# UAS Standards, Reg, Law & Exam

FAA Regulations: Part 107 Lesson 2c – Airspace Operations



### The NOTAM System

#### Notice to Airmen (NOTAM)

- o Time-critical aeronautical information
- o Disseminated via the National NOTAM System
- o NOTAMs contain notices to airmen that are considered essential to the safety of flight
- Examples of why NOTAMs are issued include:
  - □ Hazards, such as air shows, parachute jumps, kite flying, and rocket launches
  - **□** Flights by important people such as heads of state
  - □ Inoperable lights on tall obstructions
  - **D** Temporary erection of obstacles near airfields
  - Description Passage of flocks of birds through airspace (a NOTAM in this category is known as a BIRDTAM)
- NOTAMs are available online at
  - □ FAA NOTAM Search (https://notams.aim.faa.gov/notamSearch/)
  - □ http://www.fltplan.com/
  - □ http://www.aopa.org/whatsnew/notams.html
  - □ https://skyvector.com/



## **Temporary Flight Restrictions (TFRs)**

- o TFRs are issued by a flight data center (FDC) in a NOTAM
- TFRs are issued for a number of reasons including:
  - **D** To provide a safety environment for the operation of disaster relief
  - **D** To prevent an unsafe congestion of sightseeing aircraft above an incident/event
  - □ To protect the President, Vice President, or other public figures
  - **D** To protect sporting events
- o The NOTAM begins with phrase "FLIGHT RESTRICTIONS" and is followed by
  - **D** The location of the temporary restriction
  - **D** The effective time period
  - **D** The area defined in statute miles
  - **D** The altitude affected
- The NOTAM also contains the FAA coordination facility and telephone number, the reason for the restriction, and any other information deemed appropriate



# Check for NOTAMs and TFRs

- o Always check for TFRs in any area when you will be flying
- 0 Link https://tfr.faa.gov/tfr2/list.html
- When you call Flight Service for a briefing you should also specially ask for any TFRs that are in the are where you will be flying
- Calling Flight Service also protects you with a "Time Stamp" should a TFR occur just before and/or during your flight and could help prevent any legal action against you
- I suggest that you check out the current TFRs at the link above. Are there any in your area that might affect your ability to fly? The following pages illustrate a TFR that routinely occurs in Albuquerque every September and October (Balloon Fiesta)



#### Check for NOTAMs and TFRs

		(112)1130.300.101	iistotype=a	Il&sort=f&up=Y		C,	Q Search		쇼	Ê					M		
	eral Aviatio inistration														F	AA.go	•
TFR List		TFR Map		Map Airports	TFR H	elp	PilotWeb		<b>2</b> S	UA							
Center Select	a center	o GO	State	New Mexico	GO GO	Туре	AII NOTAMS	GO GO	w	ED, 11	OCT 20	17 20:3	4 UTC				
					Reset F	llter											
Click column h	and the second se		Chatte		Bassad attac												
Date 04/07/2017	NOTAM 7/7282	Facility FDC	State USA	Type SECURITY	USA, Friday, A	pril 14, 201	7 through Satur	rday, April	13, 201	9 UTC			20	om			
07/20/2017	7/4319	FDC	USA	SECURITY	USA, Thursday	r, July 20, 2	017 UTC										
10/10/2017	7/0724	ZAB	AZ	HAZARDS	FOREST LAKE, 2017 UTC	AZ, Wedne	sday, October 1	.1, 2017 th	rough S	aturday	y, Nove	mber 11	, @	ŧ.			
10/11/2017	7/1480	ZAB	AZ	SECURITY	Libby AAF, AZ,	, Friday, Oct	tober 13, 2017 L	Local New	ł.				•				
9/29/2017	7/4125	ZAB	NM	AIR SHOWS/SPORTS		NM, Friday,	October 06, 201	17 through	Sunday	, Octob	oer 15,	2017 UT	c 🧿				
10/11/2017	7/1475	ZAB	AZ	SECURITY	Libby AAF, AZ,	, Saturday, (	October 14, 201	7 Local No	ew				۲	ł.			
10/11/2017	7/1479	ZAB	AZ	SECURITY	Libby AAF, AZ,	, Sunday, O	ctober 15, 2017	' Local Nev	N				•	k			
05/04/2017	7/0646	ZAN	AK	HAZARDS	COLONY GLAC	IER, AK, Fri	day, May 05, 20	)17 throug	h Sunda	y, Octo	ber 15,	2017 U	тс 🧿	ł			
09/28/2017	7/3358	ZBW	MA	HAZARDS	HANOVER, MA	, Monday, O	october 02, 2017	7 through I	Friday, M	lovemb	er 03, 3	2017 UT	c 🧿	ł.			
01/10/2011	1/1155	ZDC	DC	SECURITY	WASHINGTON	, DC. EFFEC	TIVE 11011020	40 UTC					۰	ł.			
10/12/2016	6/7196	ZDC	USA	SECURITY	USA, Wednesd	lay, October	12, 2016 UTC										
10/12/2016	6/7215	ZDC	USA	SECURITY	USA, Wednesd	lay, October	12, 2016 UTC										
10/07/2017	7/9737	ZDC	wv	HAZARDS	PETERSBURG,	WV, Saturd	lay, October 07,	, 2017 thro	ugh Frid	lay, Oc	tober 1	3, 2017	•				



