



NOTAMs Affect Every User of the NAS ICAO Flight U.S. Service **Flight NOTAM Stations Flight** Inspection Office Dispatch Air Instrument **NOTAMs** ATO **Traffic Wild Fire** Approach Security Control **Fighting Procedure** Office **Service** Centers DOD **Technical Pilot Operations Technician** General **Airport Public Operator**

NOTAM



A NOTAM is a notice containing information essential to personnel concerned with flight operations but not known far enough in advance to be publicized by other means. NOTAMs concern the establishment, condition, or change of any component (facility, service, procedure, or hazard) in the NAS. They must state the abnormal status of a component of the NAS—not the normal status.

In 1947, it was agreed to begin issuing NOTAMs via telecommunications. NOTAMs were modeled after Notice to Mariners, which advised ship captains of hazards in navigating the high seas.



NOTAM Contractions

NOTAMs have a unique language characterized by the use of specialized contractions.

Contractions are imperative to the NOTAM structure because they make communication more efficient and allow computer systems to parse important words.

The International Civil Aviation Organization (ICAO) is the leading authority for standardizing contractions in the international aeronautical community. If there is no ICAO contraction, plain language is used.

Reference: FAA Order JO 7340.2, *Contractions*, the manual for commonly used contractions Contractions Manual

Building Blocks of a NOTAM



NOTAM Components

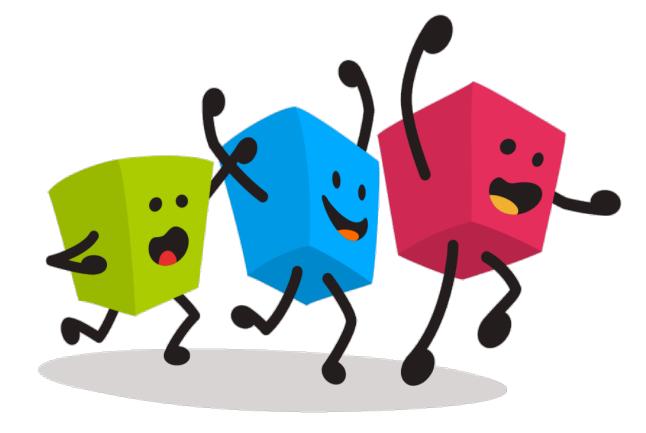


NOTAM construction uses a standardized order

- Accountability is always first
- NOTAM number
- Affected location
- Keyword
- Start of Activity and End of Validity are always the final component

NOTAM Components

Several additional elements may be included "when needed."



The slides with "when needed" in the title show optional components in their proper placement in the NOTAM structure, but those components may or may not be used.

NOTAM Components: Accountability and Number

!DCA 06/005 AML NAV VOR/DME OUT OF SERVICE YY06082230-YY06302200

The Armel VOR/DME is out of service between June 8, 2230 through June 30, 2200.

Examples of the identifier of the accountability location:

- Facility (DCA airport)
- GPS (Global Positioning System)
- CARF (Central Altitude Reservation Function)
- FDC (Flight Data Center)
- SUA (Special Use Airspace)

The accountability is a geographic tag used for internal FAA logging and is found in the Chart Supplement (formally known as the Airport/Facility Directory (A/FD)) under RADIO AIDS TO NAVIGATION: NOTAM FILE XXX.

The NOTAM number (MM/NNN), comes after the accountability; MM is the two-digit month, and NNN is the three-digit number, ranging from 001 to 999.

Note - since the NOTAM number contains month and not year, the NOTAMs don't necessarily appear in chronological order.

Common Issue

1) A NAVAID may not show up under every airport it serves, as it may serve more than one.



Best Practice

- Check 25 nautical miles (NM) to either side of your full route of flight to ensure relevant NAVAID NOTAMs are displayed.
- Do not rely only on reviewing Departure, Destination, and Alternate Airport NOTAMs.
- 3) The Chart Bulletin is a tool for keeping a situational awareness about changes to charts.

Chart Bulletin

AERONAUTICAL CHART BULLETINS

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Chart listed.

The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency.

Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information

Data is current as of 56 days prior to the date of this publication.

NOTAM Component: Location Identifier

!DCA 06/005 **AML** NAV VOR/DME OUT OF SERVICE 1706082230-1706302200 The location identifier component is the affected facility or location (airport, Navigational Aid (NAVAID), or Air Route Traffic Control Center (ARTCC)) and it appears after the NOTAM number.

