.29	60
70	22.10	65

Note: Noise impacts on individuals vary as do individual reactions to noise. This is a general prediction of the percentage of the population potentially highly annoyed based on environmental noise surveys conducted around the world.

Legend: CDNL = C-weighted Day-Night Average Sound Level; dB = decibel; DNL = A-weighted Day-Night Average Sound Level.

Sources: Department of Defense Noise Working Group 2009; Committee on Hearing, Bioacoustics, and Biomechanics 1981; Finegold et al. 1994.

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3 Existing Conditions

3.1 Modeling Data

VFC-204 and other DoD aircraft routinely use the existing non-scheduled airspace to access Snake MOA/ATCAA and WHODAT Complex for training operations. For LAANG F-15C aircraft, 98 percent (%) of operations occur between the hours of 7:00 a.m. to 10:00 p.m. and 2% between the hours of 10:00 p.m. to 7:00 a.m. All other aircraft operations are assumed to be daytime operations (7:00 a.m. to 10:00 p.m.), or prior to 10:00 p.m. local time. No supersonic aircraft operations currently occur within the non-scheduled airspace. A summary of annual airspace sorties is presented in **Table 3-1**. A sortie is the takeoff, training operation, and arrival of one aircraft.

Table 3-1 Annual Sorties in Existing Non-Scheduled Airspace

Aircraft	*Existing Sorties*	*Time (minutes)*
F-15C	1,553	10
F-5	1,195	10
Alpha Jet	396	10
F-35B/C	360	10
FA-18	353	10
C-130J	252	12
T-38	36	10
C-17	12	12
E-2	12	12
Total	***4,169***	

3.2 Subsonic Noise Exposure

MRNMap takes into account aircraft power settings, aircraft speed, and altitude when calculating average annual noise for the airspace. The software also spreads the noise out throughout the entire airspace evenly. The existing non-scheduled airspace currently experiences 35 dB DNL from annual DoD subsonic aircraft operations. Additionally, less than one daily event would exceed 65 SEL and <0.83% would be highly annoyed with the existing aircraft activity. A summary of noise exposure under existing conditions is presented in **Table 3-2**.

Table 3-2 Existing Aircraft Noise Levels within Non-Scheduled Airspace

Operations	*Airspace*	*DNL (dB)*	*Estimated Percentage of Population "Highly Annoyed"*	*Number of Daily Events >65 SEL*
Subsonic	Existing	35	< 0.83	< 1

Legend: > = greater than; < = less than; dB = decibel; DNL = A-weighted day-night average sound level; SEL = Sound Exposure Level

Source: Stantec 2024a,b.

Land use under the airspace proposed as the Bourbon MOA/ATCAA consists primarily of uninhabitable swamp and marsh lands and intertidal waters. Single- and multi-family residences are present along rural areas of State Routes 46 and 624. Additionally, various recreational vehicle parks, marinas, lodging, and charter services are located along these highways. Both roadway and waterway vehicle operations would be the dominant noise source of the area, with the occasional military and civilian aircraft overflight.

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4 Proposed Action Scenario

The following section details the modeling data and the resultant noise exposure for the Proposed Action. The EA analyzes only the Preferred Alternative.

4.1 Modeling Data

Annual aircraft sorties for the various aircraft are summarized in **Table 4-1.** A sortie is the takeoff, training operation, and arrival of one aircraft. As shown, there would be no increase in the number of sorties in the airspace under the Proposed Action; however, training time would increase in most cases when compared to existing transit time (refer to **Table 3-1** for existing sorties and time). While no permanent SUA exists in the area of the proposed Bourbon MOA/ATCAA, this area is adjacent to other airspace and aircraft may use these areas transiting from NAS JRB NOLA to existing SUA. Similar to current conditions, F-15C aircraft would complete 98% of their training operations between the hours of 7:00 a.m. to 10:00 p.m. and 2% between the hours of 10:00 p.m. to 7:00 a.m. All other aircraft operations are assumed to be daytime operations (7:00 a.m. to 10:00 p.m.), or prior to 10:00 p.m. local time. Detailed tables of specific altitudes and power configurations can be found in **Appendix A**.

Approximately 13% of sorties for both VFC-204 F-5 aircraft and LAANG F-15C aircraft would include supersonic operations; 3% of the F-5 sorties (approximately 36 sorties) and 10% of the F-15 sorties (approximately 155 sorties) would include supersonic speed. Supersonic operations would occur above Flight Level (FL) 300 throughout the proposed airspace; additionally, supersonic operations would be authorized down to the proposed airspace floor of 4,000 feet mean sea level (MSL) starting at 12 nautical miles (NM) from the eastern edge of the Harvey Very High Frequency (VHF) Omni-directional Radio Range Tactical Air Navigation (VORTAC) 10 NM arc.

Table 4-1 Annual Sorties in Proposed Bourbon MOA/ATCAA

Aircraft	*Proposed Sorties*	*Time (minutes)*
F-15C	1,553	30
F-5	1,195	60
Alpha Jet	396	30
F-35B/C	180	30
F-35B/C	180[1]	10
FA-18	180	30
FA-18	173[1]	10
C-130J	252	30
T-38	36	30
C-17	12	30
E-2	12	30
Total	***4,169***	

Note: [1]Operations are transit to Snake MOA/WHODAT Complex.
Legend: ATCAA = Air Traffic Control Assigned Airspace; MOA = Military Operations Area

4.2 Subsonic Noise Exposure

The subsonic noise level from aircraft operations within the proposed MOA/ATCAA would be 52 dB DNL. This level would not exceed 65 dB DNL, the significant threshold defined by FAA. From a land use perspective and according to the Federal Interagency Committee on Urban Noise, the FAA, the USEPA, and the Defense Centers for Public Health (formerly the U.S. Army Public Health Command), this level

would be compatible with all land use types to include residential, public use (i.e., schools), recreational, and entertainment areas. Less than 3.31% of the population would be highly annoyed by the noise within the proposed Bourbon MOA/ATCAA (**Table 4-2**), and less than one daily event would exceed 65 SEL.

Table 4-2 Subsonic Noise Levels within Proposed Bourbon MOA/ATCAA

Operations	*Airspace*	*Noise Level (dB)*	*Estimated Percentage of Population "Highly Annoyed"*	*Number of Daily Events >65 SEL*
Subsonic	Bourbon MOA/ATCAA	52 DNL	< 3.31	< 1

Legend: < = less than; ATCAA = Air Traffic Control Assigned Airspace; dB = decibel; DNL = A-weighted Day-Night Average Noise Level; MOA = Military Operations Areas; SEL = Sound Exposure Level
Source: Stantec 2024a,b.

Proposed subsonic aircraft activity, including military training and transit within the MOA/ATCAA, would result in an increase of 17 dB over the No Action Alternative, which would be a reportable increase in some noise sensitive areas in accordance with FAA Order 1050.1F. As noted previously, the majority of the MOA exists over water, swamps, and marshes; however, there are single- and multi-family residences, in addition to businesses beneath the proposed MOA/ATCAA and these land uses would experience an increase in noise level when compared to existing conditions.

4.3 Supersonic Noise Exposure

Estimated supersonic noise generated from aircraft utilizing the proposed MOA/ATCAA would be 34 dB CDNL west of the 12 NM arc from NAS JRB NOLA and at a minimum altitude of FL300 and 42 dB CDNL to the east of the 12 NM arc and at a minimum altitude of 4,000 feet MSL. **Table 4-3** summarizes supersonic noise exposure. Supersonic aircraft operations within the proposed MOA/ATCAA would operate well below 62 dB CDNL and be compatible with all land use types according to the standards published by the U.S. Army Public Health Command. Further, supersonic aircraft operations would not directly occur over residences or businesses along State Route 46 or 624 at an altitude below 30,000 feet MSL and approximately 0.83 percent of the population would be highly annoyed by the noise from supersonic operations within the proposed Bourbon MOA/ATCAA.

Table 4-3 Supersonic Noise Levels within Proposed Bourbon MOA/ATCAA

Operations	*Airspace*	*Noise Level (dB)*	*Estimated Percentage of Population "Highly Annoyed"*
Supersonic	Bourbon MOA/ATCAA[1]	34 CDNL	< 0.83
Supersonic	Bourbon MOA/ATCAA[2]	42 CDNL	0.83

Notes: [1]Operations within Bourbon MOA/ATCAA West (inside) of the 12 NM arc above 30,000 feet MSL
[2]Operations within Bourbon MOA/ATCAA East (outside) of the 12 NM arc above 4,000 feet MSL.
Legend: < = less than; ATCAA = Air Traffic Control Assigned Airspace; dB = decibel; CDNL = C-weighted Day-Night Average Noise Level; MOA = Military Operations Areas
Source: Stantec 2024a,c.

5 Supplemental Metrics

While DNL is the U.S. Government standard metric for assessing noise impacts, supplemental metrics are used to produce more detailed noise exposure information for the decision process and to improve communication with the public and stakeholders. Supplemental metrics are not intended to replace the DNL metric as the primary descriptor of cumulative noise exposure and anticipated significance of impacts, but rather are useful tools to supplement the impact information disclosed by the DNL metric. For this Proposed Action, the noise analysis included peak sound exposure as a supplemental metric to better describe the loudness of a single overflight event.

5.1 Single Event Metrics

Table 5-1 shows the results for single event metrics for the fighter aircraft that would use the proposed MOA/ATCAA. For these calculations, each aircraft was modeled for L_{max} at the loudest power setting (afterburner) and at lowest altitude floor of the proposed MOA/ATCAA (4,000 feet MSL). For this analysis, the floor of the proposed MOA was used for the single event noise estimations since this would generate the loudest possible scenario. The DNL reported above gives the average noise levels throughout the year but does not account for the "loudness" of an individual overflight event. **Table 5-1** shows an estimation of what an observer on the ground would experience if an aircraft flew directly overhead at the power configuration and altitude shown below.

Table 5-1 L_{max} Values for Aircraft Overflights at Lowest Bourbon MOA/ATCAA Altitude

Aircraft	*Power Configuration*	*L_{max} (dBA) at 4,000 feet (MSL)*
F-5E	Afterburner	98
F-15C	Afterburner	105
F-18E/EA-18	Afterburner	105
F35A	Afterburner	105

Notes: Speed for all aircraft for all scenarios was 500 knots.
Legend: ATCAA = Air Traffic Control Assigned Airspace; dBA = A-weighted decibel; L_{max} = maximum sound level; MOA = Military Operations Area; MSL = above mean sea level
Source: Stantec 2024a,b.

Higher power configurations that are lower in altitude produce greater noise levels. As shown, the highest sound exposure (L_{max}) within proposed Bourbon MOA/ATCAA would be 105 dBA. As the altitudes increase and power settings decrease, noise levels decrease, as would be expected. At 4,000 feet MSL, a direct overflight by any of the fighter aircraft that would be using the airspace would likely be noticeable.

Experiencing such an overflight would be rare given the number of proposed sorties and the fact that aircraft would spend very little time at these low altitudes during the training scenarios. For example, in the proposed Bourbon MOA/ATCAA, it is estimated that the proposed fighter aircraft would spend approximately 5 percent of flying time in the 4,000 to 5,000-foot altitude band and of that time, 1 percent would be at afterburner power. Additionally, military aircraft observe a 5 NM standoff distance from the internal edge of the MOA/ATCAA boundary to ensure they remain within the MOA/ATCAA during training. All single- and multi-family residences and businesses are within the 5 NM standoff distance which further reduces the possibility of direct military aircraft overflight.

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6 Cumulative

Concurrently with this Proposed Action, the *Air National Guard F-15EX Eagle II & F-35A Lightning II Operational Beddowns Environmental Impact Statement* is in the *Draft* stage of NEPA process and assesses the LAANG replacement of the existing F-15C aircraft with either the F-15EX or F-35A aircraft at NAS JRB NOLA. In addition to replacement of the existing F-15C aircraft, additional sorties are also included for F-15EX and F-35A aircraft beddown. Proposed cumulative operations are summarized in **Table 6-1**, where all sorties remain as described for the Proposed Action except for F-15EX/F-35A sorties which would replace F-15C and are projected to increase to 3,000.

Table 6-1 Cumulative Sorties in Proposed Bourbon MOA/ATCAA

Aircraft	*Sorties*	*Time (minutes)*
F-15EX/F-35A	3,000	30
F-5	1,195	60
Alpha Jet	396	30
F-35B/C	180	30
F-35B/C	180	10
FA-18/EA-18	180	30
FA-18/EA-18	173	10
C-130J	252	30
T-38	36	30
C-17	12	30
E-2	12	30
Total	***5,616***	

Note: A sortie is the takeoff, operation, and landing of one aircraft.
Legend: ATCAA = Air Traffic Control Assigned Airspace; MOA = Military Operations Area

6.1 Subsonic Noise Exposure

Subsonic aircraft operations under both cumulative scenarios, either implementation of the F-15EX or F-35A, and when combined with the Proposed Action but without the F-15C operations, the resulting cumulative noise within the proposed Bourbon MOA/ATCAA would be below the significance level of 65 dB DNL established by the USEPA, Federal Interagency Committee on Urban Noise, and FAA (**see Section 2.4.1**). **Table 6-2** summarizes subsonic noise exposure associated with cumulative actions. The addition of F-15EX or F-35A aircraft to the Proposed Action without F-15C aircraft operations would result in 54 dB DNL and 55 dB DNL, respectively. The DNL increase of 19 dB and 20 dB would fall under the "reportable" level according to the FAA as there is a 5 dB increase between 45 dB DNL and 60 dB DNL, when compared to the No Action Alternative. The percentage of the population expected to be highly annoyed by the cumulative noise from subsonic aircraft operations would be low (3.31 percent) and less than one daily event would exceed 65 SEL. Structural damage or secondary vibration impacts are not expected to occur based on the maximum sound exposure. An individual location is not expected to experience this scenario on a recurring or routine basis since aircraft operations would be distributed over a wide area. (see **Section 2.4.1**).

Table 6-2 Cumulative Subsonic Noise Levels for Annual Aircraft Operations in Proposed Bourbon MOA/ATCAA

Cumulative Scenario	*Operations*	*Airspace*	*Noise Level (dB)*	*Estimated Percentage of Population "Highly Annoyed"*	*Number of Daily Events >65 SEL*
F-15EX Beddown	Subsonic	Bourbon MOA/ATCAA	54 DNL	<3.31	< 1
F-35A Beddown	Subsonic	Bourbon MOA/ATCAA	55 DNL	3.31	< 1

Legend: < = less than; ATCAA = Air Traffic Control Assigned Airspace; dB = decibel; DNL = A-weighted Day-Night Average Noise Level; MOA = Military Operations Areas; SEL = Sound Exposure Level
Source: Stantec 2024a,b.

6.2 Supersonic Noise Exposure

Estimated noise generated from supersonic LAANG F-15EX aircraft replacing F-15C aircraft utilizing the proposed MOA/ATCAA would be 34 dB CDNL west of the 12 NM arc from NAS JRB NOLA and at a minimum altitude of FL300 and 45 dB CDNL to the east of the 12 NM arc and at a minimum altitude of 4,000 feet MSL. Should LAANG select the F-35A aircraft to replace the F-15C aircraft, supersonic noise levels of 34 dB CDNL and 44 dB CDNL would be expected west of the 12 NM arc at FL300 and east of the 12 NM at 4,000 feet MSL, respectively. Supersonic aircraft operations and resulting cumulative noise within Proposed Bourbon MOA/ATCAA would be below 62 dB CDNL, compatible with all sensitive resources when applying U.S. Army Public Health Command criteria, and a low percentage of the population (<1.66 percent) would be expected to be highly annoyed. **Table 6-3** summarizes supersonic noise exposure associated with cumulative actions. The estimated percentage of the population to be "highly annoyed" would be the same or slightly higher than the Proposed Action.

Table 6-3 Cumulative Supersonic Noise Levels for Annual Aircraft Operations in Proposed Bourbon MOA/ATCAA

Cumulative Scenario (Sorties)	*Operations*	*Airspace*	*Noise Level (dB)*	*Estimated Percentage of Population "Highly Annoyed"*
F-15EX (3,000)	Supersonic	Bourbon MOA/ATCAA[1]	34 CDNL	< 0.83
	Supersonic	Bourbon MOA/ATCAA[2]	45 CDNL	< 1.66
F-35A (3,000)	Supersonic	Bourbon MOA/ATCAA[1]	34 CDNL	< 0.83
	Supersonic	Bourbon MOA/ATCAA[2]	44 CDNL	< 1.66

Notes: [1]Operations within Bourbon MOA/ATCAA West of the 12 NM arc above 30,000 feet MSL.
[2]Operations within Bourbon MOA/ATCAA East of the 12 NM arc above 4,000 feet MSL.
Legend: < = less than; ATCAA = Air Traffic Control Assigned Airspace; dB = decibel; CDNL = C-weighted Day-Night Average Noise Level; MOA = Military Operations Areas
Source: Stantec 2024a,c.

7 Conclusion

The establishment of a new MOA/ATCAA in eastern Louisiana would present little change in the noise environment. The number of aircraft operations and the altitudes that they would utilize would not produce significant noise impacts for observers under the proposed airspace. The highest annual average noise exposure in the proposed Bourbon MOA/ATCAA would be 52 dB DNL which does not exceed thresholds for determining significant noise impacts. In fact, even if the proposed operations in this MOA/ATCAA were quadrupled, the DNL would only be 55 dB DNL which is still below the FAA threshold for significance. The cumulative noise exposure under either of the LAANG Beddown scenarios would not result in a significant cumulative impact in the proposed Bourbon MOA/ATCAA, as noise exposure would be a maximum of 55 dB DNL.

Noise exposure associated with supersonic aircraft activity would remain low at 42 dB CDNL in the eastern portion of the MOA/ATCAA where supersonic operations would be authorized at all altitudes (4,000 feet MSL and above). Implementation of either aircraft scenario associated with the LAANG Beddown would result in a cumulative level of no more than 45 dB CDNL in the eastern portion of the MOA/ATCAA.

Individual overflights at lower altitudes would likely be noticeable but would be infrequent, end quickly, and would be unlikely to disrupt daily activities. The inhabited or developed land beneath the MOA/ATCAA is limited, which further reduces the likelihood of experiencing a low-altitude overflight. The maximum noise level anyone would experience at the ground level would be 105 dB; however, this would be rare (a few times annually) as this noise level is based on aircraft operating at the lowest floor of the proposed Bourbon MOA/ATCAA. Therefore, individual overflights would have a negligible noise impact.

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Appendix A
Detailed Flight Operations proposed Bourbon MOA/ATCAA

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Table A-1 Existing Aircraft Flight Profiles within Non-Scheduled Airspace

Sorties	Aircraft		*Percentage of Relative Time in Altitude Bands*			
			Altitude Band (MSL)			
			4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
1,553	F-15C	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		Afterburner	0%	0%	0%	0%
		85% RPM	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
1,195	F-5	*Time in Altitude Band (%)*	0%	0%	50%	50%
		Power Configuration				
		Afterburner	0%	0%	0%	0%
		85% RPM	0%	0%	100%	100%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
396	Alpha Jet	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		88% RPM	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
360	F-35B/C	*Time in Altitude Band (%)*	0%	0%	50%	50%
		Power Configuration				
		Afterburner	0%	0%	0%	0%
		85% ETR	0%	0%	100%	100%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
353	FA-18	*Time in Altitude Band (%)*	0%	0%	50%	50%
		Power Configuration				
		Afterburner	0%	0%	0%	0%
		90% NC	0%	0%	100%	100%

			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
252	C-130J	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		2200 HP	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
36	T-38	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		88% RPM	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
12	C-17	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		80% NC	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
12	E-2	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		3000 ISHP	0%	0%	100%	0%

Legend: % = percent; %ETR=% Engine Thrust Request; %NC=percent speed of compressor stage; HP=Horsepower; ISHP=Indicated Shaft Horsepower; MSL=mean sea level; RPM=Revolutions per Minute.

Table A-2 Proposed Aircraft Flight Profiles within Proposed Bourbon MOA/ATCAA

			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
1,553	F-15C*	*Time in Altitude Band (%)*	2%	5%	36%	57%
		Power Configuration				
		Afterburner	50%	50%	50%	50%
		85% RPM	50%	50%	50%	50%

			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
400	F-5 (BFM)	*Time in Altitude Band (%)*	5%	40%	50%	5%
		Power Configuration				
		Afterburner	10%	90%	75%	20%
		85% RPM	90%	10%	25%	80%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
400	F-5 (CNY)	*Time in Altitude Band (%)*	5%	10%	40%	45%
		Power Configuration				
		Afterburner	5%	5%	5%	5%
		85% RPM	95%	95%	95%	95%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
360	F-5 (FRS)	*Time in Altitude Band (%)*	2.5%	2.5%	15%	80%
		Power Configuration				
		Afterburner	5%	10%	10%	10%
		85% RPM	95%	90%	90%	90%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
25	F-5 (FCF)	*Time in Altitude Band (%)*	0%	5%	20%	75%
		Power Configuration				
		Afterburner	0%	5%	5%	5%
		85% RPM	0%	95%	95%	95%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000[#]
10	F-5 (FT)	*Time in Altitude Band (%)*	0%	5%	90%	5%
		Power Configuration				
		Afterburner	0%	5%	5%	5%
		85% RPM	0%	95%	95%	95%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
396	Alpha Jet	*Time in Altitude Band (%)*	0%	0%	100%	0%

		Power Configuration				
		88% RPM	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
180	F-35B/C	*Time in Altitude Band (%)*	2.5%	2.5%	15%	80%
		Power Configuration				
		Afterburner	10%	10%	10%	10%
		85% ETR	90%	90%	90%	90%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
180	F-35B/C	*Time in Altitude Band (%)*	0%	0%	50%	50%
		Power Configuration				
		Afterburner	0%	0%	0%	0%
		85% ETR	0%	0%	100%	100%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
180	FA-18/EA-18	*Time in Altitude Band (%)*	2.5%	2.5%	15%	80%
		Power Configuration				
		Afterburner	10%	10%	10%	10%
		85% ETR	90%	90%	90%	90%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
173	FA-18/EA-18	*Time in Altitude Band (%)*	0%	0%	50%	50%
		Power Configuration				
		Afterburner	0%	0%	0%	0%
		90% NC	0%	0%	100%	100%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
252	C-130J	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		2200 HP	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000

36	T-38	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		88% RPM	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
12	C-17	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		80% NC	0%	0%	100%	0%
			Percentage of Relative Time in Altitude Bands			
			Altitude Band (MSL)			
Sorties	**Aircraft**		4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
12	E-2	*Time in Altitude Band (%)*	0%	0%	100%	0%
		Power Configuration				
		3000 ISHP	0%	0%	100%	0%

Notes: *=F-15C data taken from Final Noise Study 159th Fighter Wing at NAS JRB New Orleans, Louisiana For the Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement; #=includes operations within altitude block FL320 to FL500 for no more than 15-minutes

Legend: % = percent; %ETR= % Engine Thrust Request; %NC=percent speed of compressor stage; ATCAA = Air Traffic Control Assigned Airspace; BFM=Basic Flight Maneuvers; CNY=Currency; FCF=Functional Check; FRS/TI=Fleet Replacement Training/Tactical Intercepts Flight; FT=Familiarization Training; HP=Horsepower; ISHP=Indicated Shaft Horsepower; MOA = Military Operations Area; MSL=mean sea level; RPM=Revolutions per Minute

Table A-3 Proposed F-15EX Flight Profiles within Proposed Bourbon MOA/ATCAA under Cumulative Action 1

Sorties	Aircraft		*Percentage of Relative Time in Altitude Bands*			
			Altitude Band (MSL)			
			4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
3,000	F-15EX	*Time in Altitude Band (%)*	2%	5%	36%	57%
		Power Configuration				
		Afterburner	50%	50%	50%	50%
		85% RPM	50%	50%	50%	50%

Notes: F-15EX data taken from Final Noise Study 159th Fighter Wing at NAS JRB New Orleans, Louisiana for the Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement

Legend: % = percent; ATCAA=Air Traffic Control Assigned Airspace; MOA=Military Operations Area; MSL=mean sea level; RPM=Revolutions per Minute

Table A-4 Proposed F-35A Flight Profiles within Proposed Bourbon MOA/ATCAA under Cumulative Action 2

Sorties	Aircraft		*Percentage of Relative Time in Altitude Bands*			
			Altitude Band (MSL)			
			4,000 MSL to 5,000	5,000 to 10,000	10,000 to 18,000	18,000 to 32,000
3,000	F-35A	*Time in Altitude Band (%)*	2%	5%	24%	69%
		Power Configuration				
		Afterburner	50%	50%	50%	50%
		85% ETR	50%	50%	50%	50%

Notes: F-35A data taken from Final Noise Study 159th Fighter Wing at NAS JRB New Orleans, Louisiana for the Air National Guard F-15EX Eagle II & F-35A Operational Beddowns Environmental Impact Statement

Legend: % = percent; ATCAA=Air Traffic Control Assigned Airspace; %ETR= % Engine Thrust Request; MOA=Military Operations Area; MSL=mean sea level

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
N46/025
July 24, 2024

Mr. Seth Bordelon
U.S. Fish and Wildlife Service, Southeast Region
Louisiana Ecological Services Office
200 Dulles Drive
Lafayette, LA 70506

Dear Mr. Bordelon:

The Department of the Navy (Navy) is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with proposed flight training activities within a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA. The proposed MOA/ATCAA is located east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) and adjacent to existing Special Use Airspace (SUA). The Bourbon MOA/ATCAA would be located partially over St. Bernard Parish and partially over the waters of the Gulf of Mexico. The purpose of this letter is to request informal consultation under section 7(a)(2) of the Endangered Species Act (ESA) regarding potential impacts of the Proposed Action on threatened and endangered species.

