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F-15EX Eagle II and F-35A Lightning II Operational Beddowns Draft Environmental Impact Statement (EIS) Public Comment Summary and Responses

The virtual and in-person public hearings conducted during the Draft EIS comment period provided opportunities for government agencies, interest groups, and the general public to provide substantive comments or concerns regarding the analyses conducted in the Draft EIS.

Official notification of the availability of the Draft F-15EX and F-35A Operational Beddowns EIS occurred with publication of the Notice of Availability (NOA) on February 16, 2024 in the Federal Register. This also commenced the comment period for the Draft EIS, which concluded on April 5, 2024.

All comments received were reviewed and any substantive comment that was made was entered into Tables A5-1 (public comments) and A5-2 (agency comments). Substantive comments were addressed in the revision of the EIS, if necessary. Generally, substantive comments are regarded as those comments that specifically challenge the analysis, methodologies, or information in the Draft EIS as being factually inaccurate or analytically inadequate; that identify impacts not analyzed or developed and evaluate reasonable alternatives or feasible mitigations not considered by the NGB; or that offer specific information that may have a bearing on the decision, such as differences in interpretations of significance, scientific, or technical conclusions, or cause changes or revisions in the proposal. Non-substantive comments, which do not require a specific NGB response, are generally considered to be those comments that are non-specific; express a conclusion, an opinion, agree, or disagree with the proposals; vote for or against the proposal itself, or some aspect of it; that state a position for or against a particular alternative; or that otherwise state a personal preference or opinion. Though many of the comments received did not contain substantive comments, as defined above, NGB appreciates everyone who took the time to participate in the public involvement process. All substantive comments, either written or verbal, received during the public comment period, were given full and equal consideration in the preparation of the Final EIS.

The NGB received a total of 42 comments from the public during the official comment submittal period (February 16–April 5, 2024). Three agency letters were received (U.S. Environmental Protection Agency [EPA], Department of the Interior, and Federal Emergency Management Agency); no letters were received from elected officials.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document	Department of the Air Force Response
P003	Cullen, Tyler [comment received via website]	I believe the F-15EX is the best option for the 104th FW. It best fits our current mission and the conversion to an upgraded version of our current jet allows for a seamless conversion and a faster turn around to being mission ready. With the F-35 we aren't mission ready for over 2 years. The F-35's are already stationed in Vermont. With the F-15EX we can keep our current homeland defense and Alert missions while also integrating with the F-35's just north of us.	Comment noted. Thank you for your participation.
P004	Rachal, Michael [comment received via website]	We have lived close to the base for 28 years and have considered the take off's and landings to be a source of comfort knowing that our area is protected by our National Forces. There are many dangers our area is exposed to so having the 159th Fighter Wing's Mission here is a welcome asset.	
P013	Carrillo, Michael [comment received during Fresno in-person public hearing]	My name is Michael Carrillo, I'm a lifelong resident of Fresno and retired from the Fresno Police Department. And in that time that I've been sitting around at home, I've paid attention to the Air National Guard, I live on the extreme north end of town, and I get excited hearing the jets go by and fly, and I run out and go look at them and so on and so forth. But the more I paid attention, the more I read into the Air National Guard, I was very impressed with the mission it has and the distance it covers, you know, from the Mexican border to just near the Oregon border, and then again with the Oregon National Guard covering that remaining portion of California, all of Oregon and all of Washington. And so those two states cover the entire west coast, and so they're there for our defense, which is very impressive to me. What also impressed me was the length of time that our military jets are used for, the number of years. We turn around our cars every five, six, maybe ten years, whereas we're flying jets for 25, 30 years, maybe even longer. And so with the F15C coming to its end, like the gentleman stated, we really need an upgrade and we really need to get something new. And it's kind of nice that the F15EX and the F15C are somewhat compatible and so it's not – it wouldn't be a real big change, I don't	

Table A5-1Public Comments on the Draft EIS

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		think, not knowing all the technical things about it, but just knowing that it wouldn't be or it shouldn't be that big of a transition to go from one to the other would be it's probably the best thing for Fresno. Yeah, I think it would have been cool to get the F35 or whatever it's called, but I think the F15EX is best for this community. That's all I have to say. Thank you so much.	Comment noted. Thank you for your participation.
P014	Pacheco, Chris [comment received during Fresno in-person public hearing]	My name is Chris Pacheco. I'm a supporter of the 144th, I think this is badly needed. I do happen to live on the flightpath right overhead. I spent the last 20 years living there, and every chance I got with my three children, I would say "what does that sound like," and they would say "a jet," and I would say "no, it's freedom, doesn't it sound great?" So I'm proud to support these guys and women who really sacrifice a lot. That's it.	
P015	Rhodes, Agnes [comment received during Fresno in-person public hearing]	Hi, I'm Agnes Rhodes, and me and my husband are right under the flightpath. We don't mind if there's any noise or more noise or less noise, but I want to take this opportunity to thank all the people that were involved in putting all that together for the public to just look at what the environmental impact is. Because I looked upon this and what the safety is, and talking to some of the persons here, all of the consideration for fire departments, if there is any emergency needed, that that was taken care of, and also, I didn't really see any environmental impact that's changed. Thank you.	
P016	Rhodes, Rob [comment received during Fresno in-person public hearing]	My name is Rob Rhodes, I am a Fresno resident, retired Navy officer. I live like the previous gentleman, directly under the flightpath, sometimes very closely under it, and to me, it's the same thing, it's the sound of freedom. My interest is in not so much in the environmental impacts one way or another, but in the Air Force's ability to maintain, to perform its mission. And we should be focusing on the best aircraft for the mission, I don't care how loud they are. So that's essentially my comment, thank you.	
P017	Swertfager, Rob [comment received during Fresno in-person public hearing]	For the record, I would say that I'm a retired air force officer, and I would like to highlight the fact that it was mentioned in the brief that if no decision was made, then the F15C's will continue to operate for the foreseeable future, and that there is a potential safety concern if the aircraft are not updated. With the influence or the	

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		influx of new aircraft, the wear and tear on the fleet is safer for the general public, and I'm sure Colonel Clark could talk, but this is not a question and answer. But the amount of emergency procedures that are happening with the F15C fleet, not just in Fresno, but Air-Force-wide, is significant. These aircraft are approaching their extended service life, and that has an impact on us as a community. And having a refresh of new aircraft is safer for not just the members of the 144 but also the community at large.	Comment noted. Thank you for your participation.
P019	Ramsay, Carol J [comment received via email]	"Noise" from jets??the sound of Freedom, BRING IT ON! :-)	
P020	Adams, Ann [comment received via email]	Upon reviewing the noise studies, I am definitely opposed to either the F-15EX or the F-35 being flown out of FAT as the noise increases and area increases are not acceptable	
P028	St. Marie, Carol [comment received via USPS]	Dear Mr. Strickland, I was in the last phase of the mitigation at Barnes. I was pleased at first, knowing that I would be able to get help for the noise. I met with Jane and some others with what I would receive and the initial work to be done. Had I known some of the outcome, maybe I wouldn' have done it. Also if I live 3 houses closer, they would have bought my home, and I would have sold. Now with the new 35's this is going to impact not just me, but with others in the area. First and formost were the windows. I was shown Harvey windows to be installed, and to make a long story short they replaced then with the most terrible windows I have seen. The worst about these windows are the storm window. If there was a fire in my room I don't know if I would be able to open it to escape, they are hard to open up! Also because the storm window is attached to the window unit as a whole it blocks the window width. Also for a door unit from my dining to my porch they did a terrible job. There are other issues that I have to deal with, so I guess that's part of things being free! My heating system is terrible. I have a finished room in my basement that had been previously heated. They installed new duct work and it is still cold today. The worst	

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		part of the duct work is that my husband never had any coughing problems until after it was installed. Through the years it has never stopped and I suspect it is from inadequate installing of work done. During the time of installation there was a great deal of dust and dirt from all of the work, and the heating system was on, it was Dec. So I assume that stuff has collected in my duct work. They should have cleaned them out. Being that I have both rigid and flex ducts. I am going to have to spend out a great deal of money now to get them cleaned. I also do not think that not all new ducts were installed. I have reported my issues with the mitigation team to no avail. I understand there has been a long time since completion of my work, but I just want everyone to know that things did not go smoothly for me or some of the others in my area. Now to get to the workers. During the time they were here things were stolen from my basement and attic. I did not realize it until I was getting rid of things at my tag sale. Antique train set, Fenton glass, and some other assorted things. At that time, there was a full attic of my husband and my stuff and they were not noticed until we were doing a tag sale this past year. I can't replace them and I can't do anything about them, just wanted someone to know. I am out a great deal of money. Just wanted you to know, a long time passed and hope if there are others impacted in future mitigation things will go better than mine. MY only concern is my husbands health because of the heating system. Thanks for hearing me out. Carol St. Marie	Comment noted. Thank you for your participation.
P031	Pacheco, Chris [written comment received at Fresno public hearing]	Fresno is long overdue. We need this to stay competitive and combat ready. We live directly under the flight path in old Fig Garden. We have raised our family to appreciate the men and women who serve! Watching F-15's fly over gave us great teaching opportunities with our three kids, sharing w/them that sacrificing for our country is an amazing gift given to all Americans from these great service men & women!	
P033	Boothe, Ellen	Dear Sir, I am in favor of having the F-35A jets at Barnes Airport in Westfield, Mass. I live in West Springfield, Mass, the town next to Westfield. The jets go over all the time. It's a comforting sound,	

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	[comment received via USPS]	because we are safe. I have lived with B-502's C-5 and all other aircraft overhead. (I'm 82 years old)! I'm proud of them. Thank you, Ellen Boothe	Comment noted. Thank you for your participation.
P034	Ellershaw, Donald and Larraine [comment received via USPS]	As patriots, we know sacrifice must be made by all for the support + advancement of our military. If you change the perspective of viewing the noise/house rattling as an inconvenience/annoyance to a perspective of it being a symbol of our continued protection of our freedom, it is a small sacrifice that we as civilians have to make in support of our military who risk all. We have lived in the proximity of Barnes Airport all of our 65 years, From Westfield to currently Chester (37 years) near the lands/hills of the Army Corp of Engineers of Littleville + Knightville Dams. We've heard the progression of the aircraft - From sonic booms in the 1960's to A10's flying up the valley (our front yard + tipping their wings as we waved + my 2 sons went on to serve this great country) to the F15's and hopefully soon to be F35's.We have never viewed any of the noise or maneuvers as an annoyance or inconvenience but one of advancements of our military in the protection of our freedoms + strength of our country. You have our full support for the progression of the Air Base + the advancement of the mission with the aircrafts involved. You can fly over our house anytime!!If there's anything we can do to be of assistance, please let us know. Sincerely, Larraine + Donald Ellershaw	
P007	Pooler, Eileen [comment received via website]	We would like to be involved with any news/updates as it relates to the pending arrival of the F35 fighter jets to Barnes Airport in Westfield MA. We live at and are currently experiencing adverse noise effects from the F15 fighter jets. We fear the impact of the F35's. Thank you in advance for your communication with us. Eileen and Ed Pooler	Commenter has been added to the mailing list for future distributions.
P035	Sanford, Susan [comment received via email]	Please add me to the list for updates:	

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P005	Jahromi, Shezam [comment received via website]	Can you also comment on the timeline how soon will we be able to see the new airframe at the base?	Initial aircraft arrival is anticipated in 2027–2028 for the F-15EX and as early as 2026 for the F-35A.
P002	Hernandez, Stephanie [comment received via website]	I think these jets are better suited elsewhere not in a heavily populated area such as Fresno.	These three airfields were originally developed in fairly remote areas within each region. Airports and military installations are economic engines that draw development, and over time communities have developed around the airfields. One of the missions of these fighter wings is Aerospace Control Alert, providing fighter jets ready to
P018	Adams, Ann [comment received via email]	Given Fresno's growing population and being the 5th largest city in California, the continual operation of loud military aircraft within such a densely populated area is both unreasonable and unsustainable. I strongly believe that the operation of louder aircraft, the increase in flight activities, and the extension of flying hours are unacceptable under the current conditions. The detrimental effects on our community's well-being and the encroachment on our living environment necessitate a reconsideration of the location for these military operations.	launch 24/7/365 to protect the United States (U.S.), and response times are critical to this mission, precluding locations far removed from population centers. Additionally, Air National Guard (ANG) units are largely staffed by citizen-airmen, who live and work in the communities nearby, while performing their Guard duty on a part-time basis. This citizen-airmen construct means that locating these fighter wings in remote areas would preclude effective recruiting and retention, leaving the units unable to conduct
P018	Adams, Ann [comment received via email]	It is imperative that alternatives be explored, preferably relocating military aircraft operations to more secluded areas, away from residential communities. This would mitigate the adverse impacts on the residents of Fresno, who already bear the burden of high living costs, and ensure that we are not compelled to sacrifice our indoor peace for external military activities.	their missions. The training airspace, where these aircraft spend much of their flight time, is predominantly over areas that are not densely populated.
P020	Adams, Ann [comment received via email]	This is a highly inhabited area of Fresno with many schools in the vicinity and it is not a good location for this kind of noise and disturbance to any of the residents.	
P025	Dodge, Daniel [comment received via website]	This is extremely aggravating. When Trump was president the old jets were excessively flown over our home and they were extremely noisily at unreasonable hours, and these 35's are going to be even louder. Housing these in a residential region like this is appalling	

