



Filing a NOTAM for Unmanned Free Balloons

Original Document Creator: Marian Courtney, Fall 2013



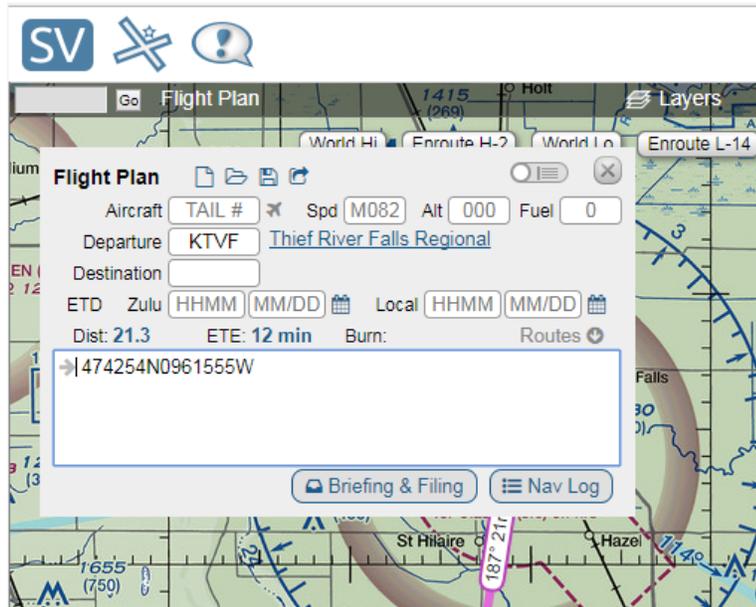
Notice to Airmen (NOTAM)

*Please read all directions before calling in a NOTAM.
Some of the procedures may be asked in a different order.
Please log all NOTAM information in a Flight Report*

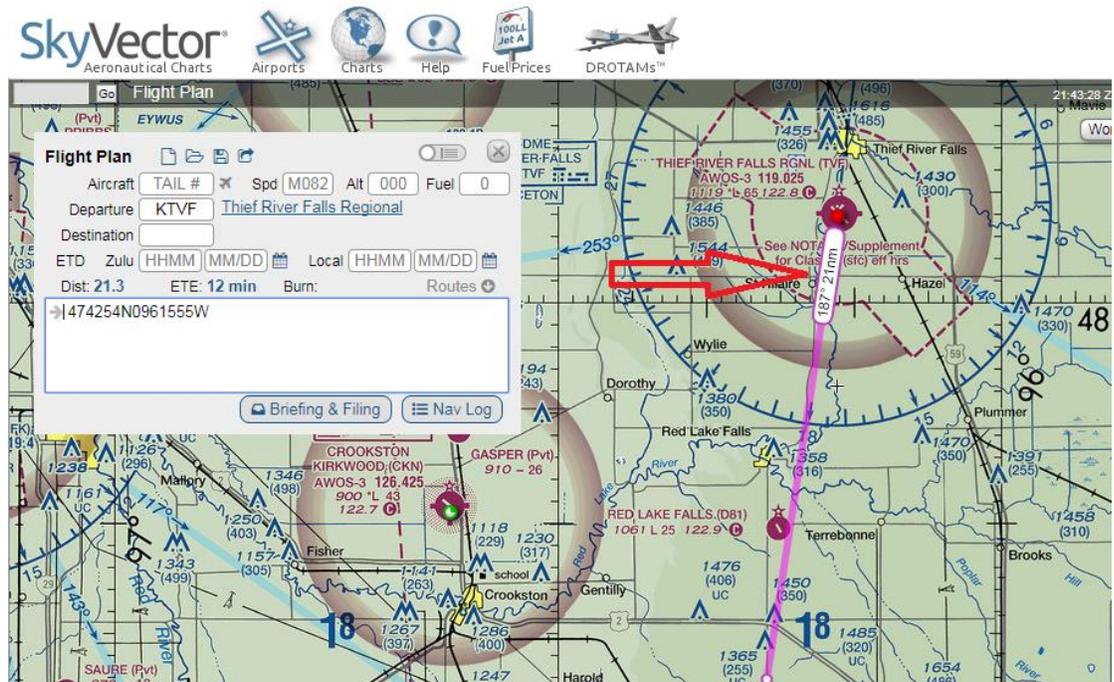
- Phone number to file a NOTAM: **1-877-487-6867**
 - North Dakota is under Fort Worth, Texas jurisdiction
 - This is our Flight Service Station (FSS). A FSS assists with navigational aid to pilots including flight planning, weather, PIREPS (Pilot Reports), and NOTAMS (Notice to Airmen)
- FAA Waivers: If you are ever asked about an FAA waiver, our balloons (unmanned free balloons) are **exempt** under the **FAR 101 Subpart D**.