The proposed MOA/ATCAA would provide training airspace closer to NAS JRB NOLA to improve the quality and efficiency of the training and make more efficient use of fuel resources. The Proposed Action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The Proposed Action is needed because existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

The Navy analyzed potential impacts of the Proposed Action using the best scientific data available, as required under section 7(c) of the ESA. Based on the Navy's analyses, the Navy determined that the Proposed Action *may affect, but is not likely to adversely affect* the following species:

- Rufa red knot (*Calidris cantus rufa*) – Threatened
- Piping plover (*Charadrius melodus*) – Threatened
- Eastern black rail (*Laterallus jamaicensis* ssp. *jamaicensis*) – Threatened
- Tricolored bat (*Perimyotis subflavus*) – Proposed Endangered
- West Indian manatee *Trichechus manatus*) – Threatened

Enclosed is an informal consultation package that provides project details and documents our analyses.

The Navy appreciates consideration by the U.S. Fish and Wildlife Service (USFWS) on the Proposed Action and requests USFWS's concurrence with the Navy's determination. The Project Manager at United States Fleet Forces Command is Mr. Greg Thompson, who may be reached at: (757) 836-6938 or via email: Gregory.S.Thompson2.civ@us.navy.mil. If you have any questions or require additional information, please contact Mr. Matt Martin, NAVFAC Southeast at (305) 928-4027 or by email at: Matthew.S.Martin54.civ@us.navy.mil.

Sincerely,

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosure: Informal Consultation Documentation for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana

Informal Consultation Documentation

Draft Environmental Assessment for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana (Project Code: 2024-0070356)

The Department of the Navy (Navy) is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with proposed flight training activities within a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA. The proposed MOA/ATCAA is located east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) and adjacent to existing Special Use Airspace (SUA) (Attachment 1). The Bourbon MOA/ATCAA would be located partially over St. Bernard Parish and partially over the waters of the Gulf of Mexico. Pursuant to Section 7 of the Endangered Species Act (ESA) of 1973 (16 United States Code [U.S.C.] sections 1531–1544), the Navy has determined that the proposed flight training within the Bourbon MOA/ATCAA *may affect, but is not likely to adversely affect* federally listed species.

A MOA is a type of SUA designated to contain non-hazardous military flight training activities. It has defined vertical and lateral dimensions and designated times of use published on sectional aeronautical charts which identifies to other airspace users where these activities occur. An ATCAA also has specific vertical and lateral limits for the purpose of providing air traffic segregation between military training activities and other airspace users. Most often, as is the case in this project, the ATCAA is located above a MOA and has the same lateral limits as the MOA below. There is no ground training component associated with a MOA, only flight training activities.

The proposed MOA/ATCAA would provide training airspace closer to NAS JRB NOLA to improve the quality and efficiency of the training and make more efficient use of fuel resources. The Proposed Action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The Proposed Action is needed because existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

Flight operations within the Bourbon MOA/ATCAA would be limited to the airspace between 4,000 to 32,000 feet above mean sea level (MSL). Operations would occur approximately 5 hours per day between 8:00 a.m. to 5:00 p.m., Monday through Friday, which is the current operations tempo for the adjacent existing SUA. The airspace proposed for the Bourbon MOA/ATCAA is currently used to transit from NAS JRB NOLA to existing SUA. The number of military aircraft using the airspace would be the same as current conditions (4,169 flights annually), but instead of straight transition flights (lasting approximately 10–12 minutes), the airspace would be used for training flights (lasting approximately 30–60 minutes). Supersonic flight within the MOA/ATCAA would be required for some training events, but would be of very short duration, infrequent, and restricted to above 30,000 feet over land. The maximum sound level of a single overflight at the lowest possible altitude (4,000 feet MSL) within the proposed airspace would be 105 decibels (dB). Aircraft would generally only be at this low altitude for a small percentage of the training time and the maximum sound level would only last for a few seconds. The cumulative subsonic noise from aircraft operations within the proposed MOA/ATCAA would be 52 dB A-weighted Day-Night Average Sound Level (DNL).

The cumulative supersonic noise level would not exceed 42 dB C-weighted Day-Night Average Sound Level (CDNL).

The Proposed Action consists of airspace changes and flight training activities and does not involve any ground- or water-based activities, ground disturbance, or physical interference with water resources. The only potential impacts of this sort would result from airborne noise and the use of chaff and flares during some training activities, which would entail individual chaff fibers and some residual debris reaching the ground or sea floor. Chaff and flares are the principal defensive countermeasures dispensed by military aircraft to avoid detection or attack by enemy air defense systems and keep aircraft from being successfully targeted by weapons. Chaff and flares are used in nearly all military training airspace and ranges.

A chaff cartridge contains millions of chaff fibers that form an electronic "cloud" when dispensed from the aircraft that interferes with a radar signal and temporarily hides the maneuvering aircraft from radar detection. The light fibers drift in the prevailing wind and ultimately settle on the surface where they readily degrade in soil or water. An individual chaff fiber (aluminum-coated silica) is thinner than a fine human hair and ranges in length from 0.3 to 1 inch. To put a chaff fiber in perspective, if a 1-inch-long strand of chaff were laid on this page, most readers would not be able to see it. It is expected that up to 10,000 chaff cartridges would be dispensed in the Bourbon MOA/ATCAA annually.

Flares are made of magnesium that burns at a temperature in excess of 2,000 degrees Fahrenheit to simulate jet exhaust as a decoy for heat seeking missiles. The magnesium is fully consumed in the training airspace within 3 to 5 seconds during which time it would fall no more than 500 feet. The standard minimum release altitude over non-military land for flares is 2,000 feet above ground level; however, the floor of the Bourbon MOA/ATCAA would be 4,000 feet mean sea level (which is approximately 4,000 feet above ground level in this geographic area) and flares would not be released below the floor. The standard minimum release altitude ensures a burning flare does not reach the ground or tree canopy, significantly reducing the possibility of wildfires. It is expected that up to 10,000 flare cartridges would be dispensed in the Bourbon MOA/ATCAA annually.

The individual cartridges that contain chaff or flares remain on the aircraft and only the contents are dispensed into the airspace. Each chaff or flare cartridge is also packed with 2–3 pieces of benign residual materials that fall to the ground as debris. This residual debris includes plastic end caps, felt spacers, and plastic pistons (each of which are no larger than 1-inch by 1-inch). The use of chaff and flares is widely distributed throughout the entire MOA/ATCAA and the chaff fibers and residual debris would not collect in any substantial or noticeable quantity in any location. These materials land on the ground or float on the water surface for a short period before sinking to the bottom where they decompose in sediment.

Federally listed species with the potential to occur below the Bourbon MOA/ATCAA that may be impacted by the Proposed Action are presented in **Table 1**. The table provides the listing status, presence of critical habitat beneath proposed airspace, and description of general habitat for the species. This list was generated with information provided in the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool (provided at end of this documentation). Potential impacts on these species are discussed below the table.

Table 1: Federally Listed Species with the Potential to be Impacted by the Proposed Action

Species	*USFWS Status*	*Critical Habitat*	*Habitat*
Birds			
Rufa Red Knot *Calidris cantus rufa*	Threatened	No	The rufa red knot migrates from coastal marine environments to the northern Arctic. During the nonbreeding season, red knots are found in coastal marine environments like coastal Louisiana where they forage along sandy beaches, lagoons, saltmarshes, eelgrass beds, and mangrove swamps (Cornell University, 2024a).
Piping Plover *Charadrius melodus*	Threatened	No	Piping plovers are found on bare shorelines and beaches of rivers, lakes, and coasts with little vegetation or disturbance and spend the nonbreeding season along the Gulf Coast, including Louisiana (Cornell University, 2024b).
Eastern Black Rail *Laterallus jamaicensis* ssp. *jamaicensis*	Threatened	No	The eastern black rail may be found year-round along the Gulf Coast of Louisiana. This species is elusive but may be found in dense marshes (Cornell University, 2024c).
Mammals			
Tricolored Bat *Perimyotis subflavus*	Proposed Endangered	No	The tricolored bat roost in caves, abandoned mines, and culverts and forages for insects during warm nights. In the spring through fall, this species is found in forested habitats, and it hibernates during winter in caves and abandoned mines (USFWS, 2024c).
West Indian Manatee *Trichechus manatus*	Threatened	No	The West Indian manatee is found along the Gulf of Mexico and Atlantic coasts as well as in the Caribbean. This species grazes on sea grasses and other aquatic plants in warm coastal waters. Manatees require access to freshwater habitat to stay hydrated and are therefore found near freshwater outlets (LDWF, 2024a).
Invertebrates[1]			
Monarch Butterfly *Danaus plexippus*	Candidate	No	Monarch butterflies migrate from central Mexico through Louisiana to the northern U.S. annually. Monarchs may pass through the low airspace beneath the MOA during migration.

Note: [1]Due to the nature of the Proposed Action, no effects to invertebrates are anticipated. Therefore, the monarch butterfly is not carried forward for analysis.

Legend: MOA = Military Operations Area; LDWF = Louisiana Department of Wildlife and Fisheries; USFWS = United States Fish and Wildlife Service.

Potential Impacts from Chaff and Flares

Potential impacts from chaff and flares could occur from the introduction of chaff fibers into the environment, distribution of residual materials in the form of debris, and potential for wildfire from flare usage. Chaff is made of aluminum coated silica fibers. The chaff concentrations that animals could be exposed to following the release of multiple cartridges (e.g., following a single day of training) depends on several variable factors. Specific release points are not recorded and tend to be random, and chaff dispersion in air depends on prevailing atmospheric conditions. Chaff fibers would drift in prevailing winds and ultimately land on the ground or water beneath the MOA/ATCAA. Residual materials from chaff and flares include

plastic end caps, felt spacers, and plastic pistons. These materials land on the ground or sink to the bottom of aquatic environments. Under the Proposed Action, up to 10,000 chaff cartridges and 10,000 flare cartridges would be expended annually in the MOA/ATCAA. Based on these annual totals, approximately one piece of residual material would occur per 5 acres of area on average. This is assuming even distribution of residual materials, and likely there would be some grouping of residual material. However, the overall number of chaff and flare residual material reaching the ground and ocean would be small and would be scattered in a large area.

There have been no observed toxicological effects of chaff or residual materials on terrestrial or aquatic organisms, even when subject to higher concentrations than would occur under this Proposed Action (Department of the Air Force, 1997, 2011, 2023). Terrestrial animals have not been observed ingesting chaff or residual materials (Department of Air Force, 1997). Birds have not been documented using chaff filaments or residual materials as nesting material or food. Chaff does not accumulate to any great degree and the fibers, if found, are often mistaken for natural elements such as animal fur or plant material. The fibers generally dissipate within a few days due to mechanical breakdown from wind, sediment erosion, and rain or snow.

The relatively slight force of a small piece of plastic (residual materials) striking any animal would not be expected to have any effect (Department of the Air Force, 2011). The wide distribution of these materials throughout the MOA/ATCAA would further reduce the likelihood that any animal would be struck by residual materials.

The possibility of a wildfire from flare usage would be extremely remote considering the reliability of flares and the amount of surface water beneath the MOA/ATCAA. Flares would not be released below the MOA floor (4,000 feet MSL) which is above the standard minimum release altitude of 2,000 feet above ground level (AGL), ensuring the flare has substantial time to burn out before contacting the ground or treetops. Flares are designed to burn completely.

Potential Impacts from Noise

Research on the impacts of noise on the specific ESA-listed species associated with this Proposed Action are not available. The impact discussion relies on available scientific studies on related bird and bat species. Continuous, intense noise exposure has been shown to cause health effects in laboratory experiments, but some research shows that intermittent noise, such as what would occur with the Proposed Action, may not, because some animals' ears can recover between the intermittent exposures and intermittent exposures result in lower total noise (Bowles, 1995a, b; Pienkowski and Eggermont, 2010). The proposed training is episodic, and would not create a consistent, significant noise source in any one location. In addition, the noise exposure throughout the MOA/ATCAA from the proposed aircraft operations would be low (52 dB DNL). While an infrequent event due to size of the MOA/ATCAA and flight altitude and annual number of flights, there is the possibility that wildlife could be subjected to a very brief direct overflight and experience a peak noise level of up to 105 dB. Exposure to peak noise levels would last only a few seconds and the animal would need to be directly beneath the flight path to experience this level of noise as the noise reduces the further the animal is from the flight path. Even at 105 dB, no harm to hearing capacity is anticipated as damage to hearing only occurs at levels over 140 to 150 dB (Bowles, 1995a).

Bats

Tricolored bats use echolocation to forage for insects at night from the spring through the fall (USFWS, 2021). Although noise would result from the flights of the Proposed Action, these flights are only scheduled to occur from 8:00 a.m. to 5:00 p.m. and would therefore generally not occur during the nocturnal foraging period of the tricolored bat. There may be small instances of overlap in dusk hours during the winter when daylight hours are fewer, but tricolored bats mostly hibernate during the winter (USFWS, 2021) and would therefore not be foraging during this time. Short, intermittent flight noise above foraging or roosting locations would be unlikely to cause significant disturbances to this species. A study in Wisconsin analyzed the effect of underground mine blasting on nearby bat roosts during hibernation, and the results indicated that vibrations from the blasting did not cause significant increases of bat activity (Summers et al., 2023). Although studies have demonstrated that bats are sensitive to disturbance during hibernation (Haarsma and de Hullu, 2012), other studies have demonstrated that bats are not sensitive to non-tactile disruptions, such as noise or light (Speakman et al., 1991), which would indicate that aircraft noise is unlikely to be significantly disruptive to bat hibernation. While the proposed operations within the MOA/ATCAA would create a noise disturbance for bats, this disturbance is expected to be intermittent and minor.

Manatee

The manatee may be affected in portions of the action area due to airborne noise, but these effects would be insignificant. Noise disturbance from the overflights is not expected to harass or agitate manatees. Exposure to noise would be brief (a few seconds), and all of the flights would occur at altitudes greater than 4,000 feet, thus allowing the sound level to attenuate before entering the water. Aircraft overflights are not expected to cause chronic stress as it is extremely unlikely that individual manatees would be repeatedly exposed to low altitude overflight noise. Noise associated with flights would not cause injury or harassment to marine species. Manatees are unlikely to be affected by aircraft noise while at the surface and while submerged, due to infrequent exposure. Exposure would be brief (a matter of seconds as aircraft passed overhead) and infrequent, given the dispersed nature of flights over such a large area.

Birds

Most concerns related to the effects of noise on birds involve the masking of communications among members of the same species, reducing the detectability of biologically relevant signals including the sounds of predators and prey, and temporarily or permanently decreasing hearing sensitivity (Dooling and Popper, 2007; Vincelette et al., 2020). These effects range from temporary pauses or elevated noise from birds after an aircraft disturbance (Vincelette et al., 2020), to disruptions of bird behavior and mating (Habib et al., 2007). In a study of ovenbirds, Habib et al. (2007) found chronic noise exposure near compressor stations affected pairing success, attributable to masking and distorting the song of breeding males on territories. Noise exposure under the Proposed Action would be intermittent and would not represent continuous hours of noise disruptions at a time in one location. Birds could be infrequently exposed to a maximum noise level of 105 dB if they are directly beneath a low-level overflight but this exposure would last a few seconds.

In a literature review including bird responses to military aircraft noise, Manci et al. (1988) found that most raptors did not show a negative response to overflights. When negative responses were observed, they were predominantly associated with rotor-winged aircraft or jet

aircraft that were repeatedly passing within 0.5 mile of a nest. Ellis et al. (1991) analyzed the effects of low-level military jet aircraft and mid- to high-altitude sonic booms (both actual and simulated) on nesting peregrine falcons and seven other raptors (common black hawk, Harris' hawk, zone-tailed hawk, red-tailed hawk, golden eagle, prairie falcon, bald eagle). Re-occupancy and productivity rates were within or above expected values for self-sustaining populations (Ellis et al., 1991). In a 1997 helicopter overflight study, Mexican spotted owls did not flush from a nest or perch unless a helicopter was as close as 330 feet (Delaney et al., 1999). Researchers in Colorado found that Mexican spotted owl responses to F-16 overflights were often less significant than responses to naturally occurring events such as thunderstorms. Similarly, Delaney et al. (1999) found that Mexican spotted owls quickly returned to normal day-roosting behavior after being disturbed by helicopters. A 6-year study in the Gila National Forest found that low-level aircraft overflight had no effect on occupancy of Mexican spotted owl activity centers and found no correlations among measures of aircraft exposure and nesting success (Air Combat Command, 2008).

A study performed on black ducks and wood ducks showed that ducks habituated to both visual and auditory aircraft activity over the course of 17 days (Conomy et al., 1998), suggesting that waterfowl may initially react to aircraft activity, but the disturbances would be unlikely to represent significant harm over time. In a study evaluating the impacts of military and civilian overflights on water birds, including least terns, beneath a MOA in North Carolina, no evidence was found that visual or acoustic stimuli from military aircraft flying between 2,100 feet AGL and 3,500 feet AGL elicited behavioral stress responses that would negatively impact nesting colonial waterbird demographic rates (Hillman, 2012). Flights within the Bourbon MOA/ATCAA would not be below 4,000 feet MSL (which in this area is approximately the same as 4,000 feet AGL).

ESA-listed Species Effects Determinations

The Proposed Action would result in random, intermittent noise across the area, but would not represent long-term continuous high levels of sound in any one area. Minor, temporary effects from aircraft noise are possible, but these effects are unlikely to pose long-term or population-level impacts to any species. Therefore, the aircraft noise and use of chaff and flares associated with the Proposed Action *may affect, but are not likely to adversely affect* rufa red knot, piping plover, eastern black rail, tricolored bat, and West Indian manatee.

Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA)

The 2003 National Defense Authorization Act gave the Secretary of the Interior authority to prescribe regulations to permit the Armed Forces to incidentally take migratory birds during approved military readiness activities without violating the MBTA. The final rule authorizing the Department of Defense to take migratory birds in such cases includes a requirement that the Armed Forces must confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate adverse effects of the Proposed Action if the action has a significant negative effect on the sustainability of a population of a migratory bird species.

Bird aircraft strikes associated with migrating birds are a substantial concern due to the risk of damage to aircraft, injury, or loss of life to aircrews or the local population in the event of an aircraft crash, as well as the risk to the bird species in collisions. Over 90 percent of reported

bird strikes occur at or below 3,000 feet AGL. Flights in the proposed Bourbon MOA/ATCAA would occur above 4,000 feet AGL.

The Avian Hazard Advisory Safety System (AHAS) is managed by the Department of the Air Force and available to all services to detect and assess the risk of a bird strike. AHAS is informed by various sources to include data from Next Generation Radar and National Oceanic and Atmospheric Association (Air Force Safety Center, 2015). AHAS uses multiple risk assessment methods to identify the risk for a given flying area that contains biological activity.

Aircrews operating in the Bourbon MOA/ATCAA would be required to follow applicable procedures outlined in the NAS JRB NOLA Bird/Wildlife Aircraft Strike Hazard (BASH) Reduction Plan (Navy, 2017) as they do currently. When safety procedures identify an increased risk, limits are placed on low-altitude flights and some types of training. Special briefings are provided to pilots whenever the potential exists for greater bird-strike risks within airspace. AHAS, together with specific procedures defined the BASH Reduction Plan, can be used to evaluate local and enroute bird strike risks and manage flight operations in training airspace. Thus, the Proposed Action would not have significant impacts to migratory birds.

Based on the discussions described above in "*Potential Impacts from Noise, Birds*", the Proposed Action would not have significant noise related impacts to migratory birds or bald or golden eagles. Migratory birds and eagles may experience brief disruptions from noise when flights pass overhead which may elicit startle responses, briefly mask intraspecific vocalizations, or result in the individual temporarily leaving the area, as discussed above. However, these disturbances would not represent long-term or significant effects on eagles. With the existing BASH protection measures already in place and the less than significant impacts associated with flight training, the Proposed Action would not result in the take of species protected under MBTA or BGEPA.

Summary

In conclusion, the Navy has determined the proposed flight training activities within the proposed Bourbon MOA/ATCAA *may affect, but are not likely to adversely affect* the rufa red knot, piping plover, eastern black rail, tricolored bat, and West Indian manatee. The Navy has determined the proposed activities would have *no effect* to the monarch butterfly.