Here, AML is the identifier of the VOR/DME, Armel.

Note: When the location occupies more than one ARTCC (e.g. an approach control or an airspace) a separate NOTAM will exist for each affected ARTCC.

NAVAID Decommissioning

A NAVAID is removed from aeronautical charts when it is decommissioned, which occurs after all airspace and procedural dependencies on that NAVAID have been removed.

It may be several years between a NAVAIDs approval for decommissioning and its eventual removal from charts.

Pilots should be alert for NAVAIDs having a dissimilar identifier from the airport(s) they serve and to use the Chart Supplement U.S. to identify the correct NAVAID NOTAM file.

NOTAM Components – Keywords for Pilots

Following the location identifier, each NOTAM will contain one of the following 20 keywords.

- RWY Runway
- IAP Instrument Approach Procedure
- VFP Visual Flight Procedure
- DVA Diverse Vector Area
- TWY Taxiway
- AD Aerodrome
- OBST Obstruction
- NAV Navigation
- COM Communication
- SVC Services
- ODP Obstacle Departure Procedure
- SID Standard Instrument Departure
- STAR Standard Terminal Arrival

!DCA MM/NNN AML **NAV** VOR/DME U/S YY06082230-YY06302200

- CHART
- DATA
- AIRSPACE
- SPECIAL
- SECURITY
- ROUTE
- APRON

Note: Because NOTAMs are not prioritized, keywords allow users to sort NOTAMs by subject matter.

Common Issue

 NOTAMs are not prioritized, therefore displayed in first-come first-serve order.

2) Confusing the name of a taxiway with cardinal directions.

Best Practice

1) The creation of NOTAM keywords in 2008 has allowed users to sort and filter based on those keywords.

 With TWY, the cardinal direction is spelled out so it is not confused with the name of the taxiway.

Example: NORTHEAST TWY used instead of TWY NE

NOTAM Examples

...TWY F EDGE LGT OUT OF SERVICE ...

Taxiway F
lights are out
of service

...RWY 03/21 CLSD...

Runway 03 and 21 are closed to aircraft

...AIRSPACE AEROBATIC ACFT WI AN AREA DEFINED AS 1NM RADIUS OF FSO SFC-3500FT DLY 1600-1700...

Aerobatic activity is taking place within a 1 mile radius of Franklin County State Airport (Highgate, VT)

...OBST TOWER LGT (ASR 1050171)
383430.80N0844921.70W (18.9NM ESE 8I1) 1229FT (289FT AGL) OUT OF SERVICE ...

An obstruction tower 18.9 nautical miles east/southeast of 811 airport is not lighted in accordance with current regulations

...COM CTAF 122.725 CHANGED TO 123.075...

The CTAF frequency 122.725 is changed to 123.075



NOTAM Examples

...AIRSPACE PJE WI AN AREA DEFINED AS 5NM RADIUS OF APT SFC-15000FT...

Parachute activity 15,000 feet and below within a 5 nautical mile radius of APT airport ...NAV VOR
OUT OF
SERVICE...

The VHF
Navigation Aid
(VOR) located
on this airport
is out of
service

...IAP LOS ANGELES INTL, Los Angeles, CA. RNAV (GPS) Y RWY 24L, AMDT 5... LPV DA 628/ HAT 505 ALL CATS, VISIBILITY ALL CATS RVR 6000. LNAV/VNAV DA 632/ HAT 509 ALL CATS. TEMPORARY CRANE 342 MSL 5513FT EAST OF RWY 24L (2016-AWP-6554-OE)...

There is a temporary crane east of runway 24L which is creating amended minimums.

...SVC TWR CLSD
MON-SUN 0100-1100,
CLASS D SVC NOT
AVBL CTC
JACKSONVILLE APP
AT 121.725

The air traffic control tower at Cecil airport (VQQ) has changed hours of operation and is now closed between 0100UTC and 1100UTC daily. When closed, Class D services are not available and Jacksonville Approach Control controls the traffic

NOTAM Components: Attribute, Activity or Surface Designator

!DCA MM/NNN AML NAV **VOR/DME**U/S YY06082230-YY06302200

In the above example, the Armel VOR/DME (attribute) is out of service for a specified period of time. Notice the attribute follows the keyword.