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P021	Adamski, Frank [comment received via website]	2. These flights take place multiple times per day, and occasionally at night. Whenever the F-15 Eagles are taking off using that runway the noise level and sonic wave vibrations are palpable. While we are indoors all conversations must cease, any music or television being played is drowned out. The vast majority of these aircraft take off in pairs, so the audible impact extends for longer periods than that from a single aircraft.	Even if there are more overall operations (not a certainty), just as in the current operations, there would be one set of takeoffs/landings in the mid-morning, and one set of takeoffs/landings in the mid-afternoon – thus the number of interruptions in a typical day would not be expected to increase.
P029	Timakov, Veronika [comment received via email]	Could the amount of times the planes fly be limited to bare minimum at least?	
P035	Sanford, Susan [comment received via email]	The proposed 81% increase in operations if the F-15EX stuff is approved is fairly astonishing (apologies if we missed it, but we did not find a comprehensive list of what constitutes an individual operation).	Historically, the average number of flying hours per F-15C/D aircraft met or exceeded the Program of Record (POR) of 250 hours/year, though due to increasing maintenance issues with the fleet, the ANG was unable to maintain these training annual hours. Fleet data was available for 2001–2020, indicating that average annual hours per aircraft exceeded the POR from at least 2001–2004 (and likely before 2001), and dropped from a high of 263 to a low of 104 in concert with aircraft age and accumulated hours. This reduction in training capability impacted the ANG's readiness to support critical missions. Though there is an increased reliance on training in simulators, it is imperative that the POR be retained as the proposed action to sustain mission readiness to ensure that pilots train as they would fight, if necessary.
P035	Sanford, Susan [comment received via email]	How can virtual reality, flight simulators, and AI be used to enhance training and reduce noise and other environmental impacts?	Though there is an increased reliance on training in simulators, it is imperative that the POR be retained as the proposed action to sustain mission readiness to ensure that pilots train as they would fight, if necessary.
P002	Hernandez, Stephanie [comment received via website	As a homeowner who lives across from Scandinavian Middle School and under the flight path of the jets reading that the new jets will be considerably louder is concerning. There are many times when the jets take off that they cause car alarms to go off and not to mention the noise and impact on our daily lives. I understand the	See Section 3.2 of the EIS for the Department of Defense (DoD) and Federal Aviation Administration (FAA) approved noise modeling methodologies. See Sections MA3.1, CA3.1, and LA3.1 for detailed analysis of noise impacts.

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		benefit to the 144th but more needs to be done for those who live near FAT and the flight paths.	See Section 3.2 of the EIS for the Department of Defense (DoD) and Federal Aviation Administration (FAA) approved
P002	Hernandez, Stephanie [comment received via website	The FAA provided windows do very little to stop the noise coming into homes	noise modeling methodologies. See Sections MA3.1, CA3.1, and LA3.1 for detailed analysis of noise impacts.
P006	Paquette, Gail [comment received via website]	I Gail Paquette live And I have lived here for over 30 years. I originally wrote a letter on 7/4/2018 an Application for Noise Mitigation Program to the one that was in charge with the program back in 2018 was Jane Verbeck. She said that it would be kept in the files for the future Noise Compatibility Program. I have also submitted a comment form for last year's meeting as well. I hope all in the surrounding areas including my house would get the help that they need from the grant. I have single pane windows and my whole house vibrates and I am afraid my glass doors on my hutch where my dishes are going to break. I have talked to Christopher Willenborg which he is very understanding in our concerns and listening to all the others what they have to say. I was also letting him know that how my house shakes and vibrates as well when the airplanes go by and over my house and others nearby. I did tell him I do have an app on my phone that reads the decibels noise, and these readings are inside my house the max readings that I have gotten is 89 Decibels and the rest are all above 65 and 70 Decibels. I also have videos of the planes just from my Ring cameras how loud they are. They clearly go right over my houses. You can't hear anyone trying to talk on the phone especially if it's a doctor's office calling if they are calling for Appointments or even Telehealth Appointment phone calls and you have to tell these people to hold on while the planes go by so I can hear you. I guess that they measure and use the readings inside the airplanes. That doesn't help when you are up in the air, and it affects all the neighborhoods in all the surrounding areas which including the	

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		 echo of being near the Hampton Ponds water. I understand there are different levels of noise variations in different areas for concern. With the concern for the bigger airplanes that are coming into Barns Westfield Regional Airport that are going to be bigger and louder than the F-15C. The F-35A Lighting II or the F-15 EX Jets. They are complaining that the noise is already bad, and they already have homes that already have insulated the homes. So, with my house with only single pane windows and siding with no insulation in it you can only imagine how loud this can be. I would be so happy with just those modifications being done that would help out immensely. I hope that all the comments and letters that are written from others as well as mine from this meeting will help and hopefully will be enough where we all can get the help and get answers for the program. I would like to thank you for your time. If you need any further information, please contact me. 	See Section 3.2 of the EIS for the Department of Defense (DoD) and Federal Aviation Administration (FAA) approved noise modeling methodologies. See Sections MA3.1, CA3.1, and LA3.1 for detailed analysis of noise impacts.
P009	Kim, J [comment received during Barnes virtual public hearing]	Hi. Yes, I am actually here on behalf of my father-in-law, Mr. Kim. So the noise currently right now, it's impacting the qualify of life. Definitely, I my father-in-law is an elderly. You know, I'm sure a lot of folks in that neighborhood. So I I highly recommend, you know, officials, elected officials come out to stay when the jets fly over his house. I was there. I witnessed it. I heard it. It's very noisy, things like shaking in his house. So it's the noise the the you know, his qualify of life the last, you know, 20 years or, you know, it's not it's at least not the same. At least, you know, I I've known him for at least ten years, the noise level does an impact on his quality of life. Thank you.	
P018	Adams, Ann	My primary concern centers around the noise pollution generated by the aircraft. The current levels of noise are already causing	

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	[comment received via email]	significant distress to myself, my family, and our pets, severely limiting our ability to enjoy outdoor activities. The prospect of introducing aircraft that potentially generate even more noise exacerbates these issues, directly impacting our quality of life.	See Section 3.2 of the EIS for the Department of Defense (DoD) and Federal Aviation Administration (FAA) approved noise modeling methodologies. See Sections MA3.1, CA3.1, and LA3.1 for detailed analysis of noise impacts.
P021	Adamski, Frank [comment received via website]	1. All fixed wing military aircraft, flying over the Massachusetts Turnpike (RT. 90), using runway 02-20 while taking off or landing, fly 'directly' over our home. A casual look at a topographical map by anyone will bear this fact out. In fact, the information on the Westfield-Barnes airport website: https://www.cityofwestfield.org/762/Noise-Abatement-Departure- Procedures directs those aircraft using the wording: "Departures on Runway 20 to be directed to maintain runway heading until 3 miles south of the southern airport boundary (unless otherwise directed by ATC)". Our home is less than 3 miles from the end of that runway, and I would estimate that the fighters passing directly overhead are approximately 200-300 feet from our home. This proximity to our home exacerbates the negative impacts of the noise levels we must endure.	
P027	Delmonte, David [comment received via website]	Please consider a study of Hopkins Road and Skipper Lane - we are located right next to the 2 schools they are marked as BA-S-03. We feel our homes are right in the flight patterns, your attention to this would be greatly appreciated.	
P035	Sanford, Susan [comment received via email]	So we just wanted to send a "report from the field" about the nearly daily impact of the current fighter jet "sound on the ground" where we live in Fresno (about 6.5 miles NW from the ANG 144th base as the F-15 flies). If we are to walk, garden, or have a meal outside, we need to have hearing protection at hand. We recently started an overflights log so we could better guesstimate when we might be able to be outside without the sonic impact of the jets. [see attachment for log]If the submission process allows me to attach sound files, I will send two – both recorded on my mobile phone. One from inside with all doors and windows closed and one outside when all coversation must cease until the jets have passed. The math from the very limited sample size, and the several recordings I have done, reveals the following: In the 17 days from March 13-29,	

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		2024, which includes 4 weekend days, there were approximately 67 overflights (some with multiple aircraft lumped together as one on the log). Duration of maximum sonic disruption (I will use the term "sonic assault" just this once) is about one and a half minutes, which yields a total of about an hour and 40 minutes of low and extremely loud jet noise. Which seems like quite a lot. And this is in addition to all the other commercial air traffic noise, law enforcement helicopters, etc. In addition to ourselves, we think of babies, elders, kids on playgrounds, outdoor workers, veterans and other survivors of war zones who may be triggered, pets, wildlife, and everyone else, who is exposed to the sound of the jets almost every day. We know others have done technical studies and perhaps someone has submitted info from studies of loud noise impacts on physiology. For consideration:* What are the justifications for the increase in operations when the impacts of noise and carbon footprint alone seem to indicate a compelling and reasonable case for a reduction?	See Section 3.2 of the EIS for the Department of Defense (DoD) and Federal Aviation Administration (FAA) approved noise modeling methodologies. See Sections MA3.1, CA3.1, and LA3.1 for detailed analysis of noise impacts.
P038	Mello, Kristen [comment received via website]	Ms. Mello expressed concern that "the planes are louder than we have ever had"	
P018	Adams, Ann [comment received via email]	The noise is within the hearing damaging ranges and it is not acceptable to subject citizens and their pets to hearing loss and constant disruption of their lives.	See Section 3.2.3.6, Potential for Hearing Loss, in the EIS. DoD guidance prescribes screening of the potential for hearing loss due to elevated aircraft noise levels beginning at noise sensitive areas (such as residential) exposed to 80 dB day night average sound level (DNL) or community noise equivalent level (CNEL) or greater. That guidance, based upon U.S. Environmental Protection Agency (EPA) Report No. 550/9-82-105, considers daily 8-hour periods of exposure. Since there are no residences or schools located within the 80 dB DNL/CNEL noise contours, and therefore no people that would be exposed to such sound levels for extended periods of time at any of the three fighter wing locations, additional analysis of the potential for hearing loss was not further examined.

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P021	Adamski, Frank [comment received via website]	 4. As you know, according to the American Speech-Language-Hearing Association, qv, https://www.asha.org/public/hearing/loud-noise-dangers/ any sound level exceeding 94 dB's are considered "Extremely loud-Dangerous to hearing; wear earplugs or earmuffs". Additionally, they indicate that a jet taking off can reach 100 dBs. This obviously varies based upon the distance or height between the person and the aircraft. Additionally, it addresses the impact of noise on human health. ibid. Noise and Your Health Loud noise does not just hurt your hearing. It can cause other problems that you may not think of as being noise related. Noise can make you more tired and cranky. Loud noise can cause other health problems, like: high blood pressure• faster heart rate• upset stomach• problems sleeping, even after the noise stops problems with how babies develop before birth. My physician prescribed medications for me to control high blood pressure, upset stomach, and sleep issues 	See Section 3.2.3.6, Potential for Hearing Loss, in the EIS. DoD guidance prescribes screening of the potential for hearing loss due to elevated aircraft noise levels beginning at noise sensitive areas (such as residential) exposed to 80 dB day night average sound level (DNL) or community noise equivalent level (CNEL) or greater. That guidance, based upon U.S. Environmental Protection Agency (EPA) Report No. 550/9-82-105, considers daily 8-hour periods of exposure. Since there are no residences or schools located within the 80 dB DNL/CNEL noise contours, and therefore no people that would be exposed to such sound levels for extended periods of time at any of the three fighter wing locations, additional analysis of the potential for hearing loss was not further examined.
P029	Timakov, Veronika [comment received via email]	I am extremely worried about the impact these jets will have on my children and their hearing and overall well being.	
P038	Mello, Kristen [comment received via website]	Ms. Mello expressed concern that there could be "damage to our hearing".	
P021	Adamski, Frank [comment received via website]	3. When we are outdoors at our home, the takeoff noise is so loud as to be painful, causing us to have to cover our ears. The sound levels exceed 100 dBs. I can make that statement with accuracy because I wear an Apple watch that has a sound level widget measuring the sound levels in dBs. I am frequently outdoors performing routine maintenance in the yard and can visually see on the watch how loud the sound levels actually are. I rarely have my mobile phone with me while performing these maintenance tasks, but serendipitously, I did once while a pair of F-35's was taking off. As the first one flew over our home, I could hear the second one	The EIS was written consistent with Department of Air Force (DAF) policy for evaluating noise impacts. As discussed in the EIS (Section 3.2.2), DNL was included per DoD guidelines. It is also a well-accepted predictor of annoyance used by the FAA and EPA, along with various other agencies, for impact analysis. DNL is time averaged over a 24-hour period and includes all noise events, so it is a very good metric for comparing the impacts at multiple sites. DNL is the only metric that specifically recognizes the importance of noise that occurs at night and penalizes it with

