

G FAA PBN Design Team Briefing

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Table of Contents

G	FAA PBN Design Team Briefing.....	i
G.1	Introduction.....	G-1
G.2	FAA PBN Design Team Briefing	G-1

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G.1 Introduction

In Section 2.0 that follows, the San Antonio Airspace Modernization Project Performance Based Navigation (PBN) Design Team developed a briefing depicting the timeline and outcomes of a deliberative design process that, when taken as the whole of many individual design efforts, forms the basis for a viable alternative under consideration in this Draft Environmental Assessment (Draft EA). Note that at the date of this briefing, design was largely complete but some minor alterations to lateral or vertical orientation may have been necessary, and any discrepancies from the procedures featured in this Appendix and those evaluated in the Draft EA were captured in the alternative evaluated in this Draft EA document. No further design changes have been made following evaluation of the alternative in the Draft EA.

G.2 FAA PBN Design Team Briefing

Follows.

Intro to Preliminary Design & Community Engagement Discussion for San Antonio International Airport

February 2022



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Project History

- April 2015 – IFP Request Initiated
- August 2015 – Internal FAA Approval to begin project
- March 2016 – Kickoff and Preliminary Design Meeting in San Antonio
- April/May 2016 – PBN Design Meetings in San Antonio
- July 2016 – PBN Design Meetings in San Antonio
- March 2017 – Meeting with SAT Airport Director and RA
- September 2017 – PBN and Community Engagement Meetings in SAT with Airport Director
- December 2017 - PBN Project put on hold due to funding lapse
- August 2018 – Project restart and CE planning restart with RA
- September 2018 – PBN and CE Planning Meetings in SAT with RA and Airport Director
- March 2019 – PBN sends procedures to begin noise analysis
- March 2020 – COVID delays procedure planning
- July 2021 – Project restarted
- August 2023 – Scheduled Publication



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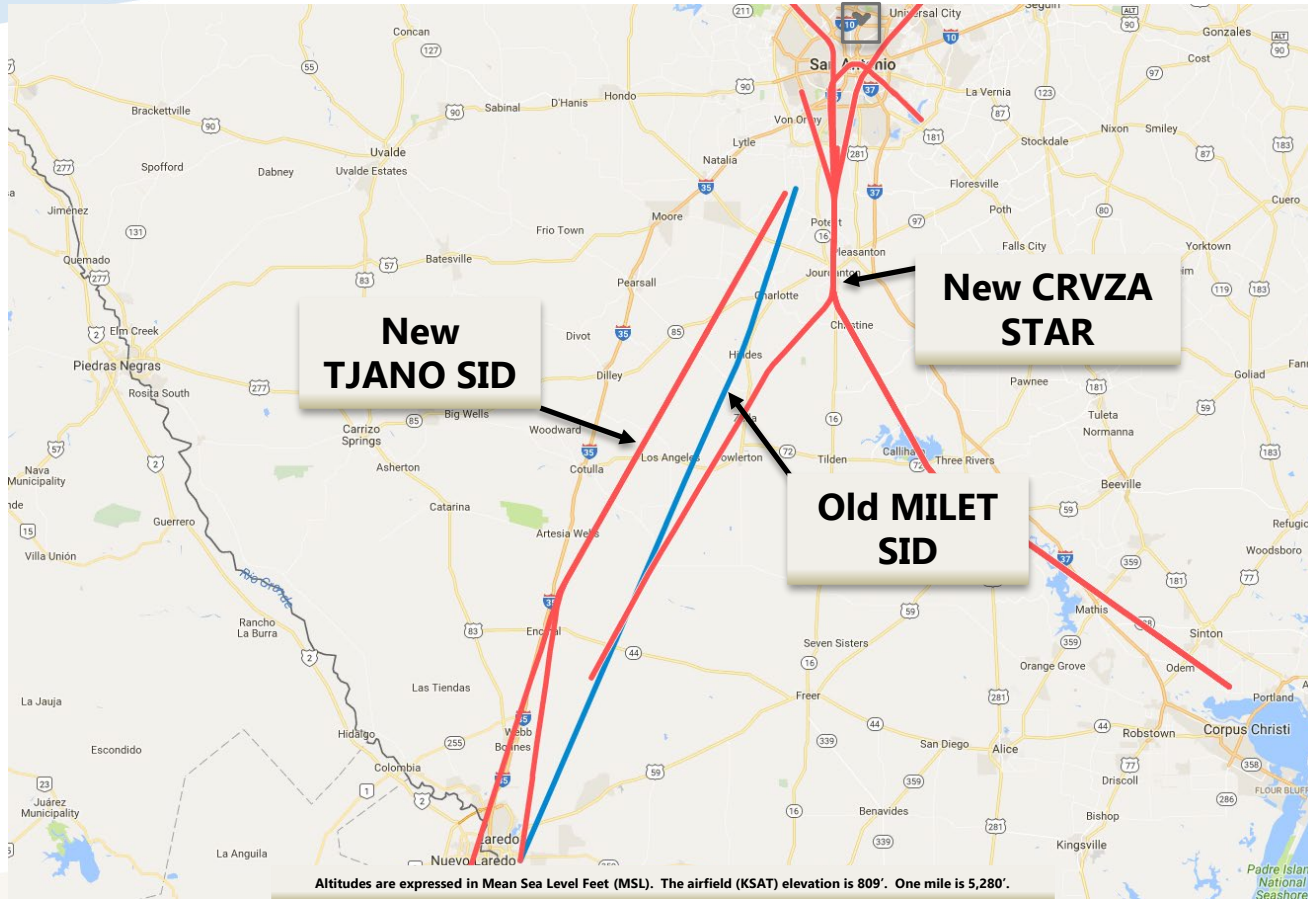
Mature Designs

Introduction

NORTH & SOUTH FLOW

TJANO Departure off KSAT

MILET4 RNAV Departure discontinued and replaced with TJANO Departure for Aircraft filed to the Southwest



**~7,200
Departures**
~19 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)

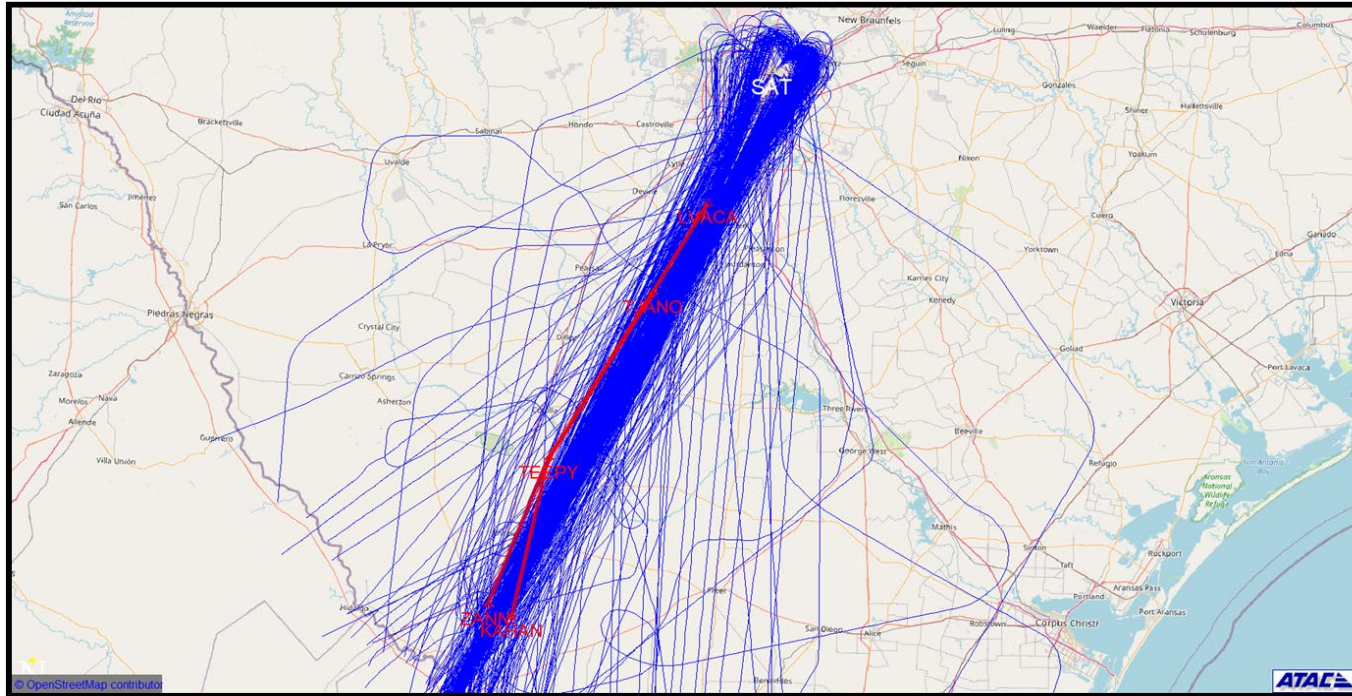
RNAV DEPARTURE PROCEDURES

	Discontinued
	Amended/New
	Existing



FAA | NextGEN

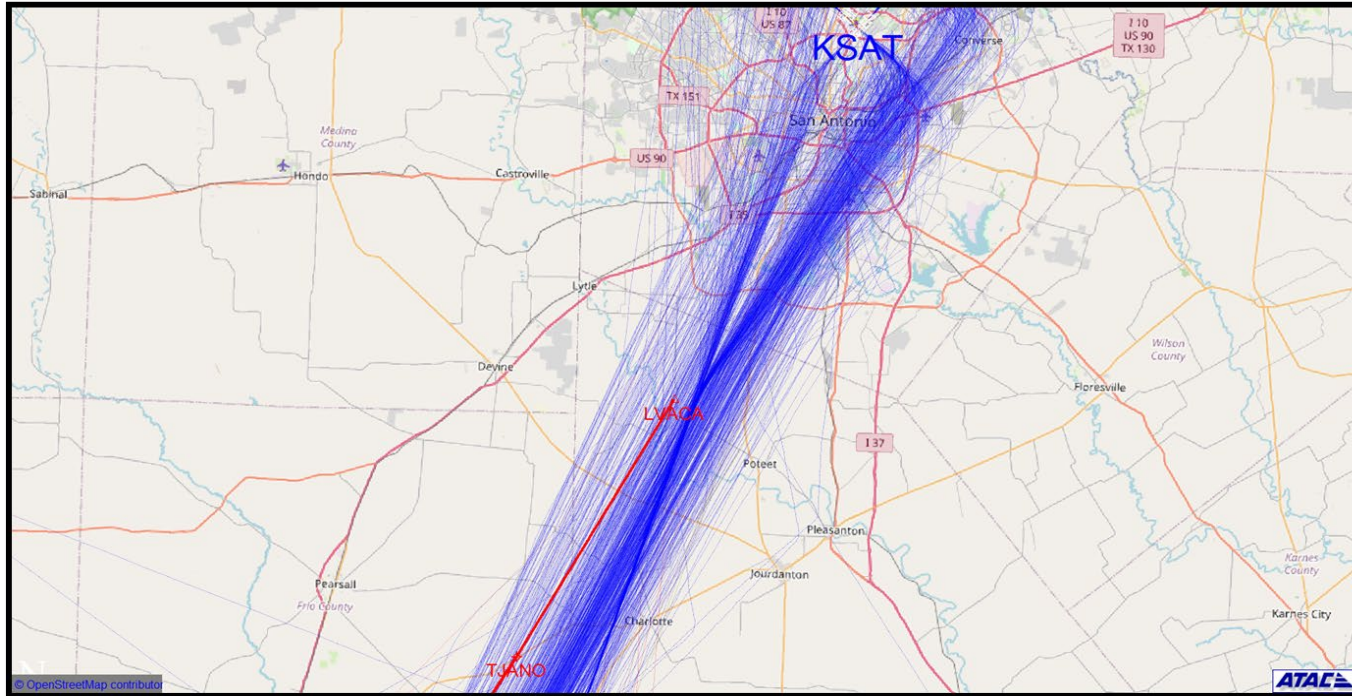
Proposed TJANO- Currently MLET4 (601 tracks-4 weeks)



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Proposed TJANO- Currently MLET4 (Zoomed-in View)