Attachments:
1. Map of Proposed Action Area
2. USFWS Species List (Project Code: 2024-0070356)

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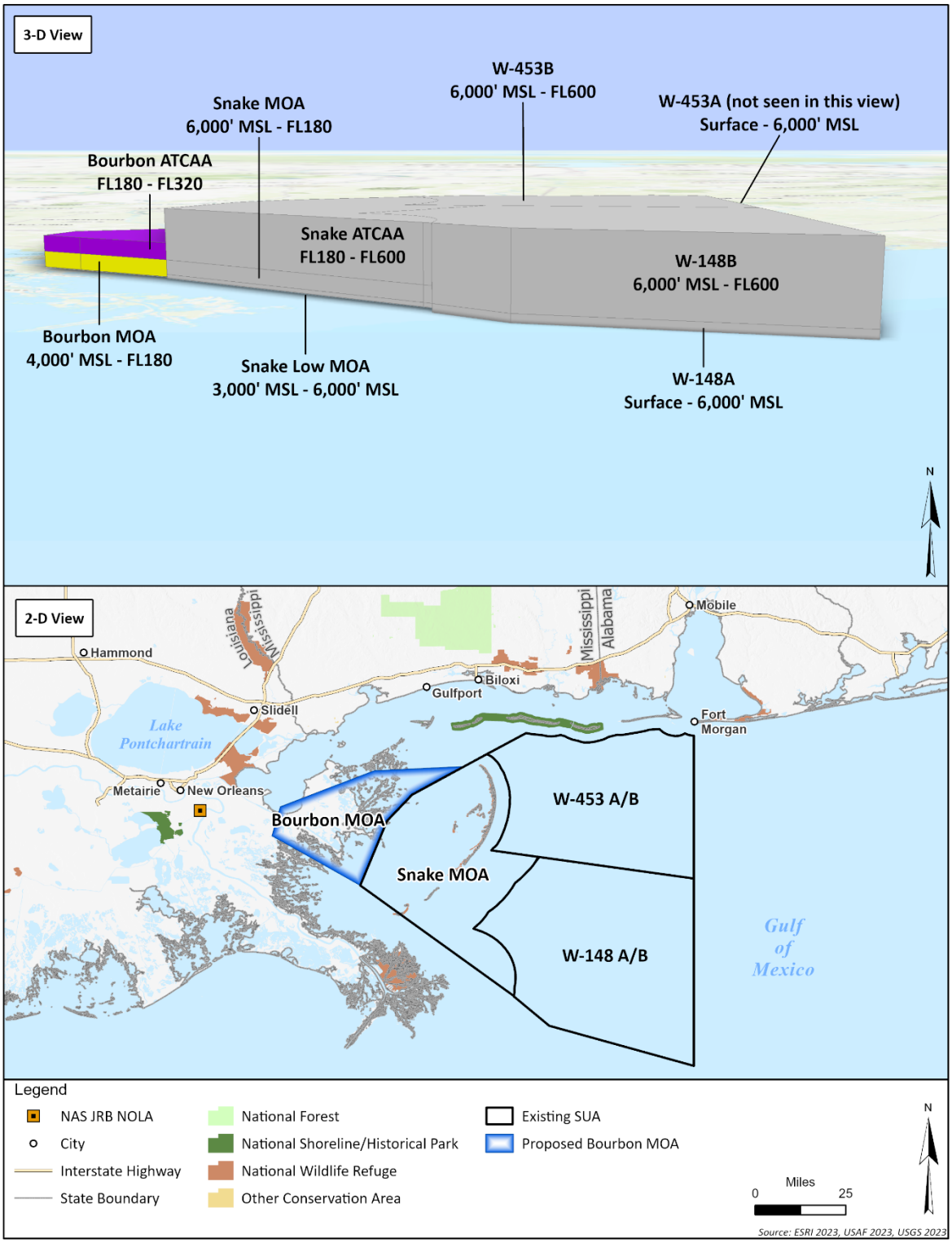
Attachment 1: Map of Proposed Action Area



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
Phone: (337) 291-3100 Fax: (337) 291-3139

In Reply Refer To:
Project Code: 2024-0070356
Project Name: New Orleans Airspace EA

03/29/2024 20:28:22 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and candidate species, as well as designated and proposed critical habitat that may occur within the boundary of your proposed project and may be affected by your proposed project. The Fish and Wildlife Service (Service) is providing this list under section 7 (c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Changes in this species list may occur due to new information from updated surveys, changes in species habitat, new listed species and other factors. Because of these possible changes, feel free to contact our office (337-291-3109) for more information or assistance regarding impacts to federally listed species. The Service recommends visiting the IPaC site or the Louisiana Ecological Services Field Office website (https://www.fws.gov/southeast/lafayette) at regular intervals during project planning and implementation for updated species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect Federally listed species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)).

Bald eagles have recovered and were removed from the List of Endangered and Threatened Species as of August 8, 2007. Although no longer listed, please be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 et seq.).

The Service developed the National Bald Eagle Management (NBEM) Guidelines to provide landowners, land managers, and others with information and recommendations to minimize potential project impacts to bald eagles, particularly where such impacts may constitute "disturbance", which is prohibited by the BGEPA. A copy of the NBEM Guidelines is available at: https://www.fws.gov/migratorybirds/pdf/management/nationalbaldeaglenanagementguidelines.pdf

Those guidelines recommend: (1) maintaining a specified distance between the activity and the nest (buffer area); (2) maintaining natural areas (preferably forested) between the activity and nest trees (landscape buffers); and (3) avoiding certain activities during the breeding season. Onsite personnel should be informed of the possible presence of nesting bald eagles within the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest occurs or is discovered within or adjacent to the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at: https://www.fws.gov/southeast/our-services/eagle-technical-assistance/. Following completion of the evaluation, that website will provide a determination of whether additional consultation is necessary. The Division of Migratory Birds for the Southeast Region of the Service (phone: 404/679-7051, e-mail: SEmigratorybirds@fws.gov) has the lead role in conducting any necessary consultation.

Activities that involve State-designated scenic streams and/or wetlands are regulated by the Louisiana Department of Wildlife and Fisheries and the U.S. Army Corps of Engineers, respectively. We, therefore, recommend that you contact those agencies to determine their interest in proposed projects in these areas.

Activities that would be located within a National Wildlife Refuge are regulated by the refuge staff. We, therefore, recommend that you contact them to determine their interest in proposed projects in these areas.

Additional information on Federal trust species in Louisiana can be obtained from the Louisiana Ecological Services website at: https://www.fws.gov/southeast/lafayette

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Marine Mammals

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
(337) 291-3100

PROJECT SUMMARY

Project Code: 2024-0070356
Project Name: New Orleans Airspace EA
Project Type: Military Operations
Project Description: Bourbon MOA
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@29.8127778,-89.47842704176865,14z

Counties: Plaquemines and St. Bernard counties, Louisiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered
West Indian Manatee *Trichechus manatus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. ***This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.*** Species profile: https://ecos.fws.gov/ecp/species/4469	Threatened

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

REPTILES

NAME	STATUS
Hawksbill Sea Turtle *Eretmochelys imbricata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3656	Endangered
Kemp's Ridley Sea Turtle *Lepidochelys kempii* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/5523	Endangered
Leatherback Sea Turtle *Dermochelys coriacea* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	Endangered
Loggerhead Sea Turtle *Caretta caretta* Population: Northwest Atlantic Ocean DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1110	Threatened

FISHES

NAME	STATUS
Gulf Sturgeon *Acipenser oxyrinchus (=oxyrhynchus) desotoi*	Threatened

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/651

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Gulf Sturgeon *Acipenser oxyrinchus (=oxyrhynchus) desotoi*	Final

https://ecos.fws.gov/ecp/species/651#crithab

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

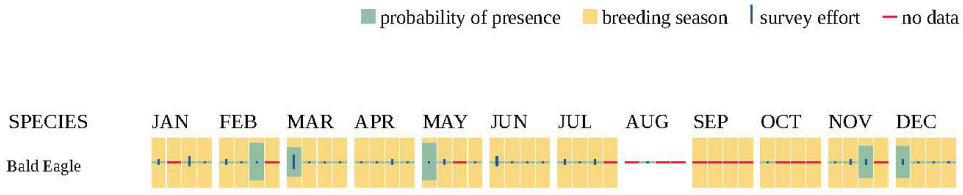
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Oystercatcher *Haematopus palliatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Black Skimmer *Rynchops niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Brown Pelican *Pelecanus occidentalis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/6034	Breeds Jan 15 to Sep 30
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Common Loon *gavia immer* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/4464	Breeds Apr 15 to Oct 31
Forster's Tern *Sterna forsteri* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11953	Breeds Mar 1 to Aug 15
Gull-billed Tern *Gelochelidon nilotica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9501	Breeds May 1 to Jul 31
King Rail *Rallus elegans* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

NAME	BREEDING SEASON
Magnificent Frigatebird *Fregata magnificens* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9588	Breeds elsewhere
Marbled Godwit *Limosa fedoa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Painted Bunting *Passerina ciris* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9511	Breeds Apr 25 to Aug 15
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-breasted Merganser *Mergus serrator* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10693	Breeds elsewhere
Reddish Egret *Egretta rufescens* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/7617	Breeds Mar 1 to Sep 15
Ring-billed Gull *Larus delawarensis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10468	Breeds elsewhere
Royal Tern *Thalasseus maximus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10471	Breeds Apr 15 to Aug 31
Ruddy Turnstone *Arenaria interpres morinella* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10633	Breeds elsewhere

NAME	BREEDING SEASON
Sandwich Tern *Thalasseus sandvicensis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9731	Breeds Apr 25 to Aug 31
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Swallow-tailed Kite *Elanoides forficatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Willet *Tringa semipalmata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5
Wilson's Plover *Charadrius wilsonia* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9722	Breeds Apr 1 to Aug 20

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

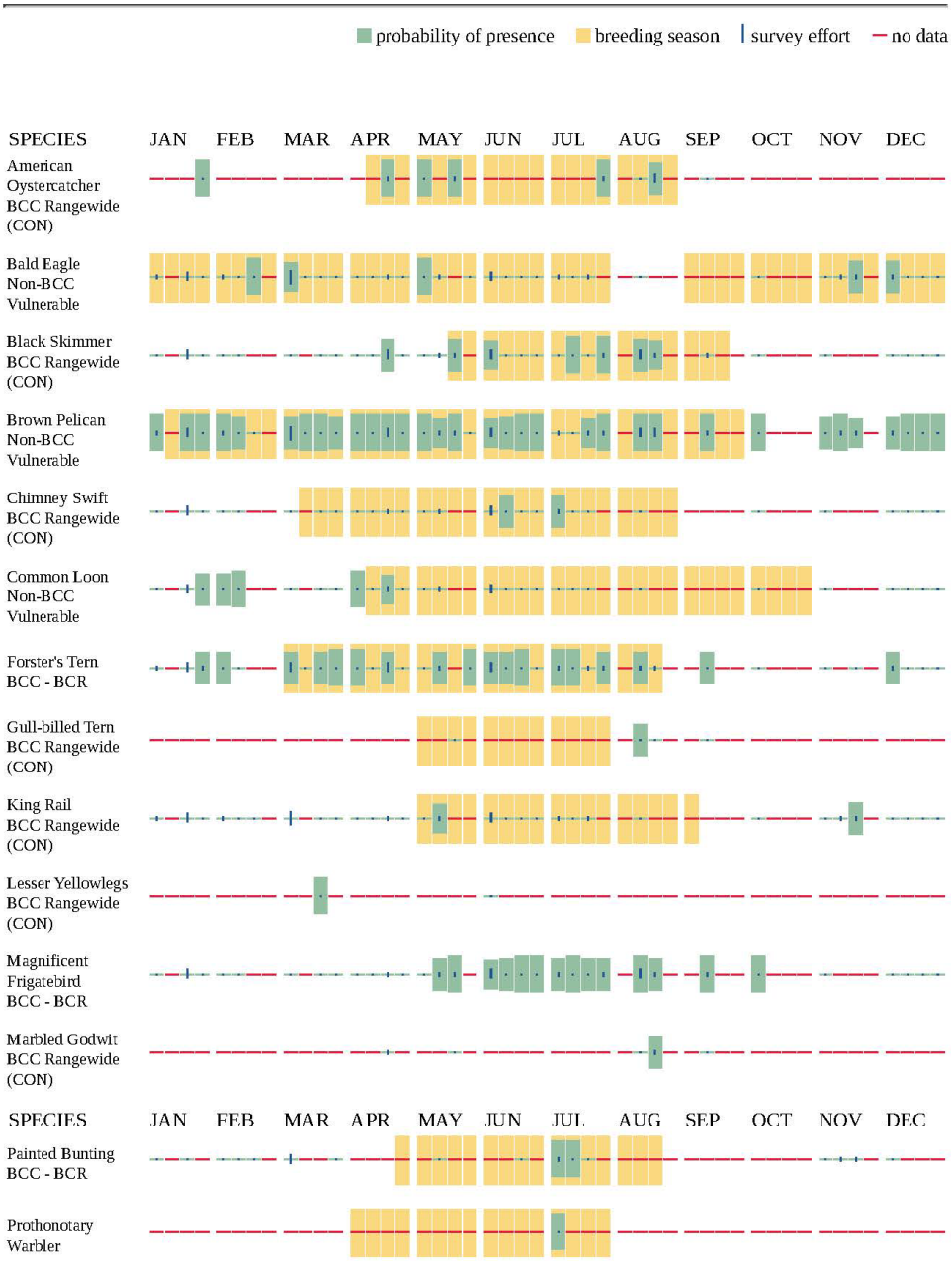
Probability of Presence (▩)

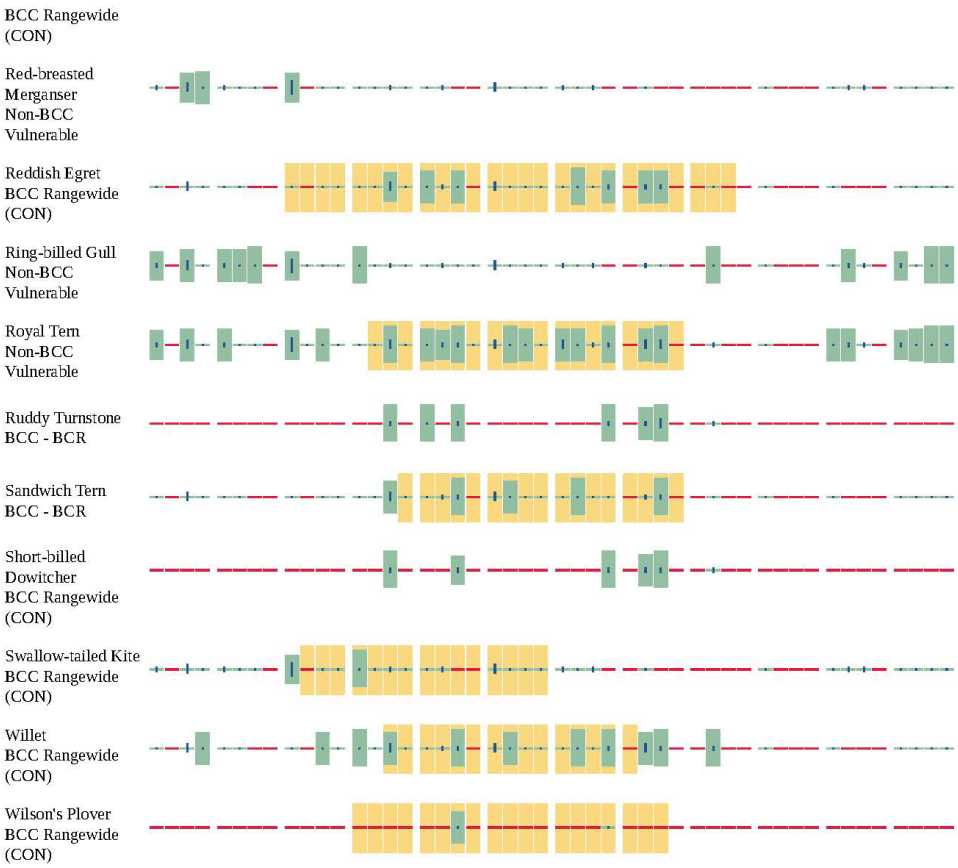
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▩)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.


probability of presence
breeding season
survey effort
no data
SPECIES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
American Oystercatcher BCC Rangewide (CON)
Bald Eagle Non-BCC Vulnerable
Black Skimmer BCC Rangewide (CON)
Brown Pelican Non-BCC Vulnerable
Chimney Swift BCC Rangewide (CON)
Common Loon Non-BCC Vulnerable
Forster's Tern BCC - BCR
Gull-billed Tern BCC Rangewide (CON)
King Rail BCC Rangewide (CON)
Lesser Yellowlegs BCC Rangewide (CON)
Magnificent Frigatebird BCC - BCR
Marbled Godwit BCC Rangewide (CON)
SPECIES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
Painted Bunting BCC - BCR
Prothonotary Warbler



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MARINE MAMMALS

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

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1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

NAME

West Indian Manatee *Trichechus manatus*
Species profile: https://ecos.fws.gov/ecp/species/4469

IPAC USER CONTACT INFORMATION

Agency: Department of Defense
Name: Ashley Thompson
Address: 501 Butler Farm Road, Suite H
City: Hampton
State: VA
Zip: 23666
Email ashley.thompson@cardno-gs.com
Phone: 7576902827

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Navy

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
N46/025
July 24, 2024

Mr. Seth Bordelon
U.S. Fish and Wildlife Service, Southeast Region
Louisiana Ecological Services Office
200 Dulles Drive
Lafayette, LA 70506

Dear Mr. Bordelon:

The Department of the Navy (Navy) is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with proposed flight training activities within a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA. The proposed MOA/ATCAA is located east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) and adjacent to existing Special Use Airspace (SUA). The Bourbon MOA/ATCAA would be located partially over St. Bernard Parish and partially over the waters of the Gulf of Mexico. The purpose of this letter is to request informal consultation under section 7(a)(2) of the Endangered Species Act (ESA) regarding potential impacts of the Proposed Action on threatened and endangered species.

The proposed MOA/ATCAA would provide training airspace closer to NAS JRB NOLA to improve the quality and efficiency of the training and make more efficient use of fuel resources. The Proposed Action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The Proposed Action is needed because existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

The Navy analyzed potential impacts of the Proposed Action using the best scientific data available, as required under section 7(c) of the ESA. Based on the Navy's analyses, the Navy determined that the Proposed Action *may affect, but is not likely to adversely affect* the following species:

- Rufa red knot (*Calidris cantus rufa*) – Threatened
- Piping plover (*Charadrius melodus*) – Threatened
- Eastern black rail (*Laterallus jamaicensis* ssp. *jamaicensis*) – Threatened
- Tricolored bat (*Perimyotis subflavus*) – Proposed Endangered
- West Indian manatee *Trichechus manatus*) – Threatened

Enclosed is an informal consultation package that provides project details and documents our analyses.

The Navy appreciates consideration by the U.S. Fish and Wildlife Service (USFWS) on the Proposed Action and requests USFWS's concurrence with the Navy's determination. The Project Manager at United States Fleet Forces Command is Mr. Greg Thompson, who may be reached at: (757) 836-6938 or via email: Gregory.S.Thompson2.civ@us.navy.mil. If you have any questions or require additional information, please contact Mr. Matt Martin, NAVFAC Southeast at (305) 928-4027 or by email at: Matthew.S.Martin54.civ@us.navy.mil.

Sincerely,

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosure: Informal Consultation Documentation for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana

The Fish and Wildlife Service (Service) has reviewed the information provided and offers the following comments in accordance with provisions of the Endangered Species Act (ESA) of 1973 (87 Stat. 884 as amended, 16 U.S.C. 1531 et seq.). Based on the justification given, we concur with your determination that the proposed action is not likely to adversely affect the federally listed and/or proposed species and their critical habitats as described herein.

We recommend that you contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly; 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed, or critical habitat designated. Additional consultation because of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.

Deputy Field Supervisor

10/21/2022

Brigette D. Firmin
FOR Field Supervisor
Louisiana Ecological Services Office
DATE

DUSTIN GARIG

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Date: 2024.10.21 14:04:20 -05'00'

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
Ser N46/021
February 12, 2025

Mr. David Bernhart
Assistant Regional Administrator
NMFS SE Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701

Dear Mr. Bernhart:

The Department of the Navy (Navy) is preparing an Environmental Assessment to evaluate potential environmental impacts associated with proposed flight training activities within a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA. The Navy provided the request to initiate informal consultation to National Oceanic and Atmospheric Administration (NOAA) Fisheries on July 24, 2024. In response to NOAA Fisheries' most recent Request for Additional Information (RAI) made on February 7, 2025, the Navy is providing a revised informal consultation package with this letter.

The proposed MOA/ATCAA is located east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) and adjacent to existing Special Use Airspace (SUA). The Bourbon MOA/ATCAA would be located partially over St. Bernard Parish, Louisiana and partially over the waters of the Gulf of Mexico. The purpose of this letter is to supplement Navy's request for informal consultation under section 7(a)(2) of the Endangered Species Act (ESA) regarding potential impacts of the Proposed Action on threatened and endangered species.

The proposed MOA/ATCAA would provide training airspace closer to NAS JRB NOLA to improve the quality and efficiency of the training and make more efficient use of fuel resources. The Proposed Action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The Proposed Action is needed because existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

The Navy analyzed potential impacts of the Proposed Action using the best scientific data available, as required under section 7(c) of the ESA. Based on the Navy's analyses, the Navy determined that the Proposed Action may affect, but is not likely to adversely affect the following species:

- Green turtle (Chelonia mydas), North Atlantic DPS - Threatened
- Kemp's ridley turtle (Lepidochelys kempii) - Endangered
- Leatherback turtle (Dermochelys coriacea) - Endangered
- Loggerhead turtle (Caretta caretta), Northwest Atlantic DPS - Threatened
- Hawksbill turtle (Eretmochelys imbricata) - Endangered
- Gulf sturgeon (Acipenser oxyrinchus desotoi) – Threatened

5090
Ser N46/021
February 12, 2025

• Giant manta ray (Mobula birostris) -Threatened

Enclosed is the revised informal consultation package that provides project details and documents our analyses in response to NOAA Fisheries' RAI.

The Navy appreciates NOAA Fisheries' consideration of the Proposed Action and requests NOAA Fisheries' concurrence with the Navy's determination. The Project Manager at United States Fleet Forces Command is Mr. Greg Thompson, who may be reached at: (757) 836-6938 or via email: Gregory.S.Thompson2.civ@us.navy.mil. If you have any questions or require additional information, please contact Mr. Jeremy Jennings, NAVFAC Southeast at: (256) 631-9673 or by email at: Jeremy.W.Jennings.civ@us.navy.mil.

Sincerely,

CUADROS.JORGE.RICARDO.1186806162
Digitally signed by CUADROS.JORGE.RICARDO.1186806162
Date: 2025.02.12 16:28:37 -05'00'

J. R. CUADROS
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosure: Revised Consultation for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana

Request to NOAA Fisheries Southeast Regional Office

for Expedited Informal Consultation

Revised February 12, 2025

Mr. David Bernhart
Assistant Regional Administrator
NOAA Fisheries SE Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701

Re: SERO-2024-01821, USN

Request for Expedited Informal Consultation under section 7(a)(2) of the Endangered Species Act for Draft Environmental Assessment for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana

Dear Mr. Bernhart:

The Department of the Navy (Navy) proposes to carry out the proposed project as described below. We request initiation of informal consultation under section 7(a)(2) of the Endangered Species Act (ESA) for the Draft Environmental Assessment for Flight Training Activities in the Bourbon Military Operations Area Offshore from Naval Air Station Joint Reserve Base New Orleans, Louisiana. We have determined that the proposed activity may affect, but is not likely to adversely affect, the ESA-listed species and critical habitat included in the table(s) below. Our supporting analysis is provided below. We request your written concurrence with our determinations.

Pursuant to our request for expedited informal consultation, we are providing, enclosing, or otherwise identifying the following information:

- A description of the action to be considered,
- A description of the action area,
- A description of the listed species or critical habitat that may be affected by the action, and
- An analysis of the potential routes of effect on any listed species or critical habitat.

Proposed Action

This proposed project is intended to establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA that would support aircraft training. The MOA/ATCAA would be east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) and adjacent to existing Special Use Airspace (SUA) that is currently used for similar aircraft training. **Figure 1** provides an illustration of the proposed Bourbon MOA/ATCAA and its relationship with other existing training airspace over the Gulf of Mexico.

