

Wing Tips

Fall 2011

Des Moines Flight Standards District Office

Football Season TFRs



It is again the season for college football games and the applicability of the Temporary Flight Restriction (TFR) for the Ames and Iowa City areas. The following information is a review of the TFR procedures you need to be aware of.

Section 99.7 is the basis for restrictions around certain sporting facilities (often referred to as the “Sports NOTAM”). Except for limited cases specified in the NOTAM, all aircraft and parachute operations are prohibited at and below 3,000 feet AGL within a three NM radius of any stadium having a seating capacity of 30,000 or more people in which a Major League Baseball™, Football League™, NCAA™ division one football, or major motor speedway event is taking place. These restrictions are in effect one hour before the scheduled time of the event until one hour after the end of the event. **This restriction does not apply to those aircraft authorized by ATC for operational or safety purposes including aircraft arriving or departing from an airport using standard air traffic procedures.** All pilots should be aware that careful advance planning might be required to comply with these restrictions.

TFRs are issued as Flight Data Center (FDC) NOTAMs, and may be retrieved via DUATS (<http://www.duats.com>) or by contacting your Flight Service Station. Typically, the only TFRs that appear in the NOTAM publication (also known as the Class II NOTAMS) are those issued for sporting, entertainment, or other events when the time and location are known well in advance.

Here are some strategies that can help you avoid TFR airspace.

First, know your area. Also, if you fly close to a national landmark, power plant, sporting facility, or

military base, be particularly vigilant for restrictions that may surround those areas.

Second, contact your Flight Service Station and/or receive a DUATS briefing prior to EVERY flight. It is very easy to become complacent, particularly when flying in familiar airspace or over short distances. Although the FAA tries to provide advance notice when possible, actual disaster, hazard, or security situations may result in TFRs being issued, or changed, on very short notice. Also, because some restrictions are so large, even rural areas far from population centers may be enveloped by a TFR.

Next, even if you self brief using DUATS, consider giving your Flight Service Station a call. A DUATS briefing may include many pages filled with NOTAMs, most of which are likely not applicable to your flight. As a result, an important notice may be easily overlooked. A call to Flight Service can help keep you out of trouble. Just be certain to ask for flight restrictions along your route of flight.

Finally, there are web resources available to help you in locating TFRs. Many can be found by using the FAA’s website at <http://www.faa.gov>. The Bureau of Land Management also maintains a website useful in tracking firefighting and other restrictions throughout the NAS. It may be accessed at <http://airspace.blm.gov/mapping/blm/index.cfm>. Other nongovernmental organizations have web-based resources to aid in flight planning. The Aircraft Owners and Pilots Association (AOPA) website contains links to many notices and graphical TFRs. It may be accessed at <http://www.aopa.org>. The Air Safety Foundation also has an excellent online program titled *Know Before You Go* that may be accessed at http://www.aopa.org/asf/know_before.

The Experimental Aircraft Association (EAA) has teamed up with AeroPlanner at <http://www.aeroplanner.com> to provide graphical TFRs and other flight planning tools.

Tips such as these will help you stay clear of TFR airspace. However, to be fully prepared in case of an inadvertent TFR intrusion, pilots are encouraged to become thoroughly familiar with the interception procedures and signals contained in Chapter 5, Section 6, in the *Aeronautical Information Manual* (available on-line at <http://www.faa.gov/ATpubs>).

“Stay committed to your decisions, but stay flexible in your approach.”



The following paragraphs are included in Change 3 of the Aeronautical Information Manual

“Transponder Operation”

(This change advises pilots operating aircraft equipped with operable transponders to turn their transponder “on” as soon as practical and leave them “on” during all operations unless otherwise requested by ATC.)

Civil and military transponders should be adjusted to the “on” or normal operating position as soon as practical and remain on during all operations unless requested to change to “standby” from ATC.