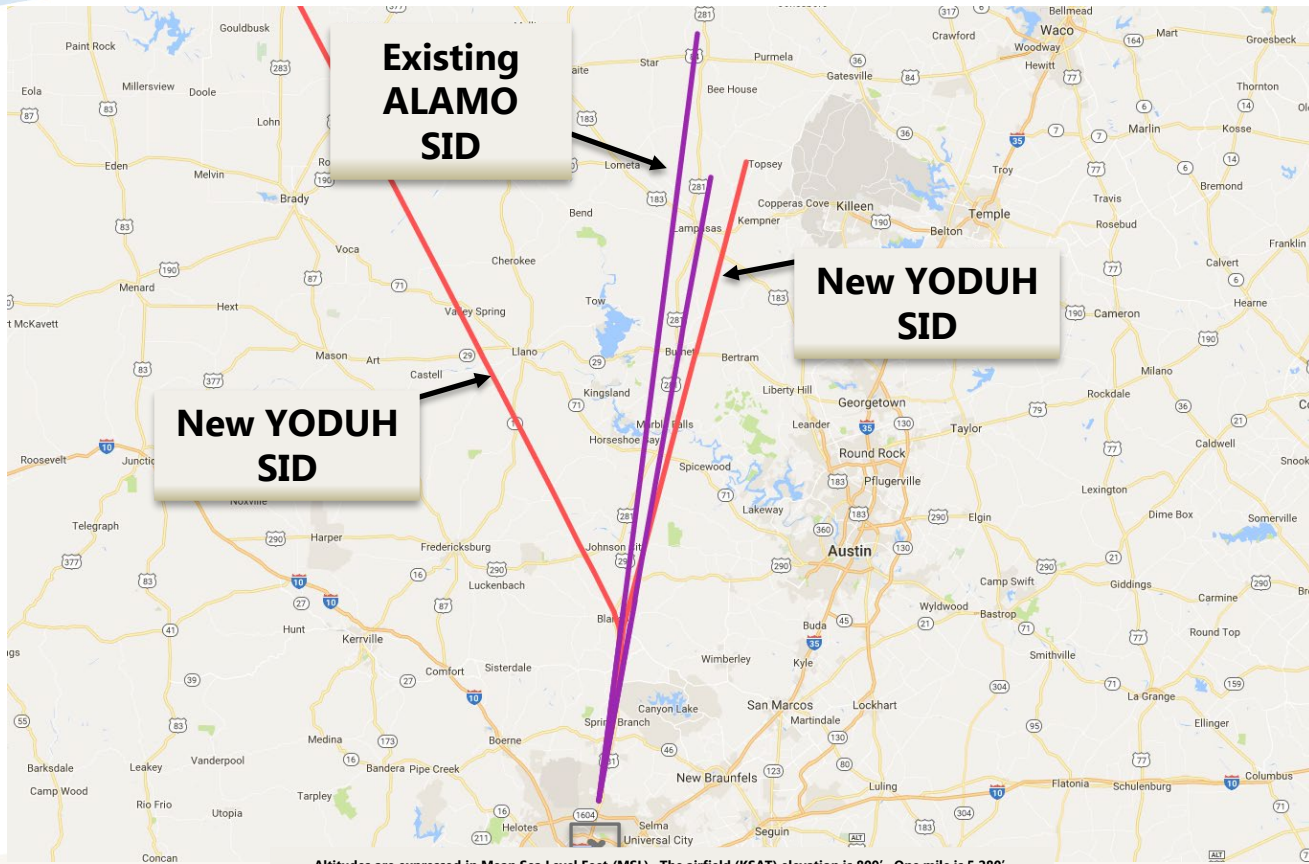


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NORTH & SOUTH FLOW

YODUH Departure off KSAT



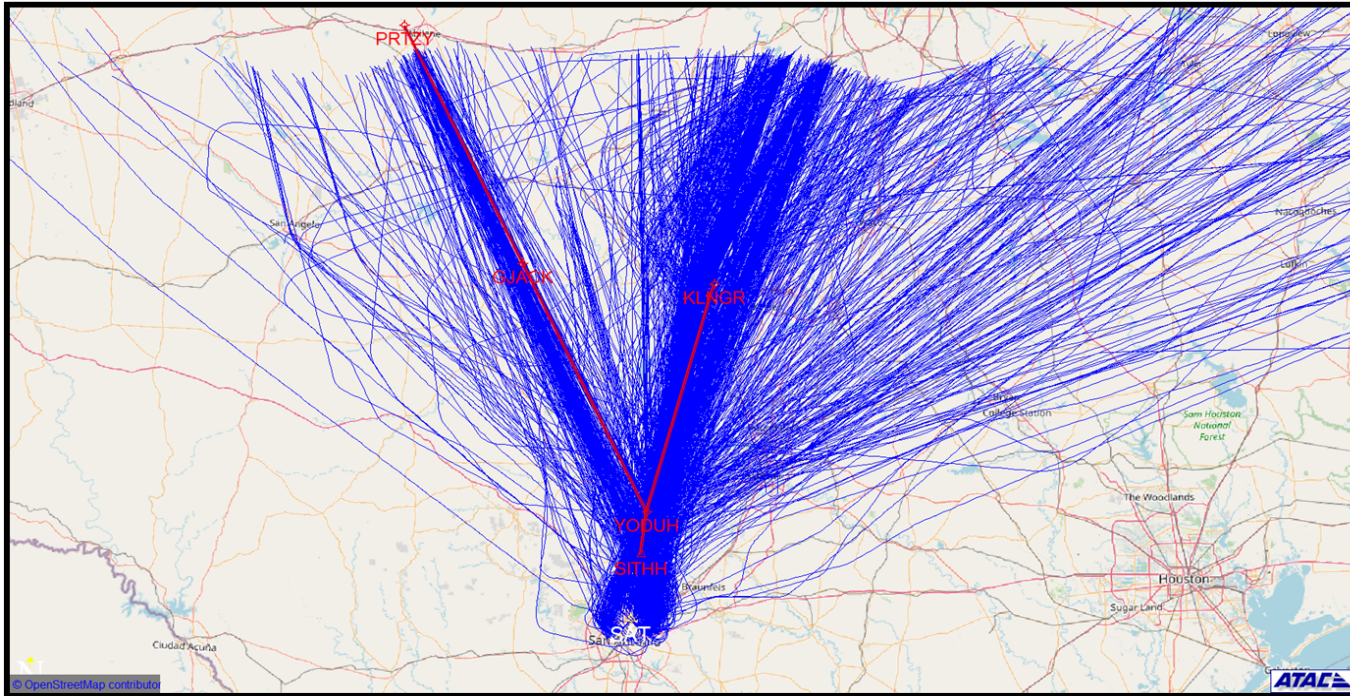
Altitudes are expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

~18,000
Departures
~49 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)

RNAV DEPARTURE PROCEDURES



Proposed YODUH- Currently ALAMO3 (1503 tracks-4 weeks)

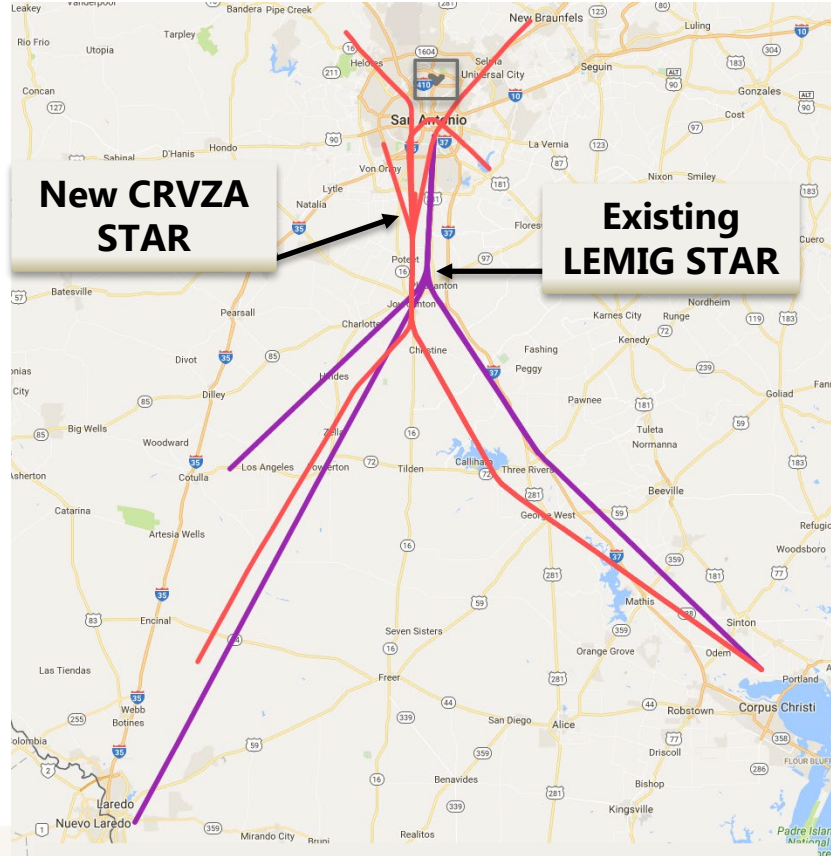


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NORTH & SOUTH FLOW CRVZA Arrival to KSAT

LEMIG Conventional Arrival will remain and the CRVZA RNAV Arrival will be added for Aircraft from the South



Altitudes are expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

**~10,000
Arrivals**
~27 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)

RNAV ARRIVAL PROCEDURES

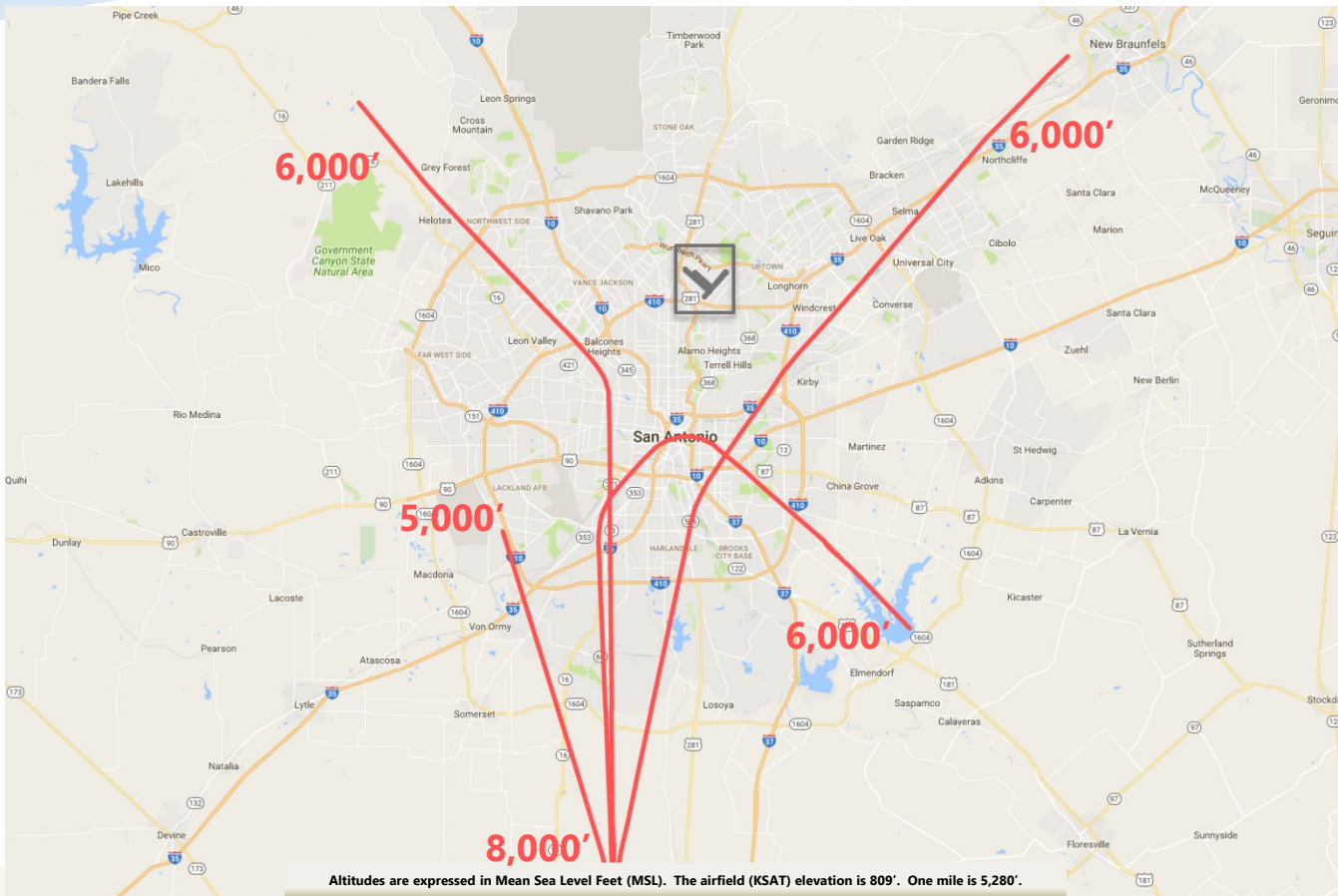
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	Amended/New
	Existing



FAA | **NextGEN**

NORTH & SOUTH FLOW CRVZA Arrival to KSAT

LEMIG Conventional Arrival will remain and the CRVZA RNAV Arrival will be added for Aircraft from the South



**~10,000
Arrivals**

~27 per day
(Estimate based on 4 weeks of 2021 seasonal traffic)

RNAV ARRIVAL PROCEDURES



Discontinued

**Amended/New**

Existing

**FAA**

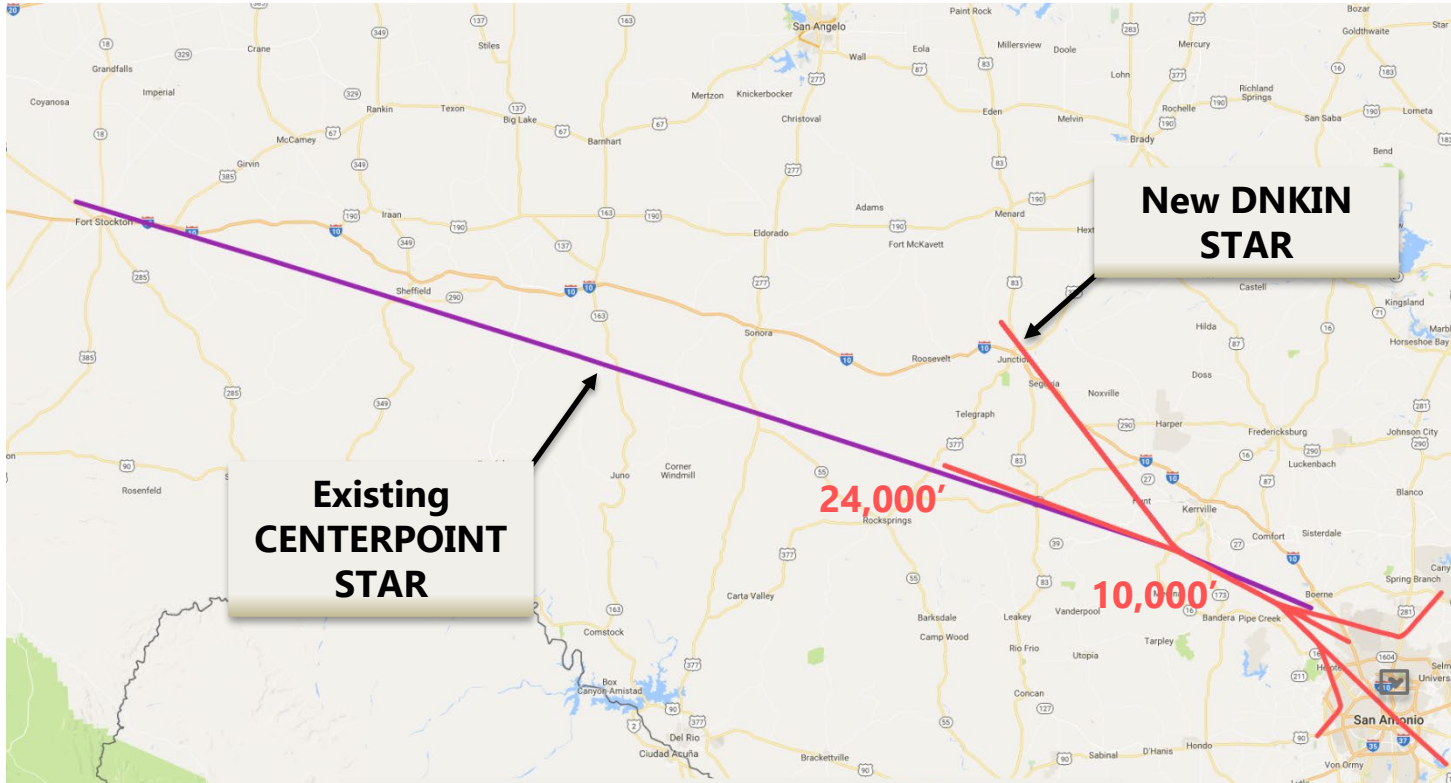
[illegible]

