

# GPS Interference Testing

**FEMA Government Sector UAS Working Group  
Wednesday, 23 June 2020**

**Curt D. Johnson, Technical Writer, Safety Warden, & Remote Pilot**



**North Carolina Emergency Management**



# What should you do if you are to conduct a UAV mission in a GPS Interference area?

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1. Look for GPS Interference Testing NOTAMs before each mission
2. If there is NOTAM anywhere near your area, then plot it on Google Earth
3. **If your UAV mission is within the affected airspace, then do not conduct the mission. You could cause far more of a problem with a flyaway UAV than whatever you are trying to accomplish.**
4. **If you lose GPS, your UAV could do any of the following:**
  - a. Record an inaccurate home point.
  - b. Be extremely difficult to handle
  - c. Not accurately plot where it is on your control station's moving map
  - d. If you are operating near a No Fly Zone (e.g. a prison), your UAV might mistakenly think that it has encountered that zone



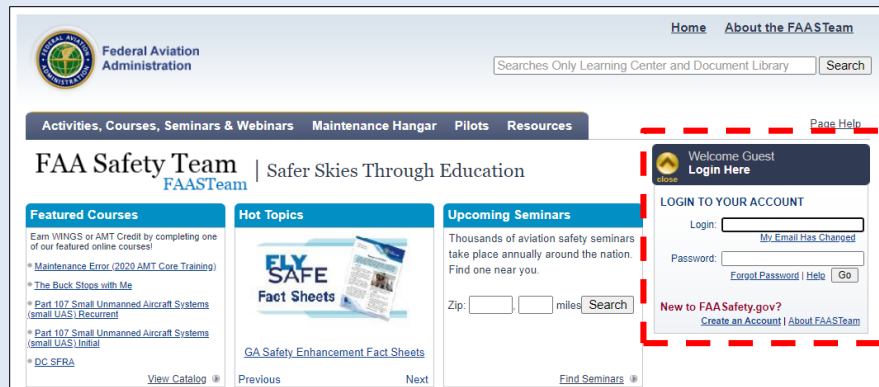
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e. Not be able to conduct a photogrammetry/mapping mission

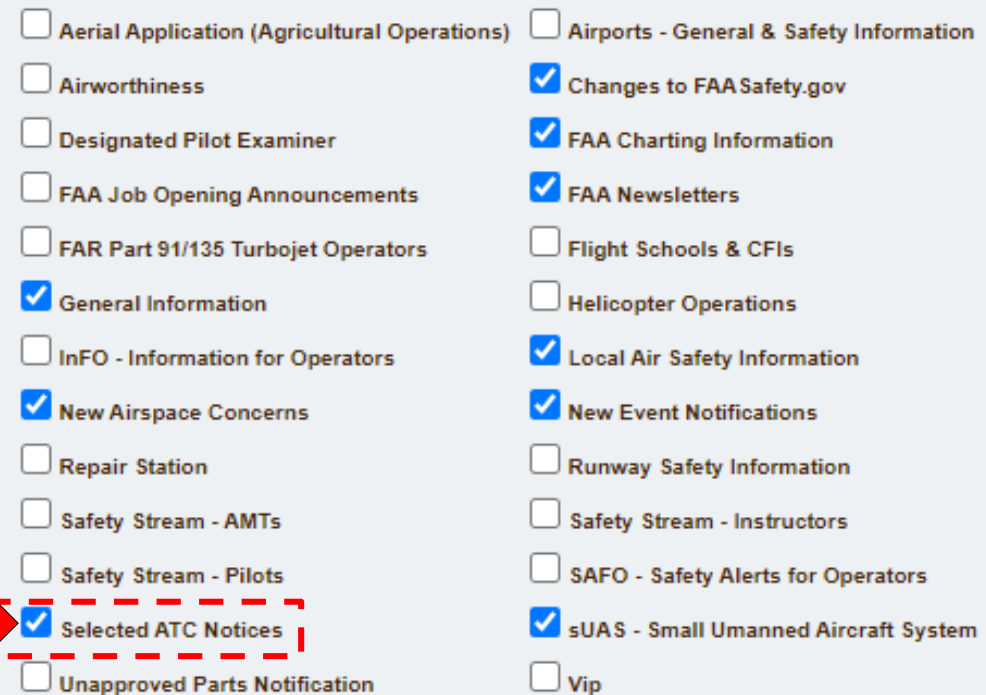
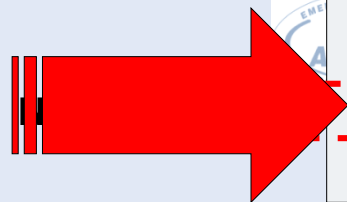
# How to receive upcoming GPS Interference Testing NOTAMs by email

## 1. FAA Safety Team (<https://www.faasafety.gov/default.aspx>)



- a. Create an account.
- b. Select the “My Preferences and Profile” option.
  - 1). Select the “**Selected ATC Notices**” option.
  - 2). Press the [Save] button.