However, when using the keywords RWY, TWY or APRON, a surface designator must follow the keyword.

Example: ...RWY <u>03</u> CLSD...and...APRON <u>MAIN RAMP</u> CLSD... and...TWY DB OPN...



NOTAM Components (When Needed): Surface Segment



!CRW 06/005 CRW TWY B BTN RWY 05/23 AND TWY A CLSD YY04230400-YY05230400

In other words, a portion of the surface, instead of the entire surface segment. In this example, taxiway B is closed between runway 05/23 and taxiway A.

Construction Notices

Example:

...SOUTH 100FT...
...BTN TWY C AND TWY B...
...NORTH OF RWY 09/27...

NOTAM Components (When Needed): Facility, Feature, Service, System, and/or Components Thereof

!MLB MM/NNN MLB RWY 27
HLDG PSN SIGN FOR RWY 18/36
NOT LGTD...

Examples:

...HLDG PSN SIGN...

...ILS LOC...



NOTAM Components (When Needed): Location Description



!ABC MM/NNN ABC RWY 02 FIRST 1000FT CLSD EXC TAX

This is an explanation that helps better define the location of the issue.

Example:

...WIP MOWING LEFT SIDE APCH END RWY 10...

...SOUTHEAST SIDE FOR RWY 13L/31R...

... APRON MAIN RAMP N 123FT CLSD...

NOTAM Components (When Needed): Lower Limit/Upper Limit

!GNV MM/NNN ZJX AIRSPACE PJE WI AN AREA DEFINED AS 3NM RADIUS OF CEW080024 (05FA) **SFC-14500FT** AVOIDANCE ADVISED...

Parachute jumping occurring within a three nautical mile radius of the Crestview VOR zero eight zero degree radial centered at 24 DME, which is at a private airport called "Melanie's Airport" from the surface to fourteen thousand five hundred feet. Avoidance of the area is advised.

Example:

...500FT AGL-10000FT...

...10000FT-FL590...



NOTAM Components: Condition

!LGB MM/NNN LGB RWY 08L/26R OPN TUE-SAT 0500-1315 YY08070500-YY08181315



OPN – OPEN

ACT - ACTIVE

CLSD - CLOSED

Example:

...NAV ILS RWY 09 HUGGY LOM OUT OF SERVICE...

...RWY 14/32 CLSD...



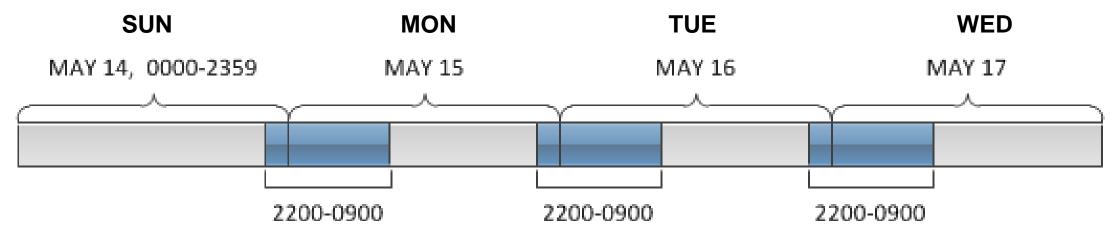
NOTAM Components (When Needed): Remarks

Remarks are any additional pieces of information that might benefit the pilot.

!BDL MM/NNNN BDL RWY 06/24 CLSD **EXC** 30MIN PPR 123.4/860-627-3001...



NOTAM Components (When Needed): Schedule



The schedule is specified in the element before the Start of Activity

Example:

!GNV MM/NNN F95 AIRSPACE MIL ACT WI AN AREA DEFINED AS 3NM RADIUS OF F95 SFC-14000FT **DLY 2200-0900** YY05142200-YY05170900

