

SAFE TRAINING AID

TEACHING MOAs AND RESTRICTED AREAS

This training aid is provided courtesy of the Society of Aviation and Flight Educators, Inc. (SAFE) and Larry Bothe, and contains the following documents:

1. "Teaching MOAs and Restricted Areas" by Larry Bothe, MCFI and DPE, December 01, 2010
2. Response from FAA Office of Chief Counsel by Rebecca B. MacPherson, November 23, 2010

Background: Among many other benefits, SAFE provides its members with exclusive access to an online Library of reference materials, many of which have been authored by top educators in the aviation industry. Articles submitted for consideration undergo peer review by the SAFE Library Editorial Review Committee (LERC). While reviewing the "Teaching MOAs and Restricted Areas" article, questions were raised concerning Restricted Areas. Specifically, the LERC wanted to verify whether or not a clearance was indeed required to fly through a Restricted Area when that area was not in use, since Part 73 makes reference to "permission" in defining restricted areas.

The LERC researched the central question, including interviewing flight instructors, the FAA (at OSH), and ATC (at OSH). The research yielded conflicting understandings, so the LERC decided to seek guidance directly from the FAA's Office of Chief Counsel. After a four-month process, the LERC received an official interpretation:

A clearance is not required to operate VFR through a restricted area when the controlling or using agency, as applicable, has made a determination that the restricted area is "cold".
[Cold = not active]

The determination by the Office of Chief Counsel was deemed sufficiently important to warrant dissemination of this information beyond SAFE's members-only Library to insure access to the broader general aviation community. Consequently, this training aid was put together for aviation educators and pilots. The information is to be used for educational purposes only. Permission for any other use must be coordinated directly with the authors of the documents assembled herein.



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Teaching MOAs and Restricted Areas

By Larry Bothe, MCFI, DPE, updated 12/01/2010

I find that many Private Pilot applicants and not a few already-certificated pilots are confused between Restricted Areas and MOAs and how they behave.

An MOA (Military Operations Area) is an airspace where there may be a higher than normal concentration of military aircraft flying around. The difference between an MOA and a Restricted Area is that in an MOA the military aircraft are just flying around practicing formation flight, intercepts, and the like, but they are NOT shooting guns or dropping bombs. In contrast, a Restricted Area often encompasses a gunnery range and/or a bombing practice area. Dangerous stuff goes on in a Restricted Area. That's why you don't need to call anybody to fly through an MOA, but you have to call about a Restricted Area (see below). According to the Airman's Information Manual, in order to fly through an MOA you are supposed to be "extra vigilant", but you don't have to call anybody to determine if it is active or not.

As a side note, if you don't think there are military aircraft flying around in the same airspace where you and I fly every day then you haven't studied a sectional chart lately. Take a look at all those gray lines with the designation VR--- or IR--- marked on them. Those are Military Training Routes, and they are all over the place. Trust me, the gray lines are only an approximation of where military aircraft might be; they are NOT necessarily right on the gray lines when they do their training exercises.

A Restricted Area is just that; access into the area is restricted (but not prohibited). That means that in order to enter a Restricted Area (like R-3401-A just west of Columbus, IN) you have to make sure it is not in use. You do that by calling the controlling agency, as shown on the frequency tab of the sectional chart, and asking if the restricted area in question is in use or not. Controller jargon for this is "hot" (in use), or "cold" (not in use). According to the FAA's Office of Chief Counsel (*further detail found in a note below*), **"A clearance is not required to operate VFR through a restricted area when the controlling or using agency, as applicable, has made a determination that the restricted area is 'cold'."** So, if the restricted area is "cold" you can fly through it; if it's "hot" then go around. It's as simple as that. The controlling agency (in the case of R-3401-A, Indianapolis Center on frequency 119.55) does not give you specific permission or a clearance to enter the restricted airspace. They just tell you if it's hot or cold; then you act accordingly.

Up until very recently, the last year or so, sectional charts were not forthcoming in terms of the information needed to contact a controlling agency about a Restricted Area. For example, the frequency tab on the sectional used to tell you that for R-3401-A the controlling agency was "ZID cntr", with a double asterisk (**). If you were very observant and had exceptionally good near vision you could find the footnote in tiny print and discover that ZID was in fact Indianapolis. The fact that "cntr" is an abbreviation for "Center" was never revealed on the chart. Neither was the apparently (then) secret frequency, 119.55. IFR pilots know all this stuff, but the poor VFR-only Private Pilot was truly left in the dark. It was as if the FAA did not want the common pilot to be able to fly through a restricted area.

In 2005 the FAA became enlightened in this regard and began printing the name of the controlling agency in plain English, and provided the call frequency. It was like a



miracle; it is now so much easier to teach, do, or examine. One only wonders why the information wasn't made directly available years ago. (Now, if the FAA would only print approach control frequencies next to Class B airspace on sectional charts, like they already do for Class C, life would be good.)