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		approaching. So, I immediately took the phone out my pocket, opened the camera, selected video mode and recorded the sound level indicated on the watch face, and that can be heard in the video, as the jet passed directly overhead. The sound level visible on the watch face widget was 107 dBs as the plane had just passed overhead.	a 10 dB weighting. The 24-hour timeframe (based on Annual Average Day operations) makes DNL the best metric for evaluating chronic exposure to neighboring communities. For all these reasons, DNL is considered the most useful, appropriate, and fair general metric. Maximum Sound Level (L_{max}) is the greatest sound level measured during a single noise event (typically lasting 1/10 of a second only). It can be very loud, but like a gunshot or a backfiring lawnmower, the sound is typically gone before the observer identifies the source. The usefulness of L_{max} as an impact metric or a predictor of annoyance is therefore limited. Sound Exposure Level (SEL), presented in the EIS, is a better descriptor than L_{max} in this type of analysis. SEL is integrated over a single noise event. It includes the building and then receding of the sound (duration) as well as the peak (L_{max}). This is more appropriate to describe the sound that a vehicle in motion makes. For example, a firecracker's bang for a tenth second at an L_{max} of 100 dB is likely not as impactful as a dump truck accelerating up a hill from a stop sign lasting many minutes at an L_{max} of 90 dB. In addition, the sound from aircraft overflights typically lasts more than 1 second, so the SEL is usually greater than the L_{max} . As described in Sections 3.2.3.2 and 3.2.3.3, SEL events have been provided in addition to DNL at noise-sensitive locations. L_{max} has been included for those locations to determine the potential for Residential and Classroom Speech Interference.
P030	Ripa, Michael P. [comment received via website]	VIBRATION #1– What "CONSIDERATIONS" have you implemented towards the vibrating aspect to the noise effect / affects on the homeowner's properties : when the vibration starts new settling cycles?? (Causing windows, doors, cracking walls, and other infrastructure damage)	Noise-induced vibration effects on structures and humans can be found in the Appendix Section B.2.10.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document	Department of the Air Force Response
P011	Streeter, Estelle [comment received during Barnes virtual public hearing]	The second one is, again, we talked about the noise. There are also people raising animals in this area and noise also affects the animals and unfortunately, we can't I don't think they want to insulate barns and things, so it has to be under consideration as well. And I'm sure the people with the animals may comment at some other time.	Noise induced impacts to domestic animals can be found in the Appendix Section B.2.14.
P018	Adams, Ann [comment received via email]	Ms. Adams expressed concern that there could be hearing damage to pets.	
P022	Richardson, Maria [written comment received at Barnes public hearing]	My husband and I have no problem with regular flight noise. Our greatest concern is regarding the vertical take-offs and use of the afterburners. During these flights/take-offs, the entire house shakes, windows rattle, items fall off of shelves, split mini air rattles, the vibration is intense and very concerning. We are replacing our windows for the 3rd time since the vibration causes loss of seal + window condensation occurs between panes. Same with doors, sliders, etc. How can the vertical take-offs using after burners be stopped or decreased?	As addressed in the EIS (Section 2.2.1.2), use of afterburner at these alternative fighter wing locations has been modeled differently for the F-15EX and the F-35A due to different characteristics of these aircraft. At the 104th Fighter Wing (104 FW), the F-15EX was modeled at 80 percent and the F- 35A was modeled at 5 percent. At the 144th Fighter Wing (144 FW), the F-15EX was modeled at 15 percent of the time (the F-35A is not an alternative at the 144 FW). At the 159th Fighter Wing (159 FW), the F-15EX was modeled at 90 percent and the F-35A was modeled at 5 percent. Because of the similarities in the aircraft, the F-15EX afterburner usage was modeled to be similar to the current use of afterburner with the F-15C/D aircraft at each location. Due to the immense thrust provided by the F-35A engine, there would be little to no expected requirement for its use. Even though there is no anticipated requirement for afterburner use by the F-35A, it has been included at 5 percent in the noise model to provide a conservative estimate of potential noise impacts and flexibility to allow a minimal amount of training to ensure pilots are experienced in afterburner departures.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document	Department of the Air Force Response
P002	Hernandez, Stephanie [comment received via website	the children at the schools who are low income are impacted by this noise as well.	Interference with classroom speech is expected to remain the same or increase by no more than one event per hour at any school under any of the alternatives (EIS Sections MA3.1.2, CA3.1.2, LA3.1.2).
P001	Wyman, Heather [comment received via website]	Hello, the F-15C frequently flies over my house, with enough noise to rattle my windows and make speech unable to be heard. We were just outside of the "official" noise improvement zone when those planes were initially brought in, but over time, the planes have circled over my neighborhood debunking that study. According to the Jan. 2024 noise study, we are completely within the purple noise zone, and at least two fight paths are projected to go over my home (pgs. 99 and 102). Please let me know if there will be an expected abatement for homeowners in this next phase to do home improvements for sound isolation, and when that might be available. If not, please inform us when that phase might be open for public comment and discussion. Thank you!	The only figures from the 104 FW Noise Study (January 2024) that have a "purple zone" are found on page 69 (F-15EX 80% afterburner scenario) and page 70 (F-35A 5% afterburner scenario). The purple zone in these figures indicates that there is either a reduction or no change anticipated in the noise within that zone (see the legend for the figures). Regarding the flight tracks used, those are not anticipated to change from tracks currently used. Regarding civil airport locations identified in this Final EIS, individuals in the neighboring communities may contact the airport authorities directly to obtain information about their sound insulation program, including their processes for determining eligibility for and the installation of sound insulation treatments OR to find out when this information about their sound insulation programs will be available to them. For the City of Fresno, individuals may contact Elodia Cavazos via email at <u>elodia.cavazos@fresno.gov</u> and may review program information on the Internet at <u>https://flyfresno.com/noise-program/#:~:text=The%20SMART%20Program%20is%20a, 75dB%20CNEL%20contours%20around%20FAT</u> . For the city of Westfield, individuals may contact Mr. Willenborg via email at <u>cwillenborg@barnesairport.com</u> and may review program information on the Internet at <u>https://www.cityofwestfield.org/849/Airport-Documents</u> .

	Last Name, First		
Comment	Name	Comment Summary/Document	Department of the Air Force Response
Number	(Organization/	Comment Summary, 2 ocument	
P024	Entity)	My parents live on , directly in line	The only figures from the 104 FW Noise Study (January
P024	Taylor, Kirsten [comment	My parents live on , directly in line , directly in line with and very close to the end of runway 2/20. They are in their 90s	2024) that have a "purple zone" are found on page 69
	received via	and wish to stay in their home for whatever time they have left.	(F-15EX 80% afterburner scenario) and page 70 (F-35A 5%
	website]	Noise from the existing F-15s, particularly on takeoff, makes them	afterburner scenario). The purple zone in these figures
	websitej	anxious and angry on a daily basis. They are convinced that the	indicates that there is either a reduction or no change
		104th is responsible for cracks in their walls, poor air quality and is	anticipated in the noise within that zone (see the legend for
		accelerating their hearing loss. I don't know whether or not any of	the figures). Regarding the flight tracks used, those are not
		this is true, but I do know that the thought of increased noise from	anticipated to change from tracks currently used.
		the F-35s is making them feel depressed and trapped in a home	anticipated to change from tracks currently used.
		nobody would buy, even if they do decide to leave - which they	Regarding civil airport locations identified in this Final EIS,
		really don't want to do. This makes me incredibly sad, because	individuals in the neighboring communities may contact the
		there is no good solution. All I can do is ask you to please do your	airport authorities directly to obtain information about their
		best to provide sound mitigation options at no- or low-cost to the	sound insulation program, including their processes for
		homeowners north of the airport - especially those that were just a	determining eligibility for and the installation of sound
		bit outside the original F-15 mitigation zone, but who are elderly,	insulation treatments OR to find out when this information
		blind, homebound and therefore impacted significantly by jet noise.	about their sound insulation programs will be available to
		As a taxpayer, I support providing noise mitigation to homeowners	them.
		and businesses surrounding the airport. I also hope that the 104th's	
		current and future operations maximize noise abatement/reduction	For the City of Fresno, individuals may contact Elodia
		where possible - as if your families lived at the end of the runway.	Cavazos via email at elodia.cavazos@fresno.gov and may
		Thank you for your consideration.	review program information on the Internet at
P036	Fanion, Karen	I have reviewed Table ES-3 Summary of Impacts – Environmental	https://flyfresno.com/noise-
	[comment	Impact Statement – January 2024. Per the summary, areas that	program/#:~:text=The%20SMART%20Program%20is%20a,
	received via	have been identified as having significant impacts were noise,	75dB%20CNEL%20contours%20around%20FAT.
	website]	especially for children under 18 and the elderly, the North Road	
		Recreational Area and residential land uses. I would request that	For the city of Westfield, individuals may contact Mr.
		programs to mitigate these impacts be implemented and/or	Willenborg via email at <u>cwillenborg@barnesairport.com</u> and
		continued. I would also request that grants be offered to the City to	may review program information on the Internet at
D 010		develop plans/projects to also mitigate these impacts.	https://www.cityofwestfield.org/849/Airport-Documents.
P012	Montoya, Juanita	I am in Census Tract , our area will	Operational (at the source) mitigations have been discussed
	[comment	have a significant increase in noise from the potential new Air	in the EIS; these are functionally best management practices $(DMR) = 1 + 1$
	received via	National Guard air craft installation. I would like to see Noise	(BMPs) such as: limiting takeoffs/landings during
	website]	Abatement Measures written into Environmental Impact Statement.	evening/nighttime; selecting flight tracks that minimize
		I was unable to find a section advising of how the increase in	impacts from noise; runway use, etc. The local units at these
		decibel readings would be resolved for those in the impacted areas.	locations already institute Standard Operating Procedure

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document	Department of the Air Force Response
P030	Ripa, Michael P. [comment received via website]	 #1- What is the plan/options for the homeowner that were sound insulated years ago (having been on the fence db wise, and are NOW in a HIGHER db range?? #2- When will CFR Part 150 3.2.2, 3.23, & 3.3 be implemented and available to those who this applies?? #3- When will the 198 homeowners be advised / informed of such information?? 	 (SOP)/BMPs to mitigate noise 'at the source,' and these have been added in Section 2.6, Mitigation Measures. #2 see response to EPA comment A003, (page A5-30) #3 see response to public comment P001 and P024 (pages A5-15 and A5-16).
P026	Morse, Tracey [comment received via website]	The map that you've drawn up seems as it is the same as the one drawn up for the F-15's years ago. I stated I live at 50 Sandy Hill rd which is off of Dry Bridge. I wake up now with my windows closed when the current aircraft F-15's are taking off either way, North or South. Not sure if you're looking to include other areas, but think you should reconsider. There were houses that were purchased on Holyoke rd when the F-15's came to town. My house is 500-600 ft away. Behind the houses on this end of Sandy Hill rd is a considerable amount of wooded acres own by the Westfield water company and after that heading southeast is a gravel pit. Plenty of space to fly over for takeoffs. Thank you for your time.	The local units at these locations already institute SOP/BMPs to mitigate noise 'at the source.' A discussion of these SOPs can be found in Section 2.6, Mitigation Measures.
P039	Pignatare, Ron [comment received via email]	Good afternoon My name is Ron Pignatare I live at I is a saw on the new map that the sound line is on my property line I was wondering am I eligible for sound proofing Thank you for your time	Regarding the civil airport locations identified in this Final EIS, individuals in the neighboring communities may contact the airport authorities directly to obtain information about their sound insulation program, including their processes for determining eligibility for and the installation of sound insulation OR to find out when this information about their sound insulation program will be available to them. For the City of Westfield, individuals may contact Mr. Willenborg via email at <u>cwillenborg@barnesairport.com</u> and may review program information on the Internet at https://www.cityofwestfield.org/849/Airport-Documents
P023	Eckhart, Trevor	I am wondering now that the f35s are nuclear capable and these are typically transported and maintained by ground transportation via	The F-35A Block 3F aircraft is not "nuclear-capable"; therefore, the F-35A aircraft that would be based at any of

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document	Department of the Air Force Response
	[comment received via website]	the energy department, how the extra heavy traffic loads and blocked routes will cause disturbance to the public.	these three fighter wing installations would not have the hardware necessary for a nuclear mission. Currently, there are no plans to add the hardware necessary to make these F- 35A aircraft nuclear-capable. Only units with a nuclear mission are provided the hardware necessary to carry nuclear weapons; therefore, because none of these fighter wings have a nuclear mission, should any of the aircraft associated with this F-35A beddown ever be fitted with Block 4 upgrades, they still would not be nuclear-capable.
P008	Babinksi, Mary Ann [comment received via website]	And so one question I would have is what data and how did they come to the conclusion and what does that actually mean? I know what it should mean, but I was just wondering if that can be clarified. And the other was that, however, there would be higher percentage of children under the age of 18 and elderly within the projected noise contours, that would be disproportionately impacted by these airplanes. So I don't know what the intent is or if this is recognized as an actual problem, what would be done to rectify that situation or how can it be corrected.	The DAF identified and addressed, to the extent practicable, disproportionately high and adverse human health or environmental effects of its activities on minority and low- income populations, children, and the elderly. In the EIS (Chapter 4.0, Sections 3.1 and 3.4 of the installation-specific chapters), the DAF conducted a detailed analysis of the noise impacts from the Proposed Action to these populations, and determined that impacts from aircraft noise near the airfield would be considered significant in some locations. The methodology used for the analysis of Environmental Justice and the Protection of Children and the elderly is located in Section 3.5.
P038	Mello, Kristen [comment received via website]	Ms. Mello expressed concern that the new aircraft would be "more dangerous than we have ever had"	As discussed in the EIS (Section 3.10 of the installation- specific sections), the DAF conducted a detailed analysis of safety, including fire/crash response, accident potential zones/runway protections zones, explosive safety, and anti- terrorism/force protection. The flight safety records of these aircraft are all identified in Section 3.11.1.2, Table 3.11-2.
P038	Mello, Kristen [comment received via website]	Ms. Mello expressed concern over air quality impacts.	As discussed in the EIS (Chapter 4.0, installation-specific Section 3.3, and Appendix D), the DAF conducted a detailed analysis of the air quality impacts from the Proposed Action and determined that impacts from the Proposed Action would not exceed regulatory thresholds and therefore would not be significant. The air quality analyses considered all potential emissions from the proposed F-15EX and F-35A operations including construction and aircraft operations.