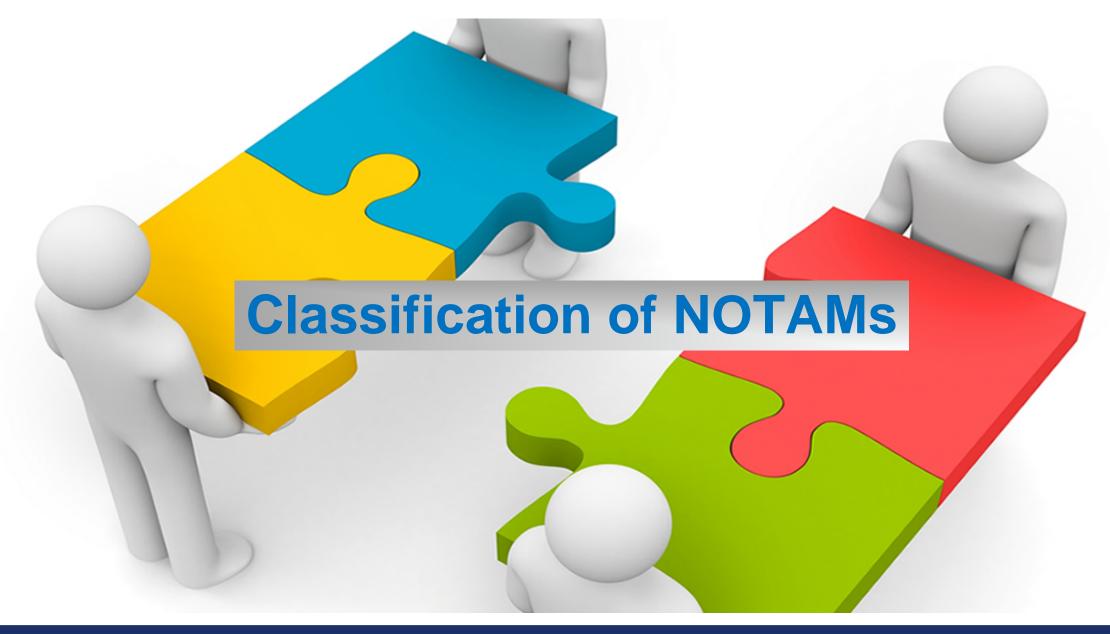
Military aircraft are operating within a three nautical mile radius of the Calhoun County Airport (Blountstown, FL) from the surface to fourteen thousand feet between 2200UTC and 0900UTC each day starting on Sunday May 14 and ending on Wednesday May 17.

NOTAM Components: Start of Activity/End of Validity

!DCA MM/NNN AML NAV VOR/DME U/S YY06082230-YY06302200 A 10-digit date-time group (YYMMDDHHMM) UTC indicating:

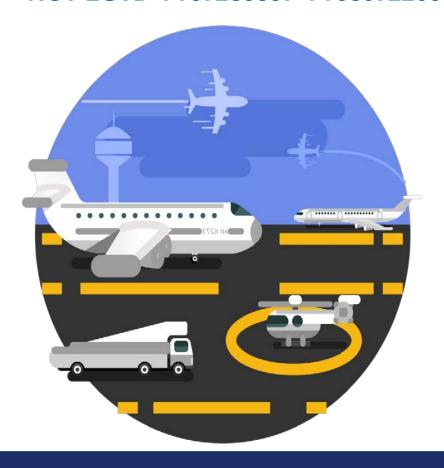
The time at which the NOTAM comes into force (the date/time a condition will begin)

The time at which the NOTAM ceases to be in force and becomes invalid (the expected time of return to service, return to normal status, or the end of the activity)



NOTAM D

!DAY 07/030 DAY TWY K HLDG PSN SIGN NOT LGTD YY07280307-YY08072200



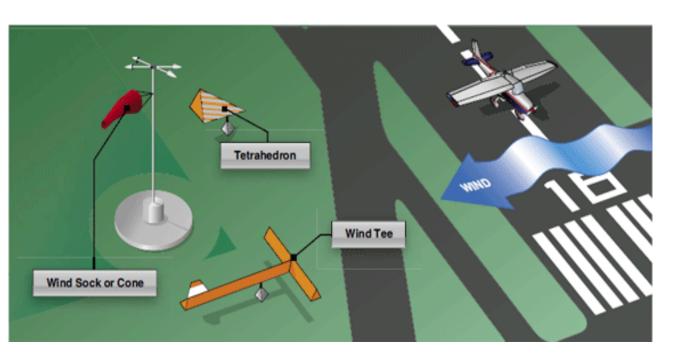
NOTAM Ds contain information concerning the establishment, condition, or change of any:

- Aeronautical facility
- En Route NAVAIDS
- Services
- Procedures
- Hazards
- Civil public-use airports listed in the U-S- Chart Supplement

NOTAM Ds are numbered consecutively each month by the NOTAM System starting with 001 for each accountability. This would be the 30th NOTAM issued for the month of July for the DAY accountable location.