In my experience, as an FAA Designated Pilot Examiner testing Private Pilot applicants, I have come to the conclusion that most flight instructors are not teaching MOAs and Restricted Areas with the proper perspective. While most applicants can tell me technically about how MOAs and Restricted Areas behave, the tone of their voice conveys the conclusion that as a practical matter they would never, ever, think about calling to see if a Restricted Area is hot. They will always go around, as if the Restricted Area was actually a Prohibited Area. This is a very wasteful attitude as most Restricted Areas are, in fact, in use for only a few hours each day. The rest of the time you can fly right through if you would only take 15 seconds or so to make the call to the controlling agency. Now that names and frequencies are available on sectional charts, calling is a piece of cake.

In addition to the name of the controlling agency and the frequency, sectional charts also provide information as to when Restricted Areas may be in use. When you see the time of use printed on the chart as "continuous" that doesn't mean the airspace will be in use continuously during the times indicated. What it really means is that it COULD be in use during those hours. Odds are that it will NOT be in use when you call. Flying an extra half-hour out of your way in order to avoid a 15-second radio call is really wasteful. When I'm instructing, I have my student plan a dual cross-country flight that on a direct route would take them through a Restricted Area. While in flight I have them call the controlling agency to find out if the airspace is in use. Sometimes it is; sometimes not. In either case the student has learned how easy it is to call and find out. Center is not just for heavy iron.

For whatever reason, probably because they weren't properly trained either, many flight instructors convey to their primary students that calling to see if a Restricted Area is "hot" is a waste of time. You are going to get told to stay out. Since in the real world the opposite is true, those same instructors need to rethink how they teach this particular bit of information. With the advent of \$4.00+ AvGas and concurrently rising rental rates, flying through Restricted Areas that are not in use is becoming an increasingly attractive alternative. Call and ask.

Larry Bothe is an FAA Designated Pilot Examiner, FAASTeam Representative and Gold Seal Instructor in the Indianapolis, IN FSDO area. He is also a Master Certified Flight Instructor as designated by Master Instructors, LLC and has over 6500 hours in more than 70 types of aircraft. He may be contacted at LBothe@comcast.net.

[NOTE: As part of the SAFE Library Editorial Review Committee (LERC) review of this article, questions were raised regarding VFR flight through restricted areas – about whether or not a clearance or some form of “permission” was required. The question was raised in a review of part 73 which, in several points, makes mention of “permission” but does not refer to “clearance” in relation to certain designated airspace – including restricted. Conversations with representatives of different parts of the FAA were carried out at OSH, and conflicting answers were received from those conversations. As a result, a letter was directed to the Office of the Chief Counsel for the FAA and the answer is in this article. Paraphrasing from the rest of the opinion letter, while a restricted area is designated on the chart, it is only actually a restricted area when it is designated as being in use – or “hot”. So, if it is not in use, it is not restricted, and clearance is not needed to fly into or through it. Keep in mind, however, that “published” hours are only a suggestion of when it might be in use, the final determination must come from the using or controlling agency – usually through a call to the controlling ATC facility. – SAFE LERC]



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

800 Independence Ave., S.W.
Washington, D.C. 20591

NOV 23 2010

Alan C. Davis
2212 E. 129th Ave.
Thornton, CO 80241-1920

Dear Mr. Davis:

This responds to your letter of July 7, 2010, requesting guidance concerning airspace that is described and designated in 14 CFR Part 73 as a restricted area. You provided excerpts from email strings and comments as background material. We are answering the three specific questions you asked about a “cold” restricted area and VFR flight. We believe that when you refer to a “cold” restricted area you mean that the restricted area is not designated as a restricted area during the time, and between the designated altitudes, when you wish to operate VFR.

Subpart B of Part 73 designates restricted areas and prescribes limitations on the operation of aircraft within them. Section 73.13 states:

73.13 Restrictions.

No person may operate an aircraft within a restricted area between the designated altitudes and during the time of designation, unless he has the advance permission of

- (a) The using agency described in §73.15; or
- (b) The controlling agency described in §73.17.

Question 1. Is a clearance required to fly VFR through a “cold” restricted area?

Answer 1. A clearance is not required to operate VFR through a restricted area when the controlling or using agency, as applicable, has made a determination that the restricted area is “cold”.

Question 2. If a clearance is required to fly VFR through a “cold” restricted area, who would provide it?

Since the answer to question 1 was no, an answer to question 2 is not necessary.

Question 3. Is the statement by ATC that the restricted area is “cold,” in fact, a tacit clearance/permission/authorization to fly through that airspace?

To answer your question we assume that ATC is the controlling or using agency, as appropriate for the restricted area, and that ATC has communicated to the VFR operator that the restricted area is “cold”. In those circumstances, the VFR operator may legally enter and transit the restricted area. However, the ATC communication is not an air traffic control clearance, permission, or authorization to operate VFR in the airspace. See, §73.13 and 14 CFR §91.133.

This response was prepared by Cecile O'Connor, an attorney in the Regulations Division, and has been coordinated with the Airspace, Regulations and ATC Procedures Group, AJV-11. We hope this response is helpful to you. If you have additional questions regarding this matter, please contact us at (202) 267-3073.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rebecca B. MacPherson", with a long horizontal flourish extending to the right.

Rebecca B. MacPherson
Assistant Chief Counsel for Regulations, AGC-200