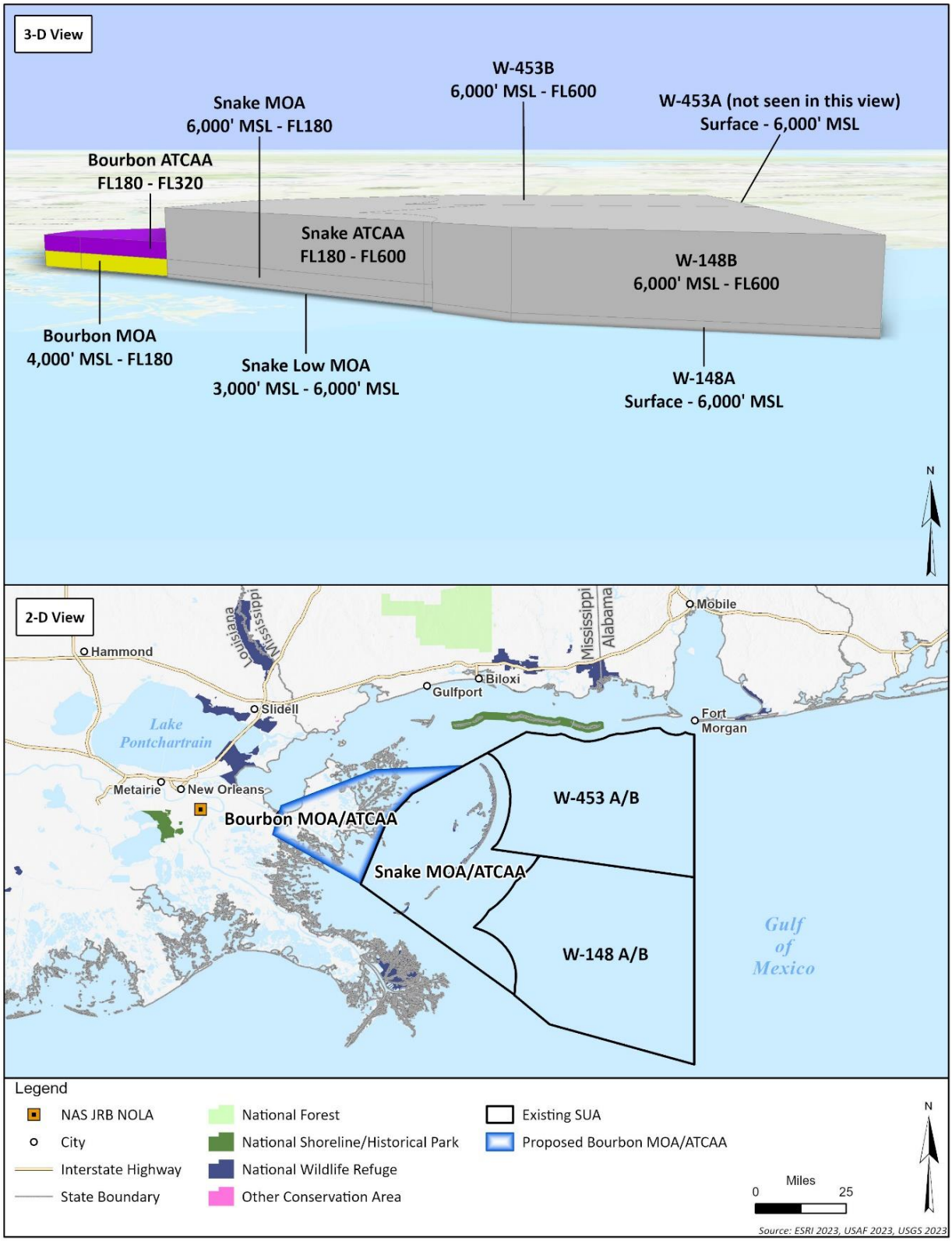

Figure 1. Location of Proposed Bourbon MOA/ATCAA

The purpose of the project is to provide closer training airspace to improve the quality and efficiency of the training at NAS JRB NOLA and make more efficient use of fuel resources. We expect the flight training activities to commence once the Bourbon MOA is published on sectional aeronautical charts and continue as an ongoing training activity. Publication of sectional aeronautical charts is the responsibility of the Federal Aviation Administration, a cooperating agency on the Environmental Assessment (EA). ATCAAs are not published on sectional aeronautical charts but are designated through a Letter of Agreement between the Navy and the Federal Aviation Administration. This agreement would occur concurrently with the MOA publication. For the purposes of this consultation, it is expected the MOA/ATCAA would be available for training activities beginning in approximately March 2025. While there is no planned "end date" for training activities, any substantial changes to the training or substantial new circumstances or information would require additional analysis in accordance with the National Environmental Policy Act (NEPA) and re-initiation of informal consultation in accordance with 50 Code of Federal Regulations (CFR) 402.16, as appropriate.

A MOA is a type of SUA designated to contain non-hazardous military flight training activities. It has defined vertical and lateral dimensions and designated times of use published on sectional aeronautical charts which identifies to other airspace users where these activities occur. An ATCAA also has specific vertical and lateral limits for the purpose of providing air traffic segregation between military training activities and other airspace users. The ATCAA is located above the MOA and has the same lateral limits as the MOA. There is no ground training component associated with a MOA/ATCAA, only flight training activities.

The proposed MOA/ATCAA would provide military training airspace closer to NAS JRB NOLA. The Proposed Action would not change the number of flights originating from NAS JRB NOLA or occurring in the region. The airspace proposed as the Bourbon MOA/ATCAA is currently used to transit from the base to the existing SUA east of the base (see **Figure 1**). The Proposed Action is needed because the prolonged transit time to access existing SUA reduces the amount of time the aircrews can train.

Flight training activities within the Bourbon MOA/ATCAA would be confined to the airspace between 4,000 to 32,000 feet above mean sea level. Flight training would occur approximately 5 hours per day between 8:00 a.m. to 5:00 p.m., Monday through Friday, which is the current operations tempo for the adjacent existing SUA. Flight training would occur at a relatively steady tempo throughout the year. The number of aircraft using the airspace would be the same as current conditions, but instead of straight transition flights (lasting approximately 10–12 minutes), the airspace would be used for a variety of flight training activities (lasting approximately 30–60 minutes) (**Table 1**). Flight training within the MOA/ATCAA would be randomly distributed throughout the defined dimensions of the space; there are no flight patterns or specific flight tracks within this type of training airspace. Flight activity would not occur below 4,000 feet mean sea level (the designated "floor" of the MOA/ATCAA) and would not occur above 32,000 feet mean sea level (the designated "ceiling" of the MOA/ATCAA).

Table 1. Existing and Proposed Annual Sorties[1] in Bourbon MOA/ATCAA

Aircraft	*Existing Sorties (Transit)*		*Proposed Sorties (Training)*	
	Sorties (Number)	*Time per Sortie (minutes)*	*Sorties (Number)*	*Time per Sortie (minutes)*
F-5	1,195	10	1,195	60
F-15	1,553	10	1,553	30
F-35	360	10	360	10–30[2]
F-18	353	10	353	10–30[2]
Other[3]	708	10-12	708	30
TOTAL	**4,169**	**718 hours**	**4,169**	**2,565 hours**

Notes: [1] A sortie is the takeoff, operation, and landing of one aircraft.
[2] About half of the F-35 and F-18 sorties are expected to transit through the new Bourbon MOA/ATCAA as they do currently to access the existing SUA (10 minutes); the other half would remain in the new MOA/ATCAA for training (30 minutes).
[3] Other aircraft could include various jets, cargo aircraft, helicopters, and unmanned aircraft.

The Proposed Action consists of airspace changes and flight training activities and does not involve any ground- or water-based activities, low-level overflights, ground disturbance, or physical interference with water resources. Potential impacts to threatened or endangered species could result from airborne noise and the use of chaff and flares during some training activities, which would entail individual chaff fibers and some residual debris reaching the ground or sea floor. Chaff and flares are the principal defensive countermeasures dispensed by military aircraft to avoid detection or attack by enemy air defense systems and keep aircraft from being successfully targeted by weapons. Chaff and flares are used in nearly all military training airspace and ranges.

A chaff cartridge contains millions of chaff fibers that form an electronic "cloud" when dispensed from the aircraft that interferes with a radar signal and temporarily hides the maneuvering aircraft from radar detection. The light fibers drift in the prevailing wind and ultimately settle on the surface where they readily degrade in soil or water. An individual chaff fiber (aluminum-coated silica) is thinner than a fine human hair and ranges in length from 0.3 to 1 inch. The release of chaff is dependent on the type of training activity or scenario. Training could occur anywhere within the confines of the MOA/ATCAA and the quantity and exact location of chaff released per day or week is not predictable. Based on the number of sorties proposed to occur in the MOA/ATCAA, it is expected that up to 10,000 chaff cartridges would be dispensed in the Bourbon MOA/ATCAA annually.

Flares are made of magnesium that burns at a temperature in excess of 2,000 degrees Fahrenheit to simulate jet exhaust as a decoy for heat seeking missiles. The magnesium is fully consumed in the training airspace within 3 to 5 seconds during which time it would fall no more than 500 feet. The standard minimum release altitude over non-military land for flares is 2,000 feet above ground level; however, the floor of the Bourbon MOA/ATCAA would be 4,000 feet mean sea level (which is approximately 4,000 feet above ground level in this geographic area) and flares would not be released below the floor. The standard minimum release altitude ensures a burning flare does not reach the ground or tree canopy, significantly reducing the possibility of wildfires. Like with chaff, the release of flares is dependent on the type of training activity or scenario. Training could occur anywhere within the confines of the MOA/ATCAA and the quantity and exact location of flares released per day or week is not predictable. Based on the number of sorties proposed to occur in the MOA/ATCAA, it is expected that up to 10,000 flare cartridges would be dispensed in the Bourbon MOA/ATCAA annually.

The individual cartridges containing chaff or flares remain on the aircraft, with only their contents being dispensed into the airspace (see photos of each below). Each cartridge also contains residual materials, including plastic end caps, felt spacers, and plastic pistons, each no larger than 1 inch by 1 inch. The plastic end cap weighs approximately 0.0976 ounces and the piston weighs approximately 0.0688 ounces. The felt spacers weigh considerably less than the plastic pieces. These residual materials fall to the ground or into surface waters, eventually sinking to the bottom. The plastic pieces sink immediately in surface water. The felt spacer would float until it is saturated and then sink to the bottom. Some of the residual materials released with flares are often consumed with the burning magnesium pellet. However, this analysis conservatively assumes that all pieces of residual materials would reach the surface after dispensed. Based on annual totals of 10,000 chaff and 10,000 flares, approximately one piece of residual material would be dispersed per 5 acres, assuming even distribution. **Table 2** provides a summary of the residual materials associated with operations in the proposed Bourbon MOA/ATCAA.

Table 2. Residual Material Distribution in Proposed Bourbon MOA/ATCAA

	Total to be Released Annually	Total Pieces of Residual Materials	Airspace Area (acres)	Pieces of Residual Material per Acre	Dispersal Footprint for One Piece (acres)
Chaff[1]	10,000	30,000	353,280	0.1981	5.05
Flare[2]	10,000	40,000			

Notes:
[1] Each chaff cartridge includes 1 plastic end cap, 1 felt spacer, and 1 plastic piston.
[2] Each flare cartridge includes 1 plastic end cap, 1 or 2 felt spacers, and 1 piston. For conservative purposes, this table assumes 2 felt spacers.

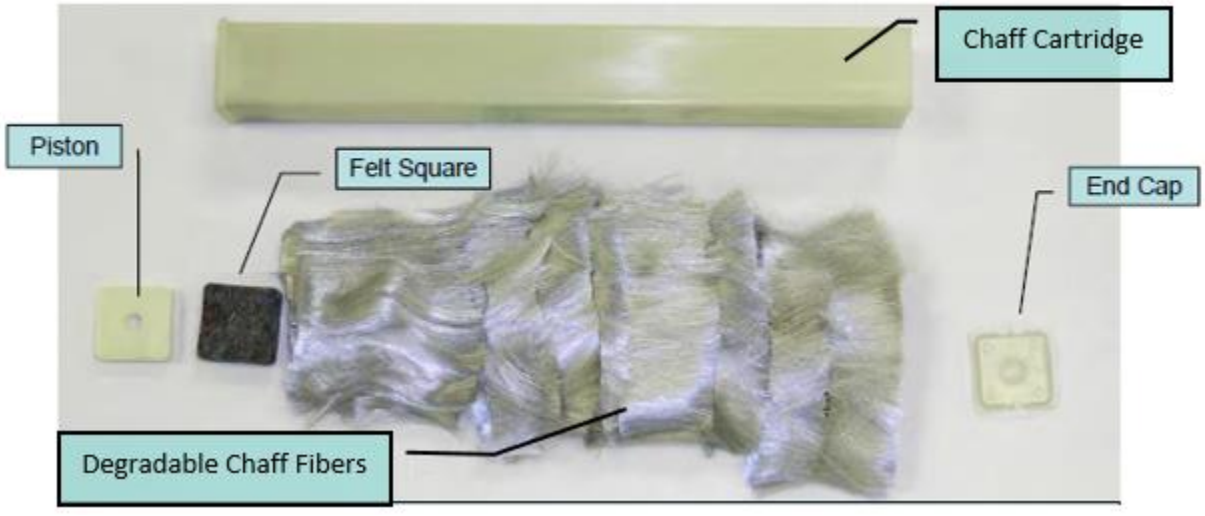

Photo of Sample Chaff Cartridge and Components

Photo of Sample Flare Cartridge and Components

While some grouping of residual materials is possible, it is unlikely that they would accumulate in significant or noticeable quantities in any one location. The residual materials would be unlikely to occur outside of the geographical footprint of the MOA/ATCAA since flight operations do not occur along the outer perimeter. However, it should be noted that the eastern edge of the proposed MOA/ATCAA would connect to a much larger existing MOA/ATCAA where the use of chaff and flares is already occurring. The overall number of residual pieces from operations in the Bourbon MOA/ATCAA reaching the ground or ocean would be minimal and widely scattered (see Table 2). Previous studies on the effects of chaff, flares, and their residual materials (e.g., end caps and felt spacers) concluded that the chemical components of these items, as well as the presence of residual materials, do not adversely affect water resources, particularly given the insignificant quantities involved (Department of the Air Force, 1997, 2011, 2023; Air National Guard, 2002).

In 2009, a similar action described in the EA/Overseas Environmental Assessment (OEA) for Atlantic Fleet Training in the Key West Range Complex was issued a concurrence from the National Oceanic and Atmospheric Administration (NOAA) Fisheries on their conclusions that the training flights may affect, but were not likely to adversely affect loggerhead, green, hawksbill, Kemp's ridley, and leatherback turtles and sperm whales. The Key West Range Complex EA/OEA assessed proposed flight training activities for F-18, F-16, F-15, F-5, and E-2 aircraft. Flight training activities in the Key West Range Complex involved use of chaff and flares and at greater quantities than those proposed in this Proposed Action. NOAA Fisheries concurred that the use of chaff and flares was not likely to adversely affect threatened and endangered species under their jurisdiction (Department of the Navy, 2009).

Conservation Measures and BMPs

The Proposed Action does not consist of ground- or water-based activities. All actions occur in the MOA/ATCAA airspace between 4,000 and 32,000 feet above mean sea level. No conservation measures or Best Management Practices (BMPs) detailed in the *Protected Species Construction Conditions* are applicable to this action.

Description of the Action Area

The *action area* is all areas to be affected by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). *Effects of the action* are all consequences to listed

species or critical habitat that are caused by the Proposed Action, including the consequences of other activities that are caused by the Proposed Action. A consequence is caused by the Proposed Action if it would not occur but for the Proposed Action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. The action area is distinct from and can be larger than the project footprint because some elements of the project may affect listed species or critical habitat some distance from the project footprint. The action area, therefore, extends out to a point where no effects from the project are expected to occur.

For this project, the action area includes the land and water area beneath the proposed Bourbon MOA/ATCAA that would be impacted by airborne noise and chaff and flare usage (see **Figure 1**). **Attachment 1** provides the report generated from the polygon feature of the ESA Section 7 Mapper. The airspace is partially above the land of St. Bernard Parish outside of New Orleans, and partially above the Gulf of Mexico off the coast of St. Bernard Parish. Approximate latitude and longitude of the center of the MOA at surface level is 29.876547, -89.302203.

Potentially Affected NOAA Fisheries ESA-Listed Species and Critical Habitat

Using the U.S. Fish and Wildlife Service Information for Planning and Consultation tool and the NOAA Fisheries ESA Section 7 Mapper, we have identified the listed species that may be present in the action area and our determination of the project's potential effects to them as shown in **Table 3** below.

Please note abbreviations used in Table : E = endangered; T = threatened; NLAA = may affect, not likely to adversely affect; NE = no effect; N/A = not applicable; DPS = Distinct Population Segment; ESA = Endangered Species Act; FR = Federal Register

Table 3. ESA-listed Species in the Action Area and Effect Determination(s)

Species	ESA Listing Status	Listing Rule/Date	Most Recent Recovery Plan/Outline Date	Effect Determination (Species)
Sea Turtles				
Green (North Atlantic distinct population segment [DPS]) (*Chelonia mydas*)	T	81 FR 20057/ April 6, 2016	October 1991	NLAA
Kemp's ridley (*Lepidochelys kempii*)	E	35 FR 18319/ December 2, 1970	September 2011	NLAA
Leatherback (*Dermochelys coriacea*)	E	35 FR 8491/ June 2, 1970	April 1992	NLAA
Loggerhead (Northwest Atlantic DPS) (*Caretta caretta*)	T	76 FR 58868/ September 22, 2011	December 2008	NLAA
Hawksbill (*Eretmochelys imbricata*)	E	35 FR 8491/ June 2, 1970	December 1993	NLAA
Fish				

Species	ESA Listing Status	Listing Rule/Date	Most Recent Recovery Plan/Outline Date	Effect Determination (Species)
Gulf sturgeon (Atlantic sturgeon, Gulf subspecies) (*Acipenser oxyrinchus desotoi*)	T	56 FR 49653/ September 30, 1991	September 1995	NLAA
Giant manta ray (*Mobula birostris*)	T	83 FR 2916/ January 22, 2018	2019	NLAA

Legend: E = Endangered; ESA = Endangered Species Act; FR = Federal Register; NLAA = Not Likely to Adversely Affect; T = Threatened

We have assessed the critical habitats that overlap with the action area and our determination of the project's potential effects to them as shown in **Table 4** below.

Table 4. Critical Habitat(s) in the Action Area and Effect Determination(s)

Species	Critical Habitat in the Action Area	Critical Habitat Rule/Date	Effect Determination (Critical Habitat)
Gulf sturgeon (*Acipenser oxyrinchus desotoi*)	Unit 8	68 FR 13370/ March 19, 2003	NE

Legend: FR = Federal Register; NE = No Effect

Effects of the Action

ROUTE(S) OF EFFECT TO ESA-LISTED SPECIES:

Potential impacts of the Proposed Action on ESA-listed sea turtles and fish species could occur from airborne noise and the potential ingestion of chaff fibers or residual debris from the use of chaff and flares. Selective ingestion of chaff fibers or residual materials is not likely, but inadvertent consumption could occur during normal feeding activities by sea turtles or fish.

Gulf sturgeons are anadromous fish and migrate from saltwater to large coastal rivers to spawn during the warmer months. This species spends most of its life in freshwater rivers (United States Fish and Wildlife Service [USFWS] and Gulf States Marine Fisheries Commission, 1995). Gulf sturgeons and its critical habitat are located along the estuaries and coast of Louisiana under the Bourbon MOA/ATCAA.

Giant manta rays are considered seasonal visitors to productive coastlines. The species has also been observed in estuarine waters near oceanic inlets. They may occur in water depths from less than 10 meters to over 1,000 meters. They use sandy bottom habitat and seagrass beds, as well as shallow reefs, and the ocean surface both inshore and offshore. NOAA Fisheries determined that there are currently no identifiable physical or biological features that are essential to conservation of the giant manta ray within areas under United States (U.S.) jurisdiction, and therefore there are no areas that meet the definition of critical habitat for the species.

The ESA-listed sea turtles that may occur under the action area are migratory and occur along the gulf coast of Louisiana. Sea turtles rise to the ocean surface to breathe and lay their eggs on beaches and coastlines. These species spend various amounts of time in the open ocean during migratory periods. In the U.S., the green turtle is primarily found nesting in the Hawaiian Islands, the U.S. Pacific Island territories, Puerto Rico, the Virgin Islands, and Florida. Small

nesting areas also occur in Georgia, South Carolina, North Carolina, and Texas (NOAA Fisheries, 2024). In the U.S., hawksbill turtles are found off the coast in the Gulf of Mexico from southern Texas to southern Florida. This species nests on sandy beaches globally in the subtropics and tropics and migrates among coastal waters (USFWS, 2013). Loggerhead turtles occur along the coast of the Gulf of Mexico and the Atlantic coast in the U.S. The population that occurs in Louisiana is the Northwest Atlantic Ocean Distinct Population Segment (DPS) (USFWS, 2024). Females lay eggs on sandy beaches. The leatherback turtle may be found off the coast of most of the continental U.S., including Louisiana. This species nests on beaches and shorelines with a variety of substrate (USFWS, 2020). Kemp's ridley turtles are found along the Gulf coast, including Louisiana, as well as the Atlantic coast from Georgia to Maryland. Major nesting beaches are mainly found in Mexico, Texas, Alabama, and Florida (USFWS, 2011).

Effects of Airborne Noise

Transmission of sound from a moving aircraft to a receptor underwater is influenced by numerous factors, but most of the acoustic energy is transmitted into the water directly below the aircraft in a narrow cone. Underwater sounds from aircraft are strongest just below the surface and directly under the aircraft. Underwater noise levels are highly dependent on the altitude of the aircraft, the angle at which the aerial sound encounters the water surface, and the amount of wave action and surface roughness. Transmission of sound from a moving, airborne source to a receptor underwater has been studied by Young (1973), Urick (1983), Richardson et al. (1995), Eller and Cavanagh (2000), Department of the Air Force (2000), and others. Sound is transmitted from an airborne source to a receptor underwater by four principal means: (1) a direct path, refracted upon passing through the air-water interface; (2) direct-refracted paths reflected from the bottom in shallow water; (3) evanescent transmission in which sound travels laterally close to the water surface; and (4) scattering from interface roughness due to wave motion.

The sound that enters the water is refracted due to the difference in sound velocity between air and water, as shown in **Figure 2**. As the angle of the in-air incident wave moves away from perpendicular, the direction of travel of the underwater refracted waves becomes closer to parallel to the water surface. When the incident angle is reached, the underwater refracted sound wave is parallel to the water surface and all the sound is reflected into the air and no sound enters the water. This occurs at an angle of about 13 to 14 degrees. As a result, the acoustic energy is transmitted into the water through a relatively narrow cone extending vertically downward from the in-air source. The width of the footprint would be a function of the source altitude.

Eller and Cavanagh (2000) modeled estimates of sound pressure level (SPL) as a function of time at selected underwater locations (depths of 2, 10, and 50 meters) for F-18 aircraft overflights (speed of 250 knots) at various altitudes (300, 1,000, and 3,000 meters). As modeled for all deep water scenarios, the SPLs ranged from approximately 120 to 150 decibels (dB) (referenced to 1 microPascal). Eller and Cavanagh (2000) concluded that it is difficult to construct cases (for any aircraft at any altitude in any propagation environment) for which the underwater sound is sufficiently intense and long lasting to cause harassment or injury to any form of marine life.