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P011	Streeter, Estelle [comment received during Barnes virtual public hearing]	First of all, the airport and the whole bunch of this areas is over an aquifer and it provides water for people in Westfield, I think South Hampton, a lot of wells, and so on. It is highly important. So before anything happens in any way, that has to be considered and nothing can go into that aquifer that shouldn't be going in there.	As discussed in the EIS (Chapter 4.0, installation-specific Section 3.7,), the DAF conducted a detailed analysis of the surface water, groundwater, and floodplain impacts from the Proposed Action and determined that impacts from would not be significant. Site-specific stormwater pollution
P038	Mello, Kristen [comment received via website]	water pollution is incalculable	prevention plans would be prepared in compliance with the Construction General Permit and would include BMPs to minimize potential impacts associated with erosion, runoff, and sedimentation during construction. Any increase in runoff would be attenuated through the use of drainage management features using Low Impact Development design concepts to manage stormwater. Proposed activities would be outside of the 100-year floodplain at both the 104 FW and 144 FW installations; though some construction would occur within the 500-year floodplain at the 144 FW. Several construction projects are located within the 100-year floodplain at the 159 FW. In compliance with the current building codes in the state of Louisiana, all new construction or substantially improved buildings within the 100-year floodplain would have the lowest floor elevated at least 1- foot above the 100-year flood elevation. The development, issuance, and analysis provided by this EIS constitutes compliance of Executive Order (EO) 11988 and EO 13690. EO 11988 and EO 13690 require that agencies evaluate the potential effects of actions within a floodplain and to avoid floodplains unless the agency determines there is no practicable alternative.
P010	Knoth, Thomas [comment received during Barnes virtual public hearing]	think that the F-35s or F-15EXs will also help contribute to our communities economic growth. I know that there's been talk of creating a lot of new jobs within the civilian and military sector of Westfield there and yeah,	The DAF conducted a detailed analysis of socioeconomics, including population, housing, employment, and income in Chapter 4.0, Section 3.5 in the installation-specific sections of the EIS, which provides analysis on potential economic benefit from temporary construction jobs and salaries from additional personnel.

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P017	Swertfager, Rob [comment received during Fresno in-person public hearing]	I would also like to highlight that having a mission set in our community provides jobs, over a thousand jobs for the local community, they're citizen soldiers. Outside of the full-time manpower at the base, we have a lot of traditional guardsmen that serve throughout our community, and that has a positive impact on not just Fresno and California, but it helps us represent our state as a whole. So those are the things I'd like to highlight. Thank you.	The DAF conducted a detailed analysis of socioeconomics, including population, housing, employment, and income in Chapter 4.0, Section 3.5 in the installation-specific sections of the EIS, which provides analysis on potential economic benefit from temporary construction jobs and salaries from additional personnel.
P032	Swertfager, Rob [written comment received at Fresno public hearing]	This country and community need jobs and relevance. the F-15EX or F-35 bring our city jobs and security.	
P021	Adamski, Frank [comment received via website]	U.S. military, and the Westfield-Barnes Airport Authority commit in writing, to perform noise mitigation measures in a timely manner, to us, and others directly, and severely negatively impacted including, but not limited to replacing our homes' windows, and doors with triple pane insulated glass, and adding additional insulation free of charge, as we did not, and could not anticipate these negative impacts on or living conditions, peaceful enjoyment of, and resale value of our homes with the placement of the fleet of F-35's at Westfield-Barnes Airport. To decline to do so, would be equivalent to these governmental authorities to an unlawful taking of the value of our property without just compensation, and we are confident that our government would not do so.	Means to mitigate noise are incorporated into the fighter wing's daily operational activities, these may include minimizing use of afterburner, minimizing nighttime operations, etc. The USAF does not have authority to expend appropriated funds on facilities that are not under the direct control of the USAF. Refer to Section 2.6 in the EIS for more information. The potential effect of airport noise on property value is a complex issue due to the variety of factors that may affect property value at a certain location and the subjectivity in real estate values. Studies on the effects of noise on property values have been inconclusive, contradictory, or only representative of certain locations. Although some studies documented declining property values, other studies have found evidence suggesting that property values near an airport can be higher, owing to the desire of some individuals, such as those who are employed in the airport industry or who travel frequently, to live near an airport. Other studies have shown lower property values near ariport, but also noted the presence of other contributing factors, such as underperforming schools, nuisance land uses, and employment opportunities.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document	Department of the Air Force Response
P018	Adams, Ann [comment received via email]	Regrettably, I am unable to attend the scheduled meeting and have encountered difficulties accessing further information through the provided link (www.ANGF15EX-F35AEIS.com), which appears to be non-functional.	Individuals may contact the airport directly to obtain information about their sound insulation program, including their processes for determining eligibility for and the installation of sound insulation OR to find out when this information about their sound insulation program will be available to them. For the city of Westfield, individuals may contact Mr. Willenborg via email at <u>cwillenborg@barnesairport.com</u> and may review program information on the Internet at <u>https://www.cityofwestfield.org/849/Airport-Documents</u> A robust public involvement plan was developed and implemented, including Fact Sheet mailings, newspaper ads, press releases, public service announcements, interviews with local TV and print news media, flyers posted in the local area, and a project website with extensive information on the proposed action, National Environmental Policy Act (NEPA) process and opportunities for involvement. Additionally, multiple opportunities were provided during both scoping and draft comment/hearing phases, with virtual options and in-person events held in the neighboring community at each location, for a total of 12 opportunities for the communities to participate in a live format to provide their input, review project information and analysis, and ask questions.
P037	Babinski, Mary Ann [comment received via email]	See attached file!	The file was corrupt and could not be opened.
P038	Mello, Kristen [comment received via website]	I'll be surprised if any human reads this at all. If you have and would like me to know you read it, please include the word "rutabaga" in your communications to indicate you have.	Rutabaga. Real people do read these comments and prepare responses to them.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A001	Velazquez, Dana M. Federal Emergency Management Agency (FEMA), Texas Hazard Mitigation Division Branch [Comment received via email]	Good Day Mr. Strickland, Please ensure that you are working with the local floodplain administrator and obtaining floodplain permits and any other federal/state or local permits that were required with the planned project. Best Regards [Comment received via email]	The applicants at each fighter wing are required to coordinate with the community floodplain administrators regarding floodplain permit(s) prior to the start of any activities, and new construction must be compliant with current codes and standards, including maintaining compliance with EO 11988 and EO 11990.
A002	Lazinsky, Diane U.S. Department of Interior, Office of Environmental Policy and Compliance [Comment received via email]	The following comments on NAS JRB New Orleans are offered in coordination with the Department's National Park Service (NPS). We have no comments on the proposed Massachusetts and California locations. Under the National Park Service Organic Act of 1916, the NPS is mandated to protect national parks' natural soundscapes and dark night skies as critical natural and cultural resources. NPS management policies further detail the agency's responsibilities, including "to prevent or minimize all noise that through frequency, magnitude, or duration adversely affects the natural soundscape or other park resources or values" and to "work constructively and cooperatively with those responsible for inappropriate sources of noise in parks." The following recommendations pertain to the potential impacts to natural soundscapes, wildlife, and visitor experience at Jean Lafitte National Historic Park and Preserve (JELA) associated with the proposed changes in operations at the 159 FW at NAS JRB New Orleans.	The DNL for several residential points of interest (POIs) located east of the JELA by about a quarter mile (closer to NOLA) is approximately 40 decibels (dB) DNL for baseline and would be a maximum of 43 dB DNL for the proposed action alternatives. The JELA is further away than these POIs and therefore would be expected to be lower than these POIs. The noise grids calculated DNL in the JELA area at a range from about 32 to 38 DNL. That level is at the lower end of the software's limits and where non-aircraft sources of noise (even wind gusts) can dominate. A brief discussion regarding the relative change to the acoustic environment at Barataria Preserve, within the JELA has been added to Section LA3.1.2.1).

Table A5-2Agency Comments on the Draft EIS

1. The noise study for the 159 FW does a thorough job modeling noise impacts on census tracts, healthcare facilities, residential areas, and schools considered Points of Interest (POI) in the vicinity of NAS JRB New Orleans, but entirely overlooks the presence of JELA. The Barataria Preserve, with portions located less than 4 miles southwest of the runway, protects wetland ecosystems and wildlife, and the Chalmette Battlefield, located northeast about 6 miles, preserves the site of the 1815 Battle of New Orleans as well as14,000 graves from the War of 1812 through the Vietnam War. An increase in noise associated with the proposed introduction of F- 15EX or F-35A aircraft is likely to affect the natural and cultural acoustic environments of both units. The NPS recommends extending the noise analyses to include units of JELA as additional Points of Latarett	Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A002Lazinsky, Diane U.S. Department2. In the noise study for the 159 FW, which includes the following figures: Figures 3-2 [map of existing Day-Night Average SoundThese NPS properties are well off the map extent though where added a brief discussion of them in the Noise section	A002	Lazinsky, Diane U.S. Department of Interior, Office of Environmental Policy and Compliance [Comment received via	 noise impacts on census tracts, healthcare facilities, residential areas, and schools considered Points of Interest (POI) in the vicinity of NAS JRB New Orleans, but entirely overlooks the presence of JELA. The Barataria Preserve, with portions located less than 4 miles southwest of the runway, protects wetland ecosystems and wildlife, and the Chalmette Battlefield, located northeast about 6 miles, preserves the site of the 1815 Battle of New Orleans as well as14,000 graves from the War of 1812 through the Vietnam War. An increase in noise associated with the proposed introduction of F-15EX or F-35A aircraft is likely to affect the natural and cultural acoustic environments of both units. The NPS recommends extending the noise analyses to include units of JELA as additional Points of Interest. 2. In the noise study for the 159 FW, which includes the following figures: Figures 3-2 [map of existing Day-Night Average Sound Level (DNL) contours/noise gradients], 4-1 (F-15EX percent afterburner), 4-3 (F-15EX 90 percent afterburner), 4-5 (F-35A 5 percent afterburner), 4-6 (F-35A 5 D percent afterburner), 4-8 (F-35A 50 Percent afterburner), 4-7 (F-35A 50 percent afterburner), 4-8 (F-35A 50 Percent afterburner), and 4-11 (Comparison of 65 dB DNL contours), all fail to include the borders of JELA and important features such as the Chalmette Battlefield and National Cemetery, and the interpretive centers in New Orleans' old quarter/French 	These NPS properties are well off the map extent though we have added a brief discussion of them in the Noise section and explained that the noise associated with the project at these locations would be in the 40 dB DNL range.

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A002	Lazinsky, Diane U.S. Department of Interior, Office of Environmental Policy and Compliance [Comment received via email]	3. The noise exposure analysis for DNL contours and POI levels uses the Department of Defense (DoD) threshold for land use recommendations for noise sensitive land uses of 65 dB DNL, and the classroom learning interference analysis screens for a threshold of 60 dB Leq, 8hr. However, these metrics do not account for, and are not compatible with NPS mandates and management policies.	See Section 3.2 of the EIS for the DoD and FAA approved noise modeling methodologies. See Sections MA3.1, CA3.1, and LA3.1 for detailed analysis of noise impacts.
A002	Lazinsky, Diane U.S. Department of Interior, Office of Environmental Policy and Compliance [Comment received via email]	4. Staff at JELA currently report already having to pause conversations, including Interpretive Rangers talking with visitors on the trail system, at the Barataria Preserve when fighter jets fly overhead. Even in close proximity, human speech cannot be heard during these times, indicating that the noise exposure exceeds 60 dB LAeq,1s – the level for speech interruption for normal conversation. Above this sound level, raised-voice communication at 4 m, such as an audience and interpreter 4 m apart, would result in 95% sentence intelligibility. That means the visitor will miss 5% of what an interpreter is saying, even if the interpreter is speaking loudly. Keep in mind that normal conversation starts to be affected at 52 dB, and this metric is used as a cutoff because that's the point at which the activity begins to be interrupted and worsens as a noise gets louder. Since the interpretive programming at JELA is already being interrupted by fighter jets, they're likely already experiencing events that are 65 dB and above. Given that the introduction of F-15EX or F-35A aircraft might increase the Lmax and/or frequency of such interruptions, negatively impacting the visitor experience and impeding the NPS's ability to carry out its mandate, NPS recommends that the noise analysis includes either Number of Events Above (NA) or Time Above (TA) noise level threshold (Lmax) 60 dB for an average 24-hour day in Barataria Preserve.	A brief discussion has been added to Section LA3.1.2.1 to explain how the NA60 dB for an average 24-hour day would change in the Barataria Preserve due the proposed action alternatives relative to Baseline.