IN ALL CASES, WHILE IN CONTROLLED AIRSPACE EACH PILOT OPERATING AN AIRCRAFT EQUIPPED WITH AN OPERABLE ATC TRANSPONDER MAINTAINED IN ACCORDANCE WITH 14 CFR SECTION 91.413 SHALL OPERATE THE TRANSPONDER, INCLUDING MODE C IF INSTALLED, ON THE APPROPRIATE CODE OR AS ASSIGNED BY ATC. IN CLASS G AIRSPACE, THE TRANSPONDER SHOULD BE OPERATING WHILE AIRBORNE UNLESS OTHERWISE REQUESTED BY ATC.

“Pilot Responsibility upon Clearance Issuance”

(This change explains that clearance readbacks should include the runway assignment.)

ATC Clearance/Instruction Readback: Pilots of airborne aircraft should read back *those parts* of ATC clearances and instructions containing altitude assignments, vectors, or runway assignments as a means of mutual verification. The read back of the “numbers” serves as a double check between pilots and controllers and reduces the kinds of communication errors that occur when a number is either “misheard” or is incorrect.

“Approach Clearance; and Instrument Approach Procedures”

(This change clarifies the meaning of “cleared for approach” for aircraft on vectors or unpublished segments.)

The following applies to aircraft on radar vectors and/or cleared “direct to” in conjunction with an approach clearance:

1. Maintain the last altitude assigned by ATC until the aircraft is established on a published segment of a transition route, or approach procedure segment, or other published route, for which a lower altitude is published on the chart. If already on an established route, or approach or arrival segment, you may descend to whatever minimum altitude is listed for that route or segment.
2. Continue on the vector heading until intercepting the next published ground track applicable to the approach clearance.
3. Once reaching the final approach fix via the published segments, the pilot may continue on approach to landing.
4. If proceeding to an IAF with a published course reversal (procedure turn or hold-in-lieu of PT pattern), except when cleared

for a straight in approach by ATC, the pilot must execute the procedure turn/hold-in-lieu of PT, and complete the approach.

5. If cleared to an IAF/IF via a No PT route, or no procedure turn/hold-in-lieu of PT is published, continue with the published approach.
6. In addition to the above, RNAV aircraft may be issued a clearance direct to an Intermediate Fix followed by a straight-in approach clearance.

The name of an instrument approach, as published, is used to identify the approach, even though a component of the approach aid, such as the glideslope on an Instrument Landing System, is inoperative or unreliable. The controller will use the name of the approach as published, but must advise the aircraft at the time an approach clearance is issued that the inoperative or unreliable approach aid component is unusable, except, when the title of the published approach otherwise allows, for example, ILS or LOC.

"A compromise is an agreement whereby both parties get what neither of them wanted."



Back in the early '70s, this report came from an FO for now-defunct Cascade Airways in the Pacific Northwest. We were known to ATC as the VFR on-top airline. The following exchange was heard one day:

ATC:

"Ah, Cascade 123, Seattle Center; what do the clouds look like for you out there?"

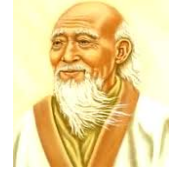
Cascade 123:

"Well, let's see -- there's one at 12 o'clock that looks like a fat little bunny and another at 9 o'clock that looks like a big pony with a really long tail."

ATC:

[no reply]

If Lao Tzu were teaching recurrent training, he might say:



**Accept the wisdom of the FMC.
 Let it find the way.
 But if the course does not agree,
 Don't be led astray.**

This issue of *CALLBACK* looks at an ASRS report in which the pilot was so "autoflight complacent" that he was unaware of significant track or altitude deviations until alerted by Air Traffic Control. This reporter strayed before being reminded of the true meaning of flight management. We can avoid the same errors by accepting the wisdom of their teachings.

"Forceful" and "Valuable" Lessons in Autopilot Monitoring

The human task of system monitoring is made more difficult by the high reliability of today's automation. In the following two reports, the autopilot failed to capture an altitude and caught the pilots off guard. In the first instance, a vigilant Controller stepped in to "save" a C-208 pilot who trusted the autopilot to make a low altitude level off.

I had just completed a long night of cargo flights. It was in the morning on my last leg into my home base. ATC was vectoring me in for a visual approach and told me to descend to 1,500 feet. I put 1,500 feet into the Autopilot and it should have leveled off at that altitude. For some reason it did not and I continued down to almost 1,000 feet without noticing. At that point ATC said, "Say altitude." I noticed my mistake, started a climb, and responded, "Correcting to 1,500 feet...."