Fixed-wing aircraft activities are transient in nature and the likelihood that marine animals would occur or remain at the surface while an aircraft transits directly overhead would be low. Impacts from aircraft training activities would be highly localized and concentrated in space and duration. The consensus of all the studies reviewed is that aircraft noise would cause only small temporary

changes in the behavior of marine animals. Specifically, sea turtles at or near the surface when an aircraft flies overhead may startle, divert their attention to the aircraft, or avoid the immediate area by swimming away. No more than short-term reactions are likely. No long-term consequences for individuals, species, or stocks would be expected.

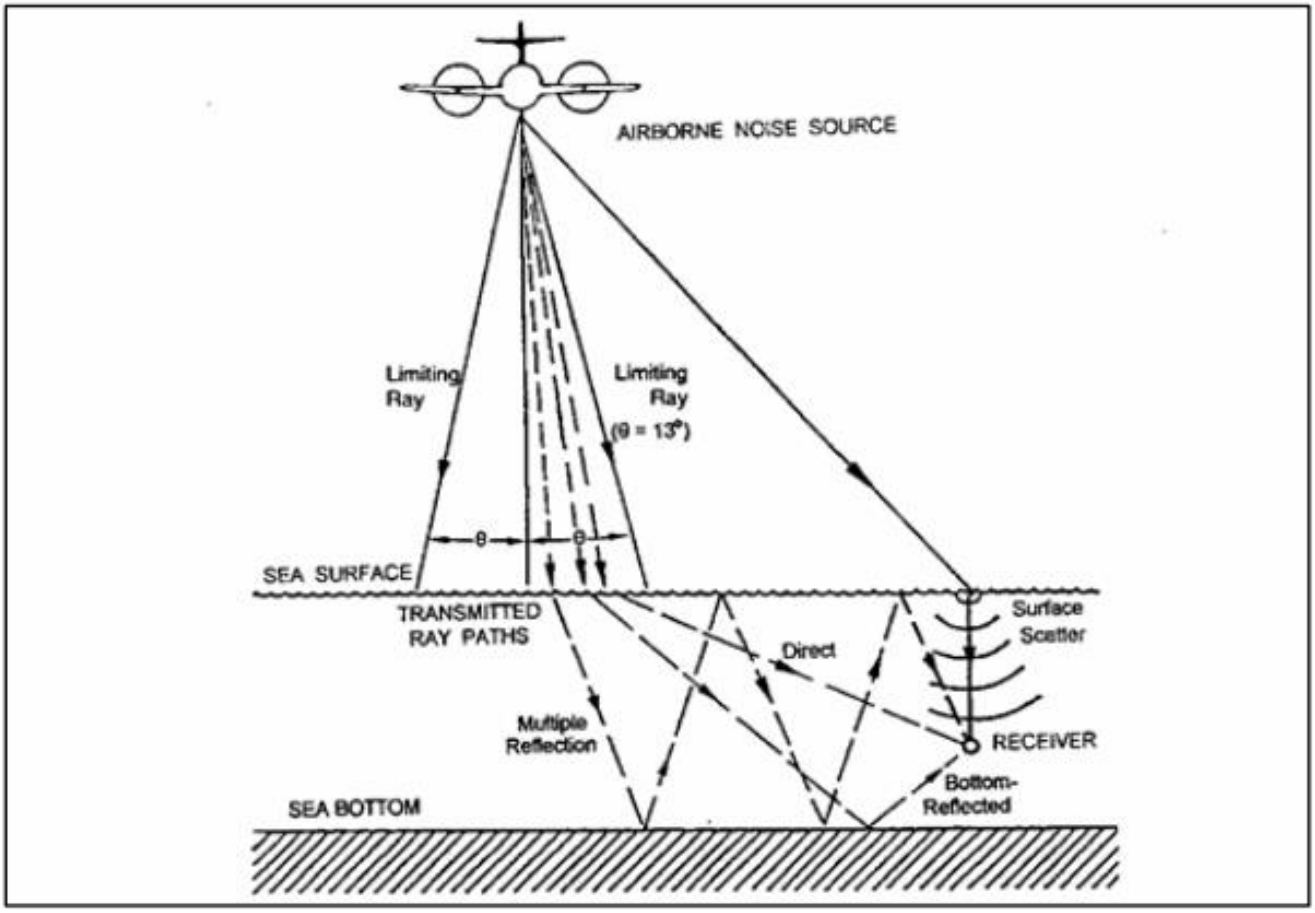

Figure 2. Characteristics of Sound Transmission Through the Air–Water Interface (Source: Richardson et al., 1995)

ESA-listed sea turtles, giant manta ray and sturgeon may be affected in portions of the action area due to airborne noise, but these effects would be insignificant. Noise disturbance from overflights is not expected to harass or agitate the animals. Exposure to noise would be brief (a few seconds). Flight training would be distributed randomly throughout the horizontal and vertical dimensions of the MOA/ATCAA; thus, limited overflights would occur at the lowest possible altitude (4,000 feet) significantly reducing the likelihood of exposure to sea turtles at the water's surface. The approved Department of Defense noise model, known as NOISEMAP (Wyle, 1998; Wasmer Consulting, 2006), was used to calculate the potential noise exposure for a single overflight event. Individual time-varying noise events have two main characteristics—a sound level, which changes throughout the event and a period of time during which the event is heard. L_{max} is the maximum sound level experienced by a receptor during a noise event. The sound exposure level (SEL) combines L_{max} with the total duration in which the sound is heard. The SEL takes the sound energy from a single event and compresses it into 1 second. SEL is always greater in value than L_{max} because it compresses all sound energy into a 1-second

timeframe. Based on the result of the noise model for this action, it is expected that less than 1 overflight per day would result in airborne noise with an SEL over 65 dB. This is considerably low noise exposure.

Sound from aircraft noise lacks the amplitude or duration to cause any harassment or injury to marine animals underwater. Aircraft pass quickly overhead and potential impacts from aircraft noise are limited to brief behavioral and physiological response reactions from animals at the water's surface as aircraft pass overhead. Based on the short duration of potential exposure to aircraft noise, behavioral and physiological response reactions, if they did occur, are unlikely to be significant. Therefore, airborne noise generated during the Proposed Action may affect, but is not likely to adversely affect the green turtle, Kemp's Ridley turtle, leatherback turtle, loggerhead turtle, hawksbill turtle, gulf sturgeon, and giant manta ray.

Effects of Chaff and Flares

The identified ESA sea turtle species, gulf sturgeon, and giant manta ray may be affected by residual materials associated with the use of chaffs and flares; however, any effects on these species would be insignificant. ESA-listed sea turtles, giant manta ray and sturgeon could be exposed to individual chaff fibers through ingestion. The chaff fiber concentrations that sea turtles and fishes could be exposed to following the release of multiple cartridges (e.g., following a single day of training) depends on several variable factors. Specific release points are not recorded and tend to be random, and chaff fiber dispersion in air depends on prevailing atmospheric conditions. Chaff fibers would be dispersed by sea currents as they float and slowly sink toward the bottom. The fibers readily degrade in aquatic and terrestrial environments and there have been no observed toxicological effects of chaff fibers on terrestrial or aquatic organisms, even when subject to higher concentrations than would occur under this Proposed Action (Department of the Air Force, 1997, 2011, 2023). Chaff fibers do not accumulate to any great degree and, if found, could be mistaken for natural elements such as animal fur or plant material. Direct body contact or ingestion of chaff fibers is not expected to impact the health of fish or sea turtles.

As with chaff fibers, the residual materials (e.g., end caps and felt spacers) associated with the use of chaff and flares would be widely dispersed. Based on the proposed annual quantities of chaff (10,000 cartridges) and flares (10,000 cartridges) to be used, approximately 1 piece of residual debris would occur per 5 acres of area. This is assuming even distribution of residual debris across the total area of the MOA/ATCAA. This debris would be released over land or into the marine environment where it would sink to the bottom, reducing the likelihood of ingestion by sea turtles at the surface. Once on the bottom, these materials would be incorporated into bottom sediments by natural sedimentation process and would become less available to benthic foraging turtles. Like with other marine debris, over time the plastic residual materials would likely be broken down into microplastics (synthetic polymer particles less than 5 millimeters in diameter) and have the potential to enter the food chain through consumption by smaller bottom-feeder animals (i.e., crustaceans, amphipods, mussels, etc.). As noted above, these materials would be scattered over a large area resulting in a miniscule amount of debris in any given location.

The probability of an animal ingesting residual materials is dependent on their feeding behavior and the likelihood of encountering these items in their environment. The relatively rare

occurrence of these materials combined with natural dispersion would make the interaction of sea turtles or fishes and residual debris rare.

As filter-feeders, manta rays would not attempt to ingest residual materials intentionally. It is possible, however unlikely, that a manta ray could ingest these materials while feeding as the materials pass though the water column. The potential for this scenario to occur is so remote, however, as to be discountable.

Gulf sturgeons feed on benthic organisms such as crustaceans (e.g., amphipods, shrimps), worms, molluscs, and some fish, primarily by sucking prey from the substrate. Therefore, residual materials on the bottom or within the substrate could possibly be mistaken for a food item or could be incidentally taken along with other food items.

For sea turtles, the impacts of ingesting residual materials from chaff and flare would be limited to cases where an individual sea turtle might encounter and then consume an indigestible item too large to be passed through the gut. For the most part, these materials would be incidentally ingested by individuals feeding in the precise location and time these items were deposited. Based on foraging preferences, it is unlikely that sea turtles would be preferentially attracted to residual chaff and flare materials. Therefore, the likelihood that a sea turtle would encounter and subsequently ingest residual material from chaff and flares is considered insignificant. Impacts to individuals resulting from such ingestion of these materials could cause short-term or long-term disruption to feeding behavior, impaired digestion which may result in changes to an individual's behavior, growth, survival, and reproductive success.

The occurrence of residual debris from chaff and flares and the distributed chaff fibers result in very small potential negative impacts to ESA-listed sea turtles and fishes. Therefore, chaff and flare use in the Proposed Action may affect, but is not likely to adversely affect the green turtle, Kemp's Ridley turtle, leatherback turtle, loggerhead turtle, hawksbill turtle, gulf sturgeon, and giant manta ray.

ROUTES OF EFFECT TO CRITICAL HABITAT

The project is located within the boundary of gulf sturgeon critical habitat. The following physical or biological features essential for the conservation of the species ("essential features") are present in Unit 8: juvenile, subadult and adult feeding, resting and passage habitat for gulf sturgeon from the Pascagoula and Pearl Rivers subpopulations, and winter habitat (68 Federal Register 13370–13495). We do not believe any of the essential features may be affected by the Proposed Action, as no ground or surface water quality impacts would occur as part of the Proposed Action. Therefore, we believe there are no potential routes of effect to this critical habitat.

Conclusion

The Navy has reviewed the proposed project for its effects to ESA-listed species and their critical habitat. Based on the analysis above, we have determined that establishing the Bourbon MOA/ATCAA may affect but is not likely to adversely affect any listed species and will not affect critical habitat under NOAA Fisheries' jurisdiction. We have used the best scientific and commercial data available to complete this analysis. We request your concurrence with this determination.

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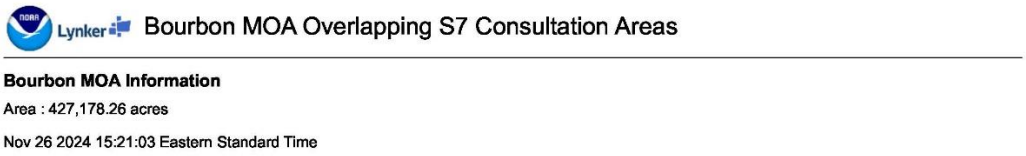
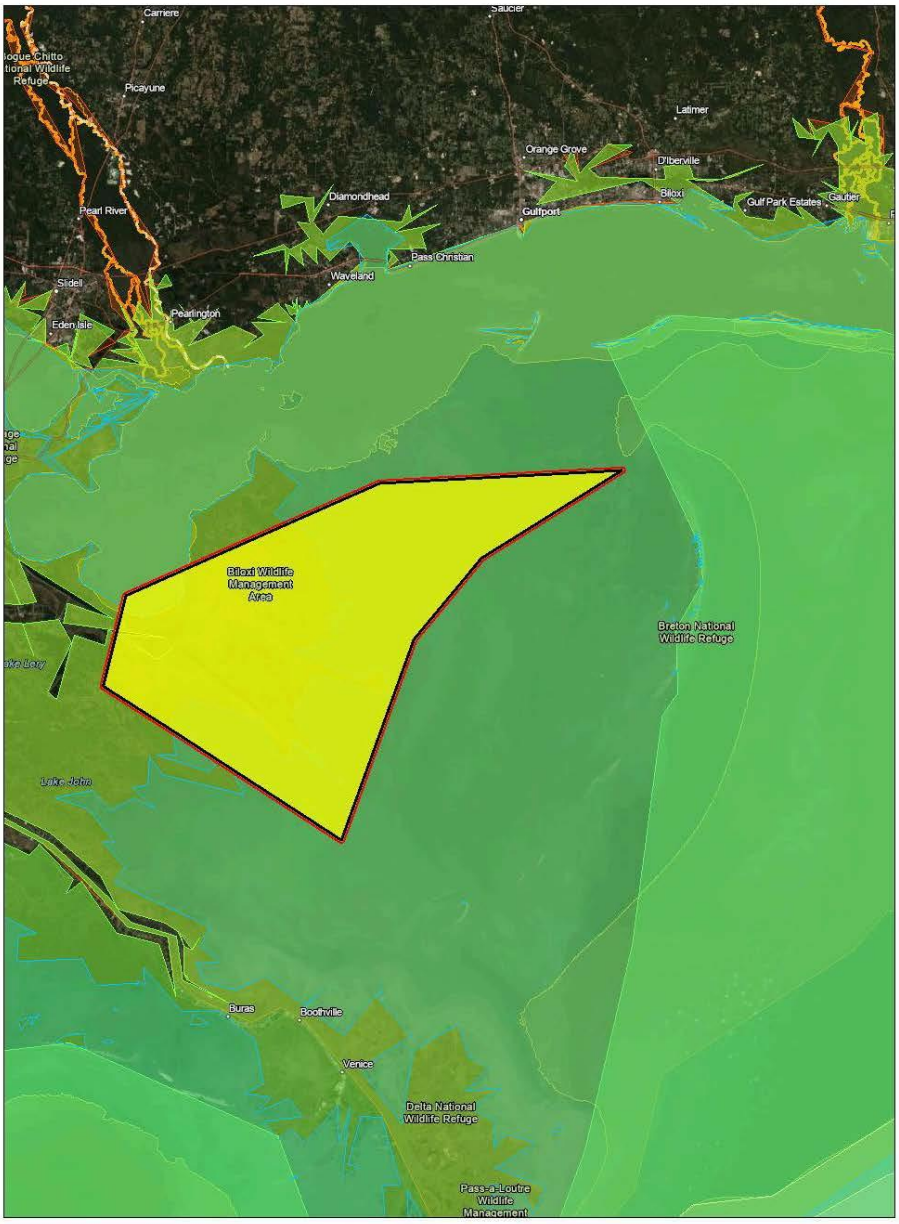
Attachment 1 – ESA Section 7 Mapper Report




Carriere
Saucier
Picayune
Latimer
Orange Grove
D'Iberville
Diamondhead
Biloxi
Gulf Park Estates
Gautier
Pearl River
Gulfport
Pass Christian
Waveland
Slidell
Pearlington
Eden Isle
Biloxi Wildlife Management Area
Breton National Wildlife Refuge
Lake John
Buras
Boothville
Venice
Delta National Wildlife Refuge
Pass-a-Loutre Wildlife Management
Consultation Area Overview
Sea Turtles
Sea Turtles
Sea Turtles
Sea Turtles
Sea Turtles
Sharks, Rays, Sawfish
Sharks, Rays, Sawfish
Grouper and Sturgeon
Whales
Whales
Critical Habitat (lines)
Critical Habitat (polygons)
Critical Habitat (lines as polygons)
1:577,791
0 5 10 20 mi
0 5 10 20 km
CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Summary

Name	Count	Area(acres)	Length(mi)
Conchs	0	0	N/A
Corals	0	0	N/A
Sea Turtles	6	1,701,537.00	N/A
Sharks, Rays, Sawfish	28	1,056,133.46	N/A
Grouper and Sturgeon	6	850,754.11	N/A
Whales	0	0	N/A
Critical Habitat (linear)	0	N/A	0
Critical Habitat (area)	1	9,385.52	N/A
Critical Habitat (lines as polygons)	1	9,385.52	N/A
Miscellaneous	0	0	N/A

Sea Turtles

#	Species	Status	Life Stage	Behavior	Zone
1	Green Sea Turtle	Threatened	Adults	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
2	Green Sea Turtle	Threatened	Neritic Juveniles	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
3	Kemp's Ridley Sea Turtle	Endangered	Adults and Neritic Juveniles	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
4	Loggerhead Sea Turtle	Threatened	Adults and Neritic Juveniles	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore

#	Sub-ZONE	Date From	Until	Date From (2)	Until (2)
1	*No Data*	01/01	12/31	*No Data*	*No Data*
2	*No Data*	01/01	12/31	*No Data*	*No Data*
3	*No Data*	01/01	12/31	*No Data*	*No Data*
4	*No Data*	01/01	12/31	*No Data*	*No Data*

#	Notes	Feature ID	Area(acres)
1	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GRN_GTD_ADU_MAF	425,383.93
2	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GRN_GTD_NJV_MAF	425,383.93
3	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	KMP_GTD_ANJ_MAF	425,384.57
4	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	LOG_GTD_ANJ_MAF	425,384.57

Sharks, Rays, Sawfish

#	Species	Status	Life Stage	Behavior	Zone
1	Giant Manta Ray	Threatened	Adults	Migrating & Foraging	Ray, Giant Manta, Inshore Gulf of Mexico
2	Giant Manta Ray	Threatened	Adults	Mating	Ray, Giant Manta, Inshore Gulf of Mexico
3	Giant Manta Ray	Threatened	Juveniles	Migrating & Foraging	Ray, Giant Manta, Inshore Gulf of Mexico
4	Giant Manta Ray	Threatened	YOY	Migrating & Foraging	Ray, Giant Manta, Inshore Gulf of Mexico

#	Sub-Zone	Date From	Until	Date From (2)	Until (2)
1	*No Data*	01/01	12/31	*No Data*	*No Data*
2	*No Data*	01/01	12/31	*No Data*	*No Data*
3	*No Data*	01/01	12/31	*No Data*	*No Data*
4	*No Data*	01/01	12/31	*No Data*	*No Data*

#	Notes	Feature ID	Area(acres)
1	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_ADU_MAF	264,033.36
2	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_ADU_MAT	264,033.36
3	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_JUV_MAF	264,033.36
4	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_YOY_MAF	264,033.36

Grouper and Sturgeon

#	Species	Status	Life Stage	Behavior	Zone
1	Gulf sturgeon	Threatened	Adults and Subadults	Migrating & Foraging	Sturgeon, Gulf, Critical Habitat: Unit 8 Lake Pontchartrain - Mississippi Sound
2	Gulf sturgeon	Threatened	Adults and Subadults	Overwintering	Sturgeon, Gulf, Critical Habitat: Unit 8 Lake Pontchartrain - Mississippi Sound
3	Gulf sturgeon	Threatened	Adults and Subadults	Overwintering	Gulf of Mexico Tidally-Influenced Inshore
4	Gulf sturgeon	Threatened	Juveniles	Overwintering	Gulf of Mexico Tidally-Influenced Inshore

#	Sub-Zone	Date From	Until	Date From (2)	Until (2)
1	*No Data*	10/01	04/30	*No Data*	*No Data*
2	*No Data*	10/01	04/30	*No Data*	*No Data*
3	*No Data*	10/01	04/30	*No Data*	*No Data*
4	*No Data*	10/01	04/30	*No Data*	*No Data*

#	Notes	Feature ID	Area(acres)
1	While the major shipping channels of Gulf Sturgeon Critical Habitat Unit 8 Lake Pontchartrain - Mississippi Sound are excluded from Critical Habitat designation, impacts to species in these excluded area must still be considered in the context of section 7 consultations. This map only includes freshwater areas designated as Gulf sturgeon critical habitat and is not intended to be an accurate representation of all freshwater portions of the Gulf sturgeon range. In riverine units, the U.S. Fish and Wildlife Service will be responsible for all consultations regarding Gulf sturgeon and critical habitat.	GLF_G08_ASA_MAF	9,385.52
2	While the major shipping channels of Gulf Sturgeon Critical Habitat Unit 8 Lake Pontchartrain - Mississippi Sound are excluded from Critical Habitat designation, impacts to species in these excluded area must still be considered in the context of section 7 consultations. This map only includes freshwater areas designated as Gulf sturgeon critical habitat and is not intended to be an accurate representation of all freshwater portions of the Gulf sturgeon range. In riverine units, the U.S. Fish and Wildlife Service will be responsible for all consultations regarding Gulf sturgeon and critical habitat.	GLF_G08_ASA_WIN	9,385.52
3	NOAA Fisheries and the U.S. Fish and Wildlife Service divide consultation responsibility for Gulf sturgeon. Please request further clarification from NOAA Fisheries on the consultation lead in this area. The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GLF_GTD_ASA_WIN	415,991.54
4	NOAA Fisheries and the U.S. Fish and Wildlife Service divide consultation responsibility for Gulf sturgeon. Please request further clarification from NOAA Fisheries on the consultation lead in this area. The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GLF_GTD_JUV_WIN	415,991.54

Critical Habitat (area)

#	Species	CH Status	CH Unit	Area(acres)
1	Sturgeon, Atlantic (Gulf subspecies)	Final	8 Lake Pontchartrain - Mississippi Sound	9,385.52

Critical Habitat (lines as polygons)

#	Species	CH Status	CH Unit	Note	Area(acres)
1	Sturgeon, Atlantic (Gulf subspecies)	Final	Unit 8 Lake Pontchartrain - Mississippi Sound	Some designated Critical Habitat units for Gulf Sturgeon and Atlantic Sturgeon are defined as river stems, formally depicted as linear features in the CFR. For overlay tools in the S7 Mapper to work properly, we extrapolated linear Critical Habitat units to the corresponding double river bank polygon features represented in NHD.	9,385.52

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
https://www.fisheries.noaa.gov/region/southeast

02/27/2025

F/SER31:OR
SERO-2024-01821

Jorge Cuadros
Director (Fleet Installations and Environment and Deputy Chief of Staff)
U.S. Fleet Forces Command
Department of the Navy
1562 Mitscher Avenue Suite 250
Norfolk, Virginia 23551

Ref.: USN, The Department of the Navy, US Navy Flight Training Bourbon MOA & ATCAA, St. Bernard Parish, Louisiana – EXPEDITED TRACK

Dear Jorge Cuadros,

This letter responds to your February 12, 2025, request pursuant to Section 7 of the Endangered Species Act (ESA) for consultation with the National Marine Fisheries Service (NMFS) on the subject action.