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A002	Lazinsky, Diane U.S. Department of Interior, Office of Environmental Policy and Compliance [Comment received via email]	5. Wildlife respond to daily average noise levels as low as 40 dB LAeq, 24hr [20–10,000 Hz] and the NPS considers 35 dB LAeq, 24hr [50–10,000 Hz] to be an important indicator of quality for the acoustic environment in NPS units. As the current noise exposure analysis doesn't allow full understanding of potential impacts to resources and the overall acoustic environment in JELA, NPS recommends that the contour analysis for JELA be modeled down to at least 40 LAeq, 24hr.	There is no DoD requirement to model down to 40 dB, though a brief discussion of 24-hour equivalent sound level (Leq(24hr)) levels in the Barataria Preserve has been added in Section LA3.1.2.1.
A002	Lazinsky, Diane U.S. Department of Interior, Office of Environmental Policy and Compliance [Comment received via email]	 6. Given a likely increase in noise at JELA resulting from proposed operations of F-15EX or F-35A aircraft at NAS JRB New Orleans, the NPS would like the DEIS to include also include proposals for mitigation measures, such as: Reducing flights over Barataria Preserve during the morning bird song chorus (5 a.m 10 a.m.) during the spring and early summer breeding season (March-June). Pausing flights over the Chalmette Battlefield during special programming, (i.e., living history demonstrations, musket and cannon-firing demonstrations, and a kid's camp scheduled for the annual Battle of New Orleans Commemoration). Provide the NPS with a Point of Contact at the NAS JRB to coordinate key programming events, and to contact with noise-related issues for assistance with their resolution. 	The DNL for several residential POIs located east of the JELA by about a quarter mile (closer to NOLA) is approximately 40 DNL for baseline and a maximum of 43 dB for the proposed actions. The JELA is further away than these POIs and therefore would be expected to be even lower than that. The noise grids calculated DNL in the JELA area at a range from about 32 to 38 DNL. Therefore, it is unlikely that there would be a need to mitigate noise at these locations.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003	Vitulano, Karen U.S.Environment al Protection Agency, Region 9 [Comment received via email]	" <u>Noise Impacts</u> . Increases in noise are substantial, with the project adding just under 5,600 individuals into noise conditions not suitable for residential land use around the FAT and just under 800 individuals at BAF. We appreciate the DEIS discloses the numerical values from its modeling, the results are not translated in a way such that the public can clearly understand how these changes would affect their daily lives. We have suggestions for improving the methodology to better communicate the significant noise impacts to the public. See <i>Noise Assessment Methodology</i> subheading. We appreciate the disclosure that at FAT these impacts will be borne by a population with environmental justice concerns. Based on the Scoping Report in Appendix A4, the outreach that occurred for this DEIS was typical and did not include additional and focused efforts to consult and inform the affected community with environmental justice subheading below. The DEIS also discloses that impacts at BAF and FAT will be disproportionately borne by our most vulnerable population, our children. Please see our comments below under the <i>Schools and Impacts to Children's Learning</i> subheading. The DEIS states that mitigation has been integrated into flight operations and further noise mitigation be discussed in case other parties could implement it. Additionally, the Federal Aviation Administration's (FAA) Part 150 program was raised and discussed at the public meetings, but its application and limitations are not discussed in the DEIS. See our comments under the <i>Mitigation for Noise</i> subheading"	Both in-person and virtual public scoping meeting and public hearings were held at all locations during the course of the project. Opportunities to submit comments were plentiful, and over 50,000 Fact Sheets have been distributed to those residences and businesses within the projected noise contours, thusly providing information and opportunity for public inquiry and engagement into the Proposed Action and NEPA process. In their comment letter for the Air National Guard F-15EX and F-35 Draft Environmental Impact Statement (CEQ/EIS No. 20240025; pages 1-7 of their enclosed detailed comments), the EPA made several comments and recommendations concerning noise impacts and noise mitigation associated with the proposed military aircraft operations. Regarding the comment "Additionally, the Federal Aviation Administration's (FAA) Part 150 program was raised and discussed at the public meetings, but its application and limitations are not discussed in the DEIS" on page 1 of the EPAs' detailed comments, it is important to note that identifying Part 150 or an airport noise compatibility program in an analysis prepared pursuant to NEPA is misleading and ineffective because an assessment pursuant to 14 CFR Part 150 is a planning tool, not a mitigation program or plan and it is not prepared to mitigate project-specific impacts at civil airport locations. Instead, an airport authority identifies and recommends measures to address non-compatible land uses from the typical day-to- day operations of a civil airport. In addition, FAA approval of an airport noise compatibility program pursuant to 14 CFR Part 150 does not constitute decisions to implement the recommended measures identified in the airport's noise compatibility program and they do not constitute a commitment by the FAA to provide federal financial

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003		<i>Noise Assessment Methodology</i> The DEIS does not discuss noise modeling results in terms of community annoyance. The DEIS identifies annoyance as a metric on pages 3-6, stating that "studies of community annoyance show that DNL (Day-Night Average Level) correlates well with impact assessments; there is a consistent relationship between DNL and the level of annoyance". It also acknowledges that DNL and Community Noise Equivalent Level for California (CNEL) metrics are used by all federal agencies for predicting human annoyance and other potential noise effects on humans (p. 3-17). However, annoyance as a metric is only discussed generically in the Noise appendix and is not applied to the numeric modeling results included in the noise impact assessment for the project. The Department of Defense (DoD) Technical Bulletin <i>Community</i> <i>Annoyance Caused by Noise from Military Aircraft Operations</i> (December 2009) states that the concept of "community annowance" to man annoyance to mean to	assistance to the airport authority for the implementation of the recommended measures. It is also important to understand that an airport authority's participation in the Part 150 process to develop and implement a noise compatibility program is voluntary, not required. Regarding the comments and recommendations for noise modeling results in terms of community annoyance on pages 1-2 of EPA's enclosed detailed comments, the analysis in the EIS is based on DoD and FAA policy for analyzing noise sensitive locations potentially experiencing significant impacts. As recognized by the comment, DNL/CNEL is a composite metric and may be difficult for some members of the public to understand. To aid the public's understanding, the EIS includes supplemental metrics, such as classroom learning interference (8-hour equivalent sound level [Leq(8hr)], number of speech interfering events above [NA] 50, time above [TA] during a school day, TA50), number of residential speech interfering events NA50, and sleep disturbance estimates. The noise appendix includes details on the discussion of noise levels and differences in perception, but due to limitations on page count, and apprint and the pagulations (CFR)
		annoyance" was developed to provide one comprehensive term to describe the overall community response to noise, including both degradation of outdoor activities and interference with indoor activities. The cover of the DoD Technical Bulletin states: "Long term community annoyance from aircraft noise is typically the greatest adverse effect of low altitude, subsonic overflights of residential populations. Understanding annoyance is essential to successful public relations in the vicinity of air installations and operating areas, and to informed decisions on changes to the military operations."	consistent with 40 Code of Federal Regulations (CFR) Section 1502.2(a) and (c), incorporating additional material in the main body was impractical. However, additional summary information has been added to the methodology section in Section 3.2.2 of the main body of the EIS to explain the differences in perception of typical dB changes and the percent highly annoyed that corresponds to key DNL values since some readers may not go to the appendix for this info. These changes can be found on pages 3-4 and 3-7 of the Final EIS:

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		We agree that understanding annoyance is essential for sufficient disclosure and strongly recommend its inclusion in the FEIS for all locations. Community annoyance is especially important because it helps translate noise values that are expressed in DNL, which is an averaging metric that does not represent the noise level people experience. Indeed, the Government Accountability Office found that providing information on potential noise impacts grounded in DNL was not clear enough for communities to understand planned changes. As the DoD Technical Bulletin indicates, assessing community annoyance from noise uses various concepts, including the "Schultz Curve," developed from extensive studies where DNL is shown on the X axis and the percent highly annoyed on the Y axis, and is generally part of Air Force noise disclosures. This curve has been updated over the years; the most recent update by the FAA using their recent Neighborhood Environmental Survey found a substantial increase in the percentage of people who are highly annoyed by aircraft noise over the entire range of aircraft noise levels considered, including at lower noise levels. In addition to annoyance, there are other ways the data can be presented in understandable terms for the public, as we recommended in our scoping comments. Noise impacts in a general sense are discussed most effectively in the Noise appendix, and much of this information is appropriate for the body of the EIS where more readers will encounter the information. Recommendations: Include the community annoyance supplemental metric in the FEIS and in outreach materials. Disclose information from the updated FAA curve for this metric in relation to the project and interpret the numerical data generated from modeling to better convey its effects on the lived experience of residents. This can include describing how noise is likely to be experience (i.e., how much louder in simple terms, how speech interference events could interrupt daily living, and incorporating additional descript	 A 3 dB increase = the minimum change in the sound level of individual events that an average human ear can detect. A 5 dB increase = a moderately noticeable increase. A 10 dB increase = twice as loud. A 20 dB increase = four times as loud. However, a recent study by the FAA, <i>Analysis of the Neighborhood Environmental Survey</i> found that the proportion of people highly annoyed by aircraft noise of 65 dB DNL could be as high as two-thirds leaving less than one-third not highly annoyed (FAA 2021a). Additionally, the EIS depicts the noise exposure gradient that extends below 65 down to 55 dB DNL/CNEL specifically to show how noise levels would change in less than significant ways in the community and may affect annoyance.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Additional Methodology Recommendations (pages 2-3 of EPA's enclosed detailed comments) "Recommendations• Include population in POIs: Treating entire census groups as one point of interest (POI) does not sufficiently communicate the impact. For example, the DEIS states that the number of speech-interfering events with windows open ranges from one to five events per hour at 52 POIs, with the greatest occurring at CAFr-C-08 Census Tract 31.04 centroid point (p. CA-25). We recommend adding a column to the tables where POIs are listed (e.g., Table CA3.1-11, Table MA3.1-11, Table LA3.1-11, etc.) enumerating the population within each census tract POI, and referencing the population number in the text where the POIs are discussed.	The population calculations requested can be found within the Noise Sections (MA3.1, CA3.1, and LA3.1) by the tables providing the number of households and population affected by each 5 dB band of DNL/CNEL from 65 to 85 dB for each of the project scenarios for this primary metric. The purpose of the supplemental metrics (i.e., speech interfering events) is to provide a means for members of the public to find a representative POI relatively near their location of interest that provides additional details. The use of census tract centroids was to provide a consistent way to develop modeled POI's across multiple airfields in three states with varying population densities. The POI noise results reported in supplemental noise tables only applies to the specific modeled point because areas in the associated census tract will vary with some experiencing greater or and some lesser noise exposure. Additional clarification has been added to MA3.1.1.1, CA3.1.1.1, and LA3.1.1.1 of the EIS to provide additional clarification.
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Additional Methodology Recommendations (pages 2-3 of EPA's enclosed detailed comments), Cont'd Sleep disturbance: The potential for awakenings (PA) conveys the percentage of the population that would be awakened at least once per night under the noise conditions. Multiple events can be combined to determine the PA for all events during a single night (FAT Noise Report, p. 24). This does not capture the impact of additional awakenings if the population already experiences at least one awakening. For example, Table CA3.1-15 identifies Census Tract 31.04, the one closest to the FAT airfield, as having 30% of the population currently experiencing at least one awakening per night, and the project causing a 0% change (p. CA-44); however, additional awakenings to this same 30% of the population are not captured in the metric. There is a big difference between one awakening and three awakenings. We recommend communicating in the FEIS the number of households that would experience <i>additional</i> awakenings and how many, or otherwise conveying the	Calculating probability of awakening suggested in this comment references the 2008 ANSI/ASA procedures. However, in 2018, the same two organizations and several of the same authors withdrew the 2008 standard: <i>The decision of Working Group S12/WG 15 to withdraw</i> <i>ANSI/ASA S12.9-2008/Part 6 implies that the method for</i> <i>calculating "at least one behavioral awakening per night"</i> <i>contained in the former Standard should no longer be relied</i> <i>upon for environmental impact assessment purposes. The</i> <i>Working Group believes that continued reliance on the 2008</i> <i>Standard would lead to unreliable and difficult-to-interpret</i> <i>predictions of transportation-noise-induced sleep</i> <i>disturbance. (ANSI/ASA 2018).</i> The withdrawal paper also explained that "Minor differences in prediction of small awakening rates should not interpreted as evidence of meaningfully different environmental impacts of one project <i>alternative with respect to another."</i>

