



Joint Base San Antonio

Joint Base San Antonio T-7A Recapitalization Draft Environmental Impact Statement Virtual Public Hearing November 16, 2021

Dial-In: 1-408-418-9388 Meeting number: 2491 041 7105#

Meeting Password: T-7ADEISHearing#

Web Link: https://bit.ly/T-7A-DEIS-Hearing

Webex Troubleshooting Assistance: Call (914) 340-4408

Introduction





Joint Base San Antonio

Virtual Public Hearing

Draft Environmental Impact Statement for the T-7A Recapitalization at Joint Base San Antonio

November 16, 2021





Joint Base San Antonio

This Virtual Public Hearing is supported by both phone and online components.

- All audio for the public hearing is supported via phone
- If joining only by phone (basic dial-in) you will hear and be able to make a comment but will not see the presentation
- If dialing in and are joining online via Webex (on your computer or smartphone) you will also be able to see the presentation

If you get disconnected and wish to rejoin:

- Phone: Call 408-418-9388 and enter the Meeting number: 2491 041 7105#
- **Web:** Go online at www.jbsa.T-7ANEPADocuments.com to the "**Get Involved**" page and click the Webex link if you wish to also view the Hearing presentation

Webex Troubleshooting Assistance: Call (914) 340-4408

Tech Talk and Troubleshooting





Joint Base San Antonio

Nolan Swick, Air Force Civil Engineer Center (AFCEC), NEPA Division

AETC T-7A Program Office

AFCEC, Aircraft Noise and Air Quality Specialists

Joint Base San Antonio

HDR and LPES, Contractor Team





Joint Base San Antonio

Air Force Presentation

- Proposed action and alternatives
- Overview of the NEPA process
- Summary of the potential environmental consequences of the proposal
- Discussion of the Department of the Air Force (DAF)'s plans and actions to mitigate and manage any adverse impacts

Formal Draft EIS Verbal Comment Opportunity

- Statements on the record
- Transcribed by Court Reporter





Joint Base San Antonio

- During this Virtual Public Hearing :
 - Follow the teleconference prompts to register to provide a comment
- Mail: Mr. Nolan Swick, AFCEC/CZN

Attn: JBSA T-7A Recapitalization EIS

Headquarters Air Education and Training Command Public Affairs

100 H. East Street, Suite 4; Randolph AFB, TX 78150

- Online on the Project Website: www.jbsa.T-7ANEPADocuments.com
- Comment Form: Available for download on project website



T-X Recapitalization
Environmental Impact Statement



Joint Base San Antonio-Randolph

Home

ibsa.t-7anepadocuments.com

About

Get Involved

Documents

Provide Comments

To ensure timely consideration of your comments in the Final EIS, please submit comments by November 29, 2021.

Providing Comments





Joint Base San Antonio

Joint Base San Antonio-Randolph is home to the U.S. Air Force Air Education and Training Command (AETC).

- AETC Mission: Recruit, Train, and Educate Exceptional Airmen
- AETC Pilot Training: Train on three different types of aircraft: the T-1A Jayhawk, the T-6A Texan, and the T-38C Talon

The T-38C aircraft are approaching the end of their useful life, and student pilots need a more technologically advanced aircraft with which to train. The DAF received Congressional approval and funding to procure newer training aircraft to replace the aging T-38C fleet with greater capabilities that are more compatible with the more modern F-22, F-35, and other 4^{TH} and 5^{TH} generation DAF aircraft





Joint Base San Antonio

Joint Base San Antonio-Randolph designated as the preferred alternative to receive the initial compliment of T-X (now T-7A) aircraft. This was a planning decision, not an action decision, and whether to implement the action is still subject to the NEPA process.

- 350 T-7A aircraft will replace the 422 T-38Cs program-wide (delivery of aircraft will continue through 2034)
- T-7A aircraft will meet fifth-generation fighter training requirements
- Operational considerations limit the enterprise to the five current AETC T-38C installations
- T-7A beddown end state requires approximately the same number of manpower authorizations as currently programmed (1,754)
- Total estimated military construction cost for all locations is \$450M

T-X Strategic Basing Initiative





- Secretary of the Air Force Wilson specified JBSA-Randolph as the preferred alternative for the T-7A recapitalization in her 2018 memo
- Basing the first T-7A aircraft at JBSA-Randolph meets the AETC objectives of optimizing total T-7A training
- Use of this site minimizes transition inefficiencies
- Pilot instructor training occurs at JBSA-Randolph with the largest throughput of instructor pilots
- The base is also the primary Introduction to Fighter Fundamentals location for non-Euro-NATO Joint Jet Pilot Training





Joint Base San Antonio

To implement the initial beddown of the T-7A aircraft and accomplish the recapitalization program at JBSA for T-7A pilot training while better preparing pilots to operate more technologically advanced aircraft.