We reviewed the action agency's consultation request document and related materials. Based on our knowledge, expertise, and the action agency's materials, we concur with the action agency's conclusions that the proposed action is not likely to adversely affect the NMFS ESA-listed species and/or designated critical habitat.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on May 6, 2024 (89 Fed. Reg. 24268). We are applying the updated regulations to this consultation. The 2024 regulatory changes, like those from 2019, were intended to improve and clarify the consultation process, and, with one exception from 2024 (offsetting reasonable and prudent measures), were not intended to result in changes to the Services' existing practice in implementing section 7(a)(2) of the Act. 84 Fed. Reg. at 45015; 89 Fed. Reg. at 24268. We have considered the prior rules and affirm that the substantive analysis and conclusions articulated in this letter of concurrence would not have been any different under the 2019 regulations or pre-2019 regulations.

This concludes your consultation responsibilities under the ESA for species and/or designated critical habitat under NMFS's purview. Reinitiation of consultation is required and shall be requested by the action agency where discretionary Federal action agency involvement or control over the action has been retained or is authorized by law and: (a) take occurs; (b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in this consultation; (c) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not previously considered in this consultation; or (d) if a new species is listed or critical habitat designated that may be affected by the action.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions on this consultation, please contact Omar Rodriguez, Consultation Biologist, by email at Omar.Rodriguez@noaa.gov.

Sincerely,

REECE.KARLA.MICHELLE.1365885962 Digitally signed by REECE.KARLA.MICHELLE.1365885962 Date: 2025.02.27 17:26:07 -05'00'

for David Bernhart
Assistant Regional Administrator
for Protected Resources

File: 1514-22.g

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
N46/026
July 24, 2024

Mr. James Bondy
Office of Coastal Management – Interagency Affairs & Field Services
Louisiana Department of Natural Resources
P.O. Box 94396
Baton Rouge, LA 70804-9396

Dear Mr. Bondy:

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy (hereinafter referred to as the Navy) proposes to request that the Federal Aviation Administration (FAA) establish a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base. In accordance with the Coastal Zone Management Act (16 United States Code [U.S.C.] section 1456(c)) and 15 Code of Federal Regulations (CFR) Part 930 Subpart C, the Navy has prepared a Coastal Consistency Determination and is requesting coordination with the Louisiana Coastal Resources Program (LCRP) concerning the potential effects to coastal resources.

The proposed project would provide training airspace closer to NAS JRB NOLA to improve the quality and efficiency of the training and make more efficient use of fuel resources. Efficiencies are achieved when pilots can train in airspace of sufficient size and proximity to the base. The new MOA/ATCAA would be used alone and in conjunction with existing adjacent airspace. The action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The Proposed Action is needed because existing airspace is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

Based on a consistency review of the approved LCRP in accordance with section 307(c) of the Federal Coastal Zone Management Act of 1972, the Navy has determined that the project will be consistent to the maximum extent practicable with the federally enforceable policies of the LCRP (Enclosure) and requests concurrence with this determination. Please provide your response within 60 days of receipt of this correspondence. The Project Manager at U.S. Fleet Forces Command is Mr. Greg Thompson, who may be reached at: (757) 836-6938 or via email: Gregory.S.Thompson2.civ@us.navy.mil.

If you have any additional questions or comments, please contact Laila Capers Cobb, who may be reached at: (904) 542-6180 or via email: Laila.T.Capers.civ@us.navy.mil. Thank you for your time and consideration and for supporting the military mission in Louisiana.

Sincerely,

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosure: Project Description and Louisiana Coastal Resources Program Consistency Review

Copy to: Thalas Rattanaxay, NAS JRB New Orleans, Acting Installation Environmental Program Director; Laila Capers Cobb, NAVFAC Southeast

Flight Training Activities in the Bourbon Military Operations Area Offshore From Naval Air Station Joint Reserve Base New Orleans, Louisiana
Project Description and
Louisiana Coastal Resources Program Consistency Review

Introduction

This document provides the State of Louisiana with the Department of the Navy's (Navy) Consistency Determination under section 307(c) of the Coastal Zone Management Act (CZMA) (16 United States Code [U.S.C.] section 1456) and 15 Code of Federal Regulations (CFR) Part 930, for the flight training activities in the Bourbon Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA) offshore from Naval Air Station Joint Reserve Base New Orleans. The information in this Consistency Review is provided pursuant to 15 CFR section 930.39 and the requirements of the Louisiana Coastal Resources Program (LCRP).

A MOA is a type of Special Use Airspace (SUA) designated to contain non-hazardous military flight training activities. It has defined vertical and lateral dimensions and designated times of use published on sectional aeronautical charts which identifies to other airspace users where these activities occur. An ATCAA also has specific vertical and lateral limits for the purpose of providing air traffic segregation between military training activities and other airspace users. Most often, as is the case in this project, an ATCAA is located above a MOA and has the same lateral limits as the MOA below. There is no ground training component associated with a MOA, only flight training activities.

Project Location

The location of the proposed Bourbon MOA/ATCAA is shown on **Figure 1**. The Bourbon MOA/ATCAA would be located partially over St. Bernard Parish and partially over the waters of the Gulf of Mexico. The proposed MOA/ATCAA would be directly adjacent to existing SUA known as Snake MOA/ATCAA, Warning Area (W-) 453 and W-148. **Figure 1** includes a 2-dimensional and 3-dimensional representation of the airspace. The proposed vertical segmentation of the MOA/ATCAA is detailed on the 3-dimensional graphic. Under the proposed MOA/ATCAA are the primarily open waters of Breton Sound, Chandeleur Sound, Lake Borgne, the bayous and marshes of Biloxi State Wildlife Management Area and other bayous, and marshes of St. Bernard Parish. The entirety of the proposed SUA is within Louisiana's Coastal Zone Boundary. **Figure 2** shows the proposed Bourbon MOA/ATCAA within the parishes and coastal zone of Louisiana.

Description of the Proposed Action

The Navy proposes to establish the Bourbon MOA/ATCAA east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) adjacent to the existing Snake MOA/ATCAA. The purpose of the Proposed Action is to accomplish training requirements more efficiently for squadrons based at NAS JRB NOLA. Efficiencies are achieved when pilots can train in a SUA of sufficient size and proximity to the base. The Proposed Action is needed because the existing SUA is located a considerable distance from NAS JRB NOLA resulting in prolonged transit times and reduced training time.

The action would not change the existing types or quantities of military flight activities originating from NAS JRB NOLA or occurring in the region. The airspace proposed for the Bourbon MOA/ATCAA is used to transition from NAS JRB NOLA to the current SUA (Snake MOA/ATCAA and Warning Areas). Annual operations would be conducted within the Bourbon MOA/ATCAA up to 240 days per year, which is the current operations tempo for the existing space and the adjacent SUA. The number of annual military flights (4,169) would be the same as current conditions, but instead of straight transition flights (lasting approximately 10–12 minutes), the airspace would be used for training flights (lasting approximately 30–60 minutes).

Training mission scenarios for aircraft utilizing the Bourbon MOA/ATCAA would be similar to those occurring in the existing adjacent SUA and include non-hazardous training activities such as functional check flights, currency, basic fighter maneuvers, Fleet Replacement Squadron training/tactical intercepts, familiarization training, and participation in large scale exercises that would include multiple aircraft and use the connected SUA. Flight activities may occur as either subsonic or supersonic. Supersonic speed is expected to be infrequent in the Bourbon MOA/ATCAA with approximately 13 percent of the annual flights employing supersonic speed. Supersonic speed occurs in one or more short intervals of approximately 30 seconds during a training event, it does not occur for the entire training event. Supersonic speed would have altitude restrictions within certain zones of the MOA/ATCAA which would limit supersonic speed over land areas to an altitude above 30,000 feet.

Subsonic aircraft operations and the resulting cumulative Day-Night Average Sound Level (DNL) within the Bourbon MOA/ATCAA would be below the significance level established by the Federal Aviation Administration. The DNL is also below the level defined by U.S. Environmental Protection Agency to protect public health. The DNL is at a level defined by the Federal Interagency Committee on Urban Noise as compatible with all land uses to include residential and recreational uses. Direct overflights at the lowest possible altitude (4,000 feet above mean sea level), while noticeable, would be very rare over any coastal land area and last for only a few seconds or less. An individual location is not expected to experience this scenario on a recurring or routine basis since aircraft operations would be distributed over a wide area. Supersonic aircraft operations and the resulting C-weighted DNL (CDNL) would be below the threshold defined by U.S. Army Public Health Command as compatible with all sensitive resources. Therefore, there would be no significant impacts to coastal zone resources due to noise from the Proposed Action flight operations.

Some training events may include the expenditure of chaff and flares, consistent with the adjacent SUA. The deployment of chaff and flares within the proposed Bourbon MOA/ATCAA would have negligible impacts to coastal resources. Flares are designed to burn out within 3–5 seconds of release and would be consumed within the SUA and very unlikely to impact the land or water beneath the MOA. Chaff fibers, which are finer than a human hair, would drift in the wind after release and would ultimately settle to the ground or sea. Chaff fibers are non-toxic (aluminum silica) and readily break down in water or soil once they reach the earth's surface and would not be noticeable beneath the MOA/ATCAA. Chaff and flares each contain benign components used in the packaging that ultimately fall to the ground or sink in the water as debris after released from the aircraft. These materials are referred to as "residual materials" and include plastic end caps, felt spacers, and pistons. The potential effects of chaff and flares and

the residual materials have been studied in previous analyses with the overall conclusion that the chemical components of chaff and flares and the presence of residual materials do not impact air, water, or biological resources, particularly in the insignificant quantities of these components that would occur with the Proposed Action. Furthermore, the low annual usage of chaff and flares and the large size of the SUA make any potential impact on coastal resources negligible. Flight operations are widely dispersed within the SUA, reducing the likelihood of chaff fibers, flare ash, or dud flares accumulating in the coastal zone.

Federal Consistency Review

The LCRP is composed of state statutes, which constitute the enforceable policies of the Coastal Resources Program. Statutes addressed as part of the LCRP consistency review and considered in the analysis of the Proposed Action are discussed in **Table 1** below.

Conclusion

The Navy has reviewed the LCRP and reviewed its Proposed Action for how and to what degree the activities could affect Louisiana's coastal zone uses and resources. The Navy has determined that the Proposed Action is consistent to the maximum extent practicable with the applicable enforceable policies of the LCRP.

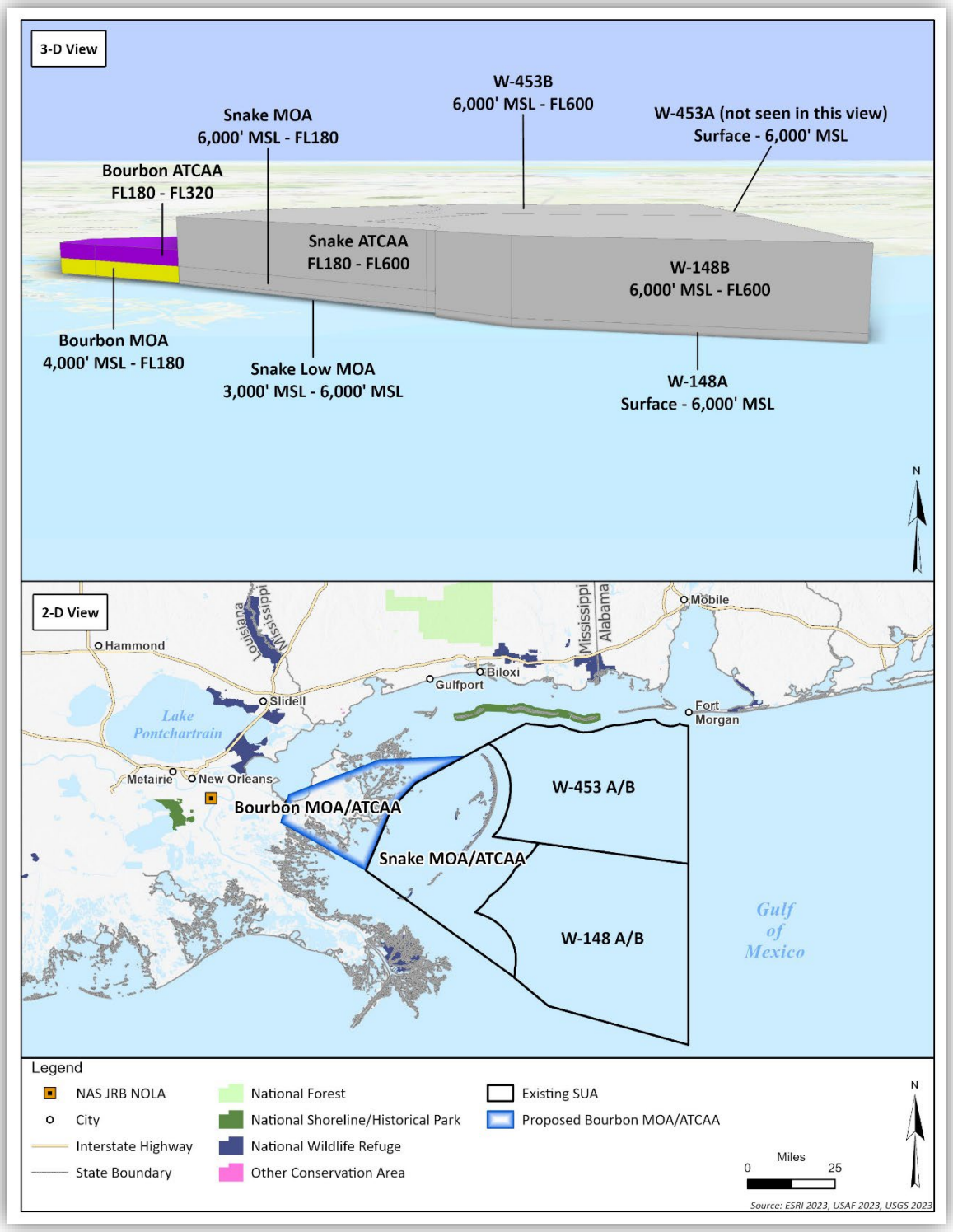


Figure 1: Proposed Bourbon MOA/ATCAA and Existing Adjacent SUA

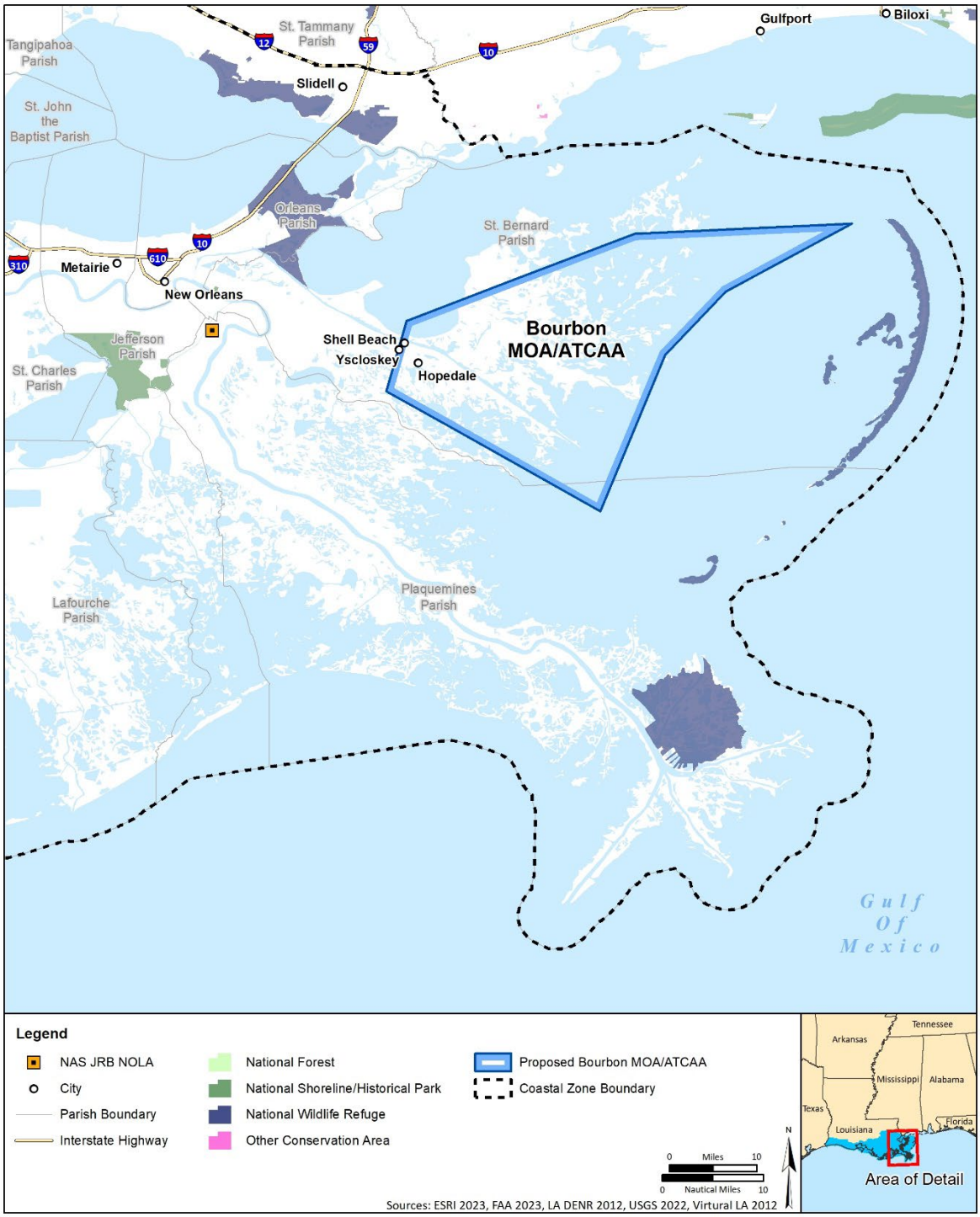


Figure 2: Bourbon MOA Location within the Coastal Zone

Table 1: Louisiana Enforceable Statutes and Federal Consistency Review

Louisiana Administrative Code, Title 43 Part I	Legal Scope	Consistency Evaluation
Section 701 (G). Guidelines Applicable to All Uses	It is the policy of the coastal resources program to avoid the following adverse impacts. To this end, all uses and activities shall be planned, sited, designed, constructed, operated, and maintained to avoid to the maximum extent practicable significant: **Part 1**: reductions in the natural supply of sediment and nutrients to the coastal system by alterations of freshwater flow; **Part 2**: adverse economic impacts on the locality of the use and affected governmental bodies; **Part 3**: detrimental discharges of inorganic nutrient compounds into coastal waters; **Part 4**: alterations in the natural concentration of oxygen in coastal waters; **Part 5**: destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and water bottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features; **Part 6**: adverse disruption of existing social patterns; **Part 7**: alterations of the natural temperature regime of coastal waters; **Part 8**: detrimental changes in existing salinity regimes; **Part 9**: detrimental changes in littoral and sediment transport processes.	**Part 1**: The Proposed Action does not include alterations of freshwater flow in the coastal zone. The Proposed Action does not include any changes to the existing drainage ditches or canals on the military installation. **Part 2**: The Proposed Action does not include adverse economic impacts to the locality of the use and affected governmental bodies. **Part 3**: The Proposed Action does not include discharges of inorganic nutrient compounds. **Part 4**: The Proposed Action does not include alterations to oxygen concentrations in coastal waters. **Part 5**: The Proposed Action does not include destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and water bottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features. **Part 6**: The Proposed Action does not include disruptions of existing social patterns. **Part 7**: The Proposed Action does not include alterations of coastal waters' natural temperature regime. **Part 8**: The Proposed Action does not include alterations in existing salinity regimes. **Part 9**: The Proposed Action does not include changes in littoral and sediment transport processes.

Louisiana Administrative Code, Title 43 Part I	Legal Scope	Consistency Evaluation
Section 701 (G). Guidelines Applicable to All Uses (*continued*)	**Part 10**: adverse effects of cumulative impacts; **Part 11**: detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging; **Part 12**: reductions or blockage of water flow or natural circulation patterns within or into an estuarine system or a wetland forest; **Part 13**: discharges of pathogens or toxic substances into coastal waters; **Part 14**: adverse alteration or destruction of archaeological, historical, or other cultural resources. **Part 15**: fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas; **Part 16**: adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands; **Part 17**: adverse alteration or destruction of public parks, shoreline access points, public works, designated recreation areas, scenic rivers, or other areas of public use and concern; **Part 18**: adverse disruptions of coastal wildlife and fishery migratory patterns; **Part 19**: land loss, erosion, and subsidence; **Part 20**: increases in the potential for flood, hurricane, and other storm damage, or increases in the likelihood that damage will occur from such hazards. **Part 21**: reduction in the long term biological productivity of the coastal ecosystem.	**Part 10**: The Proposed Action does not result in adverse effects of cumulative impacts. **Part 11**: The Proposed Action does not involve dredging. **Part 12**: The Proposed Action does not involve reductions or blockage of water flow or natural circulation patterns within or into an estuarine system or a wetland forest. **Part 13**: Chaff and flares are non-toxic; thus, the Proposed Action does not include discharges of pathogens or toxic substances. **Part 14**: The Proposed Action does not involve adverse alteration or destruction of archaeological, historical, or other cultural resources. **Part 15**: The Proposed Action does not include detrimental secondary impacts in undisturbed or biologically highly productive wetland areas. **Part 16**: The Proposed Action does not include adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands. **Part 17**: The Proposed Action does not include adverse alteration of areas of public use and concern. **Part 18**: The Proposed Action may cause birds within the coastal zone to experience minor, temporary disturbance from aircraft noise, but these effects are unlikely to pose long-term or population-level impacts. No impacts to fishery migration patterns. **Part 19**: The Proposed Action does not include land loss, erosion, and subsidence. **Part 20**: The Proposed Action does not include increases in the potential for flood, hurricane, or other storm damage. No impervious surfaces would be added as part of the Proposed Action. **Part 21**: The Proposed Action would not directly reduce the long-term biological productivity of the coastal ecosystem.
Section 703	Guidelines for Levees	The Proposed Action does not include construction of levees.
Section 705	Guidelines for Linear Facilities	The Proposed Action does not include development of linear facilities.
Section 707	Guidelines for Dredged Spoil Deposition	The Proposed Action does not include dredged spoil deposition.
Section 709	Guidelines for Shoreline Modification	The Proposed Action does not include shoreline modification.

Louisiana Administrative Code, Title 43 Part I	Legal Scope	Consistency Evaluation
Section 711	Guidelines for Surface Alterations	The Proposed Action does not include surface alterations in Louisiana's Coastal Zone (*all activities are within the airspace above the coastal zone*).
Section 713	Guidelines for Hydrologic and Sediment Transport Modifications	The Proposed Action would not result in hydrologic or sediment transport modifications through such means as controlled diversions, deposition systems, siphons, controlled conduits, water control structures, impoundments, or surface/groundwater withdrawals.
Section 715	Guidelines for Disposal of Wastes	The Proposed Action does not include the location or operation of waste storage, treatment and disposal facilities in the Louisiana coastal zone.
Section 717	Guidelines for Uses that Result in the Alteration of Waters Draining into Coastal Waters	The Proposed Action does not include activities that would result in alteration of waters draining into coastal waters. No changes are expected to the quantity, quality, and rate of flow off the installation.
Section 719	Guidelines for Oil, Gas, and Other Mineral Activities	The Proposed Action does not include oil, gas, or other mineral activities.