I had become distracted with something on my phone. In combination with mild fatigue this caused me to descend through my altitude without noticing. I would like to think I would have noticed before I hit the water, but maybe not. If it were not for ATC

asking about my altitude this could have been a deadly situation.

This was a forceful lesson for me to keep unnecessary distractions in check while flying, especially during the non-cruise phases and when fatigue may be a factor. This also was a good reminder to not become too reliant on the automation.

**From the desk
of the
FAASTeam Manager**



Gunnar Nielsen has earned recognition for the Charles Taylor Master Mechanic Award.

In order to receive this award, the applicant must have worked for a period of 50 years in an aviation maintenance career. The applicant must also have been an FAA-certificated mechanic or repairman working on an N-registered aircraft maintained under the Federal Aviation regulations for a minimum of 30 of the 50 years required.

“There is danger in changing too much in search of perfection.”

**Experts Urge
“Sweeping”
Changes in
Pilot Training**



Training for airline pilots should utilize more-realistic simulators and focus more on manual flying skills, according to a new report by a panel of experts at the Wall Street Journal. The 54-page report, which was requested by Congress, has been presented to the FAA but has not yet been publicly released. It includes 24 recommendations that

would create "sweeping changes in initial and recurring training for airline pilots," according to the Journal. Among the report's conclusions: new hires should spend time in the jump seat to learn cockpit procedures before they take the controls, special leadership courses for captains should be developed, training for instructors should be standardized, and training for coping with stalls should be improved.

The report is expected to influence new rules and legislation, according to the Journal. The experts who wrote the report will help to implement their findings over the next year or so. Airlines may balk at the cost of enacting some of the recommendations, but some of the suggestions already are standard practice, such as voluntary reporting of safety incidents and data-sharing among airlines.

“It’s easy to make a buck. It’s a lot tougher to make a difference.”

**FAA Updates
Flight School
Rules**



The FAA has published a final rule with updates to regulations that affect pilot, flight instructor, and flight-school certification. The rule allows pilot applicants to apply concurrently for a private pilot certificate and an instrument rating, and permits flight schools to apply for a combined private pilot certification and instrument rating course. The rule also allows pilot schools to offer internet-based training programs even if they don't have a physical ground-training facility and revises the definition of "complex airplane" to include airplanes with full authority digital engine control (FADEC). The proposed rule would have replaced the 10 hours of complex airplane time required for commercial pilot applicants with 10 hours of advanced instrument training, but that provision has not been adopted in the final rule.

Runway Construction & Automatic Terminal Information Service (ATIS) Messages



This Information Bulletin serves to inform aircraft operators and pilots of ATIS messages and takeoff/landing clearances they may receive at airports where runway construction is under way or just completed.

Background: A number of runways throughout the nation are currently under construction or have just completed construction. In either case, it is possible that the runway has been shortened. To reduce risks associated with conducting operations during construction, it is imperative that pilots and operators are aware of the messages they may hear/see on the ATIS and/or receive as part of their air traffic clearance.

Discussion: For runways that are undergoing construction or have recently completed construction.

Operators and pilots can expect to hear the following messages via the ATIS recording. In situations where the runway has been shortened, operators will hear “WARNING” and “SHORTENED.” This should trigger a review of the available runway length (TORA) during construction period. When the construction results in a permanently shortened runway, the ATIS message will continue for 30 days following completion of construction or the publication of a new airfield diagram, whichever date is longer. In addition, “SHORTENED” will be used as part of the takeoff (or line up and wait) and landing clearance if cleared to use a runway that has been shortened. Finally, controllers will not use “full length” when clearing aircraft to takeoff (or line up and wait) on a shortened runway. These changes should prevent you from assuming that the runway in use is the published (maximum) length. In addition to ATIS messages and controller actions, some airports may add extra signage to communicate that the runway(s) is shortened. When

construction closes an entire runway(s), you will not see any change from the present, and closure information will be included in ATIS messages and NOTAMs.