The FAA usually sends out the email notifications late Friday afternoon to evening for tests that will start on the following Sunday or Monday.



# How to look up scheduled GPS Interference Testing

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## 1. NAVCEN Approved GPS TESTING

([https://www.navcen.uscg.gov/pdf/gps/gpsnotices/GPS\\_Interference.pdf](https://www.navcen.uscg.gov/pdf/gps/gpsnotices/GPS_Interference.pdf))

### APPROVED GPS TESTING (UPDATED NOVEMBER 12, 2020)

TEST PERIOD APPROVED BY DEPARTMENT OF DEFENSE, EXACT DATES AND TIMES OF TESTING, DURING APPROVED PERIOD, WILL BE DETERMINED BY TEST RANGE EVENT PLANNERS AND SUBJECT TO CHANGE.

Area	Range	Date(s)	BNM/LNM
YUMA, AZ YPG_AZ GPS 20-33	137 NM	12 NOVEMBER 2020 - 20 NOVEMBER 2020	NO
WILMINGTON, NC MARSOC GPS 20-04	69 NM	11 OCTOBER 2020 - 16 NOVEMBER 2020	YES
CAMP SHELBY, MS MARSOC GPS 20-03	52 NM	08 NOVEMBER 2020 - 16 NOVEMBER 2020	YES
WILMINGTON, NC MARSOC GPS 20-05	69 NM	08 NOVEMBER 2020 - 16 NOVEMBER 2020	YES
WHITE SANDS MISSILE RANGE, NM WSMRNM GPS 20-29	160 NM	05 NOVEMBER 2020 - 20 NOVEMBER 2020	NO
FT. POLK, LA FTPKLA GPS 20-62	84 NM	12 NOVEMBER 2020 - 20 NOVEMBER 2020	YES
YUMA, AZ YPG_AZ GPS 20-33	137 NM	12 NOVEMBER 2020 - 20 NOVEMBER 2020	NO

# How to look up GPS Interference Testing NOTAMs

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## 1. FAA Public Notices ([https://www.faasafety.gov/SPANS/notices\\_public.aspx](https://www.faasafety.gov/SPANS/notices_public.aspx))

NOTE: The FAA no longer post **past** GPS Interference Testing NOTAMs on the opening retrieval page.

But, you can search for past GPS Interference Tests by entering “GPS Interference Testing” followed by the testing location (e.g. Fort Bragg) and year or month (e.g. 2019) on the webpage’s Search engine. Unfortunately, the retrieved NOTAMs do not display the date and include NOTAMs for sites and dates that were not requested.