JEFF LANDRY
GOVERNOR

TYLER PATRICK GRAY
SECRETARY

KEITH LOVELL
ASSISTANT SECRETARY

State of Louisiana

DEPARTMENT OF ENERGY AND NATURAL RESOURCES
OFFICE OF COASTAL MANAGEMENT

August 22, 2024

Gregory Thompson
U.S. Fleet Forces
Home Basing/ Homeporting NEPA Program Manager
200 Dulles Drive
Lafayette, LA 70506
Via email: gregory.s.thompson2.civ@us.navy.mil

RE: **C20240077,** Coastal Zone Consistency
U.S. Navy
Direct Federal Action
Flight Training Activities in the Bourbon MOA Offshore From Naval Air Station Joint Reserve Base New Orleans
Plaquemines and St. Bernard Parish, Louisiana

Dear Mr. Thompson,

The above referenced project has been reviewed for consistency with the approved Louisiana Coastal Resource Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. The project, as proposed in the application, is consistent with the LCRP.

If you have any questions concerning this determination, please contact Ray Reich of the Consistency Section at (225) 342-7949 or ray.reich@la.gov.

Sincerely yours,

/S/ Charles Reulet
Administrator
Interagency Affairs/Field Services Division

CR/MH/rar

cc: Dave Butler, LDWF
Matthew Vincent, CPRA Sediment Management Team

From:	Ray Reich
To:	"Thompson, Gregory S CIV USN (USA)"
Cc:	Dave Butler; Matthew Vincent
Subject:	CONSISTENCY DETERMINATION ATTACHED- C20240077- Flight Training Activities in the Bourbon MOA Offshore From Naval Air Station Joint Reserve Base New Orleans
Date:	Thursday, August 22, 2024 4:08:02 PM
Attachments:	C20240077 C[redacted]tion Letter.pdf

Good afternoon, Gregory

Please see the attached consistency approval letter for ***C20240077***. Thank you for working with us.

Ray Reich
Coastal Resources Scientist
Office of Coastal Management (OCM)
LA Dept. of Energy and Natural Resources
225.342.7949 office
Office Hours: 8 AM - 430 PM, M-F
Telecommute- Mon and Fri

From: Charles Reulet
To: Ray Reich
Subject: FW: FOR REVIEW- C20240077- U.S. NAVY FLIGHT TRAINING ACTIVITIES WITHIN THE PROPOSED BOURBON MILITARY OPERATIONS AREA
Date: Friday, August 23, 2024 8:48:23 AM
Attachments: ~~77_fin[redacted]t.docx~~
~~77_recom[redacted] sheet draft.docx~~

Approved

Charles Reulet
Administrator

Office of Coastal Management
Louisiana Department of Energy and Natural Resources
225.342.0861 Office
225.937.5688 Cell

From: Charles Reulet <Charles.Reulet@LA.GOV>
Sent: Thursday, August 22, 2024 2:12 PM
To: Ray Reich <Ray.Reich@LA.GOV>
Subject: Fwd: FOR REVIEW- C20240077- U.S. NAVY FLIGHT TRAINING ACTIVITIES WITHIN THE PROPOSED BOURBON MILITARY OPERATIONS AREA

From: Mark Hogan <Mark.Hogan@LA.GOV>
Sent: Thursday, August 22, 2024 1:36:27 PM
To: Charles Reulet <Charles.Reulet@LA.GOV>
Cc: Sara Krupa <Sara.Krupa@LA.GOV>; Ray Reich <Ray.Reich@LA.GOV>
Subject: FW: FOR REVIEW- C20240077- U.S. NAVY FLIGHT TRAINING ACTIVITIES WITHIN THE PROPOSED BOURBON MILITARY OPERATIONS AREA

Charles, please approve the attached Consistency letter. Thanks.

-Mark

From: Ray Reich <Ray.Reich@LA.GOV>
Sent: Tuesday, August 20, 2024 3:38 PM
To: Mark Hogan <Mark.Hogan@LA.GOV>
Subject: FOR REVIEW- C20240077- U.S. NAVY FLIGHT TRAINING ACTIVITIES WITHIN THE PROPOSED

BOURBON MILITARY OPERATIONS AREA

Good afternoon, Mark

Please see the attached final letter and recommendation sheet drafts for ***C20240077***:

Public Access:
file:///F:\Sonris\OCM\OCMPubl\Interagency\Consistency\Consistency%20Files\C20240077

C Number: C20240077
Applicant: US NAVY
Report: Report Link
Data Access: Data Link
Document Access: Document Link

Thanks,
Ray Reich
Coastal Resources Scientist
Office of Coastal Management (OCM)
LA Dept. of Energy and Natural Resources
225.342.7949 office
Office Hours: 8 AM - 430 PM, M-F
Telecommute- Mon and Fri

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
N46/028
July 24, 2024

Kristen Sanders
State Historic Preservation Office
Louisiana Office of Cultural Development
PO Box 44247
Baton Rouge, LA 70804-4241

Dear Ms. Sanders:

The United States (U.S.) Department of the Navy (hereinafter referred to as the Navy) is preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with proposed flight training activities within a new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA) (Enclosure 1). In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, the Navy is providing information for your review and concurrence regarding the above-referenced project.

The proposed undertaking establishes a new MOA and associated ATCAA east of NAS JRB NOLA adjacent to the existing Snake MOA/ATCAA to accommodate required flight training activities for squadrons stationed at the base (Enclosure 2). Potential impacts are analyzed in the EA for both the No Action and Proposed Action Alternatives. The EA addresses the airspace utilization.

The Navy's Area of Potential Effects (APE) for this proposed undertaking includes areas directly or indirectly affected beneath the proposed airspace. For this proposed undertaking, the Navy determined that the APE is the land and water under the newly proposed airspace where flight training activities would occur as shown in Enclosure 2.

The Navy is sending a letter to the Chitimacha Tribe of Louisiana requesting the identification of traditional cultural properties and/or other sacred sites or any other concerns with the undertaking. The letter describes the purpose and need of the project and includes a map showing the APE, a description of the APE, a description of all historic properties within and adjacent to the APE, and a detailed project description.

A search of the National Register database was conducted and one National Register of Historic Places (NRHP) structure was identified under the proposed airspace. The historic property is Fort Proctor located in St. Bernard Parish, north of Shell Beach on Lake Borgne. The fort is constructed of granite, brick, and cast iron I-beams. The National Register Nomination Form, which was submitted in 1978, noted that the land has receded and Lake Borgne has partially engulfed approximately two-thirds of the outer earthworks. Currently, Fort Proctor is surrounded by water at least one foot deep, and modern aerial imagery confirms the site is still heavily inundated (Enclosure 3).

A search of the Louisiana State Historic Preservation Office (SHPO) database was conducted for all NRHP-listed or -eligible districts and individual properties under or adjacent to the proposed airspace. In addition to Fort Proctor, two other properties were identified: the Samuel Proctor House (Enclosure 4) and an unnamed residential property (Enclosure 5). As of a 1982 structural survey, the Samuel Proctor House was described as an unoccupied, deteriorated cottage with remains of a front porch. Current aerial images from the SHPO database do not show evidence that the structure is still standing. The second structure was recorded during the same 1982 survey and was described as a deteriorated residential structure. Current aerial images from the SHPO database clearly show this building is no longer extant and has been replaced by a larger, more modern structure.

A search of the National Oceanic and Atmospheric Administration Automated Wreck and Obstruction Information System database noted two shipwrecks under the proposed airspace: the Queen Mary II, a 36-foot cabin cruiser, and an unknown shipwreck. Both are in shallow water, and neither are noted as significant.

Some training events may include the expenditure of chaff and flares, consistent with the adjacent Snake MOA/ATCAA. Flares are fully consumed within the airspace within approximately 5 seconds of release. Chaff fibers (which are approximately 1 inch or less in length and are finer than a human hair) are widely distributed with prevailing wind conditions and ultimately settle to the surface. The fibers are non-toxic and readily degrade in soil or water. The potential effects of chaff and flares have been studied in previous analyses with the overall conclusion that their use does not have significant impacts to air, water, cultural or biological resources. No weapons testing or ordnance expenditure would occur within the new MOA/ATCAA. As such, there would be no direct impacts to ground resources. The subsonic noise level from training activities in the MOA/ATCAA would be 52 A-weighted decibels (dBA) Day-Night Average Sound Level (DNL), which would not exceed the U.S. Environmental Protection Agency threshold for protecting public health and welfare (55 dBA DNL). Similarly, the supersonic noise levels (34–42 C-weighted decibels [dBC] DNL [CDNL]) are well below the level defined by U.S. Army Public Health Command as compatible with residential and noise sensitive areas (62 dBC CDNL). Previous studies have found it is unlikely that noise and vibration associated with air operations would cause structural damage to buildings. In fact, several studies of the effects of noise on historic properties located in high aircraft noise zones have found that vibration resulting from the activities of tour groups, and even vacuuming, generated more structural vibration than that generated by aircraft noise. Subsonic sound of less than 130 dB is highly unlikely to damage structural elements. Noticeable vibration of windowpanes and objects within buildings may occur at sound levels of 110 dB or greater. Flight operations within the Bourbon MOA would not exceed 110 dB.

The proposed undertaking would not impact known or unknown historic properties under the proposed airspace, thus the Navy recommends a Finding of "No Adverse Effect" pursuant to 36 CFR part 800.5(b). Attached for your review are copies of relevant documents supporting our finding. This documentation satisfies requirements set forth at 36 CFR part 800.11(e).

The Project Manager at United States Fleet Forces Command is Mr. Greg Thompson, who may be reached via phone (757) 836-6938 or via email at: Gregory.S.Thompson2.civ@us.navy.mil. If you have any additional questions or comments, please contact Dr. John Calabrese at NAVFAC Southeast via phone (904) 657-7447 or via email at: John.A.Calabrese4.civ@us.navy.mil. Thank you for your attention to this matter.

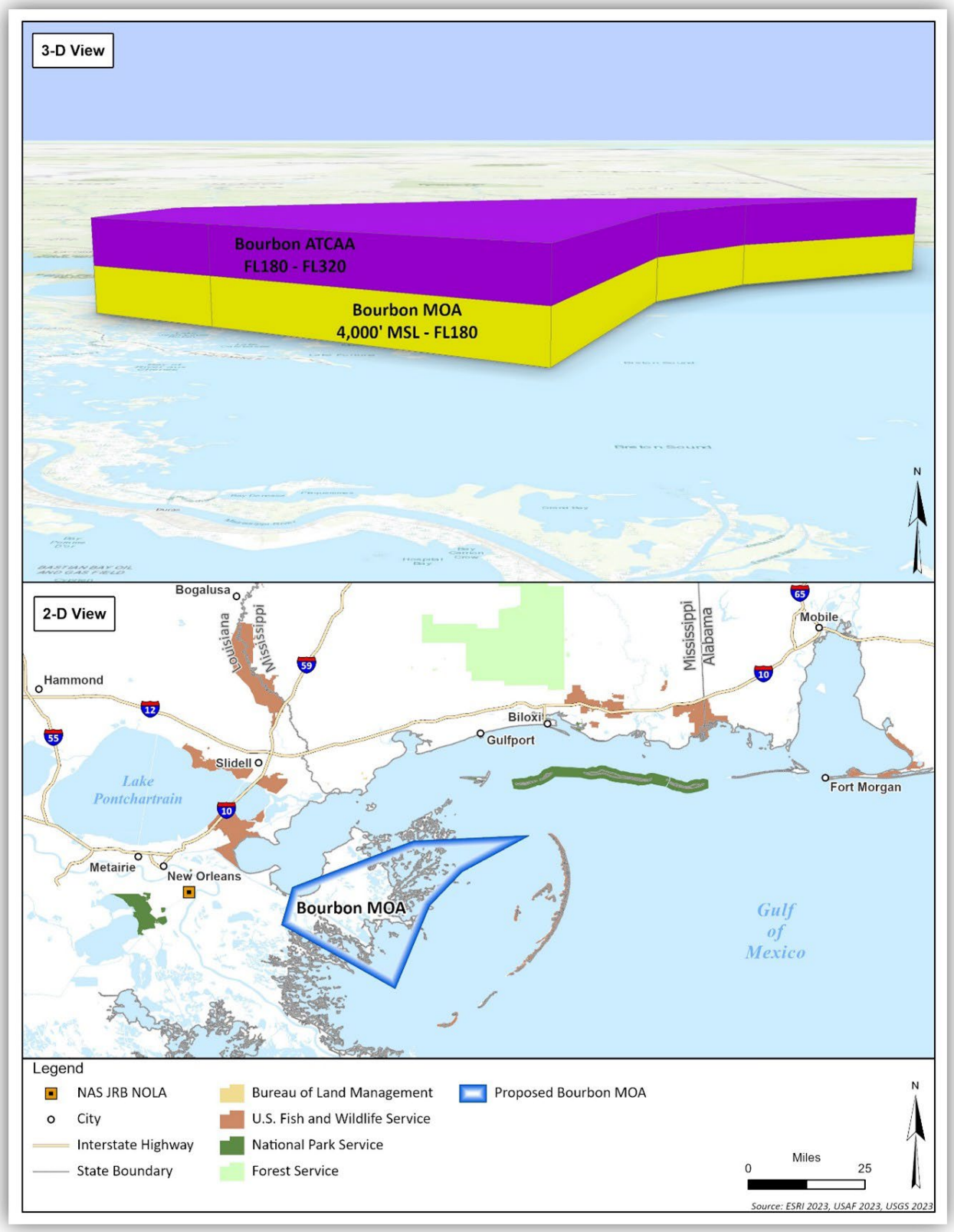
Sincerely,

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosures: 1. NAS JRB NOLA Location
2. NAS JRB NOLA Proposed Airspace
3. Fort Proctor NRHP Form
4. Samuel Proctor House
5. Unnamed House

Attachment 1 – NAS JRB NOLA Location

Attachment 2 – NAS JRB NOLA Proposed Airspace



Attachment 3 – Fort Proctor NRHP Form

Form No. 10-300 REV. (9/77)

DATA SHEET PH06679 60

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED MAY 2 1978
DATE ENTERED SEP 20 1978

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC: Fort Proctor **

AND/OR COMMON: Fort Beauregard

LOCATION

STREET & NUMBER: N of Shell Beach Near Old Shell Beach on Lake Borgne

__NOT FOR PUBLICATION

CITY, TOWN: Shell Beach vic __ VICINITY OF

CONGRESSIONAL DISTRICT: 1st Robert Livingston

STATE	CODE	COUNTY	CODE
Louisiana	22	St. Bernard	087

CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	__PUBLIC	__OCCUPIED	__AGRICULTURE	__MUSEUM
X BUILDING(S)	X PRIVATE	X UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	X BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	X OTHER:

OWNER OF PROPERTY

NAME: Shell Beach Properties, Inc.

STREET & NUMBER: 1000 South Carollton Avenue

CITY, TOWN: New Orleans __ VICINITY OF

STATE: Louisiana

LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.: St. Bernard Parish Courthouse

STREET & NUMBER:

CITY, TOWN: Chalmette

STATE: Louisiana

6 REPRESENTATION IN EXISTING SURVEYS

TITLE: Louisiana Historic Sites Survey

DATE: 1978

__FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS: State Historic Preservation Office

CITY, TOWN: Baton Rouge

STATE: Louisiana

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
_EXCELLENT	X DETERIORATED	X UNALTERED	X ORIGINAL SITE
_GOOD	_RUINS	_ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The work (or fort) at Proctor's Landing was built on the southern shore of Lake Borgne along a road which ran beside Bayou Terre aux Boeufs. The road and the bayou were both major means of access to the city of New Orleans, and thus a potential invasion route. Today the setting is open, flat, and marshy, much as it was when the fort was built. The only difference is that the land has receded and Lake Borgne has partially engulfed approximately two-thirds of the outer earthworks. The area is, however, completely free of modern intrusions.

The fort was designed as a two-story, square plan tower with four main guns mounted on a parapeted roof terrace. Although the two lower floors were to serve principally as living quarters, eight smaller guns were to be mounted on the second floor. These were to be placed in pairs at the corners. The fort was only completed to a level of 1½ stories. The first floor has a central entrance on the east side which would have been reached by a drawbridge. The magazine is in the center, surrounded by soldiers' quarters. The quarters show considerable concern for comfort. There are vertical slits in the outside walls, which were to be mounted with windows to provide adequate light. Bathrooms were to be installed near the outside walls, with a complete plumbing system. Some of the pipes were installed, but nothing else. Plans also called for paneled doors, fireplaces and other amenities, though these were never installed.

The fort rests upon a spreading brick base, with cisterns below. Sixteen brick piers rise from the base and terminate about six feet above the second floor level. These piers were to support massive groin vaults, which would in turn have supported the gun platform on the roof. The outer walls are also of Flemish bonded brick, approximately four feet thick. Cast iron beams, which resemble modern "I" beams, were installed to support the second floor. They were to have segmental brick vaults running between, but these were never built. The fenestration features granite lintels and sills.

Although plans called for a number of decorative features, including molded doorways and mantels, the only one which was actually installed was a Renaissance Revival doorway at the entrance.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
__1600-1699	X ARCHITECTURE	__EDUCATION	X MILITARY	__SOCIAL/HUMANITARIAN
__1700-1799	__ART	X ENGINEERING	__MUSIC	__THEATER
X 1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
__1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES

BUILDER/ARCHITECT J. G. Totten, H. A. Wright, P. G. T. Beauregard

STATEMENT OF SIGNIFICANCE

Fort Proctor is significant because it was part of the United States' coastal fortification system prior to the Civil War and also because of certain features of its architecture which were unusual in the design of American forts.

Although Fort Proctor was never completed, the existing work embodies two innovations in fortification design. 1) Full and comfortable living quarters for the soldiers, including bathrooms, were incorporated into the design. In most other forts, the soldiers' living quarters were very restricted and were used only in times of seige. 2) The use of structural iron was unusual in forts in the era before the Civil War. When Joseph G. Totten assumed command of the Army Corps of Engineers in 1838, he instituted a program to improve the technology of fort construction. This program involved in part the use of structural iron, and it is Fort Proctor which best represents this aspect of the improvement program, since no other fort used structural iron to such a great extent.

In the years after the War of 1812, Congress authorized the development of a permanent national system of forts to defend routes which could be used for invasion. (See the attached map, which is page 87 of Willard B. Robinson's American Forts.) Regional fortifications for the defense of New Orleans were conceived as integral links of this extensive national chain.

The board of engineers, led by Simon Bernard (1779-1838), recommended that a chain of forts and batteries be constructed at strategic locations around New Orleans to block potential invasion routes to the city. To protect the approach up the Mississippi River, a work (later named Fort Jackson) was projected for the Plaquemines, opposite Fort St. Philip, the only colonial work to be retained in the system. To defend the northern water communication to New Orleans through Lake Borgne and Lake Pontchartrain, works were projected respectively for Rigolets Pass (Fort Pike) and Chef Menteur Pass (Fort Wood, later renamed Fort Macomb). To defend Barataria Bay, a work was projected for Grand Terre Island (Fort Livingston). To defend the pass used by the English in 1814, a work was projected for Bayou Bienvenue (Battery Bienvenue). To defend a channel leading to New Orleans to the south of Bienvenue, a tower was projected for Bayou Dupre.[1]

It was not until the mid-1840's that Proctor's Landing began to claim attention as a possible invasion route. At that time, the entire system of seacoast defense was undergoing reevaluation in light of new developments in naval architecture. Several sites previously considered too shallow for

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Coastal Environments, Inc.
"1976 Resource Management: St. Bernard Parish Wetlands," report submitted to the St. Bernard Parish Police Jury, Baton Rouge.
1856 letter to J. G. Totten from General P. G. T. Beauregard, National Archives, Army and Navy Branch.
Senate Documents, Volume 7, #509, Report of J. G. Totten.
(See continuation sheet)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY less than one

QUADRANGLE NAME _____ QUADRANGLE SCALE _____

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	15	241290	3306920
B			
C			
D			
E			
F			
G			
H			

VERBAL BOUNDARY DESCRIPTION

The site is bounded by the outer walls of the earthworks of the fort.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE Eileen K. Burden, Archaeologist — Revised by John Easterly

ORGANIZATION Coastal Environments, Inc. — DATE March 1978

STREET & NUMBER 1260 Main Street — TELEPHONE

CITY OR TOWN Baton Rouge — STATE Louisiana

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE X LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE J. Bernard Lanier

TITLE State Historic Preservation Officer — DATE 25 April 1978

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

KEEPER OF THE NATIONAL REGISTER R. B. Rettig — DATE 9/20/78

ATTEST: CHIEF OF REGISTRATION William LeBoeuf — DATE Sept 18, 1978

GPO 921-803

Form No. 10-300a
(Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

Fort Proctor

CONTINUATION SHEET 1 ITEM NUMBER 8 PAGE 2

8. Significance (cont'd)

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Appropriations for the work at Proctor's Landing were requested in 1847, but funds were not made available for nearly a decade due to widespread skepticism over the strength of the system. Throughout the late 1840's and early 1850's, this skepticism made the forts, including Fort Proctor, low priorities for Congressional appropriations. But it was finally decided that the internal system should be continued and in 1856 work began on Fort Proctor. Satisfactory progress was made in the years immediately following, but a hurricane in 1860 retarded construction. When the state seized Fort Proctor at the beginning of the Civil War, it was still unfinished.[2]

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Fort Proctor

CONTINUATION SHEET 2 ITEM NUMBER 9 PAGE 2

9. Bibliography (cont'd)

American Forts: Architectural Form and Function, by Willard B. Robinson. Urbana: University of Illinois Press, 1977.

Interviews with Powell Casey and Willard B. Robinson, 19 April 1978.

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NOTES

1. Willard B. Robinson, "Maritime Frontier Engineering: The Defense of New Orleans," Louisiana History 18 (Winter 1977): 24-31. Hereinafter cited as Robinson, "Maritime Frontier Engineering."

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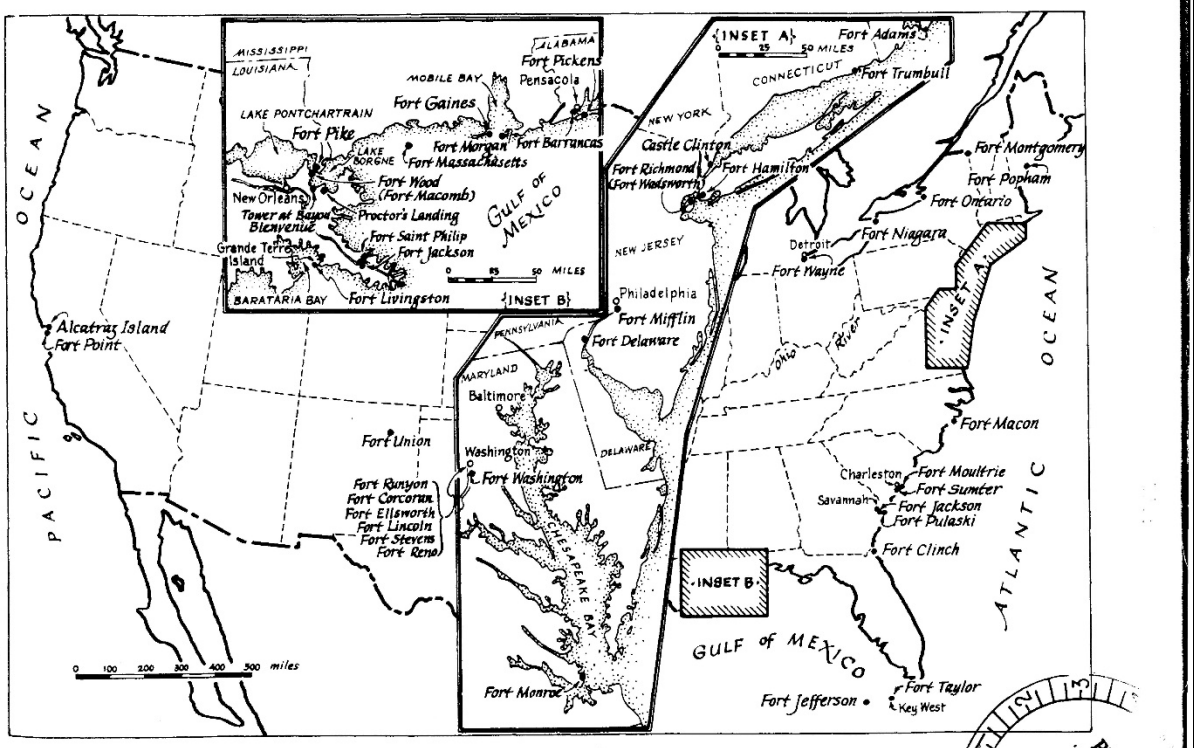


The Permanent System

Attachment 4 – Samuel Proctor House

44-00561

STANDING STRUCTURES SURVEY

Site Number 1.A

I. PARISH St. Bernard

MUNICIPALITY

USGS QUAD Delacroix

Township 14S Range 14E Section 84

TYPE OF PROPERTY Unoccupied

NAME (common) Samuel Proctor

NAME (historic) Bartolome Molero

ADDRESS below box 345 Verret Proctor house

DATE OF CONSTRUCTION circa 1840

II. 1. Condition Deteriorated

2. Style Islenos Cottage

3. Floor Plan 1½ story creole cottage

4. Building Material Vertical board clapboard with a tin roof

III. Physical description of property and historic significance

This deteriorated four bay cottage has a gabled roof with a center chimney of exposed brick. There are remains of a front porch. Excellent mill work and interior details.