NORTH & SOUTH FLOW DNKIN Arrival to KSAT

CENTERPOINT Conventional Arrival will remain and the DNKIN RNAV Arrival will be added for Aircraft from the Northwest

**~10,000
Arrivals**

~27 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)



RNAV ARRIVAL PROCEDURES

	Discontinued
	Amended/New
	Existing



FAA | **NextGEN**

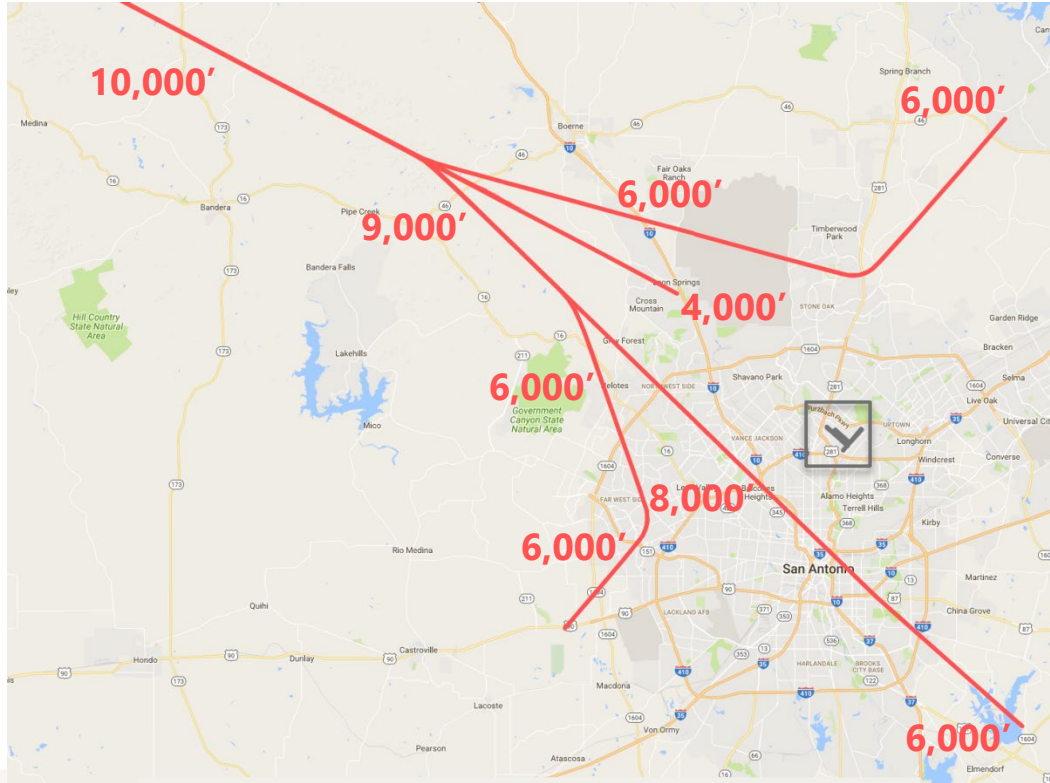
Altitudes are expressed in Mean Sea Level Feet (MSL). The airport (KSAT) elevation is 809'. One mile is 5,280'.

NORTH & SOUTH FLOW

CENTERPOINT Conventional Arrival will remain and the DNKIN RNAV Arrival will be added for Aircraft from the Northwest

**~10,000
Arrivals**

~27 per day
(Estimate based on 4 weeks of 2021 seasonal traffic)



Altitudes are expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

RNAV ARRIVAL PROCEDURES



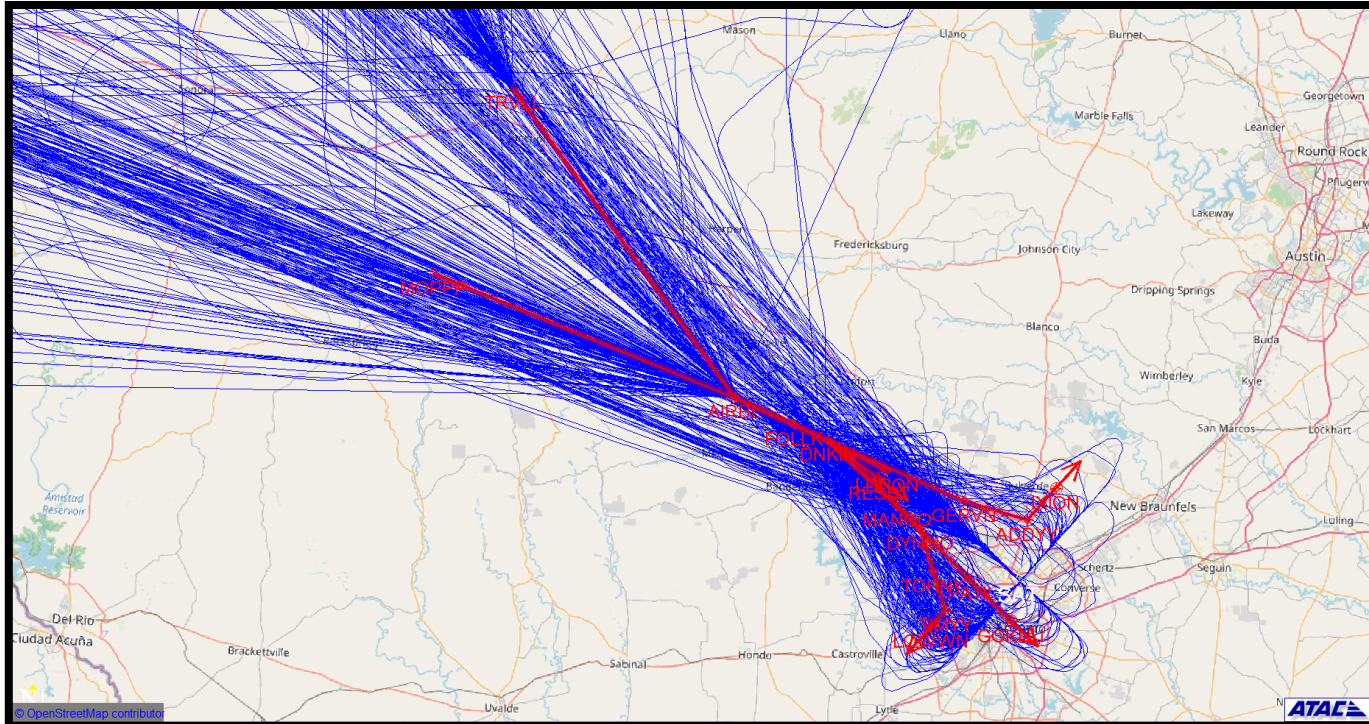
Discontinued
Amended/New
Existing



FAA | NextGEN

NextGEN

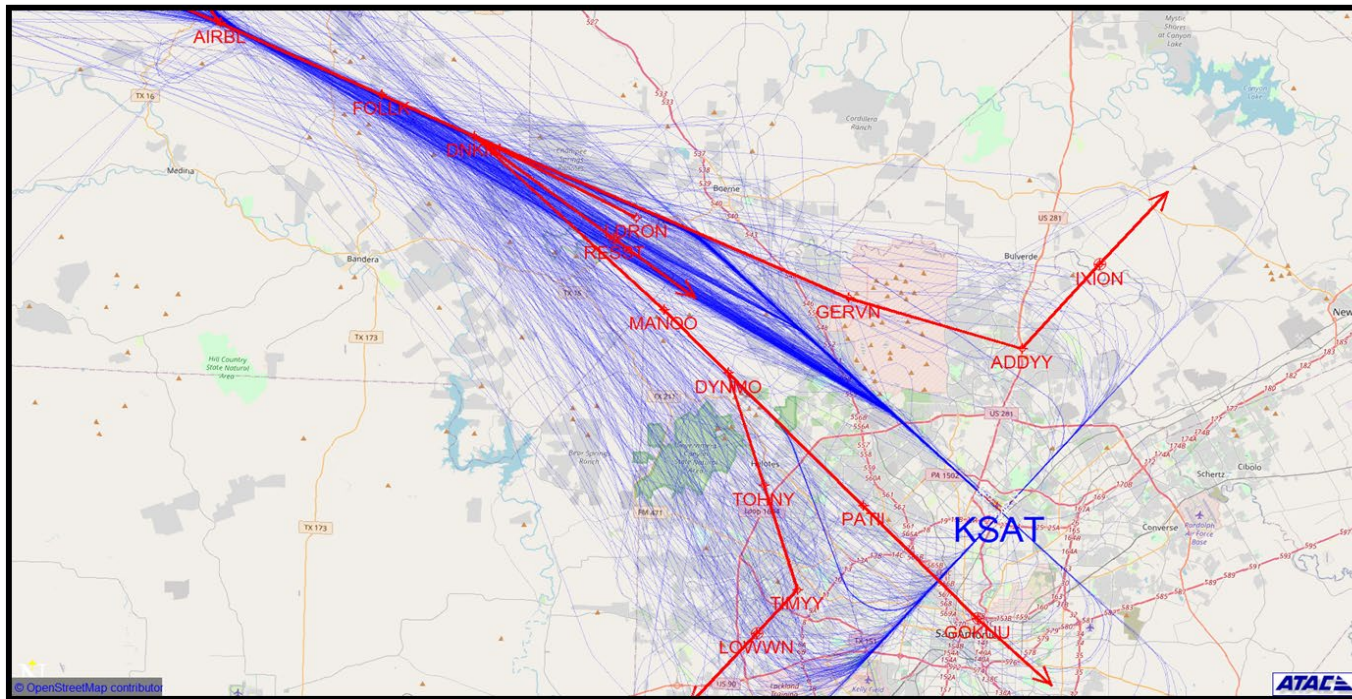
Proposed DNKIN- Currently CENTERPOINT2 (843 tracks-4 weeks)



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Proposed DNKIN- Currently CENTERPOINT2 (Zoomed-in View)

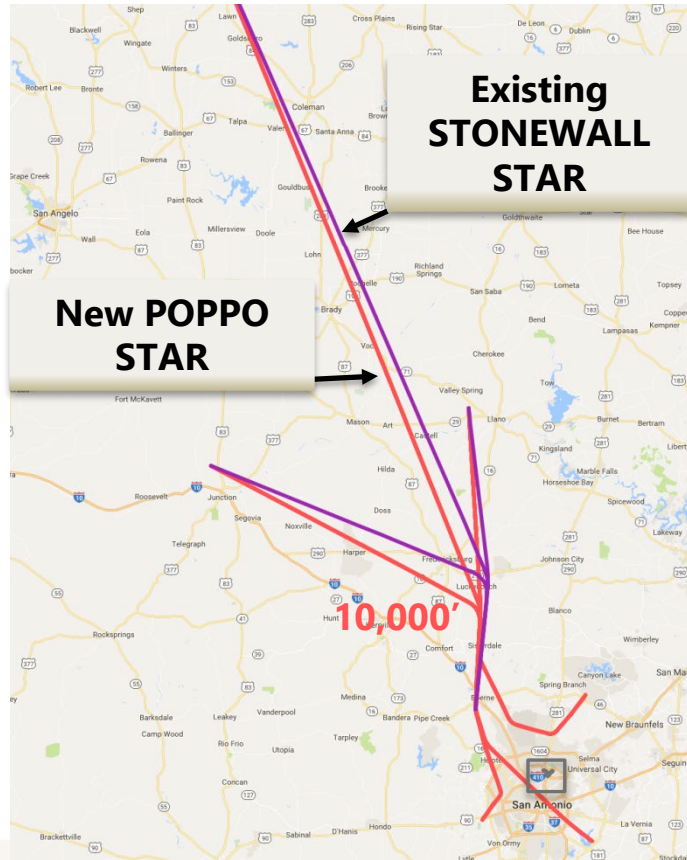


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NORTH & SOUTH FLOW POPPO Arrival to KSAT

STONEWALL Conventional Arrival will remain and the POPPO RNAV Arrival will be added for Aircraft from the North



**~5,200
Arrivals**

~14 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)

RNAV ARRIVAL PROCEDURES

	Discontinued
	Amended/New
	Existing

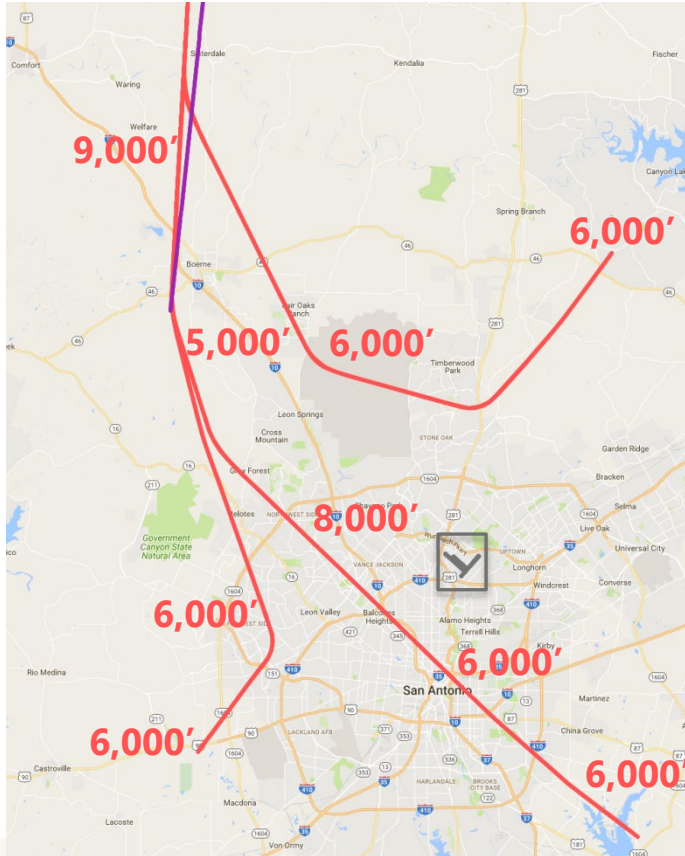


FAA | **NextGEN**

Altitudes are expressed in Mean Sea Level Feet (MSL). The airport (KSAT) elevation is 809'. One mile is 5,280'.