Joint Base San Antonio

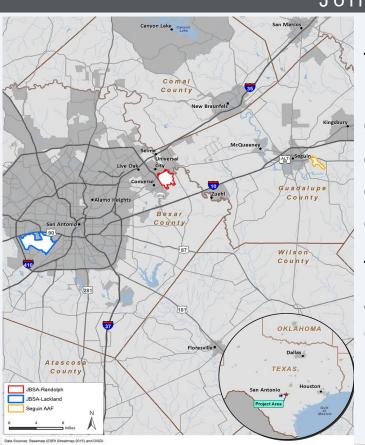
Current training practices with the older T-38C aircraft fail to prepare pilots for the technological advancements of fourth and fifth generation aircraft. Training systems provided with the newer T-7A aircraft allow for enhanced and improved flight and simulator training.

The T-7A recapitalization program will allow DAF to establish a T-7A pilot pipeline that provides more efficient and effective pilot training for operating 4^{TH} and 5^{TH} generation aircraft.





Joint Base San Antonio



The focus of the action occurs at JBSA-Randolph located in the northeast portion of Bexar County. Other local airfields where T-7A operations would occur are Seguin Auxiliary Airfield (AAF) to the east of Randolph, and at Kelly Airfield at JBSA-Lackland on the southwest side of San Antonio.

The aircraft would also use existing training airspace, which is composed of several Military Operating Areas (MOAs), Military Training Routes (MTRs), and restricted airspace over McMullen Range.





Joint Base San Antonio

The DAF has identified the Proposed Action as its Preferred Alternative

- 1. The Proposed Action is T-7A recapitalization at JBSA using 72 T-7A aircraft and sufficient operations to fully meet all T-7A training requirements.
- 2. The T-7A aircraft would be assigned to JBSA-Randolph where primary flight operations would occur. Secondary flight operations would occur at JBSA-Lackland, Seguin AAF, and within the existing designated airspace where T-38C aircraft currently operate.
- 3. The initial delivery and operation of T-7A aircraft would occur in 2023 and the last T-7A would arrive no later than 2028. T-7A aircraft operations would be phased in with both T-38C and T-7A operations occurring simultaneously through 2031.

Overview of the Proposed Action





Joint Base San Antonio

- 4. All flight operations would take place within existing airspace and no additions or alterations of airspace would occur under the Proposed Action.
- 5. T-7A training flights would expand beyond current sunrise to sunset hours and occur in evening, nighttime and possibly early morning hours at JBSA-Randolph and JBSA-Lackland.
- 6. Facility construction and upgrades through six military construction and 13 renovation projects would be implemented and coordinated with T-7A aircraft arrival.

Overview of the Proposed Action





Joint Base San Antonio

- The three action alternatives include a variation of the number of training operations proposed for T-38C/T-7A transition and the proposed steady state at full implementation with all T-38C aircraft phased out and only T-7A aircraft operating
- For each of the three alternatives, the T-7A would perform the same types of operations within the training region of JBSA-Randolph, JBSA-Lackland, and Seguin AAF, as described for the Proposed Action

Overview of Alternatives





Joint Base San Antonio

The AF would phase out T-38C and phase in T-7A aircraft at operational levels that would not exceed the air emission significance indicators for the criteria pollutants under the National Ambient Air Quality Standards.

- The number of aircraft and intensity of operations under this alternative, if selected, would be adequate to meet training and basing requirements through 2026
- Beyond 2026, concurrent actions would need to occur to define the allowable level of future T-7A operations
- JBSA-Randolph would receive up to 56 T-7A aircraft no later than 2028
- The scope of military construction projects would be adjusted as necessary to accommodate the lesser complement of newer aircraft

Alternative 1





Joint Base San Antonio

- JBSA-Randolph would receive 72 T-7A aircraft with all aircraft arriving no later than 2028
- T-7A operations would reach full capacity in 2032
- T-38C operations would conclude in 2031
- Beginning in 2024, T-7A aircraft would perform annual operations at JBSA-Randolph, JBSA-Lackland, and Seguin AAF at an intensity that is approximately 15 percent greater than the Proposed Action