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		information without multiple events being combined so that additional awakenings are obscured.	As explained in the sleep disturbance section of the noise appendix, "without a reliable and standardized method to compute probability of awakening, or updated guidance from DNWG, this study presents the sleep impact analysis utilizing the previous standard (ANSI/ASA 2008 and DNWG 2009) for environmental impact disclosure purposes. The reader is cautioned that the PA metric provides only a crude estimate because it cannot truly account for all variables that could affect a person's sleep. A comparison of the baseline conditions and the Proposed Action awakening percentages showing large changes to PA could provide some insight on whether a particular action would be likely to increase or decrease sleep impacts. However, any additional conclusions may not be supportable." ANG aircraft associated with this action avoid operating at night as much as possible (0.5–2 percent depending on the installation) as a matter of policy, which results in roughly one night departure a month and only a handful of night arrivals (generating quieter noise levels than departures). Therefore, it is very possible there would be no appreciable change to nighttime awakenings and that there is no scientifically defensible method to calculate what the comment requests. Based on this explanation, no change made.
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Additional Methodology Recommendations (pages 2-3 of EPA's enclosed detailed comments), Cont'd Errors in tables: The numbers in Table CA3.1-10 for households in the 80-85 dB contour don't match the text directly above the table. In Table 4-9 of the FAT Noise Study <i>Classroom Speech Interfering Events per School Day Hour in the Vicinity of FAT</i> it appears that the change from existing conditions in parentheses is not accurately represented. We recommend checking all associated tables for accuracy.	Yes, looks like a sentence of the text above Table CA3.1-10 transposed the wording slightly, which has been corrected to match the results as presented in the table. The error in the Fresno Yosemite International Airport (FAT) noise study classroom tables is due to pasting values in the existing conditions columns in incorrect rows. The results for proposed actions and relative changes in this table and the EIS are accurate as is. This table and others were reviewed.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Environmental Justice (pages 3-4 of EPAs enclosed detailed comments) "The DEIS acknowledges disproportionate effects to low-income and minority populations, stating that for FAT, 26% of the individuals in the area under the noise contours are low-income and 80% are minority. The EPA provided a training on the use of EJScreen to the Air Force/ANG and contractor staff working on this project on October 24, 2022, but it does not appear this tool was used since our approximation of the population under the noise contours at FAT indicates approximately 52% are low- income. Nevertheless, we appreciate the acknowledgement in the DEIS of disproportionate impacts to communities with environmental justice concerns and note the possibility that impacts to low-income households may be higher. The DEIS also acknowledges disproportionate impacts to children and the elderly around BAF (p. MA-86). EO 14096 Revitalizing Our Nation's Commitment to Environmental Justice for All (4/25/23) states that "advancing environmental justice can successfully occur only through meaningful engagement and collaboration with underserved and overburdened communities to address the adverse conditions they experience and ensure they do not face additional disproportionate burdens or underinvestment" (emphasis ours). The outreach that occurred for the project, as documented in the Scoping Report (Appendix A4), describes standard outreach that might occur for a typical project but does not represent an effort that could be characterized as meaningful engagement in the context of significant disproportionate impacts. Because of the significance of noise impacts that may be unmitigable, especially for homes already sound-insulated, it is vital that the Air Force/ANG ensure the local community is made aware of the proposed action and its impacts and to solicit the knowledge gained from those already experiencing elevated noise impacts. Meaningful public involvement is a process that proactively seeks full representation from the community, consider	EO 14096 specifies that NEPA process "Sec 3 (ix) (C) provides opportunities for early and meaningful involvement in the environmental review process by communities with environmental justice concerns potentially affected by a proposed action, including when establishing or revising agency procedures under NEPA;" While the spirit of EO 14096 is to ensure consideration of and communication with "over-burdened" communities in federal government activities, the DoD has not issued specific guidance related to the addressing EO 14096 and NEPA analysis. The DoD published an Equity Action Plan in April 2022 (one year before EO 14096 was issued) that identifies barriers for disadvantaged communities and two actions to address them: 1) evaluate which communities may be experiencing negative environmental, health, or economic effects, due to proximity to DoD testing sites, bases, or munitions sites, and 2) invest in mitigating those effects and advancing equitable outcomes for those communities." In following DoD guidance and EO, the following activities have been completed: Fact Sheets #2 through #6 are being distributed to all addresses (i.e., residences, businesses, etc.) that fall within the 65 dB noise contours projected for this action, resulting in over 50,000 Fact Sheets being distributed. (Fact Sheet #1 pre-dated the development of noise contours.) Regarding the recommendation to "consider discussions with key community leaders and stakeholder representatives, parent's organizations, and existing ongoing groups and committees by providing project briefings, information on the City of Fresno's Sound Mitigation Acoustic Remedy Treatment Program" Individuals may contact the city of Fresno directly at Elodia Cavazos via email at elodia.cavazo@fresno.gov and may review program information on the Internet at <u>https://flyfresno.com/noise-</u>

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		the agency and community to build strong relationships, and increases the likelihood that plans will be accepted. Most importantly, it provides first-hand information about community- specific issues and concerns that might otherwise be unknown. In the case of noise, community engagement itself can be somewhat mitigating in that, as DoD notes, advance notification of significant noise events to the public seems to lessen annoyance. This is consistent with the information in Table B-3: <i>Non-Acoustic</i> <i>Variables Influencing Aircraft Noise Annoyance</i> which include various emotional variables that affect annoyance. Recommendation: We strongly recommend the Air Force/ANG engage in focused and enhanced outreach to the neighboring community before the FEIS is published, consistent with E.O. 14096. Consider discussions with key community leaders and stakeholder representatives, parent's organizations, and existing ongoing groups and committees by providing project briefings, information on the City of Fresno's Sound Mitigation Acoustic Remedy Treatment Program and the DoD Community Noise Mitigation program, and to distribute information on remedies that homeowners themselves can pursue. Indicate whether renters, which comprise roughly half the low-income and minority population south of BAF, are less likely to receive benefit from available noise mitigation funding opportunities for sound insulation. Document the process for meaningful community engagement in the FEIS, including feedback received and how it was incorporated."	program/#:~:text=The%20SMART%20Program%20is%20a, 75dB%20CNEL%20contours%20around%20FAT to learn about FAT's sound insulation program. Regarding the recommendation to "indicate whether renters, which comprise roughly half the low-income and minority population south of BAF, are less likely to receive benefit from available noise mitigation funding opportunities for sound insulation", it is important to note airport authorities implement sound insulation programs in phases, based on noise contours and a determination of interior noise levels. Meaning noise sensitive properties in DNL 75 dB or greater noise contours experiencing interior noise levels above 45 dB, followed by noise sensitive properties in DNL 65 to 74 dB noise contours experiencing interior noise levels above 45 dB. It is also important to note that when an airport authority voluntarily develops a noise compatibility program and recommends measures to mitigate aviation noise, including implementation of sound insulation programs, the FAA approval of an airport noise compatibility program does not constitute decisions to implement the recommended measures and they do not constitute a commitment by FAA to provide federal financial assistance to the airport authority for the implementation of the recommended measures. FAA also does not provide financial assistance directly to individual property owners or their tenants.
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9	Schools and Impacts to Children's Learning (pages 4-5 of EPA's enclosed detailed comments). "We appreciate that the DEIS discloses that noise impacts would fall disproportionately on children at BAF and FAT. The evidence for noise impacting children's learning is robust and well documented. While the associated noise study states that "a noisy environment can adversely affect and interfere with classroom learning" (emphasis ours), it downplays this serious impact on our most vulnerable	Both in-person and virtual public scoping meeting and public hearings were held at all locations during the course of the project. Opportunities to submit comments were plentiful, and over 50,000 Fact Sheets have been distributed to those residences and businesses within the projected noise contours, thusly providing information and opportunity for

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		population. The most useful information regarding noise impacts to children's learning is in the Noise Appendix, Section B.2.8, but is generic and not applied to the data generated in the noise modeling to present the specific predicted effects from the project. The appendix states that there is a "potential link between aircraft noise and both reading comprehension and learning motivation" (p. B-32) and describes such effects as "small". The studies discussed subsequently describe lower reading scores, lower ability to solve difficult puzzles and more likely to give up trying, and impaired reading comprehension and recognition memory. Parents may not perceive these effects (e.g., "below average reading scores") as small. The DEIS predicts the number of schools that will have increased speech interference events per hour and the number of minutes where speech would be obscured. We appreciate the use of the metrics Time Above (TA) and Number Above (NA) to better convey impacts than DNL alone; however, the results do not effectively translate these numbers to real-world effects that would be useful to parents and school administrators. For example, how would children's learning be affected for a classroom that currently has one speech interfering event per hour but would have five speech interfering events per hour under the F-15EX proposal at FAT? How much is the existing noise affecting the school day at nearby schools, such that doubling interference events from one to two per hour, which would occur at many schools around FAT and BAF, could substantially affect learning? The Summary of Impacts section on p. CA-48 states that "existing F-15C and civil jet operations at FAT already create interfering events at many of these schools, so replacing the F-15C with the F-15EX that generates greater noise levels would not significantly change the amount of time of disruption during the school day, but instead would cause each military jet interfering event to be louder by several decibels"; however, much of the predi	 public inquiry and engagement into the proposed action and NEPA process. Though it is possible that operations could increase by 81% at FAT, this is the maximum number of operations and that level of flying activity may never be achieved. With that said, should it be achieved, take-offs and landings are typically grouped together such that if it's currently 6 aircraft taking off at 11:00 a.m. (for instance), in the future it might be 10 aircraft taking off at, or around that time. Thus, the number of times that there are interruptions is not likely to change substantially. When compared with the No Action alternative at BAF, the number of speech interfering events during the school day would be projected to increase by 1 event per average hour at 2 schools with the F-15EX basing, and increase by 1 event at 3 schools, while decreasing by 1 event at 3 schools, with the F-35A basing. When compared with the No Action alternative at FAT, the number of speech interfering events during the school day would be projected to increase by 1 event at 3 schools, with the F-15EX basing, and increase hour at 4 schools with the F-15EX basing, and the F-35A basing is not an alternative at FAT. Existing F-15C and civil jet operations at BAF and FAT already create interfering events at many of these schools, so replacing the F-15C with the F-15EX or F-35A that generate greater noise levels would not significantly change the amount of time of disruption during the school day, but instead would cause each military jet interfering event to be louder by several decibels.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		operations; as such, the summary statement above should be revisited. It is important that information on the effects from noise on day- to-day living be discussed in the EIS proper, as many reviewers may not read the appendices and supplemental noise reports. Recommendation Present additional information in the FEIS proper and executive summary that uses plain language to convey impacts on children's learning, as suggested above. Because of the significant impacts on children's learning, consultation with school administrators is warranted to obtain information that could better characterize school learning impacts, to provide mitigation resources to the schools, and to explore strategies that could potentially alleviate the noise effects. Information obtained from consulting school administrators and educators could include which schools are already fully noise-insulated versus those that could be eligible for new or additional noise insulation, and information on whether schools have air conditioners so that windows are likely to be closed in hot weather, which could present a possible mitigation strategy. Consultation with schools could also explore whether coordination of schedules to avoid having children outdoors during the highest noise levels is possible. Because of the importance of protecting children, we recommend this consultation occur prior to the FEIS so that the FEIS can document feedback received and if/how it was incorporated, as applicable.	
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	<i>Mitigation for Noise (pages 6-7 of EPA's enclosed detailed comments)</i> It is important to fully explore all possible mitigation since so many additional individuals would experience significant noise impacts considered incompatible with residential land use (almost 5,600 people at FAT and 780 at BAF). The DEIS states that mitigation measures are built or designed into the actions, the existing FAA-required best practices to reduce noise would continue to the best extent possible, and further noise mitigation measures have been identified beyond the best practices mentioned; but following publication of the Record of Decision (ROD), a mitigation plan will	Operational (at the source) mitigations have been discussed in the EIS; these are functionally BMPs such as: limiting takeoffs/landings during evening/nighttime; selecting flight tracks that minimize impacts from noise; runway use, etc. The local units at these locations already institute SOP/BMPs to mitigate noise 'at the source,' and these have been added in Section 2.6, Mitigation Measures. The EIS discusses operational (at the source) mitigations, such as limiting takeoffs/landings during evening/nighttime; selecting flight tracks that minimize impacts from noise; runway use, etc. Through the Consolidated Appropriations