## **NOTAM – FDC 4/2726**

Number :		FDC 4/2726 Download shapefiles	W. GRA STAT
Issue Date :		May 12, 2024 at 1336 UTC	CIND
Location :		FORT WINGATE, New Mexico near GALLUP VORTAC (GUP)	TO AND AND IN
Beginning Date and	Time :	May 13, 2024 UTC 1500-2200 Daily	Consider want out
Ending Date and Tir	me :	May 18, 2024 UTC	Martin Haster
Reason for NOTAM	2	Temporary flight restrictions	man and and and
Type :		Hazards	T Into
Replaced NOTAM(s	5):	N/A	
Pilots May Contact	2	ALBUQUERQUE (ZAB) ARTCC, 505-856-4591	X- VID
			So So So and So
Ju	mp To:	Affected Areas	Lub Rolling A
		Operating Restrictions and Requirements	1° 1 20 14 14
		Other Information	1. 00 1 1 L
			A manager to an and the second
Affected Area(s	5)	Тор	TONIA .
Airspace Definition			Dick for Sectional
		On the GALLUP VORTAC (GUP) 088 degree radial at 12.7 nautical miles. (Latitude: 35°25'57"N, Longitude:	>> NOTAM Text
		108°37'05"W)	
		3 nautical miles	
	reading of	From the surface up to and including 11000 feet MSL	
Effective Date(s):	Annua.	From the surface up to and including frood leet MSE	
Enecuve Dute(5).	In UTC:		
		2200 UTC Daily starting May 13 and ending May 18.	
	1500 10	2200 010 Daily starting may 10 and ending may 10.	
Operating Rest	rictions	s and Requirements	
Operating Rest	rictions	s and Requirements	

Other Information:		Тој
ARTCC:	ZAB - Albuquerque Center	
Point of Contact:	ARMY CORPS OF ENGINEERS MIKE OLDFIELD	
	Telephone 269-377-1387	
Authority:	Title 14 CFR section 91.137(a)(1)	



#### **NOTAM – FDC 4/2726**

#### Affected Area(s)

#### Airspace Definition:

On the GALLUP VORTAC (GUP) 088 degree radial at Center: 12.7 nautical miles. (Latitude: 35°25'57"N, Longitude: 108°37'05"W)

Тор

Radius: 3 nautical miles

Altitude: From the surface up to and including 11000 feet MSL

#### Effective Date(s):

In UTC: 1500 to 2200 UTC Daily starting May 13 and ending May 18

# 8:00 AM (1500 UTC) to 3:00 PM (2200 UTC) Local Time

#### Daily Starting May 13 and Ending May 18





#### NOTAM – FDC 4/2726 – NATAM Text

Тор

Number :	FDC 4/2726 Download shapefiles
Issue Date :	May 12, 2024 at 1336 UTC
Location :	FORT WINGATE, New Mexico near GALLUP VORTAC (GUP)
Beginning Date and Time :	May 13, 2024 UTC 1500-2200 Daily
Ending Date and Time :	May 18, 2024 UTC
Reason for NOTAM :	Temporary flight restrictions
Type :	Hazards
Replaced NOTAM(s):	N/A
Pilots May Contact :	ALBUQUERQUE (ZAB) ARTCC, 505-856-4591
Jump To:	Affected Areas Operating Restrictions and Requirements Other Information
Jump To:	Operating Restrictions and Requirements