Alternative 2 – 15% Increase in Operations as Compared to the Proposed Action





Joint Base San Antonio

- JBSA-Randolph would receive 72 T-7A aircraft with all aircraft arriving no later than 2028
- T-7A operations would reach full capacity in 2032
- T-38C operations would conclude in 2031
- Beginning in 2024, T-7A aircraft would perform annual operations at JBSA-Randolph, JBSA-Lackland, and Seguin AAF at an intensity that is approximately 25 percent greater than the Proposed Action

Alternative 3 – 25% Increase in Operations as Compared to the Proposed Action 18





- A "No Action Alternative" is considered in the Draft EIS
- The No Action Alternative is required by NEPA regulations and provides a baseline to evaluate the impacts of the Proposed Action
- The No Action Alternatives analysis presents the environmental impacts of not implementing the Proposed Action
- The T-7A program will be implemented whether or not the No Action Alternative is selected
- If the No Action Alternative is selected, the T-7A strategic basing decision will be reconsidered to implement all or a portion of the basing requirements proposed for JBSA-Randolph at an undetermined location





Joint Base San Antonio

- The Draft EIS has been prepared in accordance with NEPA regulations
- Federal agencies must analyze potential impacts of proposed actions,
 reasonable alternatives, and a no action alternative, before action is taken
- The goal is to support sound decisions through the assessment of impacts and involve the public in the EIS process
- The results of this analysis and other relevant factors will be considered before the DAF makes a decision on this proposal

Your input during the public scoping period earlier in the NEPA process and this public comment period will help the DAF decision-maker make the most informed decision possible on this proposal.

NEPA





Joint Base San Antonio

We are currently at the Draft EIS review stage

- Federal Register publication of the Notice of Availability (NOA) for the Draft EIS occurred on October 15, 2021
- Copies of the Draft EIS were mailed to local libraries, federal and state representatives, and individuals who requested copies during the EIS Scoping period
- The review period required by NEPA is 45 days. Our date for completion of the public review period is November 29, 2021

The EIS Timeline





Joint Base San Antonio

- After the public review period closes, DAF will:
 - review all comments received tonight, through the mail, or electronically on our web site, and consider them in preparing the Final EIS
 - respond to substantive comments in the Final EIS

(Substantive comments offer information regarding the alternatives or are relative to the assessment of impacts or NEPA process.)

- Final EIS is scheduled to be released in Spring 2022.
- After the Final EIS NOA is published in the Federal Register, a waiting period of at least 30 days is observed before DAF signs the Record of Decision to document actions selected to implement

The EIS Timeline





Joint Base San Antonio

Resource areas analyzed in detail for potential environmental impacts include:

- Air Quality
- Noise
- Biological Resources
- Cultural Resources
- Land Use

- Hazardous Materials and Waste
- Infrastructure and Transportation
- Safety
- Water Resources
- Environmental Justice

Resources determined to have negligible effects and not analyzed in detail within the Draft EIS include:

Airspace

Geological Resources

Socioeconomics





Joint Base San Antonio

- The T-7A is still in production mode and undergoing testing with the manufacturer
- T-7A has not been tested for normal training operations by the DAF
- Much is still unknown about precise settings to be used for training with the new aircraft
- Flight parameters will not be defined until the T-7A training is initiated in the local area
- In order to proceed with analysis and identification of potential environmental impacts, the following assumptions were used to complete modeling of aircraft noise and emissions:
 - The same flight paths and patterns would be used for the T-7A as used by the T-38C
 - The same types of training operations would occur although the alternatives propose differing tempos or numbers of operations
 - The same training airspace would be used with no change in size or altitudes
 - The same power settings currently applied by pilots for the T-38C would be used for the T-7A

As more data on the T-7A is learned, the DAF will continue to collect input, revise assumptions, and apply an Adaptive Management strategy for the Proposed Action.