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		be prepared in accordance with 32 CFR 989.22(d) that will address any specific mitigations identified and agreed to during this environmental process (p. 2-46). We have concerns that mitigation would not be identified until after the ROD is published. It is important to discuss mitigation in the impact assessment, as "a reasonably complete discussion of possible mitigation measures is an important ingredient of an EIS" and mitigation should be "discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated." Guidance from the Council on Environmental Quality (CEQ) states that the EIS should identify the full spectrum of mitigation, regardless of whether it is implemented by the lead agency. FAT airport representatives participated in the public meetings to discuss the FAA Part 150 sound insulation program, but the DEIS does not discuss this mitigation. The most information provided is a reference to the City of Fresno's Sound Mitigation Acoustic Remedy Treatment Program (p. CA-76) which manages noise mitigation measures (such as sound insulation and land acquisition of residential properties). Thus, the DEIS does not provide information to residents on whether new or additional sound- insulation mitigation funding might be available for them to reduce the negative effects of high noise levels to protect their families. We note that the 2022 Noise Exposure Map for FAT identifies many properties that are already insulated. As mentioned, renters may not have the same sound insulation opportunities. We are aware of the new DoD Community Noise Mitigation program through the Office of Local Defense Community Cooperation to fund off-base improvements that support the military mission, but there is no mention of this program and it is unclear whether the City of Fresno or another entity could apply for its funding for noise insulation. There may be other mitigation suggestions from those individuals that currently experience the most noise impacts. Options for scheduling, advanced n	Act, 2022, (P.L. 117-103), the Office of the Secretary of Defense's (OSD's) Office of Local Defense Community Cooperation (OLDCC) has been authorized to administer a grant program for attenuating off-base noise impacts from fixed wing military aircraft. The OLDCC's Community Noise Mitigation Program, has made funding available for State and local governments and Indian Tribes to provide noise mitigation at covered facilities within one mile of a military installation or another location at which military aircraft are stationed or within an area experiencing a day- night average sound level of 65 dB or greater due to military fixed-wing aviation noise. Since the publication of the draft EIS, OLDCC has issued a Notice of Funding Opportunity; requiring grant proposals under this program to be submitted by 22 October 2024. As such, the Community Noise Mitigation program may not be available as a potential strategy to attenuate noise. Information on the program is available through the OLDCC Community Noise Program website (https://oldcc.gov). Regarding the suggestion to provide information on whether new or additional sound-insulation mitigation funding might be available and the likelihood that noise-proofing or residential land acquisitions could occur, the FAA does not provide funding directly to individual property owners and the identification of recommended measures in an airport noise compatibility program does not constitute a commitment by the FAA to provide financial assistance to the airport authority for remedial noise mitigation, such as sound insulation treatment and land acquisition. Regarding the suggestion to explain how to navigate sound insulation programs for the civil airport locations, FAT and BAF, individuals may contact the airports directly to obtain information about their sound insulation program, including their processes for determining eligibility for and the

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		Recommendations: Provide a complete list of potential noise mitigations, gathered in consultation with the most affected communities, in the FEIS. Work with the FAT and City of Fresno to provide information, in the FEIS and in outreach materials, on how the public can navigate the City's Sound Mitigation Acoustic Remedy Treatment Program process, and the likelihood that noise-proofing or residential land acquisitions could occur. 16 Specifically address remedies for the four households near FAT that would experience 75 to 80 dB CNEL (p. CA-35) which is a level that is not recommended for residential land use even with noise level reduction from sound-insulation (Table 3.6-1). Discuss DoD's new noise mitigation program and its applicability to the project. Identify other potential mitigation that was suggested by the public in additional targeted outreach. Ensure all relevant, reasonable mitigation measures, including those built into the projects at FAT, BAF and Naval Air Station Joint Reserve Base (NAS JRB) New Orleans, are identified so that this compilation can be referenced in the ROD per 1505.2(a)(3), which requires the Air Force/ANG to state whether all practicable means to avoid or minimize environmental harm from the selected alternative have been adopted, and per the Air Force's mitigation requirements at 32 CFR 989.22.	 installation of sound insulation OR to find out when this information about their sound insulation program will be available to them. For the city of Fresno, individuals may contact Elodia Cavazos via email at <u>elodia.cavazos@fresno.gov</u> and may review program information on the Internet at <u>https://flyfresno.com/noise-program/#:~:text=The%20SMART%20Program%20is%20a, 75dB%20CNEL%20contours%20around%20FAT.</u> For the city of Westfield, individuals may contact Mr. Willenborg via email at <u>cwillenborg@barnesairport.com</u> and may review program information on the Internet at <u>https://www.cityofwestfield.org/849/Airport-Documents.</u>
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Purpose and Need and Alternatives The DEIS does not appear to include all elements of the project in the purpose and need statement. For example, the proposed action includes three additional aircraft for each site (e.g., increasing from 18 F-15C to 21 F-15EX or F-35A) and states that these additional aircraft are to support the homeland security mission (p. 2-2) which is not explained. It also does not explain the much higher annual flying hour program that is proposed (BAF: 67% increase; FAT: 81% increase; NAS JRB: 107% increase) in relation to the purpose and need. The DEIS states only that the analysis would use the maximum annual flying hours of 250 per aircraft. It is largely the increase in operations that is driving the high noise levels predicted. We understand the analysis in the DEIS is a worst-case scenario and	Historically, the average number of flying hours per F- 15C/D aircraft met or exceeded the Program of Record (POR) of 250 hours/year, though due to increasing maintenance issues with the fleet, the ANG was unable to maintain these training annual hours. Fleet data was available for 2001–2020, indicating that average annual hours per aircraft exceeded the POR from at least 2001–2004 (and likely before 2001), and dropped from a high of 263 to a low of 104 in concert with aircraft age and accumulated hours. This reduction in training capability impacted the ANG's readiness to support critical missions. Though there is an increased reliance on training in simulators, it is imperative that the POR be retained as the proposed action

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		flying time may not reach these levels; however, establishing boundaries for the protection of vulnerable communities and children is appropriate and should be fully explored. We note that the DEIS evaluated the Legacy Aircraft Alternative indicating that reduced operations could meet the purpose and need under certain conditions. We understand that pilots flying the F-15EX and F-35A would use ground-based flight simulators extensively (p. 2-2) and that new and modified simulator facilities are proposed for the locations. <i>Recommendations:</i> Provide additional information in the purpose and need regarding the increased number of aircraft and necessity of including the maximum flying hours in the proposed actions to meet training needs. Discuss whether an additional alternative with smaller increases in flying hours could meet the purpose and need and if so, we recommend evaluating this alternative in the FEIS. Indicate whether further increases in simulation could decrease flying hours for BAF and FAT, where children and vulnerable populations will bear the burden of noise impacts.	to sustain mission readiness to ensure that pilots train as they would fight, if necessary.
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	PFAS-Contamination Most of the proposed facilities at BAF are located in an area of existing/potential per- and polyfluoroalkyl substances (PFAS) release (Figure MA3.11-6), and 13 of the construction and modification projects overlap with the large PFAS groundwater plume underlying the majority of the 104th Fighter Wing installation (Figures MA3.11-2 and MA3.11-6). At FAT, several proposed facilities under both locational scenarios 1 and 2 overlap areas identified as being potential sources of PFAS. These sites have not been fully characterized, but PFAS contamination has been identified in soil and groundwater. At NAS JRB, several building renovations are in PFAS-contaminated areas (Figure LA3.11-4). The DEIS states that if contaminated soil or groundwater are encountered during site preparation (e.g.,clearing, grading) or site development (e.g., excavation or potential construction dewatering for installation of building footers) for proposed construction activities, "work would cease until [104 FW, 144 FW or 159 FW]	The following has been added to Section 3.12.1.4 of the EIS: When addressing PFAS under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), DoD uses and includes all applicable and relevant regulations that protect human health and the environment for site conditions. Disposition and/or disposal of PFAS materials is determined on a case-by-case basis, consistent with the Office of the Secretary of Defense (OSD) policy memo <i>Interim Guidance on Destruction or Disposal</i> <i>of Materials Containing Per- and Polyfluoroalkyl</i> <i>Substances in the United States</i> . Consistent with EPA guidance, DoD has identified the following four commercially available options to destroy or dispose of DoD PFAS-containing materials, in the order of consideration:

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		Program Managers establish an appropriate course of action, to ensure that federal and state agency notification requirements are met, and to arrange for agency consultation as necessary" (p. CA- 146, MA-166, LA-140). It is not clear how PFAS contamination would be identified in the field, since its presence is not apparent to the senses, and techniques for rapid on-site detection of PFAS in the environment, such as through particle-induced gamma emission, are not widespread. Additionally, since encountering PFAS contamination for these areas appears highly likely based on the information in the DEIS, a more developed plan than to simply stop work and then determine what to do, appears to be needed. <i>Recommendations:</i> Prior to any earth movement, conduct testing in all PFAS source areas where construction is planned. Knowledge of PFAS presence is needed if materials will be moved, as the receiving location could become a new source. Indicate whether any material will be reused on site. Discuss in the FEIS where and how PFAS-contaminated materials will be identified, managed and disposed. If off-site disposal is possible, we recommend exploring availability of disposal sites. While some facilities do take PFAS- contaminated material, they may have restrictions. Discuss how contaminated groundwater encountered during construction would be managed, treated and disposed. Construction and demolition contractors would be responsible for ensuring their workers follow appropriate health and safety requirements (p. CA-146, MA-166, LA-140). Since inhalation is an exposure pathway for PFAS in soils, we recommend the Air Force/ANG consider dust monitoring and requiring contractors to establish worker health protections for dust inhalation.	 Carbon reactivation units with environmental permits (for used granular activated carbon only). Hazardous waste landfills with environmental permits that have composite liners, and gas and leachate collection and treatment systems. Hazardous waste incinerators with environmental permits. Hazardous waste incinerators with environmental permits. This OSD policy contains a decision tree applied to individual cases that considers availability, protective controls, ways to reduce the volume of materials requiring disposal, and costs of current disposal and destruction options, as well as the type of PFAS materials to guide the choice of option. Additionally, the OSD policy memo <i>Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program</i> directs DoD components to: "evaluate the data gathered during Preliminary Assessments/Site Inspections and Remedial Investigations and assess where an interim action can be taken to mitigate further PFAS plume migration or ongoing impacts to groundwater, surface water, and/or sediment, from an on- base PFAS source area. The DoD Components are further directed to prioritize implementation of interim actions as expeditiously as possible to address PFAS under CERCLA, such as removal of soil or sediment "hot spots" and installation of groundwater extraction systems, where supported by site-specific information."
			https://www.acq.osd.mil/eie/eer/ecc/pfas/tf/policies.html

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Water Resources <i>Floodplains, Hydrology, and Low Impact Development</i> Maintaining floodplains are of increasing importance. The U.S. is experiencing increased flooding and flood risk from climate change through more extreme rainfall events caused by a warmer atmosphere holding more water vapor, changes in regional precipitation patterns, and from sea-level rise. The DEIS identifies EO 13690 and states that "the floodplain (elevation) would be established using one of the following approaches outlined in EO 13690: climate-informed science approach; freeboard value approach; 0.2-percent-annual-chance flood approach; or any other method identified in an update to the Federal Flood Risk Management Standard" (p. 3-39). We appreciate the DEIS referencing the FFRMS, which aims to increase the resilience of projects by incorporating anticipated changes in future flood risk to ensure that those projects last as long as intended. The DEIS does not indicate how the development of new facilities will comply with the FFRMS. This is especially important for NAS JRB New Orleans, where several of the proposed construction and modification projects, as described in Table LA2.1-3, are within the 100-year floodplain (p. LA-102). The DEIS states that in compliance with the current building codes in the State of Louisiana, all new construction or substantially improved buildings within the 100-year floodplain would have the lowest floor elevated at least 1-foot above the 100-year flood elevation; however the FFRMS specifies a freeboard approach that, if used, would need to add an additional 2 feet to the base flood elevation for critical actions.17 We note that the Federal Emergency Management Agency's preferred approach is the climate informed science approach (CISA); for areas vulnerable to coastal flood hazards, the CISA includes consideration of the regional sea-level rise variability and lifecycle of the federal action. For FAT, there is at least one new facility in the 500-year floodplain (p. CA	Have added text in Sections CA3.7.2.1, and LA3.7.2.1 to address construction requirements for those buildings located within the 100-year floodplain (Naval Air Station Joint Reserve Base [NAS JRB] New Orleans) and additional text about buildings in the 500-year floodplain (FAT), noting that the design would adhere to one of the three options outlined in Federal Flood Risk Management Standard (FFRMS) to determine the flood elevation. Additional text has been added to note the resizing of stormwater management systems to accommodate additional runoff.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		FFRMS. Where floodplain development would occur, identify impacts from this development. The DEIS states that because a Finding of No Practicable Alternative to floodplain development would be prepared, impacts to floodplains are less than significant; however, preparing a FONPA does not eliminate the need to identify impacts under NEPA. The DEIS did not demonstrate how floodplain impacts, such as loss of floodplain capacity would be prevented, nor identify consequences of floodplain development considering predicted precipitation extremes. Regarding stormwater management, since all locations involve large increases in impervious surfaces, stormwater management systems must be sized to accommodate the increased precipitation frequency, intensity, and associated flooding being experienced under climate change. The DEIS commits to using Low Impact Development (LID) techniques to maintain the pre-development hydrology on the development sites. While the specific LID design may occur in a later phase, it is necessary to identify which specific LID concepts are likely to be used on the sites, especially for areas located in floodplains, so their effectiveness can be assessed. We note that site designs must allocate sufficient space for these LID features in site planning. <i>Recommendations:</i> In the FEIS, indicate how the new developments would comply with the FFRMS. Discuss how floodplain development would impact floodwaters though loss of floodplain development hydrology in the context of large increases in impervious surfaces. We recommend upsizing stormwater management systems to accommodate increased precipitation intensity. If Unified Facilities Criteria are referenced, indicate where stormwater and floodplain issues are specifically addressed and confirm they comport with the FFRMS. Discuss flood vulnerability and identify flood mitigation measures which	