Military NOTAM (report view)

M0318/09 - APCH END RWY 30 WIND DIRECTION INDICATOR UNSERVICEABLE. 16 JUL 18:17 YYYY UNTIL 25 OCT 23:59 2016. CREATED: 16 JUL 18:18 YYYY



Military NOTAMs are issued by the US Air Force, Army, Marines, Navy, and Coast Guard against NAVAIDS and airports.

These NOTAMs are numbered consecutively by accountability, location, and series (beginning with "S0001" each year, where S stands for a generic series the military may have). The NOTAM number and year of issuance are separated by a forward slash.

Common Issue

Best Practice

Military and civil NOTAMs do not use the same format.

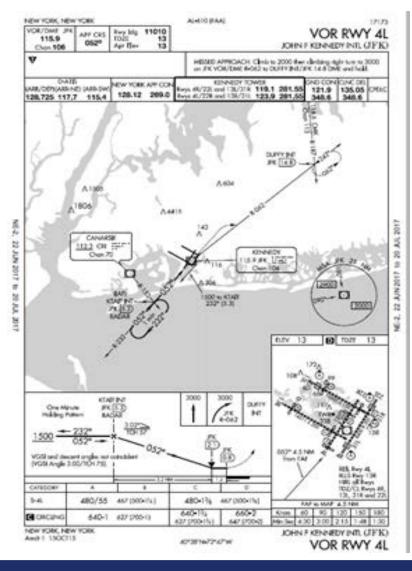


Read both the civil and military NOTAMs at Joint-Use Airfields.

Understand that Military uses the International NOTAM format and follows their own guidance for writing NOTAM text.

DoD Aeronautical Information Portal

FDC NOTAM



FDC NOTAMs contain flight information that is normally regulatory in nature, including but not limited to:

- Changes to Instrument Flight Procedures
- Flight Restrictions
- Changes to airspace usage

FDC NOTAM numbers (8/7843) are assigned consecutively by the NOTAM System.

- First number (8) is the last digit of the year issued (2018)
- Second set of numbers is the serial number starting at 0001 and continuing through 9999
- Numbers are recycled so the highest number may not be the most recently issued FDC NOTAM.

!FDC Y/7848 (A2765/YY) JFK IAP JOHN F KENNEDY INTL, New York, NY. VOR RWY 4L, AMDT 1... DME OR RADAR REQUIRED EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS, CRI R-153 UNUSABLE. YY05011218-YY12111218EST

Pointer NOTAM

NOTAM D issued to point to additional aeronautical information. The keyword in the pointer NOTAM must match the keyword in the original NOTAM. For example, a pointer NOTAM at a specific airport is used to highlight or "point out" an FDC NOTAM.



Original:

!ATL 05/754 ZTL SVC STANLY APP CLSD YY06011700-YY06170200

Explanation: The Stanly Approach Control is closed.

Pointer:

!VUJ 05/023 VUJ SVC SEE ZTL 05/754 STANLY APP CLSD YY06011700-YY06170200

Field Condition (FICON) NOTAM



A FICON NOTAM contains information on the surface conditions of landing runways, taxiways and aprons.

Example:

...RWY 01 FICON 1/2/2 100 PRCT ICE, 100 PRCT 1IN SLUSH, 100 PRCT 1IN SLUSH...

Explanation: Runway 01 is the landing runway. The RWY Condition Code is 1/2/2. The first third is covered with between 90-100% ice. The remaining two-thirds are 100% covered in one inch of slush.

International NOTAM

International NOTAMs are received from other countries and are also generated by the US NOTAM Office (USNOF). International NOTAMs are stored in the NOTAM System.