Unknown Data and Assumptions Made





Joint Base San Antonio

- DAF has determined that air quality and noise impacts are significant
- DAF will mitigate impacts through an adaptive management strategy
 - ❖ The magnitude of impacts may be refined (if substantially different from the current best available information) once the T-7A is received into the DAF inventory and engaged in the training curriculum
- Adaptive management will incorporate the following approaches:
 - Noise modeling will be used to understand the potential effects of policies, activities, or practices considered in implementing the T-7A ramp-up to operational capability
 - Management and oversight activities reveal, through monitoring and evaluation of results, the accuracy or completeness of the earlier predictions. Adaptations can be developed to eliminate or reduce effects

Adaptive Management





- The proposed construction or renovation of facilities at JBSA-Randolph is not anticipated to have significant impacts on any of the resources
- Aircraft operations for the T-7A would have significant impacts on air quality under the Proposed Action and Alternatives 2 and 3
- Noise impacts associated with T-7A flight operations would be significant under the Proposed Action as well as Alternatives 1, 2, and 3 as currently projected
- DAF will continue to explore additional adaptive management strategies and mitigation measures to reduce aircraft noise impacts





- Ozone levels in Bexar County exceed EPA and State of Texas air quality standards
- Bexar County is designated as a non-attainment status
- New actions must demonstrate proposed construction & operations emissions for nitrogen oxides (NOx) and volatile organic compounds (VOC) less than 100 tpy
- The VOC emissions for the T-7A have been calculated to be less than 100 tpy
- The T-7A engine emissions below the 3,000-foot altitude for mixing levels will result in NOx levels greater than the significance indicator of 100 tpy for the Proposed Action and Alternatives 2 and 3 beginning in the year 2027
- Alternative 1 aircraft operation numbers would keep the NOx emissions below the 100 ton per year limit and would not have a significant impact to air quality





Joint Base San Antonio

For the Proposed Action and all alternatives:

- Most aircraft operations within local training airspace of MOAs and MTRs occur above the 3,000-foot altitude
- The number of operations below 3,000 feet would not significantly affect the air quality of the counties over which those operations would occur (excluding Bexar County)





Joint Base San Antonio

- Preferred Alternative is the Proposed Action; however, NOx emissions exceed 100 tpy
- Multi-option strategy to mitigate the significant direct impact due to aircraft emissions

Strategy #1 – Evaluate the feasibility of obtaining Early Emission Reduction Credits (Early ERCs)

- State approved credits earned from a specific Federal facility for emission reduction efforts that are both legally enforceable and permanent and can be used to offset action-related emissions
- Early ERCs are banked and only used by the Federal facility that earned them
- JBSA is implementing an Energy Savings Performance Contract with approximately 27 tons of Early ERC credits. If applied and approved, this may allow a greater number of operations to occur than currently shown in Alternative 1





Joint Base San Antonio

Strategy #2 - Develop an Adaptive Management Plan

- Would further analyze if and how air quality impacts could be decreased through a change in aircraft operational parameters
- Current emission calculations are based on a T-38C syllabus, power settings, and flight profile (including 100% use of afterburner for take-offs)
- As the DAF brings the new aircraft into the inventory and begins to fly specific training operations at JBSA-Randolph, new information about aircraft performance may be learned and applied for additional analysis and refinement of approximated impacts





- Noise levels during construction of the proposed facilities are greater; however, increases in noise would be temporary and mostly within the JBSA-Randolph industrial area
- Aircraft noise levels within the local communities over which training occurs would increase each year between 2023 and 2032
- At full implementation of the Proposed Action or Alternatives 1, 2, or 3, aircraft noise around JBSA-Randolph and Seguin AAF would be much greater than current levels
- Based on the model input of # of T-7A operations and use of T-38C flight parameters
- Figures of modeled footprints and calculated data for each alternative provided in EIS
- EIS includes results for speech interference, sleep disturbance, and classroom interruption in nearby locations



(within 65+ DNL)

Existing

T-7A Recapitalization Environmental Impact Statement



Alternative 2

Alternative 3

			A 1	
Joint	Base	San	Anto	nıo
	Dasc	Can	, , , , , , ,	1110

Alternative 1

Proposed

Action

		Action			
JBSA-Randolph					
Aircraft Noise Footprint (within 65+ DNL)	5,148 acres	48,861 acres	37,497 acres	51,775 acres	58,065 acres
Population (within 65+ DNL)	5,936	61,930	49,768	64,788	66,637
Seguin AAF					
Aircraft Noise Footprint (Within 65+ DNL)	2,826 acres	11,940 acres	10,626 acres	12,938 acres	13,481 acres
Population	587	2,862	2,229	3,261	3,329