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		are required for reporting pursuant to Air Force/ANG Instruction 32-1023, December 2020, p. 22.	
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	<i>Construction-phase Stormwater NPDES Permitting</i> The DEIS indicates construction activities for the three site locations would comply with the National Pollutant Discharge Elimination Systems (NPDES) Construction General Permit (CGP) and that site specific Stormwater Pollution Prevention Plans would be prepared for each construction project to ensure that runoff would be contained on-site. We appreciate this commitment to ensuring the discharge of sediment, nutrients, and other stormwater pollutants to surface waters are minimized. This is especially important at NAS JRB where sediment has contributed to deterioration of the stormwater conveyance system (p. LA-98). We note that because the overall earth disturbance at the project sites is greater than 1-acre, smaller sites less than 1-acre, including off-site construction support areas (i.e., borrow pits, staging areas, material storage areas, temporary work areas, etc.) that are part of the larger, common plan of development would also require permit coverage. The DEIS states that following construction, disturbed areas not covered with impervious surface <i>could</i> be reestablished with appropriate vegetation and native seed mixtures and managed to minimize future erosion potential (emphasis ours) (p. MA-118, CA- 100, LA-101). <i>Recommendations:</i> Ensure all earth disturbance areas, including off-site areas less than 1-acre supporting project construction, are included in the CGP coverage and receive site protection best management practices. We recommend a commitment to restore disturbed areas with native seeds, as suggested could occur in the DEIS. Include a revegetation monitoring schedule to ensure the revegetated areas are successful over a growing season and to prevent growth of invasive species.	Text has been added to Sections BA3.7.2.1. CA3.7.2.1, and LA3.7.2.1 clarifying that all disturbance areas, including off- site laydown areas less than 1 acre in size, are included in the Construction General Permit. Also, a revegetation monitoring schedule has been added as a BMP.
A003	Vitulano, Karen U.S. Environmental Protection	Climate Change Resiliency We appreciate that the DEIS references CEQ's National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change and states that this	Specific BMPs have been added to Sections BA4.2.3, CA4.2.3, and LA4.2.3 addressing incorporation of resilience into facility design.

Agency, Region interim guidance has been incorporated into this analysis (p. 3-28). 9 The DEIS estimates the social cost of carbon as a way of providing context for a proposed action's GHG emissions and climate effects, consistent with the CEQ guidance; however Section V of the guidance also directs of climate change on a proposed action and assess vulnerabilities and resilience to the effects of climate change such as increasing sea level, drought, high intensity precipitation events, increased fire risk, or ecological change. We identified the concern regarding floodplain development above for the NAS JRB stire; this site will also experience sea level rise, rising groundwater levels, and storm surge from increased storms. All locations will experience more extreme heat days. Heat is a serious climate change the val and storm surge from increased storms. All locations will experience more extreme heat days. Heat is a serious climate effects on the projects and how the Air Force/ANG would incorporate resilience into facility design. In addition to avoiding floodplain development, we recommend heat mitigation strategies be integrated into site plans: * Use cool surfaces and pavements that store less heat than traditional pavements. Heat is lands, areas dominated by hard surfaces and lacking trees and green space, can be more than 20 degrees hotter than nearby areas with trees and grass. * Provide a certain amount of shading through either trees or built shade structures. The use of vegetation cools surrounding areas through evaportanspiration. * Orient buildings with local climate and geographic conditions in mind which can improve numan thermal comfort. On building sides with high solar exposure, improvements such as shade screens, windows on the east <th>Comment Number</th> <th>Last Name, First Name (Organization/ Entity)</th> <th>Comment Summary/Document (verbatim)</th> <th>Department of the Air Force Response</th>	Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
and west sides can help shade and keep the inside of buildings cooler. See also EPA's Adaptation Resource Center for additional		Agency, Region 9 [Comment received via	 context for a proposed action's GHG emissions and climate effects, consistent with the CEQ guidance; however Section V of the guidance also directs agencies to consider the effects of climate change on a proposed action and assess vulnerabilities and resilience to the effects of climate change such as increasing sea level, drought, high intensity precipitation events, increased fire risk, or ecological change. We identified the concern regarding floodplain development above for the NAS JRB site; this site will also experience sea level rise, rising groundwater levels, and storm surge from increased storms. All locations will experience more extreme heat days. Heat is a serious climate change effect that can be fatal. <i>Recommendations:</i> In the FEIS, discuss climate effects on the projects and how the Air Force/ANG would incorporate resilience into facility design. In addition to avoiding floodplain development, we recommend heat mitigation strategies be integrated into site plans: *Use cool surfaces and pavements that store less heat than traditional pavements. Heat islands, areas dominated by hard surfaces and lacking trees and green space, can be more than 20 degrees hotter than nearby areas with trees and grass. *Provide a certain amount of shading through either trees or built shade structures. The use of vegetation cools surrounding areas through evapotranspiration. * Orient buildings with local climate and geographic conditions in mind which can improve natural ventilation, avoid solar heat gain, decrease energy usage, and improve human thermal comfort. On building sides with high solar exposure, improvements such as shade screens, window glazing, and smaller windows on the east and west sides can help shade and keep the inside of buildings 	

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Air Quality Impacts Discussion of Emissions at FAT Existing air quality in the FAT area currently does not meet the health-based National Ambient Air Quality Standard (NAAQS) for ozone (extreme nonattainment) and particulate matter greater than 2.5 microns (PM2.5) (serious nonattainment). For cumulative impacts, the DEIS states that emissions would exceed the de minimis threshold for oxides of nitrogen (NOx) during various years between 2026 and 2030 (p. CA-179) and that the Air Force/ANG will consult with the San Joaquin Air Pollution Control District to confirm these emissions would conform with the SIP. Elsewhere in the DEIS it states that emissions would not exceed the de minimis levels. Regarding construction emissions, Tables 10 and 11 in Appendix D show that construction emissions approach the de minimis level of 10 tons per year (tpy) for NOx for 2026. It appears construction projects may have been scheduled to distribute emissions across years so that emissions would fall below de minimis levels. This is acceptable; however, according to the construction tables in Appendix C, the number of buildings at FAT listed for FY 2024 construction (which the DEIS states equates to calendar year 2025) is similar to those slated for FY 2025 (calendar year 2026) with much lower emissions for 2024 for locational scenario 1. Since the FEIS and ROD are scheduled for late 2024, a review of these timetables for accuracy is warranted. Also, it is not clear whether construction-phase mitigation measures for NOx were included in estimates; we were able to find reference to construction mitigation for dust control only. If mitigation for NOx was assumed in calculating emissions for general conformity purposes, it cannot be optional mitigation but must be incorporated into the project, generally by adding it to the project description or otherwise mandating the mitigation through enforceable provisions. Regarding operational emissions, Appendix D Table 9 shows a net increase of 4.13 tpy of NOx for the F-15EX, which is a 13.5	While the number of buildings listed for fiscal year (FY) 2024 and FY 2025 are similar, the square footage is significantly increased for the projects slated for FY 2025. For example, FY 2024 includes 50,600 square feet (SF) of building construction and 24,050 SF of asphalt surfaces while FY 2025 includes 21,190 SF of building construction and 276,650 SF for asphalt surfaces. Therefore, the estimated emissions vary from year to year, depending on the type and amount of construction. No change made. The construction timetables have been reviewed to ensure they are accurate and match the Appendix C (construction) timetable. CalEEMod version 2020.4.0 was used to estimate the emissions and no mitigation assumptions were input into the model for nitrogen oxides (NOx). For the purpose of estimating emissions, no construction-phase mitigation measures for NOx were assumed. Additional detail has been added to Section CA 3.3.2.1 of the air quality analysis explaining the difference in emissions for F-15C versus F-15EX, to make it clear as to why emissions fell even with an increase in operations.

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
A003	Entity) Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	 6,866 operations per year) with the F-15EX. While we would expect improved efficiency with newer aircraft, there is insufficient information in the DEIS to explain this difference. <i>Recommendation:</i> Review the construction timetables and the associated emissions in Tables 10 and 11 for accuracy. Indicate whether mitigation measures for NOx were included in the emissions calculations and if so, identify them in the project description as mandatory and identify how the Air Force/ANG would ensure implementation. Provide information in the FEIS to explain the minimal changes in operational emissions despite increased numbers of aircraft and 81% increase in operations. Consider including detailed emissions estimate in an appendix. <i>Construction-phase Mitigation</i> As mentioned, the only construction-phase mitigation measures for air quality at FAT regard a dust control plan (PM10), despite the <i>extreme</i> and <i>serious</i> nonattainment designations for ozone and PM2.5, respectively. Because the project would be contributing pollutants in an area with existing degraded air quality at FAT, enforceable construction phase mitigation measures are important, especially since the area northwest of the airfield is above the 80th percentile nationally for asthma prevalence. Since Census tract 8125 near BAF is also above the 80th percentile for asthma prevalence, we recommend mitigation to reduce ozone precursors and PM2.5 be incorporated at that site as well, as feasible. <i>Recommendations:</i> We recommend the following mitigation measures be incorporated into project specifications and contracts. Mobile and Stationary Source Controls *Minimize use, trips, and unnecessary idling of heavy equipment. *Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to	BMPs have been added to Sections MA3.3.2, CA3.3.2, and LA3.3.2 of the Air Quality impacts discussion. These include mobile and stationary source controls such as trip minimization, elimination of unnecessary idling, use of grid- based electricity, etc., and administrative controls such as carpooling, location of staging areas to minimize distance, etc.
		perform at verified standards applicable to retrofit technologies. Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.	

Comment Number Entity	Comment Summary/Document (verbatim)	Department of the Air Force Response
	 *Use grid-based electricity for construction activities, onsite renewable electricity generation, and/or hydrogen for construction activities rather than diesel and/or gasoline generators, to the extent possible. *Deploy Best Available Control Technology (BACT) – Require BACT during construction and operation of projects, employing the cleanest alternatives available, including but not limited to: a) Soliciting bids that include use of energy and fuel-efficient fleets. b) Soliciting preference construction bids that use BACT, particularly those seeking to deploy zero-emission technologies. c) Employing the use of electricity and/or hydrogen. * In general, commit to the best available emissions control technologies for project equipment: o On-Highway Vehicles – On-highway vehicles servicing construction areas should meet or exceed the EPA exhaust emissions standards for model year 2017 and newer light-duty vehicles and model year 2021 and newer heavy-duty vehicles (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.). o Nonroad Vehicles and Equipment – Nonroad vehicles and equipment servicing construction areas should meet or exceed the EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., nonroad trucks, construction equipment, cargo handlers, etc.). Administrative Controls * Reduce the number of commuter vehicles travelling to and from the project site. Include carpooling or transit subsidies. * Plan construction scheduling to minimize vehicle trips and/or nonroad operational hours. *Locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners. *Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow. 	

Comment Number	Last Name, First Name (Organization/ Entity)	Comment Summary/Document (verbatim)	Department of the Air Force Response
		*Identify all commitments to reduce construction emissions, including responsible party and the enforcement instrument that will ensure implementation.	
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	 Errors in DEIS and Appendix D for BAF The DEIS and Appendix D contains some inaccuracies that need correction for the FEIS: * Table 3-3 of Appendix D and page MA-63 of the DEIS refers to BAF as being in a "orphan" maintenance area for the 1997 ozone standard. EPA notes that this area is an "orphan" nonattainment area, as Massachusetts never formally requested to have the area redesignated. We recommend Appendix D be amended to indicate BAF's status as an orphan nonattainment area. *Table 3-3 of Appendix D uses an incorrect de minimus number for NOx at the BAF site. The de minimis tables at 40 CFR 93.153(b) state that the de minimus amount for NOx is 100 tpy, not 50 tpy as is indicated in the DEIS. We recommend Appendix D be amended to BAF. EPA provides de minimis rates at https://www.epa.gov/general-conformity/de-minimis-tables. 	The correction of the BAF orphan designation has been made in Section BA 3.3.1.1. As the area should be correctly identified as a maintenance area, the de minimis threshold to 100 tons per year for NOx has been corrected in Table MA3.3-1 and Section (not Table) 3-3 of Appendix D.
A003	Vitulano, Karen U.S. Environmental Protection Agency, Region 9 [Comment received via email]	Impacts from Special Use Airspace (SUA) The DEIS states that while the legacy F-15C aircraft have strictly an air-to-air mission, it is likely that, with time, the replacement aircraft would operate with their full mission capability which also includes air-to-ground missions and the analysis in the DEIS assumes this (p. 2-2). It is not clear whether impacts from increased ground target use associated with SUA were evaluated or if these increases are within those evaluated in the airspace impact assessments. Recommendation: Since the DEIS assumes air-to-ground mission use of replacement aircraft, discuss impacts from additional munitions discharges to land-based targets in all SUAs.	The analysis assumes that there would be no increase in use of munitions at ranges – even if there is an increase in operations. Munitions are costly, and with the ability to train munitions-release via simulation, it is anticipated that there would be no increase in munition expenditure. Additionally, these units operate as transients on other ranges – and transient use is covered in the respective range planning.

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