#### Affected Area(s) Airspace Definition:

On the GALLUP VORTAC (GUP) 088 degree radial at Center: 12.7 nautical miles. (Latitude: 35°25'57"N, Longitude: 108°37'05"W)

Radius: 3 nautical miles

In UTC:

Altitude: From the surface up to and including 11000 feet MSL

#### Effective Date(s):

1500 to 2200 UTC Daily starting May 13 and ending May 18.



Click for Sectional
NOTAM Text

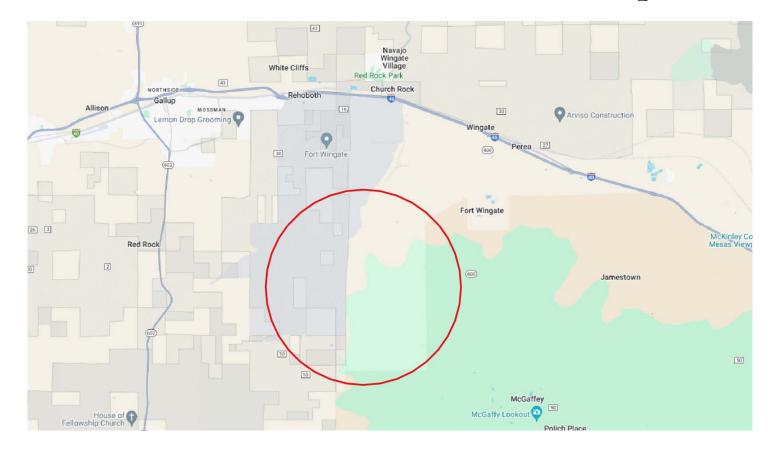
#### NOTAM: 4/2726

FDC 4/2726 ZAB NM..AIRSPACE FORT WINGATE, NM..TEMPORARY FLIGHT RESTRICTIONS WI AN AREA DEFINED AS 3NM RADIUS OF 352557N1083705W (GUP088012.7) SFC-11000FT EXPLOSIVE DEMOLITION. PURSUANT TO 14 CFR SECTION 91.137(A)(1) TEMPORARY FLIGHT RESTRICTIONS ARE IN EFFECT. ONLY RELIEF ACFT OPS UNDER DIRECTION OF ARMY CORPS OF ENGINEERS MIKE OLDFIELD ARE AUTH IN THE AIRSPACE. ARMY CORPS OF ENGINEERS MIKE OLDFIELD TEL 269-377-1387 IS IN CHARGE OF ON SCENE EMERG RESPONSE ACT. ALBUQUERQUE /ZAB/ ARTCC TEL 505-856-4591 IS THE FAA CDN FACILITY. DLY 1500-2200 2405131500-2405182200