C0101/08 NOTAM

- A) AUSTRALIAN FLIGHT INFORMATION REGION
- B) 0812240745 (SUNSET CHRISTMAS EVE) C) 0812252315 (SUNRISE CHRISTMAS MORNING)
- E) ALL TIMES IN UTC (UNIVERSAL TIME)
 AIRSERVICES AUSTRALIA SPECIAL NOTICE TO AIRMEN.
 ALL ACFT INCLUDING REGULAR PUBLIC TRANSPORT, EMENGENCY
 MEDICAL FLIGHTS, FLYING DOCTOR, FIRE FIGHTERS, POLICE AND
 THOSE JUST GOING TO BE WITH FRIENDS AND FAMILY THIS NIGHT
 ARE ADVISED TO BE ALERT TO THE REGULAR YEARLY OCCURENCE
 ASSOCIATED WITH CHRISTMAS PRESENT DELIVERY.

DEPARTURE POINT: NORTH POLE

DURATION OF FLIGHT: THE AUSTRALIAN SECTION COMMENCES AT

SUNSET NORFOLK ISLAND AND WILL BE COMPLETED BY SUNRISE COCOS ISLAND IN THE INDIAN OCEAN WITH A SOMINUTE BUFFER AT START AND FINISH

TO ALLOW FOR THE UNLIKELY DELAY.

TRACK: GPS ASSISTED FLEXIBLE AND SECRET.

TRACKING TO EACH LOCATION WHERE GOOD CHILDREN SLEEP.

ACFT: HEAVY LIFT, STEALTH SLEIGH

DRIVE TYPE: 9 DEER(9DR)DRIVE FITTED WITH ENVIORONMENTALLY

FRIENDLY AFTER BURNERS

FUEL TYPE: BIO(SUSTAINABLE GREEN GRASS AND MOSS) SUPPLEMENTED WITH THE ODD BIT OF CHRISTMAS CAKE AND MILK OR ICE COLD WATER.

SEPARATION STANDARDS: EQUIPPED WITH TRAFFIC COLLISION AVOIDANCE SYSTEM (TCAS) AND OPERATION ON SEE BUT

NOT BE SEEN VISUAL FLIGHT RULES.

OPERATING SPEED AT ALL LEVELS: ABSLOUTELY CLASSIFIED TOP SECRET.

AS FOR PREVIOUS YEARS THE OPERATING LEVELS WILL BE

LOWEST LEVEL: ROOF TOP (DURING DELIVERY SEGMENTS)

UPPER LEVEL: LOW EARTH ORBIT (IN TRANSIT)

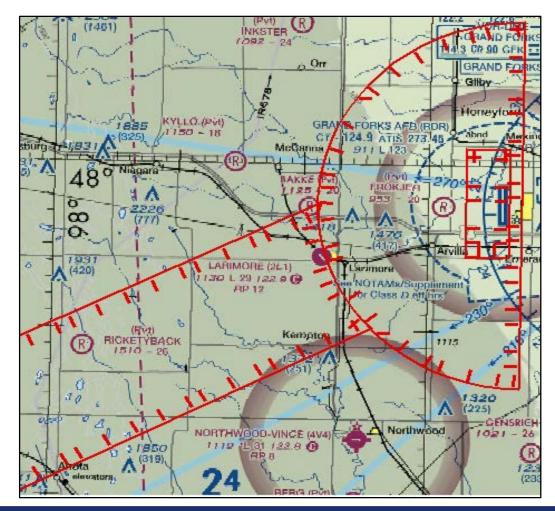
OPERATING AUTHORITY: SANTA

CONTACT: GOOGLE IT

Temporary Flight Restriction (TFR) NOTAM

A TFR is a type of NOTAM that defines an area restricted to air travel due to a hazardous condition or a special event, or that distributes a general warning for the entire FAA airspace.

You can find TFR NOTAMS online in the FAA's TFR Listing TFR Website or the FAA's NOTAM Search



BEST PRACTICES for TFRs

 Pilots are encouraged to use online preflight resources, such as those provided by Flight Service, as they provide graphics for TFRs.

- The FAA's online TFR graphical resource will provide a plain language explanation of a TFR NOTAM which can assist with understanding the area affected.
- Some TFRs may allow pilots to fly through the flight restriction should they request permission to do so and subsequently receive it.

BEST PRACTICES for TFRs

- •Participating in the FAA's Safety Program Airmen Notification System is encouraged as it enables email notifications of TFRs in your area.
- •Monitor guard (121.5) as air traffic control DoD intercept aircraft will transmit on this frequency to pilots who may inadvertently enter a TFR.
- •Be aware of when your provider's TFR information is updated as some are not updated evenings or weekends. Be aware of FIS-B latency, processing time, and distance at which TFRs are uplinked. Understand your systems settings as it relates to depiction of TFRs and other airspace.