NORTH & SOUTH FLOW

POPPO Arrival to KSAT



Altitudes are expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

**~5,200
Arrivals**

~14 per day
(Estimate based on 4 weeks of 2021 seasonal traffic)

RNAV ARRIVAL PROCEDURES

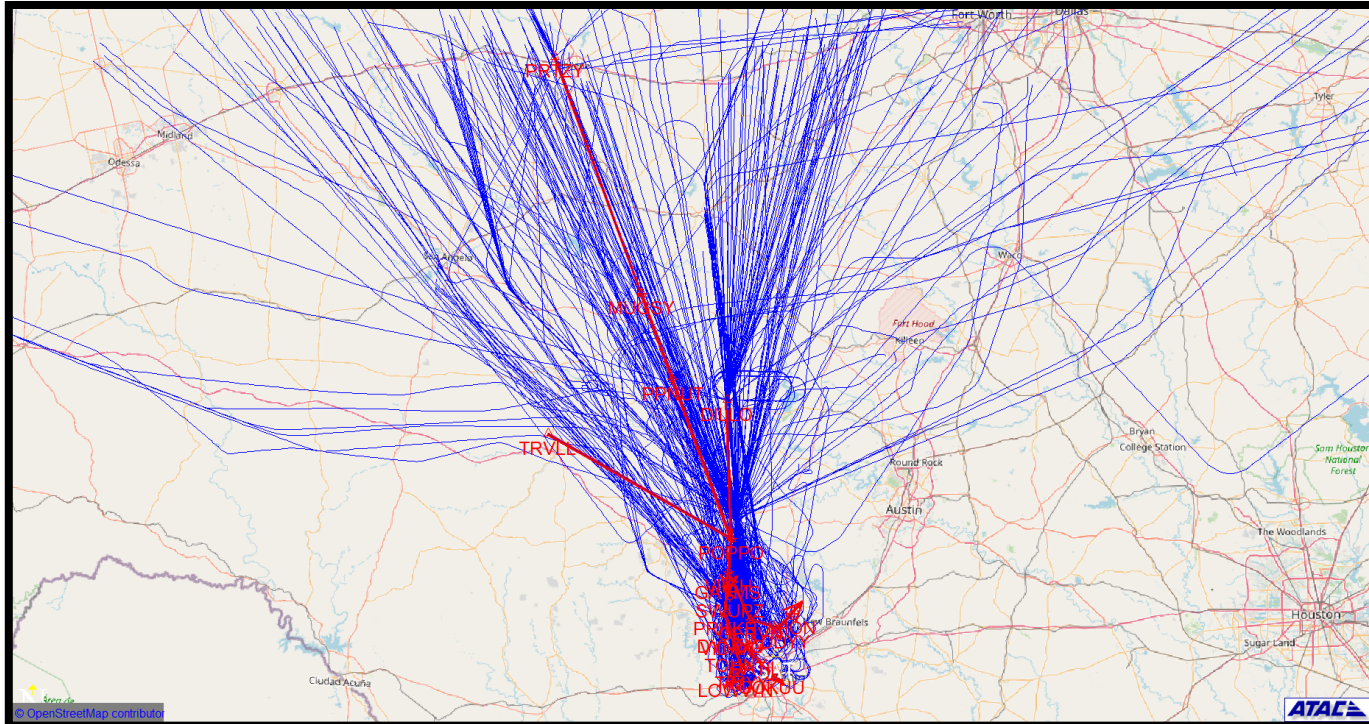


Discontinued
Amended/New
Existing



FAA | NextGEN

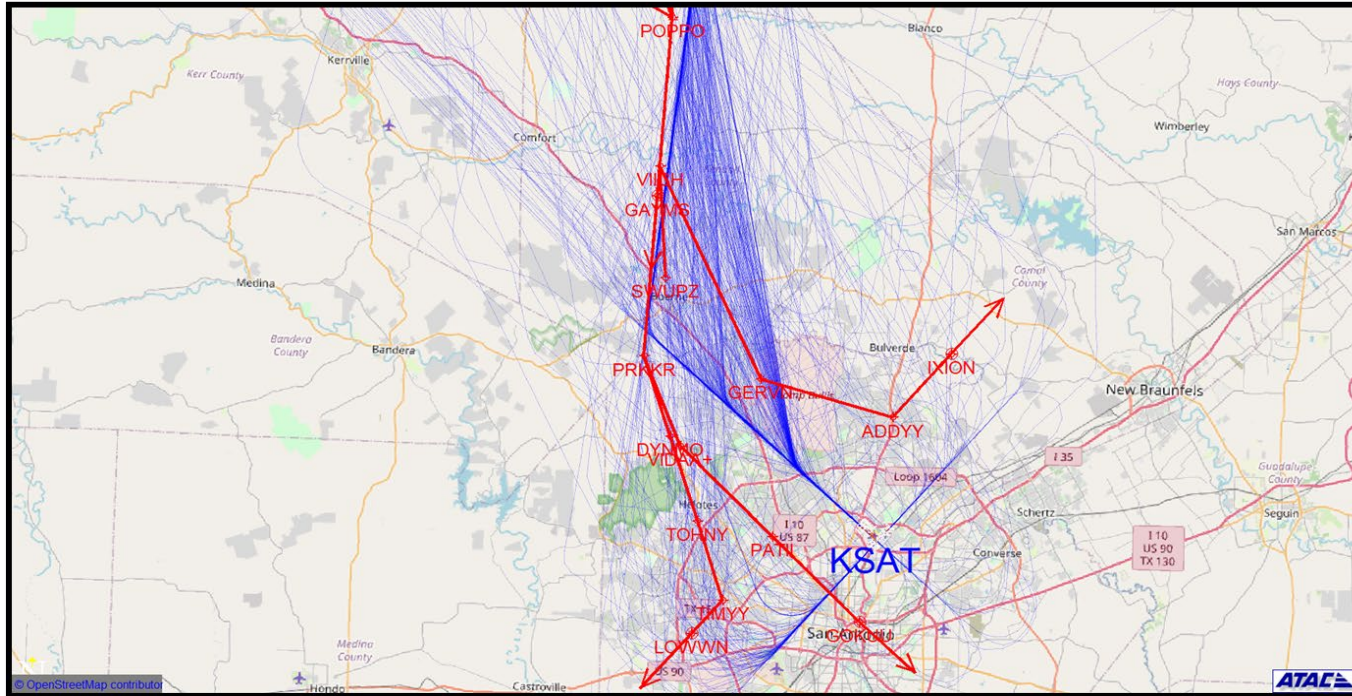
Proposed POPPO- Currently STONEWALL1 (435 tracks-4 weeks)



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Proposed POPPO- Currently STONEWALL1 (Zoomed-in View)

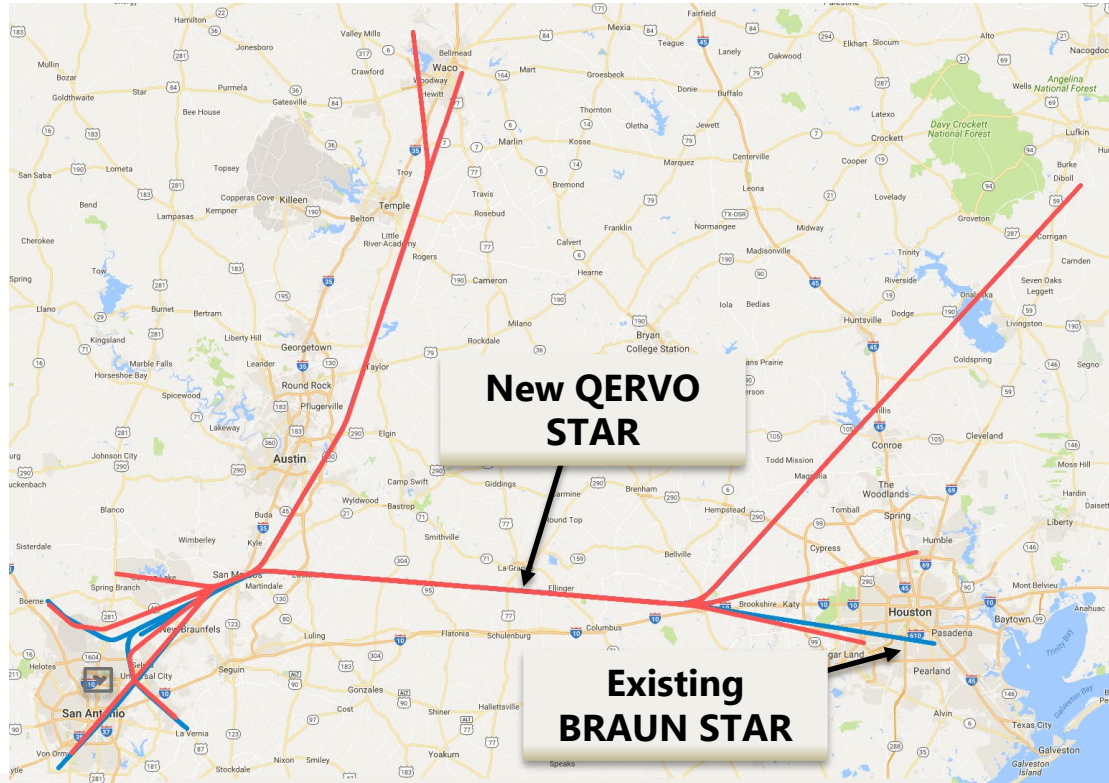


NORTH & SOUTH FLOW QERVO Arrival to KSAT

BRAUN Conventional Arrival will be cancelled and the QERVO RNAV Arrival will be added for Aircraft from the Northeast

**~18,700
Arrivals**

~51 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)



RNAV ARRIVAL PROCEDURES

	Discontinued
	Amended/New
	Existing

Altitudes are expressed in Mean Sea Level Feet (MSL). The airport (KSAT) elevation is 809'. One mile is 5,280'.



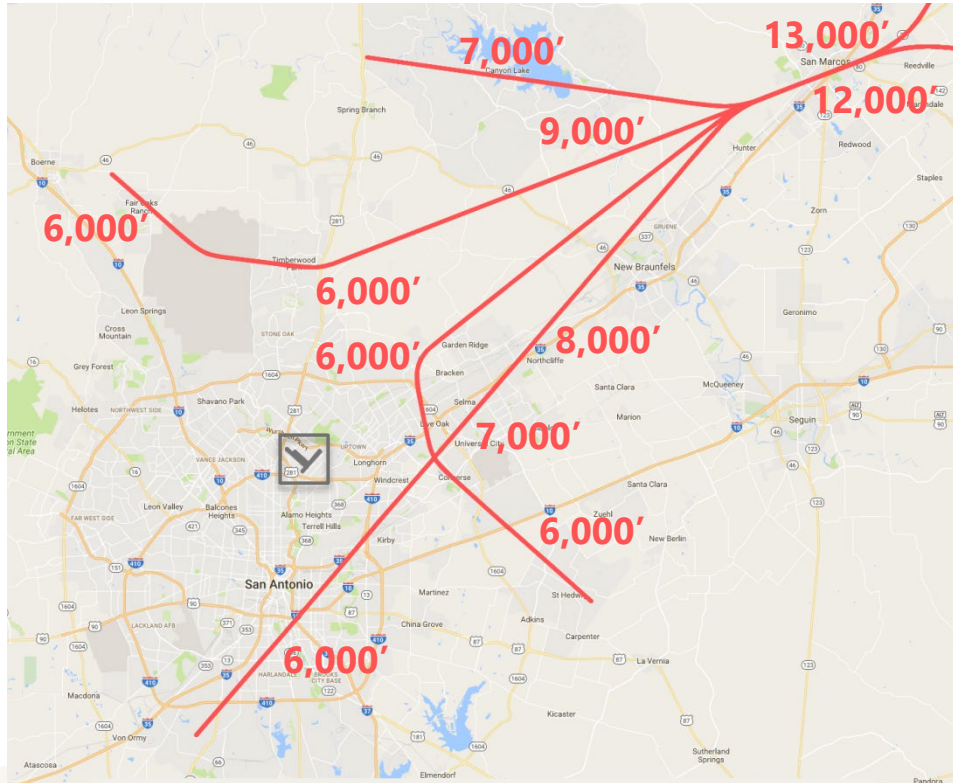
FAA | NextGEN

NORTH & SOUTH FLOW QERVO Arrival to KSAT

BRAUN Conventional Arrival will be cancelled and the QERVO RNAV Arrival will be added for Aircraft from the Northeast

~18,700 Arrivals

~51 per day
(Estimate based on 4
weeks of 2021 seasonal
traffic)