“Advice is what we ask for when we already know the answer but wish we didn’t.”

ACCIDENTS

The private pilot in a CE-210 sustained serious injuries when the aircraft landed in a corn field due to power failure. Post accident investigation revealed probable fuel exhaustion.

An experimental aircraft impacted the ground short of the runway when the engine failed. The commercial pilot was fatally injured in the accident. The aircraft struck a tree on impact and became engulfed in flames.

The commercial pilot in a G-164 was involved in an accident with substantial damage to the aircraft following a hard landing. The pilot stated his vision was obscured by landing into the sun and by chemicals on the windshield.

Another aerial application accident occurred when the commercial pilot in a CE-A188 landed in a bean field due to a power loss.

The commercial pilot in an Ayres S2R-G6 struck the blade of a wind generator during a spraying operation. The pilot stated he was aware of the location of the obstacle but due to a nose high attitude during a pullout, he did not see the tower.

The private pilot in an Alon A-2A escaped injury in an off-airport landing. The pilot reported a power loss and made an emergency landing in a corn field. A hard landing resulted in substantial damage to a Flight Design CTLS. The pilot reported everything seemed to be normal on approach but apparently the flare out was too high to recover from a hard impact.

The ATP pilot and passenger in a Fairchild M-62A were fatally injured when the aircraft impacted a sand bar along a river. The aircraft was observed flying at a low altitude along the river bed. The aircraft struck two power lines and impacted a sand bar in a nose low attitude and came to rest inverted.

The ATP pilot of a Weatherly 201C sustained minor injuries during an aerial application accident. The aircraft struck the ground and a tree while spraying. The pilot reported the engine and aircraft appeared to be operating normally, but it started sinking and he could not recover with power.

The commercial pilot in a Cavalier SA102.5 sustained serious injuries when he made an emergency landing in a corn field. The engine failed due to a possible fuel system malfunction.

Another aerial application accident with a wire strike involved a commercial pilot in an OH-13H. The power line became entangled in the tail rotor causing a loss of control. The pilot was not injured.

The commercial pilot in a Bell 47 experienced engine failure while conducting aerial application and made an emergency landing. The pilot stated he had landed previously for refueling, became distracted looking at maps, and the aircraft did not get refueled.

The ATP pilot was fatally injured during aerial application in a UH-34 when witnesses reported the aircraft descended into trees and caught fire. Destruction was too extensive to determine if there were any engine malfunctions.

Another engine failure during aerial application caused the commercial pilot in an Aero Commander S2R to make an emergency landing. The pilot was not injured.

The private pilot in an experimental aircraft sustained minor injuries while making an emergency landing in a field. The pilot reported he had encountered a loss of aileron control while maneuvering and decided on the emergency landing. Post accident investigation revealed the right aileron cable had come loose.

INCIDENTS

The commercial pilot in an AT-602 struck electrical wires during an aerial application. The aircraft sustained minor damage to the propeller, aileron, and spray rig.

The commercial pilot in an Ayres S2R made an emergency landing in a field during aerial application. The pilot reported the engine initially sputtered and then quit. Post accident investigation revealed the engine appeared to run normal after replacing the engine pump inlet filter and purging the system.

A SNJ, piloted by a private pilot, ran off the runway to the side after landing and struck a taxiway light. The pilot reported a loss of directional control when the tail wheel came down after landing. Investigation did not reveal any mechanical problems.

The right main gear on a Mustang II collapsed while taxiing. The private pilot and passenger were not injured in the incident.

The private pilot in a CE-421 was involved in an incident when the left gear collapsed on landing due to a mechanical malfunction.

Until Next Time! Have a Safe Flight



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**HOURS OF OPERATION
MONDAY THROUGH FRIDAY
7:45 a.m. – 4:15 p.m.**

Visitors are requested to make appointments.

**The DSM FSDO will be closed on the following dates
in observance of a national holiday:**

October 10, 2011	Columbus Day
November 11, 2011	Veteran's Day
November 24, 2011	Thanksgiving Day
December 26, 2011	Christmas Day (observed)
January 2, 2012	New Year's Day (observed)