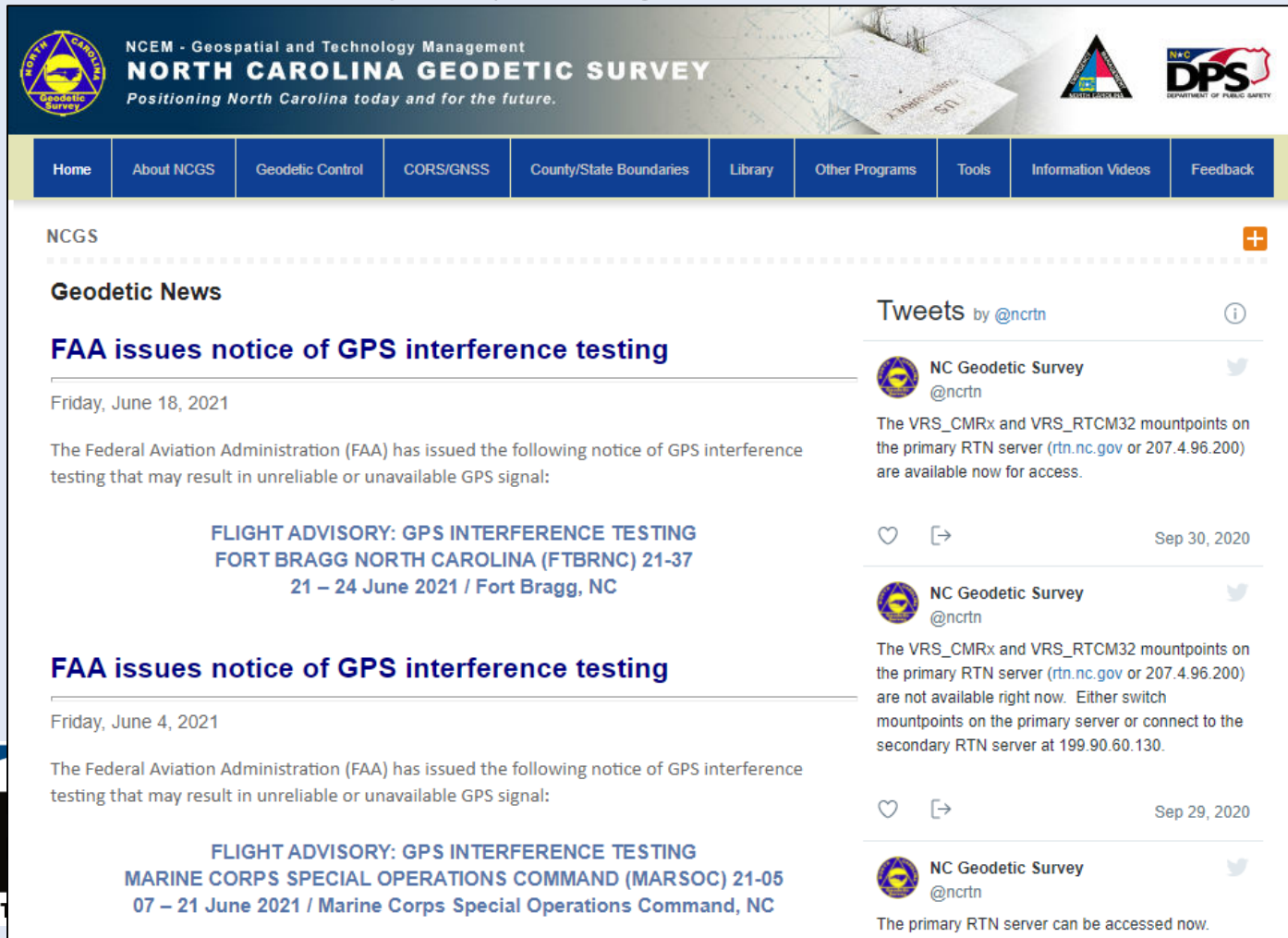


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# How to look up GPS Interference Testing that is occurring in North Carolina

## 1. NC Geodetic Survey (<https://ncgs.state.nc.us/>)



The screenshot displays the NC Geodetic Survey website. The header includes the NCEM logo, the text "NCEM - Geospatial and Technology Management", and the "NORTH CAROLINA GEODETIC SURVEY" logo with the tagline "Positioning North Carolina today and for the future." Navigation tabs include Home, About NCGS, Geodetic Control, CORS/GNSS, County/State Boundaries, Library, Other Programs, Tools, Information Videos, and Feedback. The main content area is titled "NCGS" and features a "Geodetic News" section with two articles:

- FAA issues notice of GPS interference testing**  
Friday, June 18, 2021  
The Federal Aviation Administration (FAA) has issued the following notice of GPS interference testing that may result in unreliable or unavailable GPS signal:  
**FLIGHT ADVISORY: GPS INTERFERENCE TESTING  
FORT BRAGG NORTH CAROLINA (FTBRNC) 21-37  
21 – 24 June 2021 / Fort Bragg, NC**
- FAA issues notice of GPS interference testing**  
Friday, June 4, 2021  
The Federal Aviation Administration (FAA) has issued the following notice of GPS interference testing that may result in unreliable or unavailable GPS signal:  
**FLIGHT ADVISORY: GPS INTERFERENCE TESTING  
MARINE CORPS SPECIAL OPERATIONS COMMAND (MARSOC) 21-05  
07 – 21 June 2021 / Marine Corps Special Operations Command, NC**

To the right, a "Tweets by @ncrtn" section shows three tweets from the NC Geodetic Survey (@ncrtn) regarding the availability of VRS\_CMRx and VRS\_RTCM32 mountpoints on the primary RTN server (rtn.nc.gov or 207.4.96.200) and the secondary RTN server (199.90.60.130).



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# If you want more info on GPS interference testing, please contact:

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