Altitudes are expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

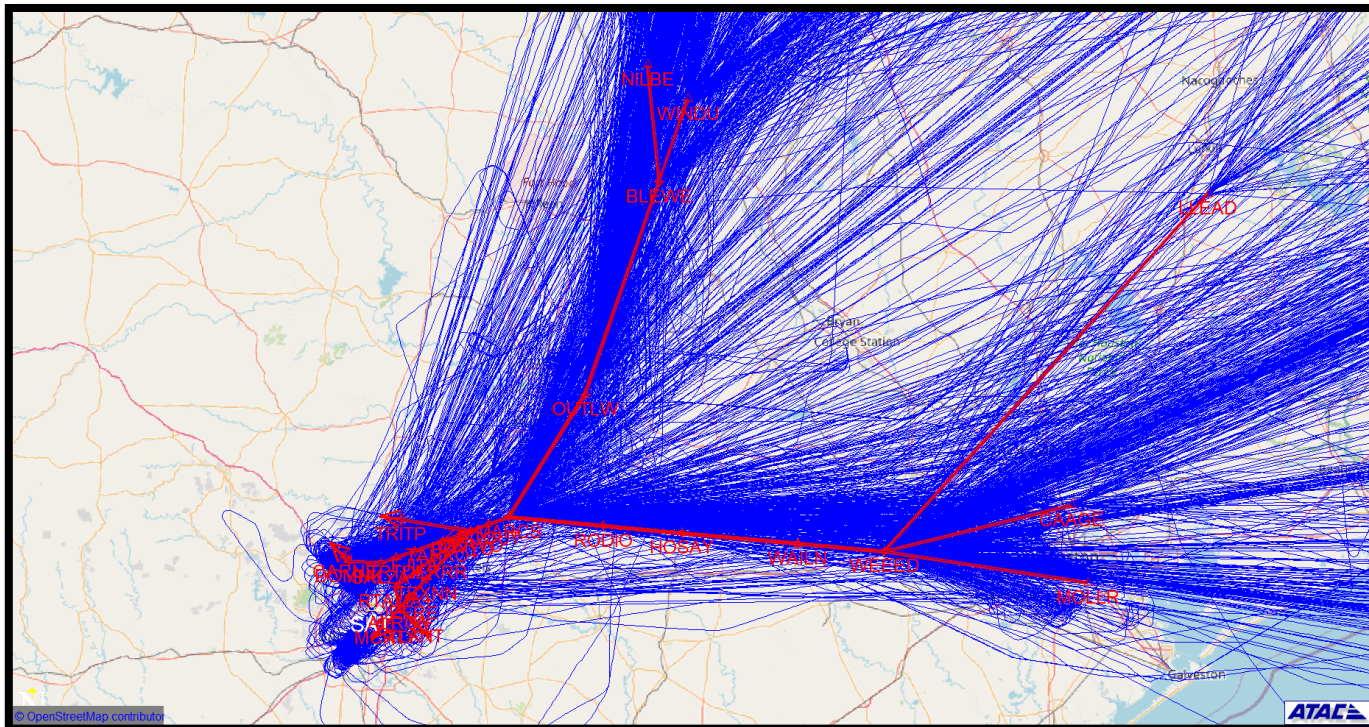
RNAV ARRIVAL PROCEDURES

	Discontinued
	Amended/New
	Existing



FAA | NextGEN

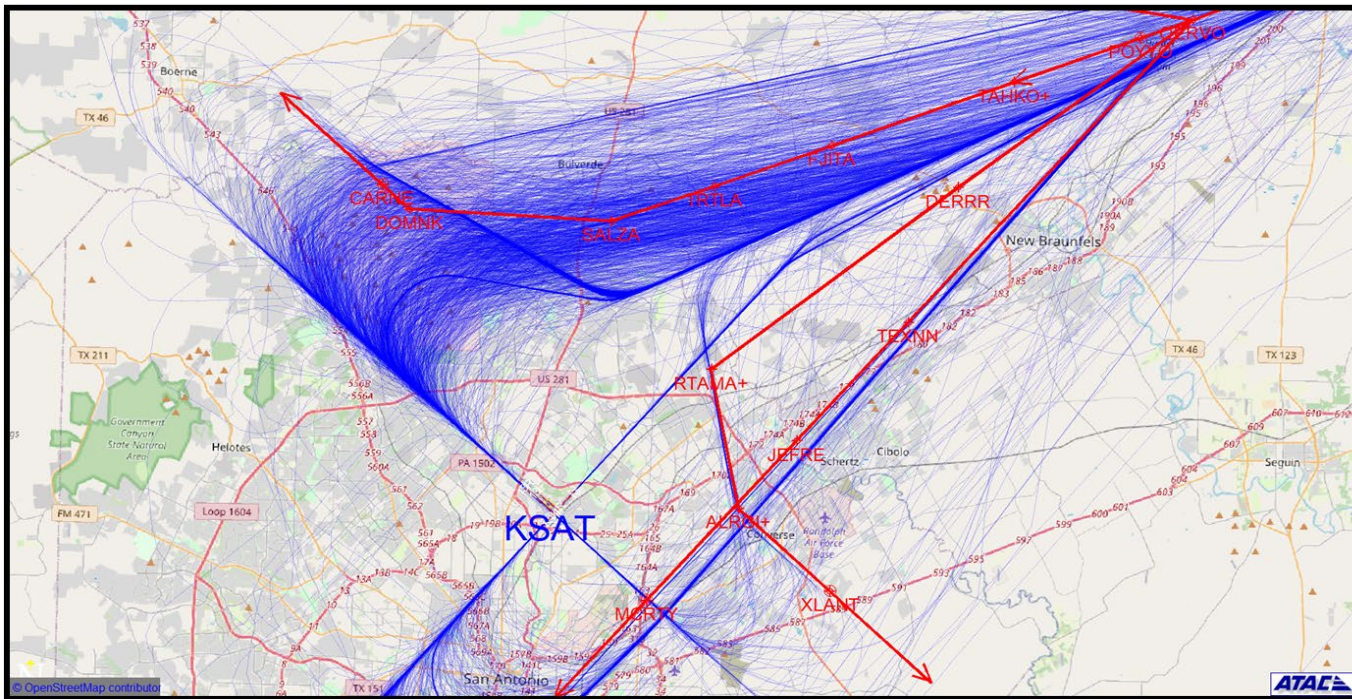
Proposed QERVO- Currently BRAUN3 (2391 tracks-4 weeks)



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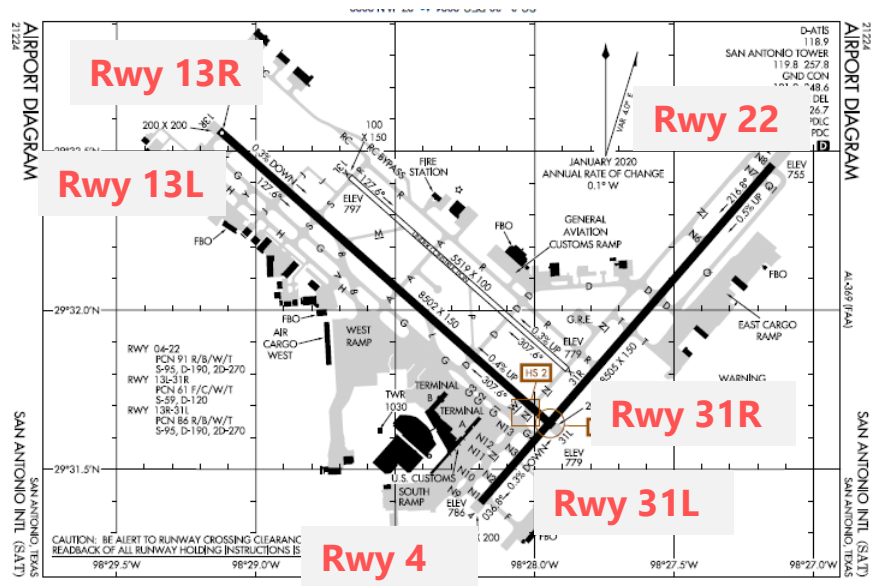
NextGEN

Proposed QERVO- Currently BRAUN3 (Zoomed-in View)



San Antonio International Runway Usage

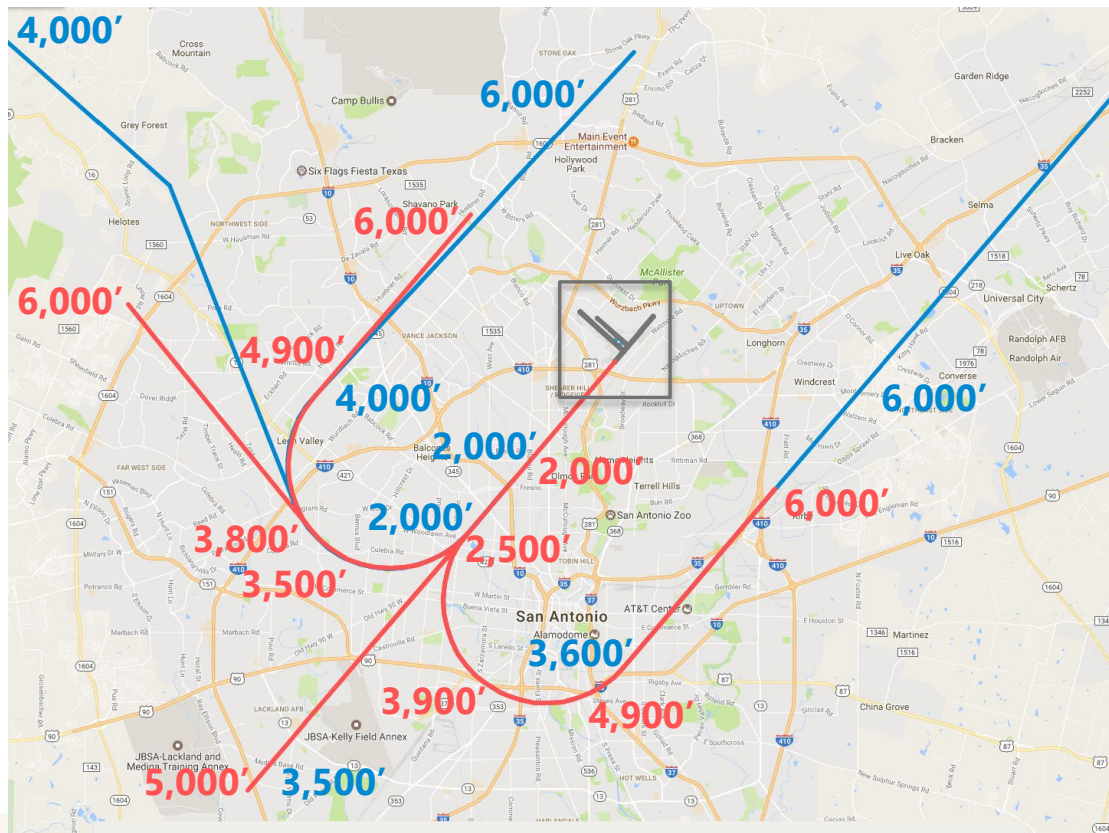
- **Arrival operations:**
 - ✦ Runway 13R—68%
 - ✦ Runway 13L—5%
 - ✦ Runway 31L—9%
 - ✦ Runway 4—15%
 - ✦ Miscellaneous Mixed Usage—3%
- **Departure operations:**
 - ✦ Runway 13R—36%
 - ✦ Runway 13L—4%
 - ✦ Runway 31L—9%
 - ✦ Runway 4—46%
 - ✦ Miscellaneous Mixed Usage—5%