Rating: Red if restored - a blue or purple

IV. Recorded by Planning Commission

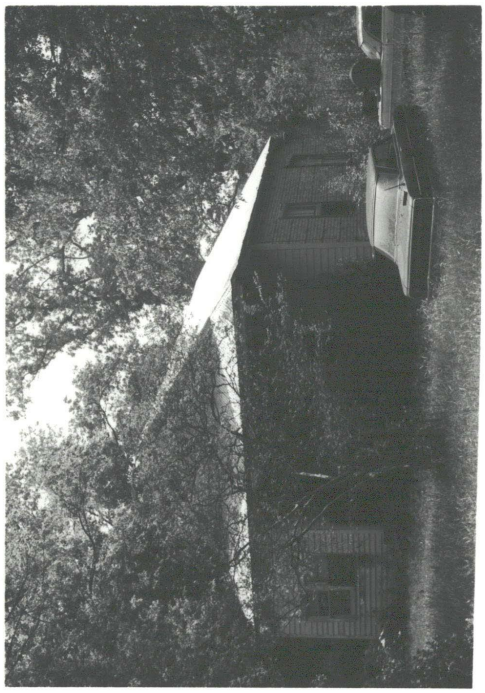
Date June, 1982

For St. Bernard Parish

V. Sources consulted Dr. Cizek

DIVISION OF ARCHAEOLOGY AND HISTORIC PRESERVATION
P. O. Box 44247 Baton Rouge, La. 70804 504 – 342-6682

Attachment 5 – Unnamed House



44-00558 TURES SURVEY VIII

Site Number 3.G

I. PARISH St. Bernard

MUNICIPALITY

USGS QUAD Delacroix

Township 14S Range 13E Section 13

TYPE OF PROPERTY Residential

NAME (common)

NAME (historic)

ADDRESS next door to Jeanne Lagarde's Fashion Boutique

DATE OF CONSTRUCTION circa

II. 1. Condition Deteriorated

2. Style

3. Floor Plan

4. Building Material Clapboard in front asphalt siding in rear with a tin roof.

III. Physical description of property and historic significance

This structure has a gabled tin roof. It has an interior exposed brick chimney. The porch has a hipped roof supported by iron columns and a wooden floor. There are two front doors with two long lights that are rounded at the top. Over each door there is a three light transom. There is a double window with a two over two light configuration.

Rating:

IV. Recorded by Planning Commission
Date June, 1982
For St. Bernard Parish

V. Sources consulted Dr. Cizek

DIVISION OF ARCHAEOLOGY AND HISTORIC PRESERVATION
P. O. Box 44247 Baton Rouge, La. 70804 504 - 342-6682

From:	Thompson, Gregory S CIV USN (USA)
To:	DCRT Section 106
Cc:	Calabrese, John A CIV USN NAVFAC SE JAX FL (USA)
Subject:	CONSULTATION REQUEST: U.S. Navy Flight Training Activities within the Proposed Bourbon Military Operations Area
Date:	Wednesday, July 31, 2024 10:44:44 AM
Attachments:	SHPO LTR And ER[redacted]Sanders.pdf

Please see the attached letter requesting consultation for the U.S. Navy's flight training activities within the proposed Bourbon Military Operating Area and Associated Air Traffic Control Assigned Airspace east of Naval Air Station Joint Reserve Base New Orleans, LA. Please let me know if you need any additional information.

v/r,

Greg

Gregory Thompson
U.S. Fleet Forces
Home Basing/Homeporting NEPA Program Manager
1562 Mitscher Avenue
Bldg NH3N, room 214
Norfolk, VA 23551
work: (757) 836-6938
cell: (757) 270-5850

The proposed undertaking will have no adverse effect on historic properties. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention.

Kristin P. Sanders

Kristin P. Sanders
State Historic Preservation Officer

Date 08/12/2024

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
N46/027
July 24, 2024

Melissa Darden
Chitimacha Tribe of Louisiana
PO Box 661
155 Chitimacha Loop
Charenton, LA 70523

Dear Chairman Darden:

The United States (U.S.) Department of the Navy (Navy) is preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with flight training activities within a proposed new Military Operations Area (MOA) and associated Air Traffic Control Assigned Airspace (ATCAA), named the Bourbon MOA/ATCAA, east of Naval Air Station Joint Reserve Base New Orleans (NAS JRB NOLA). The environmental analysis for the EA is being conducted in accordance with the Council on Environmental Quality guidelines pursuant to the National Environmental Policy Act of 1969. The purpose of this letter is to initiate consultation pursuant to the terms of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations 36 Code of Federal Regulations § 800, with your office for effects on cultural resources located within the Area of Potential Effects (APE).

The Bourbon MOA/ATCAA undertaking will improve training efficiencies by moving training activities closer to the base. The APE within the Bourbon MOA/ATCAA includes land and water areas beneath the proposed airspace that are directly or indirectly affected by the proposed undertaking (Enclosure 1). Potential impacts have been analyzed in the EA for both the No Action Alternative and the Proposed Action Alternative.

Some training events may include the expenditure of chaff and flares, consistent with the adjacent Snake MOA/ATCAA. Flares are fully consumed within the airspace within approximately 5 seconds of release. Chaff fibers are widely distributed with prevailing wind conditions and ultimately settle to the surface. The fibers are non-toxic and readily degrade in soil or water. The use of chaff and flares also results in the residual materials (plastic end caps, felt spacers, plastic pistons, etc.) which are no more than 1-inch by 1-inch in size. These materials are widely distributed throughout the MOA/ATCAA and land on the ground or water as debris after being released from the aircraft. The potential effects of chaff and flares have been studied in previous analyses with the overall conclusion that their use does not have significant impacts to air, water, or biological resources. No weapons testing or ordnance expenditure would occur within the new MOA/ATCAA. As such, no direct impacts would occur to ground or water resources. The noise exposure from proposed flight operations is below the threshold level for land use incompatibility and would not result in any structural damage to property.

Three historic properties, Fort Proctor, Samual Proctor House, and an Unnamed House in St Bernard Parish, were previously recommended to the Louisiana State Historic Preservation Office (SHPO) for nomination to the National Register of Historic Properties (NRHP).

The Samual Proctor House and the Unnamed House have hence been demolished, leaving only Fort Proctor in existence (Enclosure 2). Fort Proctor is located along the western boundary of the proposed MOA/ATCAA and is within the 5 nautical mile standoff distance, significantly reducing the likelihood of overflight and potential for noise or visual impacts. As a result, direct or indirect impacts would be unlikely to the existing historic property.

As part of our consultation efforts, we respectfully request your assistance in identifying the following:

- Traditional Cultural Properties (TCPs) and/or sacred sites that may be located within the current APE;
- historic properties in the APE of which we may not be aware; and/or
- any other concerns with the proposed undertaking.

If you or your Tribe have any information regarding resources of importance or have an interest in participating in the Section 106 process as a consulting party for the proposed undertaking, please let us know. If you request additional consultation, the Navy will work with your office to adopt procedures that will meet your Tribe's needs and requirements for continued consultation.

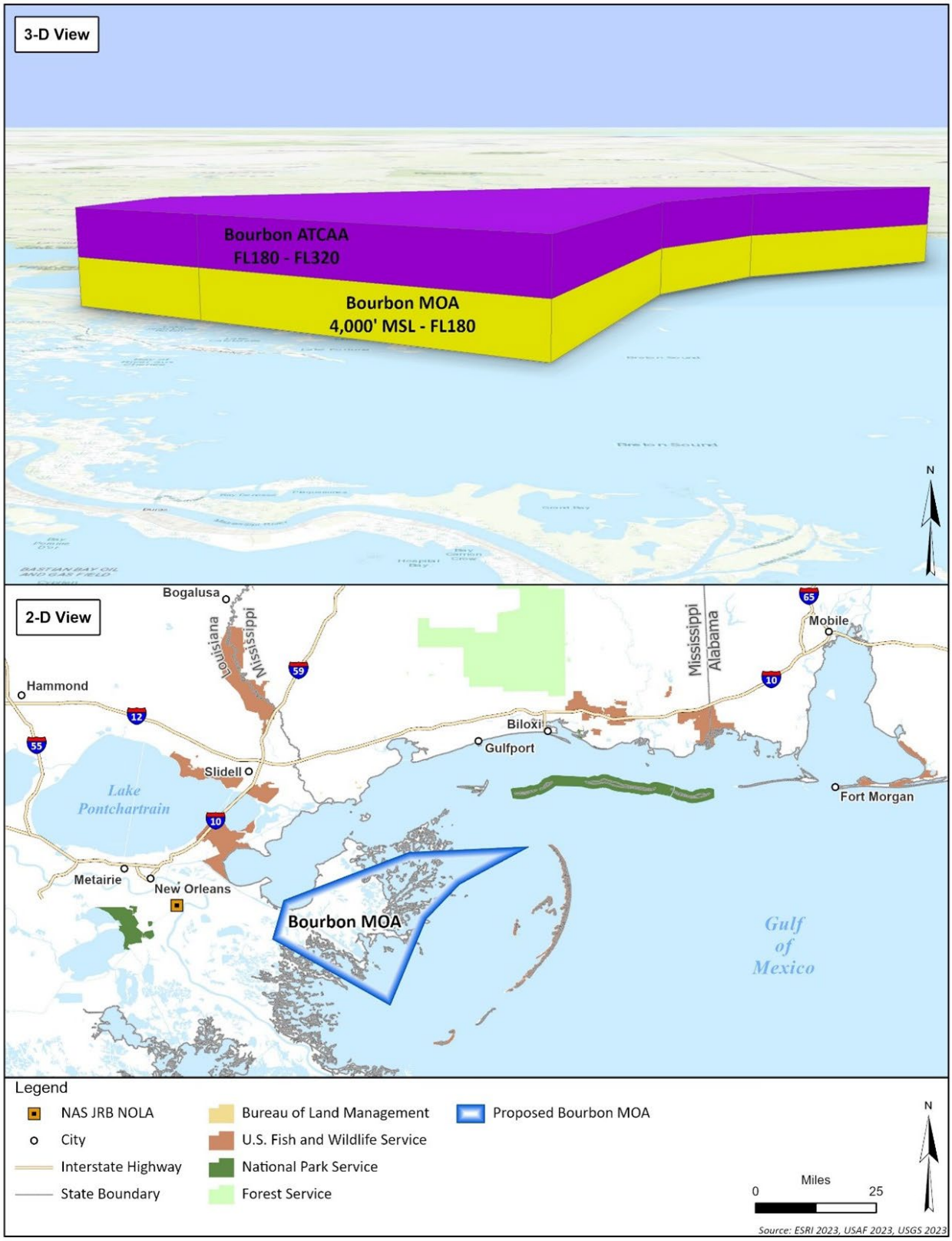
The Project Manager at United States Fleet Forces Command is Mr. Greg Thompson, who may be reached via phone (757) 836-6938 or via email at: Gregory.S.Thompson2.civ@us.navy.mil. If you have any questions or comments, please contact Dr. John Calabrese at NAVFAC Southeast via phone (904) 657-7447 or email at: John.A.Calabrese4.civ@us.navy.mil. Please respond to this letter within 30 days of receipt. Thank you for your assistance.

Sincerely,

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosures: 1. APE, Proposed Airspace
2. Fort Proctor NRHP Form

Attachment 1 – APE, Proposed Airspace



Attachment 2 – Fort Proctor NRHP Form

Form No. 10-300 REV. (9/77)

DATA SHEET PH0667960

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED MAY 2 1978
DATE ENTERED SEP 20 1978

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC: Fort Proctor **

AND/OR COMMON: Fort Beauregard

LOCATION

STREET & NUMBER: N of Old Shell Beach / Near Old Shell Beach on Lake Borgne

__NOT FOR PUBLICATION

CITY, TOWN: Shell Beach vic. __VICINITY OF

CONGRESSIONAL DISTRICT: 1st Robert Livingston

STATE	CODE	COUNTY	CODE
Louisiana	22	St. Bernard	087

CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	__PUBLIC	__OCCUPIED	__AGRICULTURE	__MUSEUM
X BUILDING(S)	X PRIVATE	X UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	X BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	X OTHER:

OWNER OF PROPERTY

NAME: Shell Beach Properties, Inc.

STREET & NUMBER: 1000 South Carollton Avenue

CITY, TOWN: New Orleans __VICINITY OF

STATE: Louisiana

LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.: St. Bernard Parish Courthouse

STREET & NUMBER:

CITY, TOWN: Chalmette

STATE: Louisiana

6 REPRESENTATION IN EXISTING SURVEYS

TITLE: Louisiana Historic Sites Survey

DATE: 1978

__FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS: State Historic Preservation Office

CITY, TOWN: Baton Rouge

STATE: Louisiana

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	X DETERIORATED	X UNALTERED	X ORIGINAL SITE
__GOOD	__RUINS	__ALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The work (or fort) at Proctor's Landing was built on the southern shore of Lake Borgne along a road which ran beside Bayou Terre aux Boeufs. The road and the bayou were both major means of access to the city of New Orleans, and thus a potential invasion route. Today the setting is open, flat, and marshy, much as it was when the fort was built. The only difference is that the land has receded and Lake Borgne has partially engulfed approximately two-thirds of the outer earthworks. The area is, however, completely free of modern intrusions.

The fort was designed as a two-story, square plan tower with four main guns mounted on a parapeted roof terrace. Although the two lower floors were to serve principally as living quarters, eight smaller guns were to be mounted on the second floor. These were to be placed in pairs at the corners. The fort was only completed to a level of 1½ stories. The first floor has a central entrance on the east side which would have been reached by a drawbridge. The magazine is in the center, surrounded by soldiers' quarters. The quarters show considerable concern for comfort. There are vertical slits in the outside walls, which were to be mounted with windows to provide adequate light. Bathrooms were to be installed near the outside walls, with a complete plumbing system. Some of the pipes were installed, but nothing else. Plans also called for paneled doors, fireplaces and other amenities, though these were never installed.

The fort rests upon a spreading brick base, with cisterns below. Sixteen brick piers rise from the base and terminate about six feet above the second floor level. These piers were to support massive groin vaults, which would in turn have supported the gun platform on the roof. The outer walls are also of Flemish bonded brick, approximately four feet thick. Cast iron beams, which resemble modern "I" beams, were installed to support the second floor. They were to have segmental brick vaults running between, but these were never built. The fenestration features granite lintels and sills.

Although plans called for a number of decorative features, including molded doorways and mantels, the only one which was actually installed was a Renaissance Revival doorway at the entrance.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
__1600-1699	X ARCHITECTURE	__EDUCATION	X MILITARY	__SOCIAL/HUMANITARIAN
__1700-1799	__ART	X ENGINEERING	__MUSIC	__THEATER
X 1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
__1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES

BUILDER/ARCHITECT J. G. Totten, H. A. Wright, P. G. T. Beauregard

STATEMENT OF SIGNIFICANCE

Fort Proctor is significant because it was part of the United States' coastal fortification system prior to the Civil War and also because of certain features of its architecture which were unusual in the design of American forts.

Although Fort Proctor was never completed, the existing work embodies two innovations in fortification design. 1) Full and comfortable living quarters for the soldiers, including bathrooms, were incorporated into the design. In most other forts, the soldiers' living quarters were very restricted and were used only in times of seige. 2) The use of structural iron was unusual in forts in the era before the Civil War. When Joseph G. Totten assumed command of the Army Corps of Engineers in 1838, he instituted a program to improve the technology of fort construction. This program involved in part the use of structural iron, and it is Fort Proctor which best represents this aspect of the improvement program, since no other fort used structural iron to such a great extent.

In the years after the War of 1812, Congress authorized the development of a permanent national system of forts to defend routes which could be used for invasion. (See the attached map, which is page 87 of Willard B. Robinson's American Forts.) Regional fortifications for the defense of New Orleans were conceived as integral links of this extensive national chain.

The board of engineers, led by Simon Bernard (1779-1838), recommended that a chain of forts and batteries be constructed at strategic locations around New Orleans to block potential invasion routes to the city. To protect the approach up the Mississippi River, a work (later named Fort Jackson) was projected for the Plaquemines, opposite Fort St. Philip, the only colonial work to be retained in the system. To defend the northern water communication to New Orleans through Lake Borgne and Lake Pontchartrain, works were projected respectively for Rigolets Pass (Fort Pike) and Chef Menteur Pass (Fort Wood, later renamed Fort Macomb). To defend Barataria Bay, a work was projected for Grand Terre Island (Fort Livingston). To defend the pass used by the English in 1814, a work was projected for Bayou Bienvenue (Battery Bienvenue). To defend a channel leading to New Orleans to the south of Bienvenue, a tower was projected for Bayou Dupre.[1]

It was not until the mid-1840's that Proctor's Landing began to claim attention as a possible invasion route. At that time, the entire system of seacoast defense was undergoing reevaluation in light of new developments in naval architecture. Several sites previously considered too shallow for

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Coastal Environments, Inc.
"1976 Resource Management: St. Bernard Parish Wetlands," report submitted to the St. Bernard Parish Police Jury, Baton Rouge.
1856 letter to J. G. Totten from General P. G. T. Beauregard, National Archives, Army and Navy Branch.
Senate Documents, Volume 7, #509, Report of J. G. Totten.
(See continuation sheet)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY less than one

QUADRANGLE NAME _____ QUADRANGLE SCALE _____

UTM REFERENCES

	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
A	15	241290	3306920	B			
C				D			
E				F			
G				H			

VERBAL BOUNDARY DESCRIPTION

The site is bounded by the outer walls of the earthworks of the fort.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE Eileen K. Burden, Archaeologist — Revised by John Easterly

ORGANIZATION Coastal Environments, Inc. — DATE March 1978

STREET & NUMBER 1260 Main Street — TELEPHONE

CITY OR TOWN Baton Rouge — STATE Louisiana

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KEEPER OF THE NATIONAL REGISTER

ATTEST: William Lebovich — DATE Sept 18, 1978

CHIEF OF REGISTRATION

GPO 921-803

Form No. 10-300a
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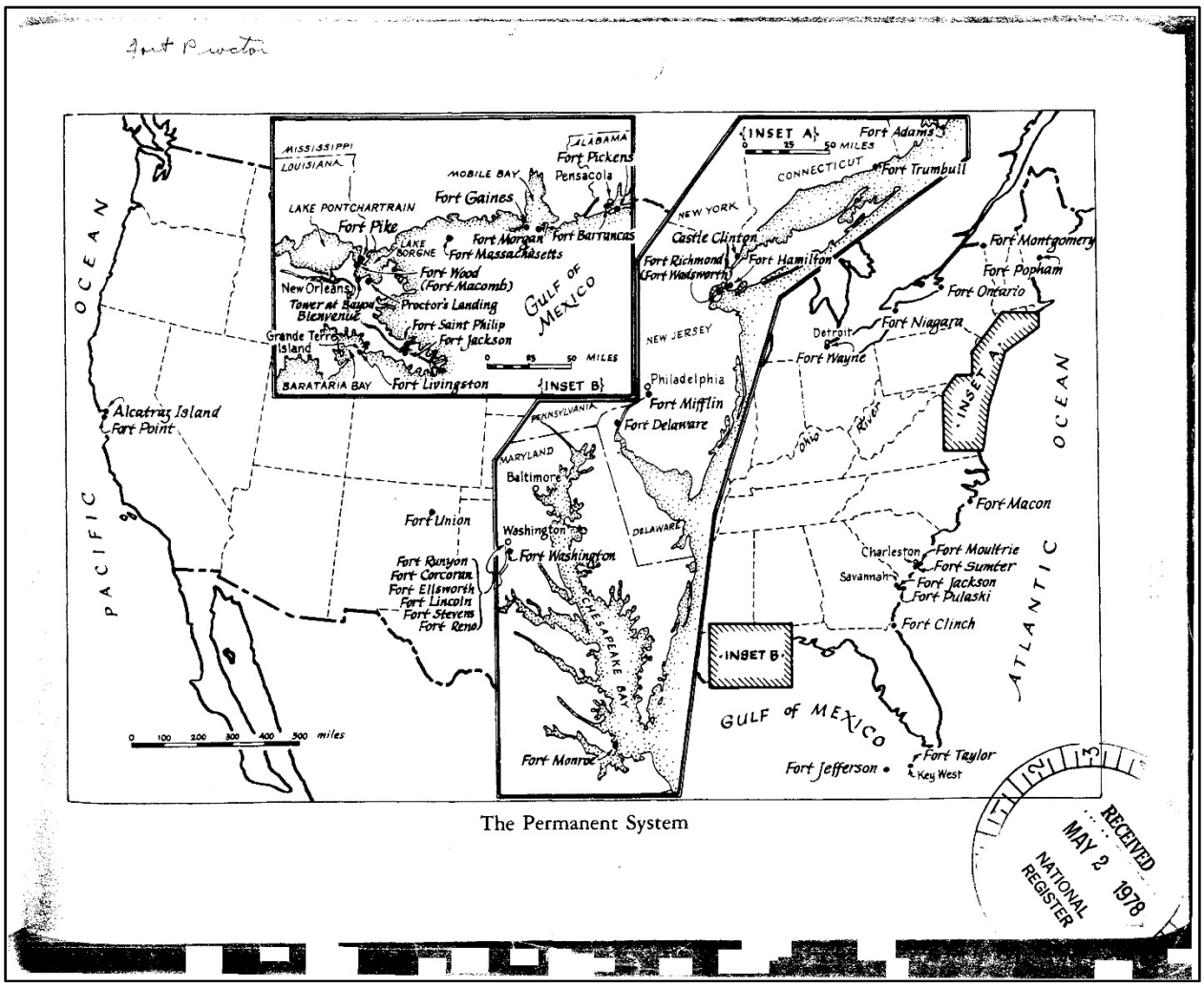

The Permanent System