#### NOTAM – FDC 4/2726 – Visualize Download Shapefiles





# NOTAM – FDC 4/2726 – Visualize Download Shapefiles



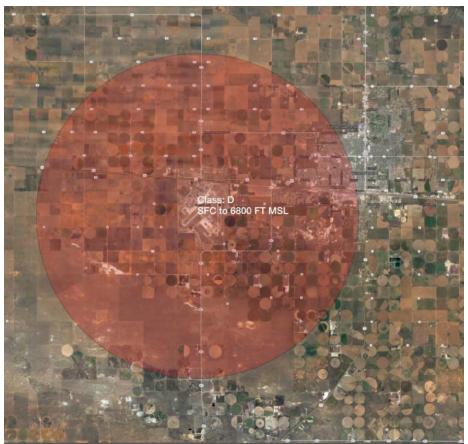


### Albuquerque (ABQ) and Santa Fe (SF) Airspace



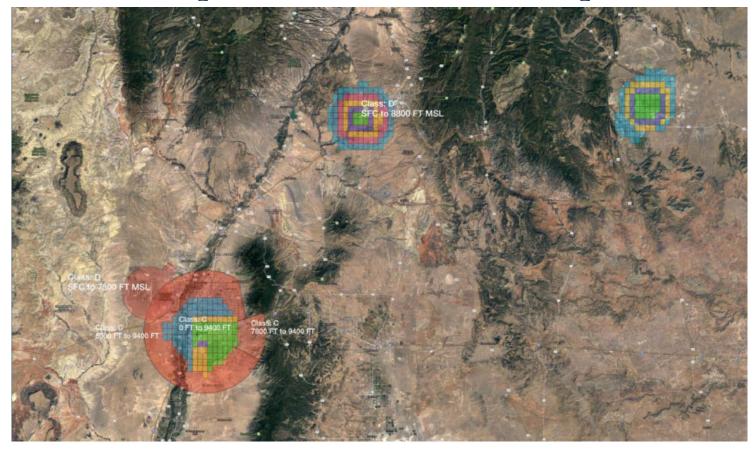


# Clovis (LVS) Airspace





# ABQ, SF, and LVS Airspace & FAA Facilities Map





- LANNC is the Low Altitude Authorization and Notification Capability, a collaboration between FAA and Industry
- 0 It directly supports UAS integration into the airspace
- o LANNC provides
  - Drone pilots with access to controlled airspace at or below 400 feet
  - □ Awareness of where pilots can and cannot fly
  - Air Traffic Professionals with visibility into where and when drones will operate
- Through the UAS Data Exchange, the capability facilitates the sharing of airspace data between the FAA and companies approved by the FAA to provide LAANC Services; the companies are known as UAS Service Suppliers (USS) and the desktop applications and mobile apps to utilize the LANNC capability are provided by the USS



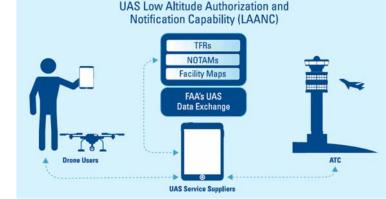
#### o How does it work

- LANNC automates the application and approval process for airspace authorization; through automated applications developed by an FAA-Approved USS pilots apply for an airspace authorization
- Requests are checked against multiple airspace data sources in the FAA UAS Data Exchange such as UAS Facility Maps, Special Use Airspace data, Airports and Airspace Classes, as well as TFRs and NOTAMs
- □ If approved, pilots can receive their authorization in near-real time
- Unless specifically requested in an authorization, drone pilots do not need to notify the tower before they fly
- □ LAANC provides airspace authorization only; pilots must still check NOTAMs, weather conditions, and abide by all airspace restrictions



#### o How and when can drone pilots use LAANC

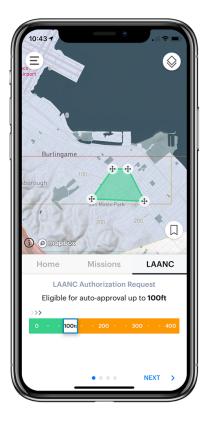
- Drones pilots planning to fly under 400 feet in controlled airspace around airports must receive an airspace authorization from the FAA before they fly
- LAANC is available to pilots operating under the Small UAS Rule Part 107 or under the exception for Recreational Flyers
- You can access through one of the following FAA-Approved LAANC USS
  - ✤ <u>https://www.faa.gov/uas/getting\_started/laanc#approve\_d</u>
  - ✤ Currently there are 10 LAANC USS





#### o There are two ways to use LAANC

- Submit a near real-time authorization request for operations under 400 feet in controlled airspace around airports (available to Part 107 Pilots and Recreational Flyers)
- Submit a "further coordination request" if you need to fly above the designated altitude ceiling in a UAS Facility Map, up to 400 feet; you can apply up to 90 days in advance of a flight and the approval is coordinated manually through the FAA (available to Part 107 pilots only)





#### o Where can I fly under LAANC

- □ LAANC is available at 726 airports
- □ If you want to fly in controlled airspace near airports not offering LAANC, you can use the manual process to apply for an authorization
- The manual process involves the use of FAADroneZone to get approval by ATC; select Airspace Authorization; fill in the required fields; review and submit the application; and receive confirmation in 30 days or so