Noise



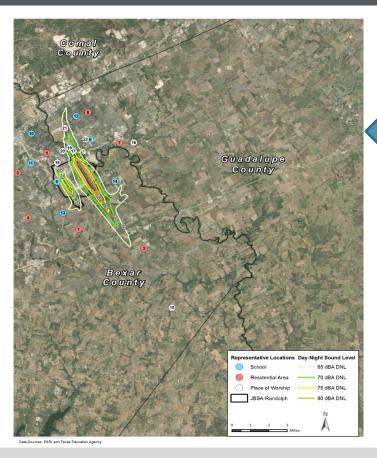


- Because the T-7A is new, DAF has some unknowns about the operation of the aircraft
- DAF will learn more about the T-7A training scenario once it begins use at JBSA-Randolph
- A mitigation scenario to reduce afterburner use at takeoff from 100% to 5% has been modeled (a comparison of contours is provided on following slides)
- The area affected by aircraft noise in the 65 dB DNL and higher contours for the reduced afterburner scenario is calculated at 15,103 acres - about one-third of the acreage of the Proposed Action using 100% afterburner
- DAF will continue to explore additional adaptive management strategies and mitigation measures to further reduce aircraft noise impacts



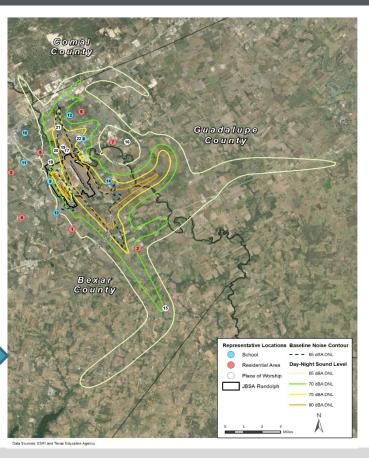


Joint Base San Antonio



Existing Noise Footprint

Proposed Action

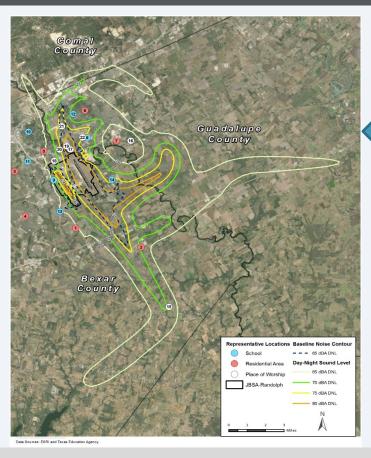


Noise – Existing Conditions vs Proposed Action



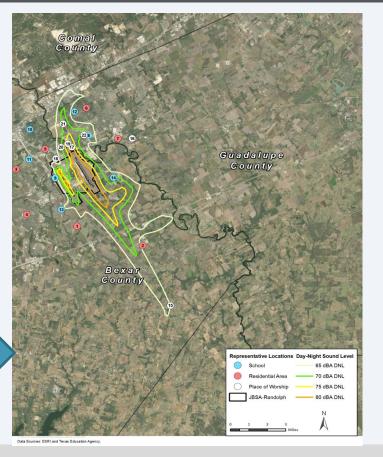


Joint Base San Antonio



Proposed Action

Reduced Afterburner

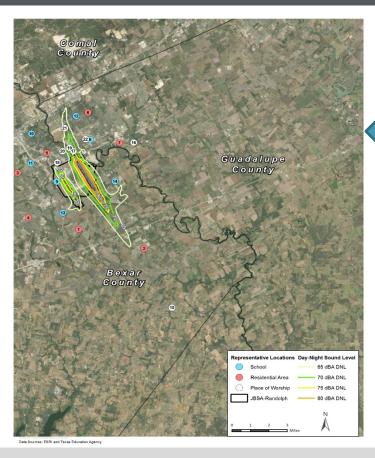


Noise – Proposed Action vs Reduced Afterburner



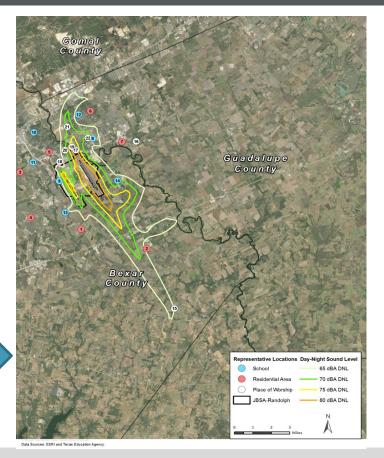


Joint Base San Antonio



Existing Noise Footprint

Reduced Afterburner



Noise – Existing Conditions vs Reduced Afterburner





- The biological resource impacts are evaluated with a specific look at vegetation, wildlife, and special status species
- The Proposed Action and the 3 alternatives have the same level of impact to vegetation. This would involve the temporary or permanent removal of some vegetation for construction of new facilities and the impacts would be negligible
- Wildlife impacts due to construction would be negligible
- Long-term impacts to wildlife from the increased aircraft operations (including the expanded hours of flying to include evening and nighttime operations) would increase the potential for bird or wildlife strikes with aircraft and bat strikes
- No effect would be expected on any of the 44 federally listed species on any of the installations or airspace areas