****Runway Usage based on flight data from Jan. 1, 2019 to Dec. 31, 2019****

NORTH FLOW

RNP Approach Runway 4



RNAV APPROACH PROCEDURES

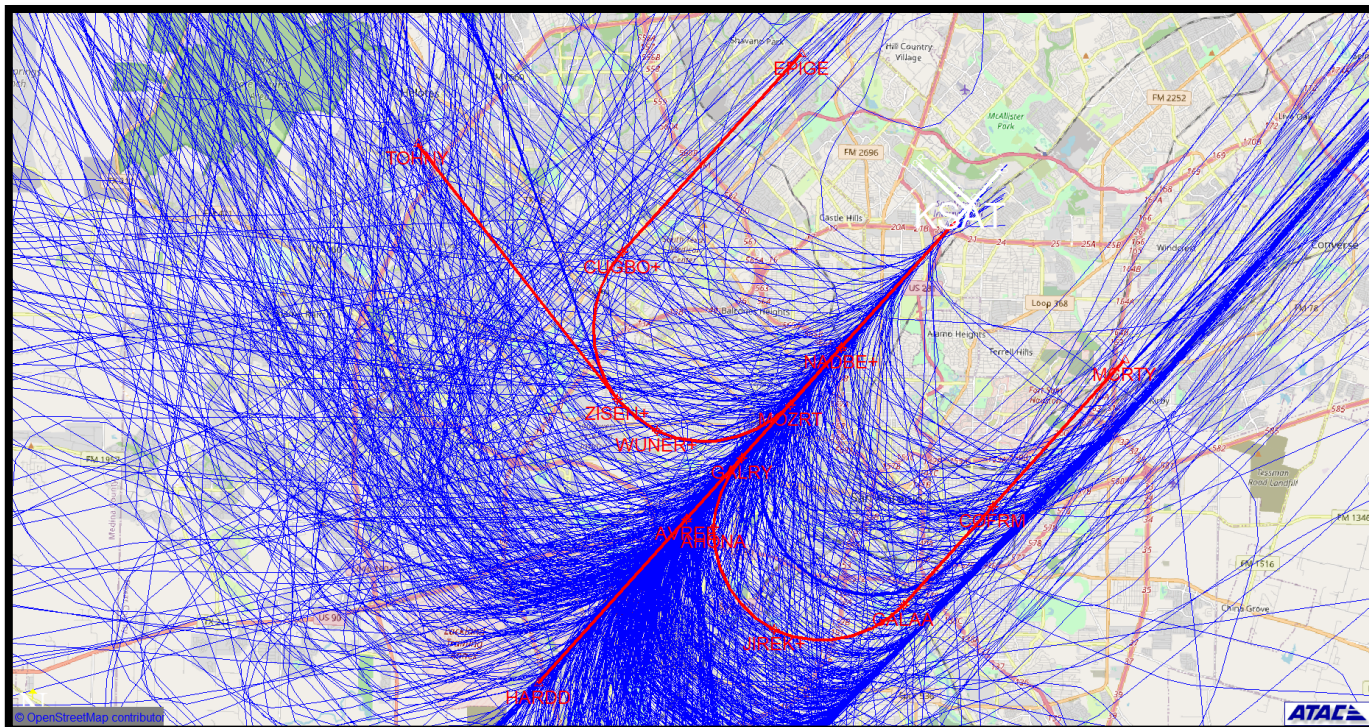
■	Discontinued
■	Amended
■	Existing



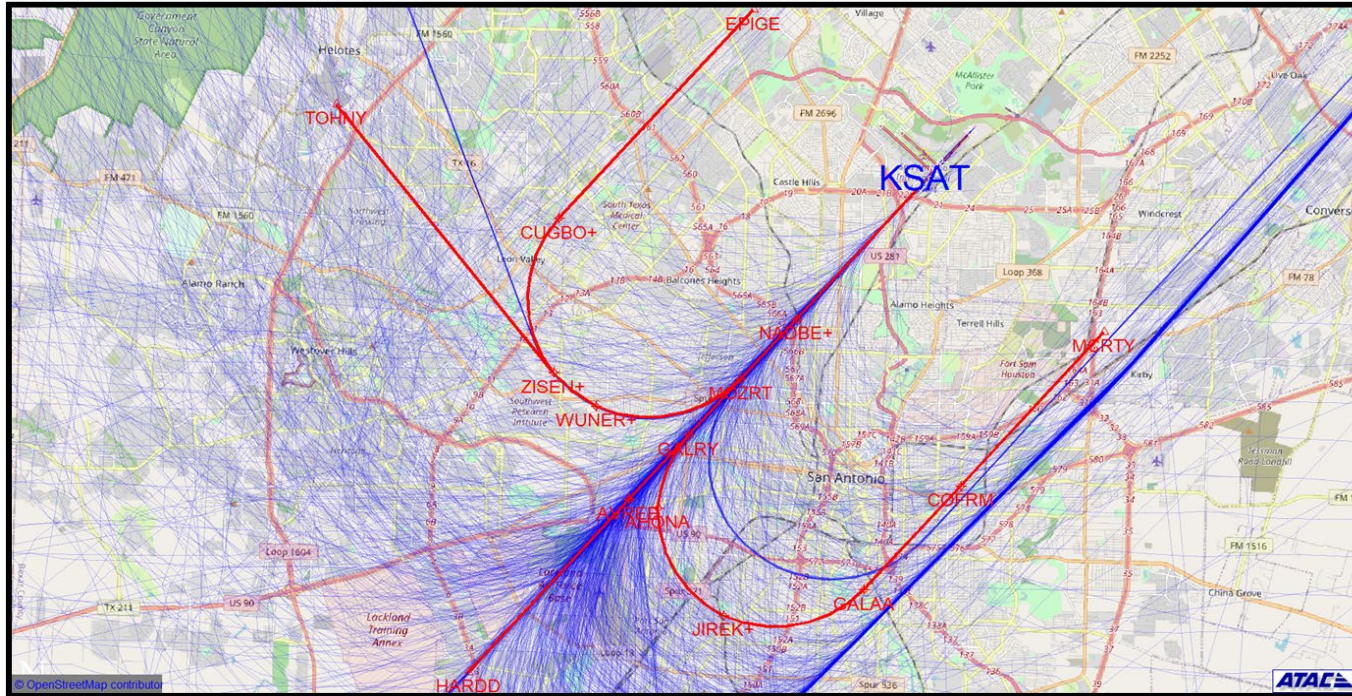
FAA | NextGEN

Lowest altitudes published are shown and expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

RNP Approach Runway 4 (1080 tracks-4 weeks)

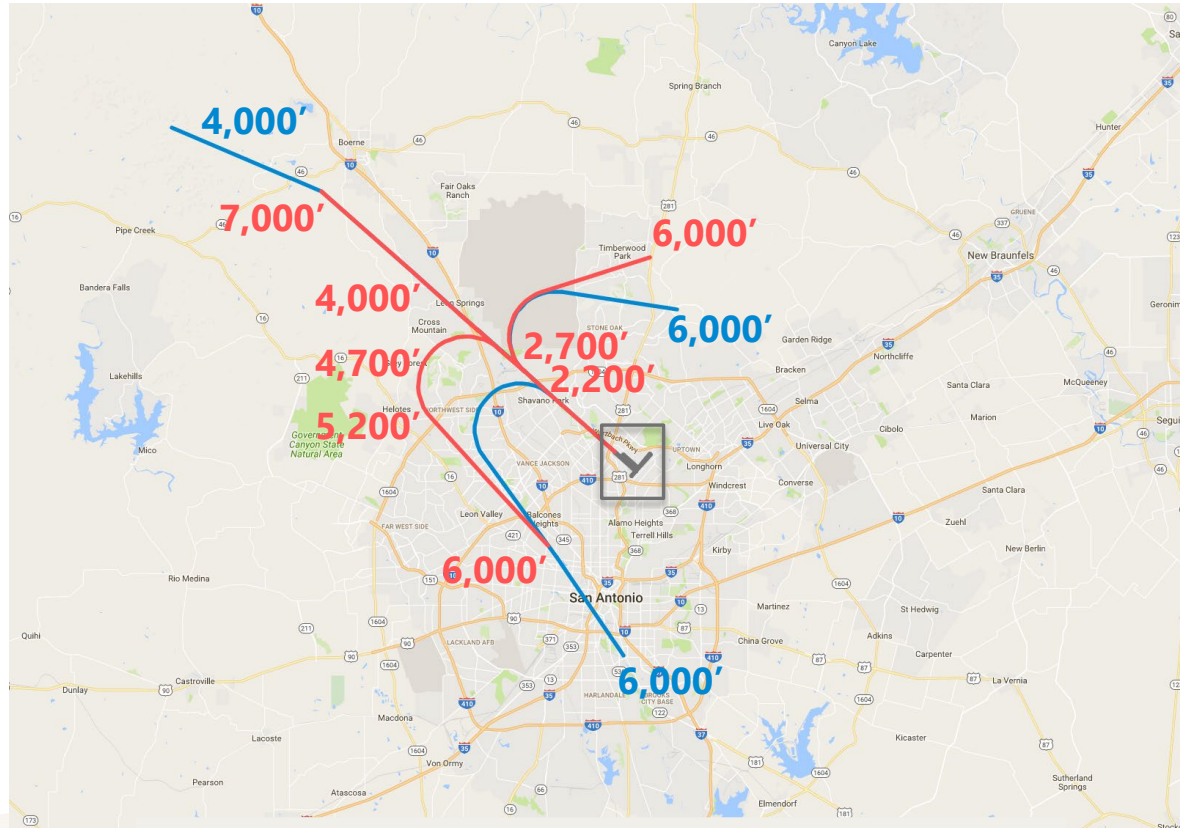


RNP Approach Runway 4 (Zoomed-in View)



SOUTH FLOW

RNP Approach Runway 13R



RNAV APPROACH PROCEDURES

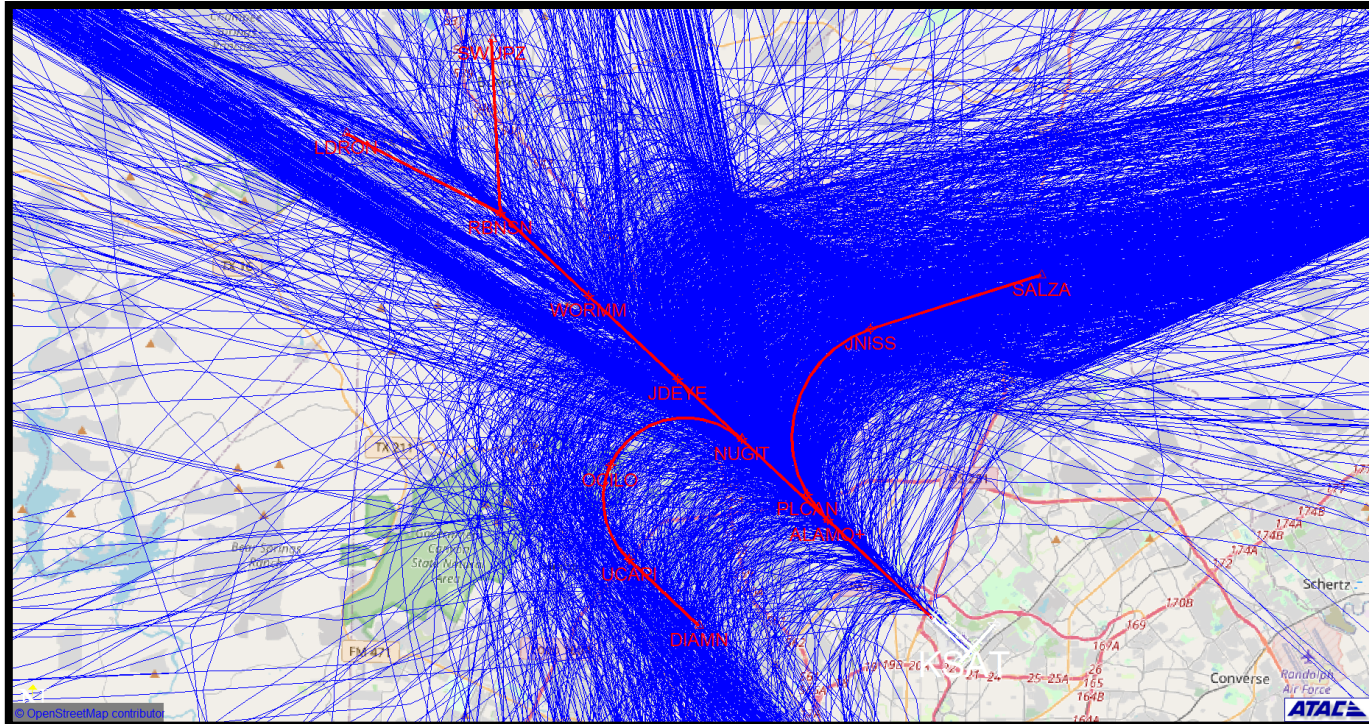
<div></div>	Discontinued
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<div></div>	Existing



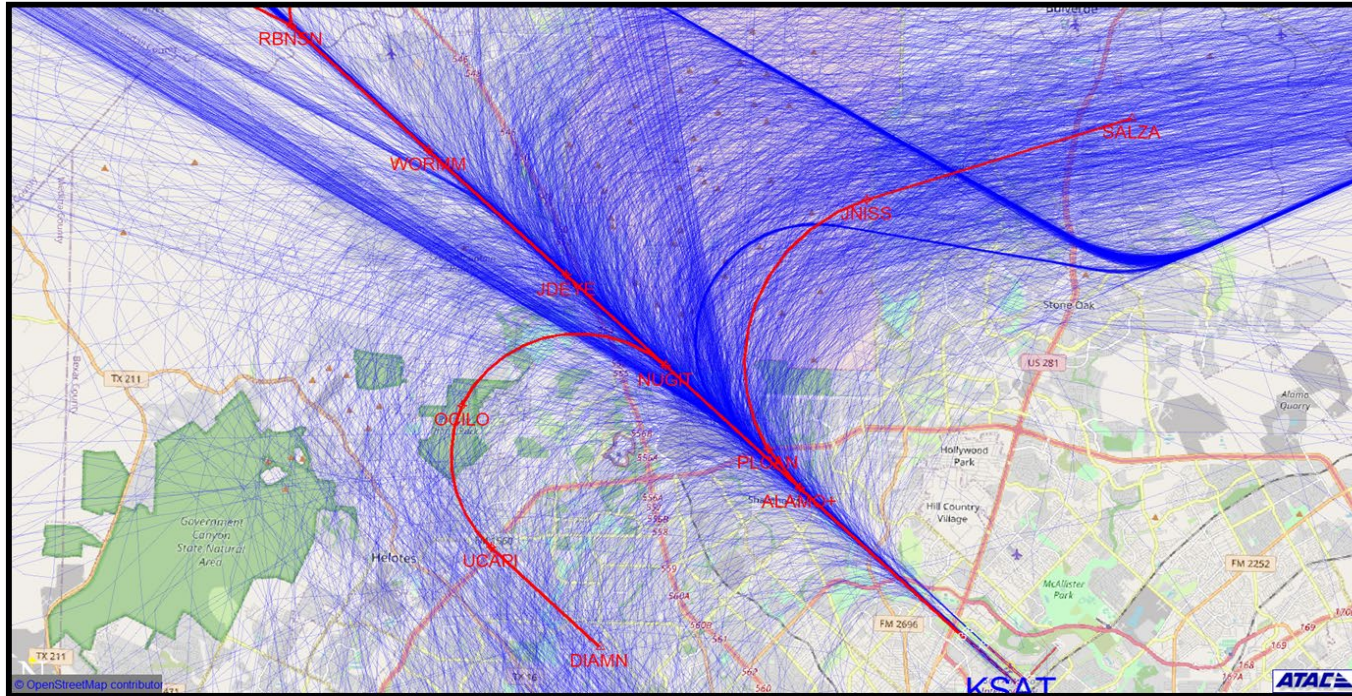
FAA | NextGEN

Lowest altitudes published are shown and expressed in Mean Sea Level Feet (MSL). The airport (KSAT) elevation is 809'. One mile is 5,280'.

RNP Approach Runway 13R (3219 tracks-4 weeks)



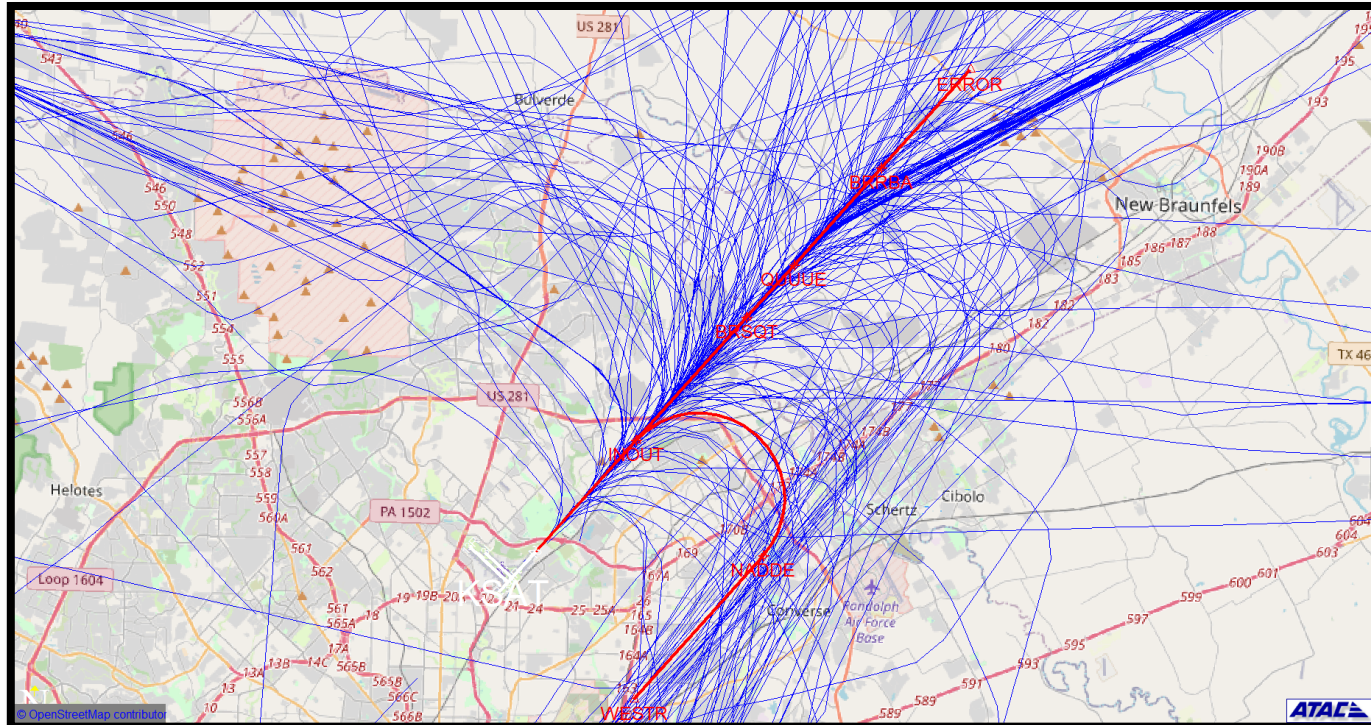
RNP Approach Runway 13R (Zoomed-in View)