Information For Operators on FIS-B

Central Altitude Reservation Facility (CARF) and Special Activity Airspace (SAA) NOTAMs

!CARF MM/NNN ZOA AIRSPACE DCC PIG SHED STNR ALT RESERVATION WI AN AREA DEFINED AS 3953N11833W TO 3946N11843W TO 4012N11939W TO 4014N11921W TO POINT OF ORIGIN FL190-FL220 YY06161730-YY06161930 CARF NOTAMs contain airspace and altitude reservations transmitted by the USNOF after receipt of the candidate NOTAM from the CARF office.

!SUAE MM/NNN ZNY AIRSPACE R5206 ACT SFC-5000FT YY06141000-YY06150400 SAA includes special use airspace (SUA) (restricted area, military operations area (MOA), warning area, and alert area airspace), instrument and visual military training routes, and aerial refueling tracks and anchors.

BEST PRACTICE - Airspace

!CARF 09/059 ZAB AIRSPACE STNR ALT RESERVATION WI AN AREA DEFINED AS TXO275034 TO TXO358009 TO TXO162011 TO TXO192027 TXO222041 TO POINT OF ORIGIN. AVOIDANCE ADZD FL180-FL240 YY09140200-YY09142330

A military operations area (MOA) is designated as a special use airspace due to a high density of military aircraft in the vicinity. The FAA urges pilots to use extreme caution when operating in these areas; however, VFR pilots can fly through a MOA because there are no weapons in use. IFR aircraft are routed around active MOAs.

Global Positioning System (GPS) NOTAM



GPS interference missions, part of national security requirements that often cover a wide geographical area, may affect the avaibility of GPS signals. A NOTAM is issued to describe the affected area(s).

Public Notices

!GPS ZAB NAV GPS (NAFC GPS 15-01 E1)
(INCLUDING WAAS, GBAS, AND ADS-B) MAY NOT
BE AVBL WI AN AREA DEFINED AS A 468NM
RADIUS CENTERED AT 330702N1062540W
(TCS103044) FL400-UNL 425NM RADIUS AT FL250,
360NM RADIUS AT 10000FT, 354NM RADIUS AT
4000FT AGL, 327NM RADIUS AT 50FT AGL DLY
0400-1000 YY08060400-YY08081000

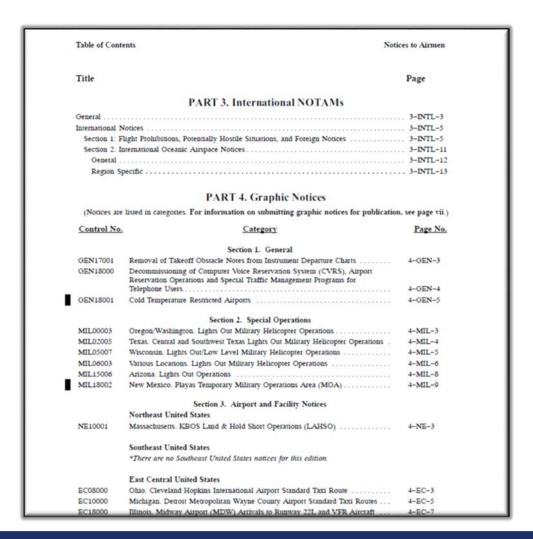
NOTAM Search

The NOTAM Search tool allows all users to search for active NOTAMs in the United States NOTAM System (USNS).

Users are able to search for NOTAMs based on location, flight path, geography, latitude/longitude, free text, accountability, archives and NOTAMs in proximity to location. Users are also able to filter the results, as well as generate reports based on search results.

Notice to Airmen Publication (NTAP)

Most changes to the NAS meeting NOTAM criteria are known sufficiently in advance to be carried in FAA publications. When this cannot be done, changes are carried in the Notices to Airmen publication (NTAP) and/or the Service A telecommunications system as a NOTAM D item.