- Architectural surveys identified several historic properties, including the Randolph Field National Historic Landmark District (NHLD)
- 10 military construction and renovation projects have the potential to impact cultural resources because they are located within the Randolph Field NHLD
 - 6 projects would occur within the interior of buildings located in the NHLD (with no impact to character-defining interior features) and would have no effect on contributing resources within the district or the NHLD itself
 - 4 projects would include exterior alteration to one NHLD-contributing hangar, repainting of the taxi lanes, and the construction of the Ground Based Training System and Maintenance Training System facilities
- DAF has determined that all of these projects would have "no adverse effect" or "no effect" and has submitted their findings to the Texas State Historic Preservation
 Office and the National Park Service for concurrence





- The DAF consulted on issues related to:
 - cultural resource management
 - the unanticipated discovery of human remains and cultural items under the Native American Graves Protection and Repatriation Act
 - project-specific effects under Section 106 of the NHPA
- 12 federally recognized tribes have an expressed or potential interest in cultural resources at JBSA and the airspace areas and invited to consult on the Proposed Action and alternatives
- To date, the tribes have not identified any sacred sites or traditional cultural properties





- Proposed locations of construction and renovation projects are compatible with existing land uses at JBSA-Randolph
- Residential land use is suggested as incompatible with any aircraft noise zone above 65 DNL – As noted on the noise impact slide, a significant number of acres and population would be affected by increased noise footprints around JBSA-Randolph and Seguin AAF
- Noise mitigation measure to reduce the use of afterburner will drastically reduce the area of incompatible land use in the community due to aircraft noise
- Additional Adaptive Management measures to reduce noise should improve land use compatibility as well
- DAF would update the Air Installation Compatible Use Zone study and work with local planning departments to adopt the results





- Other resources that were analyzed in detail include Hazardous Materials and Waste, Infrastructure and Transportation, Safety, and Water Resources
- All of these resources were determined to have no significant effects under the Proposed Action or Alternatives 1, 2, or 3





- Intent of the Environmental Justice analysis is to ensure that the Proposed Action or implementation of any of the alternatives would not disproportionately affect low-income, minority, or youth populations
- DAF examined the population characteristics of the census blocks where significant noise impacts would likely occur
- DAF determined that although the impacts from noise would occur throughout the specified area, the impacts would not disproportionately affect any specific portion of the population as determined by income, race, or age





Joint Base San Antonio

The public comment portion of the hearing will commence following this brief break.





Joint Base San Antonio

To make a comment, you need to virtually raise your hand.

- Personal computer:
 Click the menu icon then click the raise hand icon
 Smartphone or tablet:
- Smartphone or tablet:
 Click the participant icon then click the raise hand icon Raise Hand
- Landline telephone or smartphone: Dial *3 on your phone keypad

When it is time to make your comment, you will hear two beeps and you will be unmuted.

- Clearly state and spell your name and affiliation, if any.
- Comments will be limited to three minutes.
- You will be given a notice when you have only 30 seconds remaining.

You will be given a final notice when your time is up.

After commenting, please virtually lower your hand using the same procedures required to raise your hand.

Public Hearing Procedures





Joint Base San Antonio

Mail:

Mr. Nolan Swick, AFCEC/CZN

Attn: JBSA T-7A Recapitalization EIS

Headquarters Air Education and Training Command Public Affairs

100 H. East Street, Suite 4; Randolph AFB, TX 78150

Online on the Project Website: https://jbsa.T-7ANEPADocuments.com

Downloadable Comment Form: Available for download on project website



T-X Recapitalization
Environmental Impact Statement



Joint Base San Antonio-Randolph

Home

jbsa.t-7anepadocuments.com

About

Get Involved

Documents

Provide Comments

To ensure timely consideration of your comments in the Final EIS, please submit comments by November 29, 2021.

Comment Options





Joint Base San Antonio

THANK YOU

for participating in this virtual public hearing for the

Draft Environmental Impact Statement for the Joint Base San Antonio T-7A Recapitalization