NOTAM Procedures

1. **Before calling**, look up your launch site's **distance** from the closest airport or VOR in both *Nautical Miles* and **radial position in degrees** relative to the airport or VOR.
 - a. VORs are typically located right by airports, but in more rural locations they are standalone. VOR/DME refers to combined radio navigation station for aircraft, which consists of two radio beacons, placed together, a VHF omnidirectional range (VOR) and distance measuring equipment (DME). VOR produces an angle between the station and the receiver in the aircraft, while DME does the same for range. Together, they provide the two measurements needed to produce a navigational "fix" using a chart.
 - b. Nautical miles are the distance unit used in aviation. **1 nautical mile = 1.15078 statute miles** and is equal to **one minute of latitude**, which equals **1/60th** of a **degree of latitude**
 - c. **Radial position** refers to the angle between you and the nearest airport or VOR, with due north being 0 degrees
2. Find your position using flight planning software- Skyvector is a good resource: <https://skyvector.com>
 - a. Search for the airport or VOR nearest to your launch site and its three letter code (Grand Forks Airport >> GFK)
 - b. Go to skyvector.com and select "Flight Plan" in the upper left corner. Enter the airport code as the **DEPARTURE**.
 - c. Use **DMS** for your lat/long, and enter the digits in a string, omitting the degree and second symbols and separating the two values with a comma. Place a 0 in front of any values in the Western or Southern hemisphere instead of a negative symbol.



- d.
- e. Hit enter and you will get your launch site's radial position and distance in nautical miles relative to the airport (21 nm at 187° from TVF).



- f.
- g. You now have a numerical radial distance and direction (ex. 21 nm on the 187 radial from TVF [Thief River Falls])

3. **Before calling**, figure out the **time of launch**, until time of landing. It's always a good idea to add on an extra hour or two so you can be sure that the balloon will have landed before the NOTAM ends.
 - a. FSS wants Zulu time. Convert your launch time from Central Standard Time (~Mar-Nov, add 5 hours) or Central Daylight Time (~Nov-Mar, add 6 hours).
 - b. For example, 9am – 1 pm, in military time, would be 0900-1300 (local military time). Add 5 or 6 hours during daylight savings. Final time would be: 1400-1800 Zulu



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4. NOTAMS always use the phonetic alphabet for letters, including your initials and the airport's designation code. Look it up beforehand if you don't already know.
5. **Call the NOTAM phone number**
6. Listen to the recording, which asks you to select your state (as of 12/2017, **ND is 4**).
7. After someone from the FSS answers, say something like, "*Hi, I would like to file a NOTAM for an Unmanned Balloon Flight*" OR , "*Hi, I would like to file a NOTAM for a Moored Balloon Flight*"
8. Give the closest airport's three letter code (TVF)
9. They will ask you for the launch location. Reply, "*We are 21 nautical miles south of TVF on the 187 radial.*"
10. If they ask "*Is there a VLR on site*", the answer is usually **yes**, but look it up beforehand to make sure. (If they ask for more specific details, be honest and say you don't know additional information. They're very helpful and can look it up).
11. Tell them the direction the balloon is predicted to travel (usually due east for ND and MN launches)
12. They will ask for your flight levels, or the upper and lower limit of the balloon.
 - a. FSS uses flight levels. (Ex. a max height of 40,000 feet is FL400, 10,000 feet is FL100).
 - b. Say, "*Surface to Unlimited*" (it was originally a max level of FL600, but recently changed).
 - c. If they ask for the specific altitude, say 100,000 feet.
13. They will ask "when is this NOTAM for?" Respond with a *day of the week* and *date*.
14. They may ask if you want a confirmation code. Respond, **yes**. It will always begin with the month number, "slant," and then the number of the NOTAM
15. Ask for their initials and give them yours.
16. Be sure to thank them!