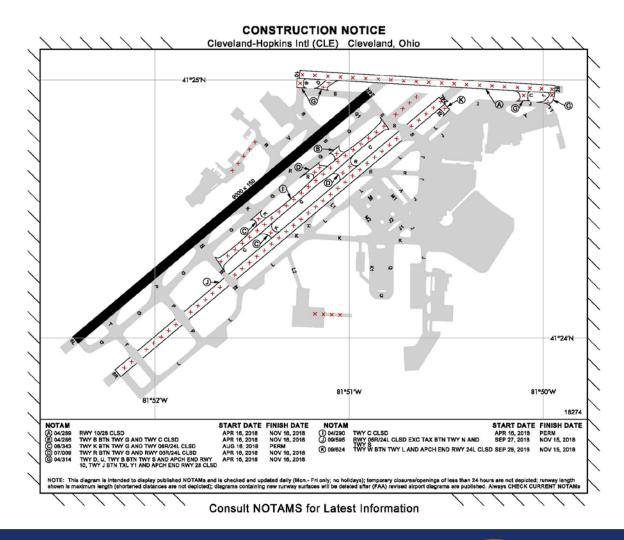


ADS-B NOTAM format



!FDC Y/NNNN ZMA AIRSPACE ADS-B, AUTO DEPENDENT SURVIELLANCE REBROADCAST (ADS-R), TFC INFO SERVICE BCST (TIS-B), FLT INFO SERVICE BCST (FIS-B) SERVICES MAY NOT BE AVBL WI AN AREA DEFINED AS 73NM RADIUS OF 270544N0835935W. AIRSPACE AFFECTED MAY INCLUDE GULF OF MEXICO AREAS OF VERNON BASIN, CHARLOTTE HABOR, ST. PETERSBURG, THE ELBOW, FLORIDA MIDDLE GROUND AND TARPON SPRINGS, SFC-UNL, YYMMDDHHMM-YYMMDDHHMM

Airport Construction Notice Diagram



Frequently Asked Questions

- Q1) What is the purpose of a GPS NOTAM?
- A1) To identify an area of coverage that may be affected by unreliable GPS signals.
- Q2) What does the NOTAM format look like?
- A2) See examples in the FAA Order 7930.2, *Notices to Airmen*; the Advisory Circular; and samples on the e-NOTAM II (ENII) website.
- Q3) How do I access NOTAMs on the FAA website?
- A3) They are fully accessible via NOTAM Search (see reference slide)
 - a) A search can be conducted on location, free text, geographical radius, or flight path.
 - b) Historical NOTAMs can be seen using the archive function:
 - 1) The NOTAM history goes back five years.
 - 2) You must provide a specific location on a specific date.

Frequently Asked Questions

- Q4) Why do all NOTAMs have a start/stop time?
- A4) Until Further Notice (UFN) and With Effect From (WEF) have been replaced with the ICAO Start of Activity/End of Validity.
- Q5) When is the term "PERM" (permanent) used as the End of Validity?
- A5) When NOTAM content is to be published in the U₋S₋ Chart Supplement or other publication.
- Q6) What is the difference between the Aeronautical Information Service (AIS) 24x7 NOTAM office and the U.S. NOTAM Office?
- A6) The USNOF is charged with monitoring the NOTAM System for compliance with the criteria and procedures set in the 7930.2. Whereas the AIS office is responsible for originating FDC NOTAMs for revisions to instrument flight procedures.
- Q7) How can I find out more about crane operations
- A7) Utilize the OE/AAA website at <u>OEAAA portal</u> to have a better situational awareness at airports.

References

Internet Resources:

NOTAM Search: https://notams.aim.faa.gov/notamSearch/

National Flight Data Center Homepage: https://nfdc.faa.gov/xwiki/bin/view/NFDC/WebHome

Flight Service Homepage: www.faa.gov/go/flightservice

Flight Service Flight Briefing Website: www.1800wxbrief.com

FAA Website: www.faa.gov

Current Temporary Flight Restrictions: http://tfr.faa.gov

Flight Service ENII System: https://notams.aim.faa.gov/en2/

GPS Notices: https://www.faasafety.gov/SPANS/notices_public.aspx

FAA Documents:

The Aeronautical Information Manual (AIM) contains important NOTAM governance for pilots.

FAA Order 7930.2, Notices to Airmen, provides guidance for FAA users.

Advisory Circular (AC) 150/5200-28, NOTAMs for Airport Operators, provides information to the airport operator.

FAA Order JO 7340.2G, *Contractions*, contains guidance on appropriate abbreviations for NOTAM writing.