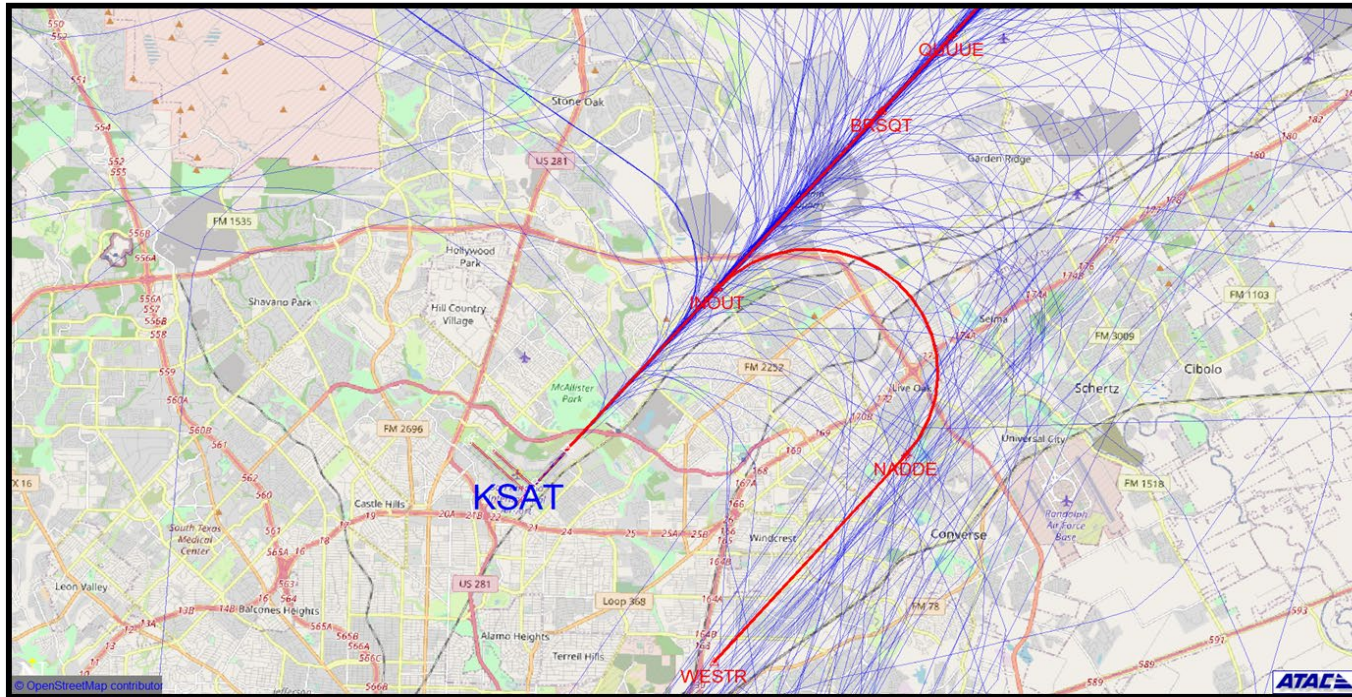
SOUTH FLOW



RNP-Z Approach Runway 22 (273 tracks-4 weeks)

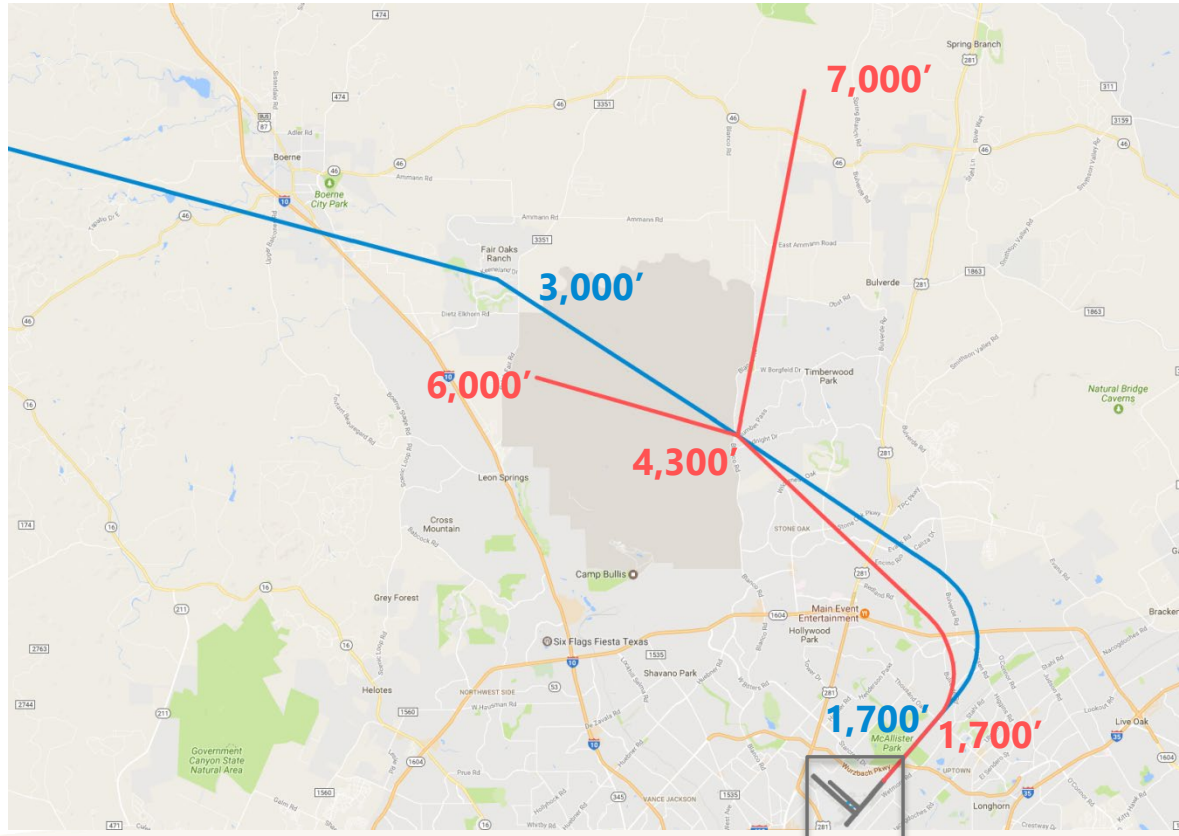


RNP-Z Approach Runway 22 (Zoomed-in View)



SOUTH FLOW

RNP X Approach Runway 22



RNP X APPROACH PROCEDURES

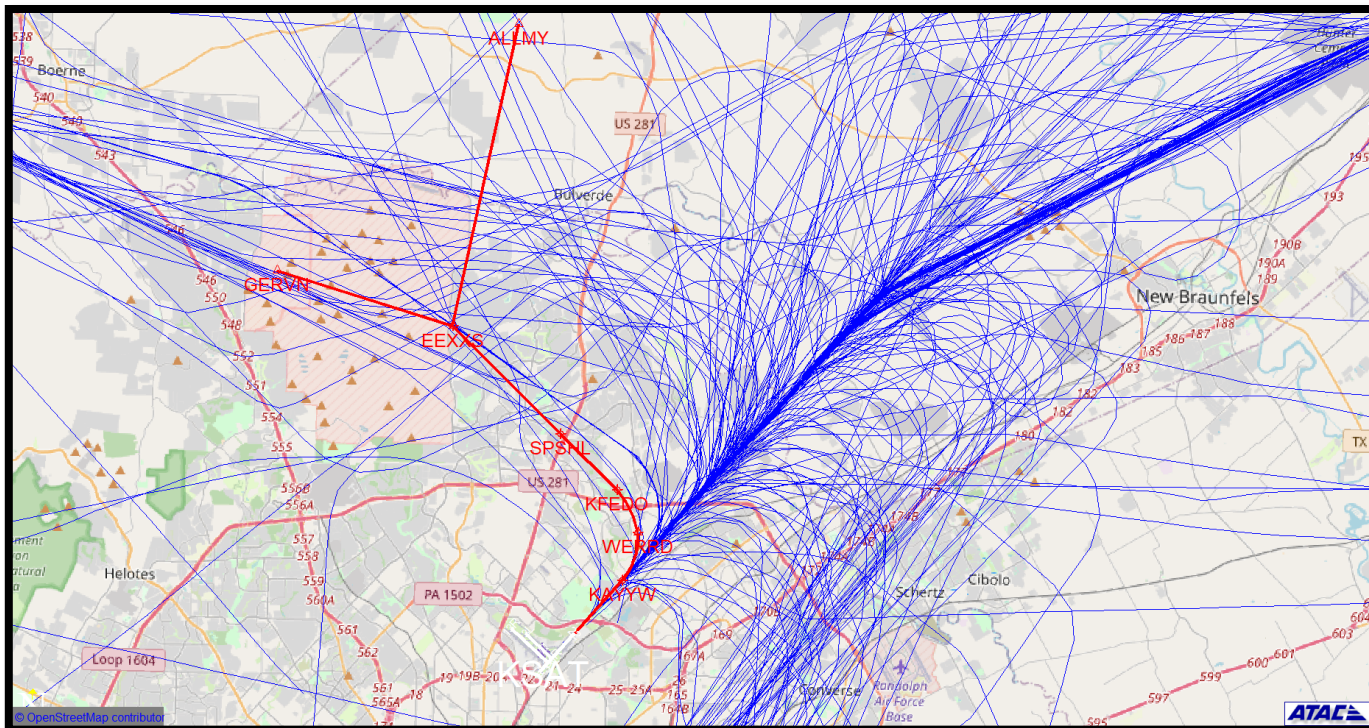
	Discontinued
	Amended
	Existing



FAA | NextGEN

Lowest altitudes published are shown and expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

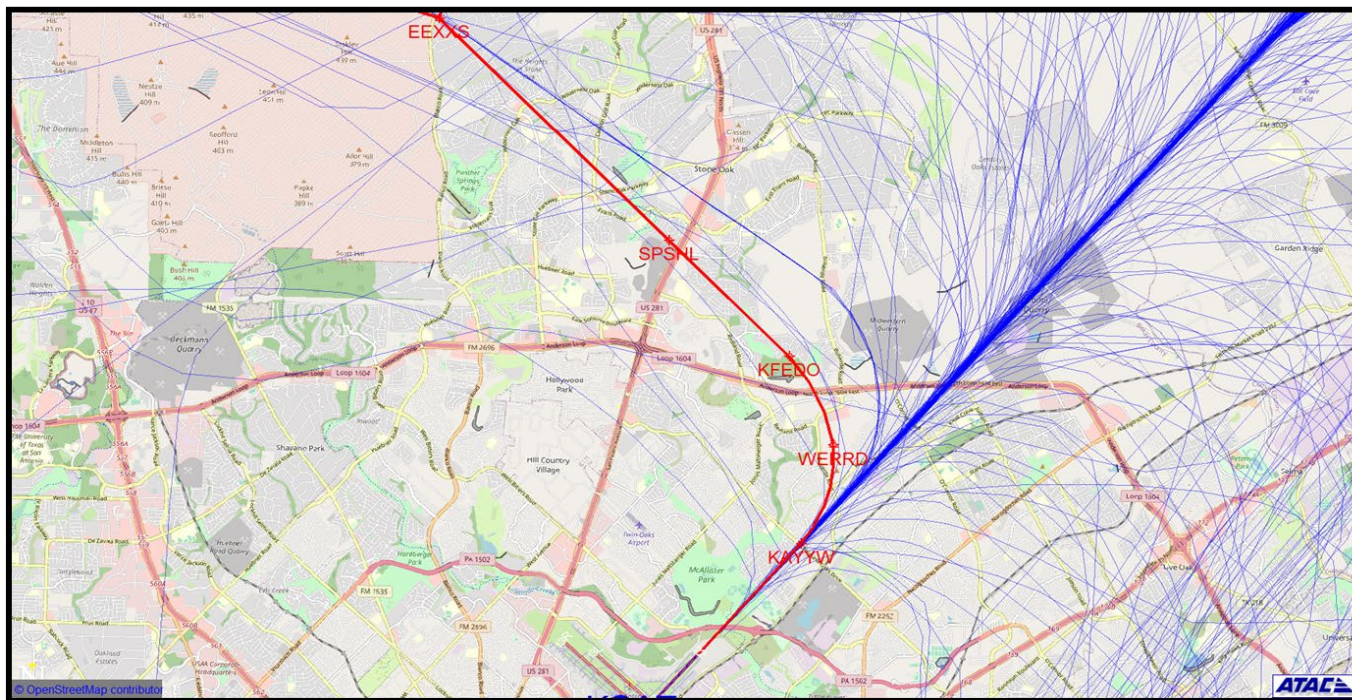
RNP-X Approach Runway 22 (273 tracks-4 weeks)



