

**AERONAUTICAL CHARTING FORUM**  
**Charting Group**  
**Meeting 09-01 - April 29-30, 2009**

**RECOMMENDATION DOCUMENT**

**FAA Control # 09-01-212**

**Subject:** Depiction of high volume UAS activity on VFR sectionals.

**Background/Discussion:**

The USAF is committed to integrating UAS technology into the NAS. However, current UAS technology does not provide UAV pilots with see and avoid capabilities. This limitation compelled the FAA to limit operations of UAVs around Beale AFB from 4100AGL to 18,000MSL (the top of the local Class C airspace to the bottom of Class A airspace) to 10nm from the airfield. These dimensions establish a Terminal Flight Restriction (TFR) area around Beale AFB, published via NOTAM.

However, VFR pilots do not necessarily check NOTAMs before each flight. In an effort to increase safety and situational awareness, a special airspace designation is required. There is precedence for such a designation. Some airfields are specifically highlighted on VFR sectional charts as areas of high glider traffic or parachute operations.

**Recommendations:**

The USAF can identify UAS main operating airfields. These airfields should be depicted with a 10nm ring centered on the airfield center point. This ring would be referenced in the chart legend: "Exercise Caution – Unmanned Aerial Vehicle traffic, SFC to 18,000MSL"

**Comments:** This recommendation affects upcoming NGA chart products.

**Submitted by:** Captain Damon Field  
**Organization:** 12<sup>th</sup> Reconnaissance Squadron  
**Phone:** Commercial (530) 634 – 1681, DSN 368 - 1681  
**FAX:**  
**E-mail:** [damon.field@beale.af.mil](mailto:damon.field@beale.af.mil)  
**Date:** 6 March 2009

**MEETING 09-01** – Maj. James Taylor, USAF, briefed the issue. The USAF is committed to integrating Unmanned Aircraft Systems (UAS) technology into the National Airspace System (NAS). However, current UAS technology does not provide Unmanned Aerial Vehicle (UAV) pilots with see and avoid capabilities. This limitation compelled the FAA to limit operations of UAVs around Beale AFB from 4100 AGL to 18,000 MSL (the top of the local Class C airspace to the bottom of Class A airspace) to 10 nm from the airfield. These dimensions establish a Terminal Flight Restriction (TFR) area around Beale AFB, published via NOTAM. However, VFR pilots do not necessarily check NOTAMs before each flight. In an effort to increase safety and situational awareness, the USAF believes a special airspace designation is required. There may be precedence for such a designation. Some airfields are specifically highlighted on VFR sectional charts as areas of high glider traffic or parachute operations. The recommendation was that the USAF-identified UAS main operating airfields should be depicted with a 10 nm ring centered on the airfield center point. This ring would be referenced in the chart legend: “Exercise Caution – Unmanned Aerial Vehicle traffic, SFC to 18,000MSL”. This recommendation affects upcoming NGA chart products as well.

The discussion of options was between placing a symbol near an airport for UAS operations and placing some sort of airspace with parameters. Ms. Valerie Watson, FAA/NACO, remarked that it would be much easier to create and place a symbol rather than to create airspace. Temporary Flight Restrictions (TFR) are difficult to get and pilots say there are too many of them now. National Security Areas must be requested by Airspace and Rules and are also difficult to obtain.

Mr. Brad Rush, FAA/NFPO, reiterated that the ACF has recently received several requests for depiction of airspace areas. His stated position was that if there is a need to establish special airspace use or regulatory airspace areas, there is a defined official government process to follow for establishing official regulatory airspace with defined lateral and vertical limits. The FAA’s official policy for integrating UAVs into the NAS is still evolving with DoD and other branches of the federal government. The subject touches numerous branches such as airspace, procedures, regulations, etc.

No conclusions were reached.

**ACTION:** Valerie Watson will approach the IACC with a proposed new UAS symbol.

**ACTION:** Mike Connor, FAA/UAV Office, will raise the issue internally and brief the ACF at the next meeting.

**ACTION:** Maj. James Taylor will communicate with Beale AFB to have a note published in the A/FD.

**MEETING 09-02:** Ms. Valerie Watson, FAA/AeroNav Services, reported that she has been working with Mr. Lance Christian, NGA, on a prototype symbol. Sources for the geographic boundaries of UAS Activity Areas are still problematic. Before a proposed IACC Requirement Document (RD) is submitted, the source and coordination issues would need to be discussed.

**ACTION:** Ms. Watson or Mr. Christian will report back at the next ACF.

**MEETING 10-01:** Ms. Valerie Watson, FAA/AeroNav, reported the symbol has been developed and the RD has been signed by the IACC. There is no source data as of yet but UAS activity is ready to be charted.

Mr. Ted Thompson, Jeppesen, asked Ms. Watson if she could provide Jeppesen with a copy of the Requirements Document and the new symbol.

Mr. John Moore, FAA/AeroNav Svc, voiced concerns that there is no written criterion similar to PJA for the UAS Charting. These will be charted only by memo from AJR-32.

*NOTE: Subsequent to the Forum the question was raised as to how this information would be disseminated to the public. Mr. Moore discussed the issue with Mr. Chris Criswell, FAA/ATO-R, about how the 'legacy' and the future UAS information would be published. Future UAS charting will be done via the NFDD Add-On page. Any notes that may need to go with the UAS symbol will be published in an Airport/Facility Directory (A/FD) Memo..*

**ACTION:** Mr. Criswell to report the publication status of the 'legacy' UAS areas and how the new process is working.

---

**MEETING 10-02:** Mr. Chris Criswell, FAA/AJR-32, said the Requirements Document is in place for the new symbol and will vet the process via the Visual Chart Branch through the UAS office.

**STATUS: CLOSED**