FAA

NextGEN

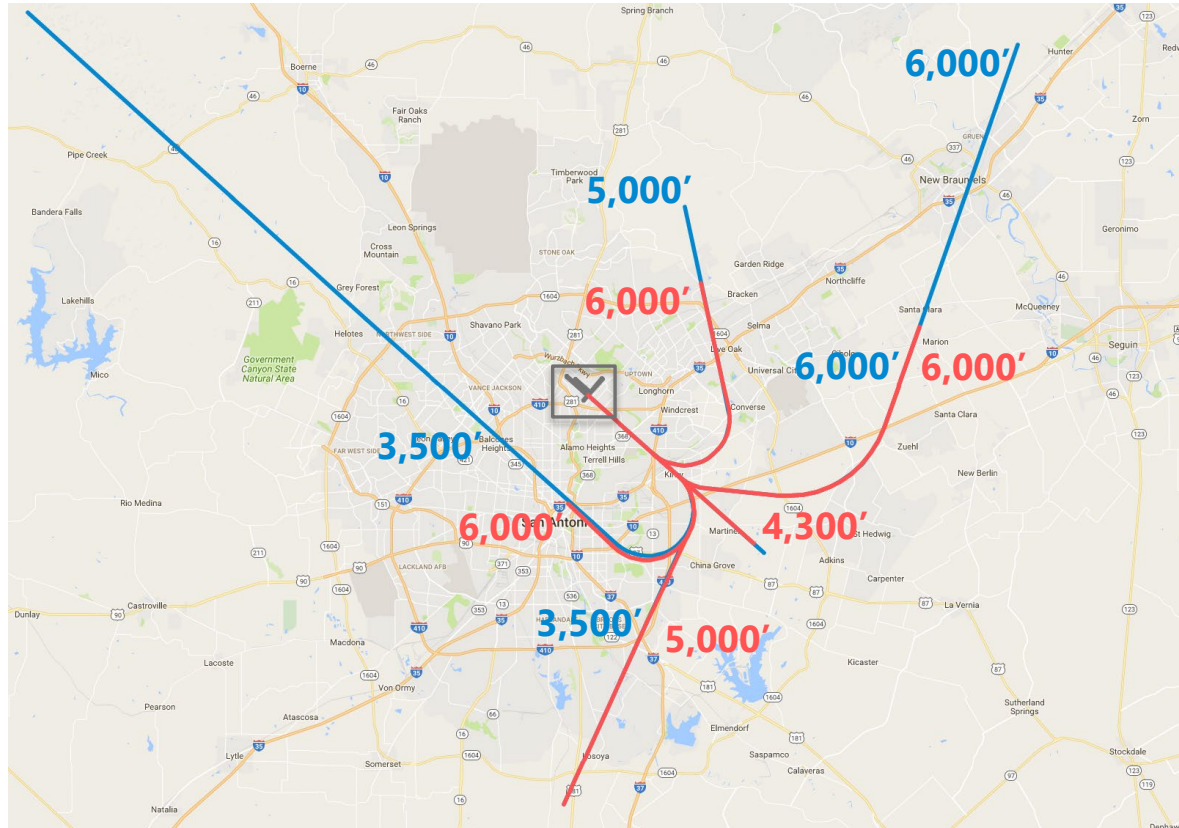
RNP-X Approach Runway 22 (Zoomed-in View)



FAA | NextGEN

NORTH FLOW

RNP Approach Runway 31L



RNAV APPROACH PROCEDURES

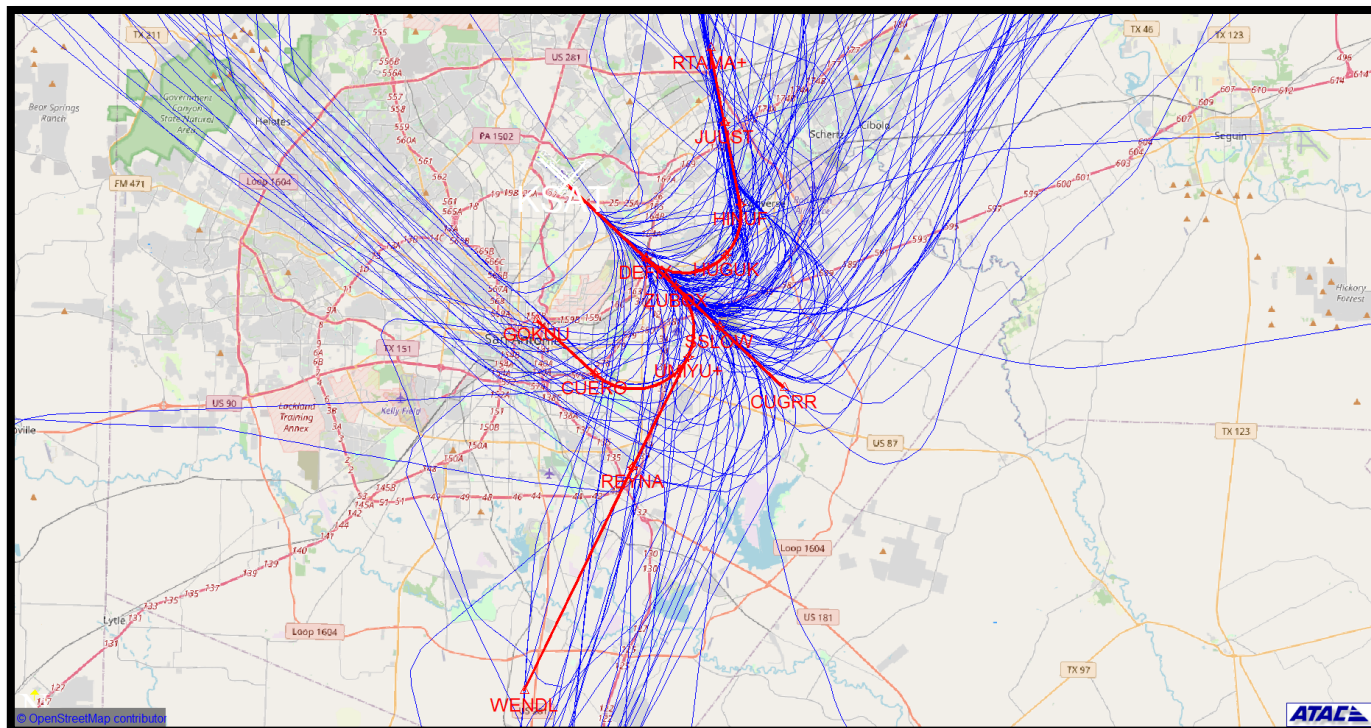
	Discontinued
	Amended
	Existing



FAA | NextGEN

Lowest altitudes published are shown and expressed in Mean Sea Level Feet (MSL). The airfield (KSAT) elevation is 809'. One mile is 5,280'.

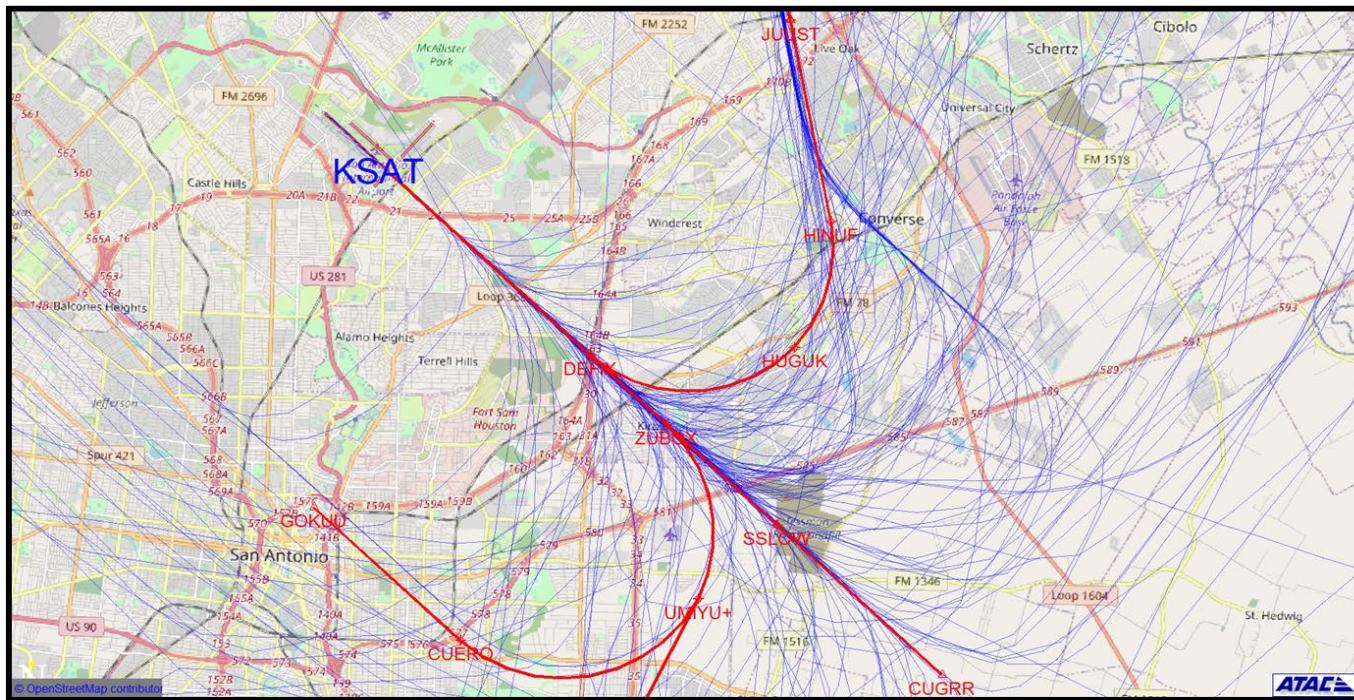
RNP Approach Runway 31L (163 tracks-4 weeks)



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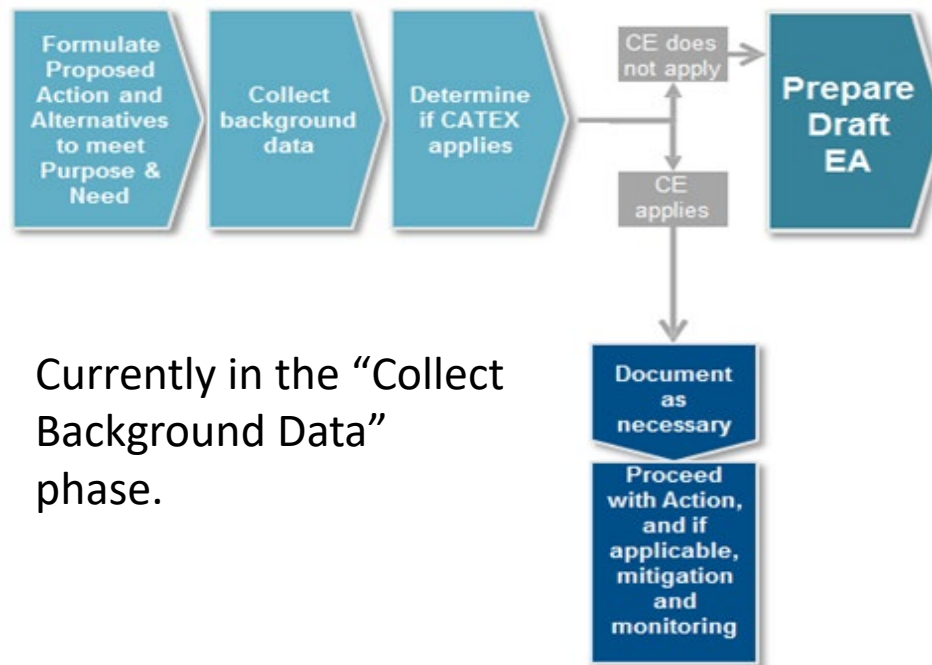
NextGEN

RNP Approach Runway 31L (Zoomed-in View)



FAA | NextGEN

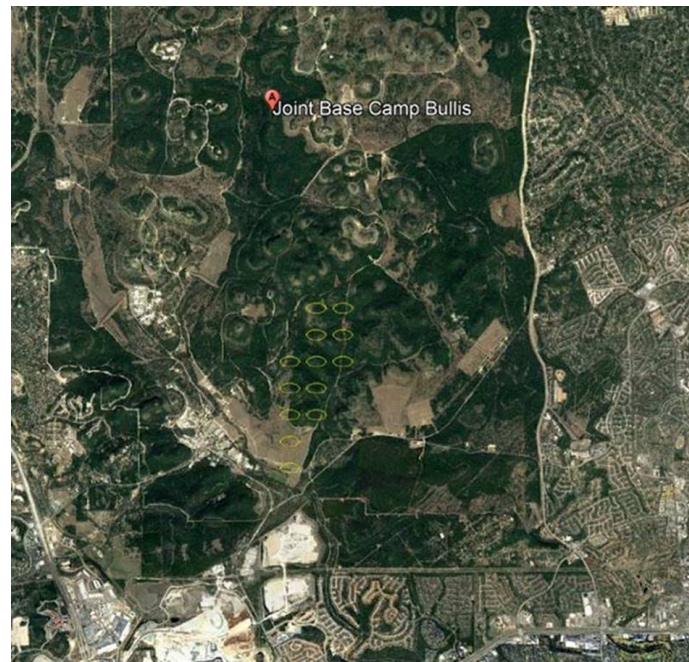
Environmental Review Update



Currently in the “Collect Background Data” phase.

Environmental Review Update

- Preliminary Noise Screen complete.
 - ✦ Reviewing results
 - No significant/reportable noise over noise sensitive areas
 - Reportable noise over Camp Bullis
 - ATREP reviewed, confirmed area is compatible use, controlled firing area (CFA)
 - Noise report in process



PROPOSED SAT Community Engagement Plan

- **Briefing to San Antonio Department of Aviation**
- **Coordinate Draft CI/CE Plan and Procedure Designs**
 - Identify local issues, special consideration areas, noise concerns
 - FAA considers input
- **Outreach to SAT Airport Advisory Commission**
 - FAA considers input
- **Develop SAT website on FAA CE webpage**
 - Update Fact Sheets, project description, and other materials
 - Brief Congressional Staffers
 - Share link for linking on SAT airport page
- **Develop and Host Workshops**
 - Project Videos (Intro, Procedures, Environmental)
 - Social media outreach regarding project, livestream events
 - Live panel workshops, propose two events- one daytime, one evening
 - ❑ Facility ATC SMEs, Regional Administrator, Industry, SAT Airport, Environmental Protection Specialist
 - Spanish speaking materials and outreach via local news source
 - Workshop recorded and placed on webpage, translated version
 - 30 day public comment period



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| **NextGEN**

Our Partnership with San Antonio:

- The FAA will provide air traffic, environmental and communications expertise.
- We want to understand from San Antonio the best way to communicate with constituents.
- We want to learn local culture, noise areas, and needs.
- We want to be aware of the Airport Authority's needs and expectations.
- We want to incorporate officials from the City and the Airport Authority in our outreach.
- We want to make this a community effort that will benefit all.

San Antonio Community Engagement

Open Discussion, Expectations, & Planning