



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Military Flying Activities Date: 8/8/90 AC No: 210-5B
Initiated by: ATM-400 Change:

1. **PURPOSE.** This circular provides information about military flying activities in the National Airspace System (NAS), describes the various types of routes and areas allocated for this purpose, and explains how information on the location and status of these routes and areas can be obtained.
 2. **CANCELLATION.** AC 210-5A dated 8/1/80 cancelled.
 3. **REFERENCES.** Department of Defense (DOD) Flight Information Publications (FLIP) AP/1A, the AP/1B and corresponding Area Planning Charts; Airman's Information Manual (AIM), Sectional Aeronautical Charts, VFR Terminal Area Charts (TAC), Planning Chart, and En Route Low-Altitude Charts.
 4. **BACKGROUND.** Our national security depends largely on the deterrent effect of our airborne military forces. To maintain aircrew proficiency the military services must continually train in a wide range of military tactics. Various routes and areas have been developed to inform the public of locations where military aircraft are practicing maneuvers and tactics which may hamper the see-and-avoid aspects of visual flight rules (VFR) flight. VFR pilots can significantly enhance flight safety by availing themselves of the latest information regarding military activities which may affect their planned flight.
 5. **SPECIAL USE AIRSPACE.** Special use airspace (SUA) consists of airspace wherein activities must be confined because of its nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. The purpose of SUA is to identify for other airspace users where military activity occurs, segregate that activity from other users to enhance safety, and to allow charting to keep airspace users informed.
 - a. **PROHIBITED AREAS** - Designated airspace within which the flight of aircraft is prohibited without the permission of the controlling agency. Prohibited areas are designated for security, or other reasons of national welfare.
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b. RESTRICTED AREAS - Airspace established to denote the existence of unusual, often invisible hazards to aircraft such as artillery firing, aerial gunnery, or missiles, etc. Penetration of restricted areas may be extremely hazardous to the aircraft and its occupants and is legally prohibited. Authorization to transit restricted areas which are not in use may be obtained from the using or controlling agencies.

c. MILITARY OPERATIONS AREAS (MOA's) - Airspace established outside the Positive Control Area (PCA) to separate/segregate certain military activities from instrument flight rules (IFR) traffic and to identify for VFR traffic where these activities are conducted. Whenever a MOA is active, nonparticipating IFR traffic may be cleared through the area provided ATC can ensure IFR separation; otherwise, ATC will reroute or restrict nonparticipating IFR traffic. Although MOA's do not restrict VFR operations, pilots operating under VFR rules should exercise extreme caution while flying within an active MOA. During initial preflight briefing, pilots should always request information on the status of MOA's along their planned route of flight (local flight service stations retain and update schedules, as provided by the appropriate military authority, for MOA's within its flight plan areas). This information is available, but only upon pilot request. Additionally, prior to entering an active MOA, pilots are encouraged to contact the controlling agency for traffic advisories due to the frequently changing status of these areas.

d. WARNING AREAS - Areas established in international airspace to identify for pilots where military activities occur that can be hazardous to nonparticipating aircraft. Pilots planning to penetrate warning areas should contact the using or controlling agencies for real-time information on the activities being conducted along their route of flight.

e. ALERT AREAS - Airspace which may contain a high volume of pilot training or an unusual type of aerial activity. Alert areas do not impose any flight restrictions or communications requirements. Operations within Alert Areas are conducted in accordance with Federal Aviation Regulations without waiver. All pilots flying in an alert area are equally responsible for collision avoidance, and they should be particularly alert when operating within these areas.

f. CONTROLLED FIRING AREAS (CFA) - Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to nonparticipating aircraft. Limitations are imposed on the use of CFAs to ensure that these areas do not impact civil aviation operations.

6. MILITARY TRAINING ROUTE (MTRs) - Routes established to accommodate low-altitude training operations that must be conducted at speeds in excess of 250 KIAS below 10,000 feet MSL (some segments may extend above 10,000 feet MSL due to terrain or other requirements). Only the route centerline is depicted on aeronautical charts. Although normal route width is 5 to 10 miles from centerline, some segments may be as narrow as 2 miles or as wide as 20 or more miles from centerline.

There are two types of MTRs:

IFR MTRs (IRs) - Operations on these routes are conducted in accordance with Instrument Flight Rules regardless of weather conditions.

VFR MTRs (VRs) - Operations on these routes are conducted in accordance with Visual Flight Rules in visual meteorological conditions.

Added vigilance should be exercised when flying in proximity to these routes. IFR aircraft will either be afforded standard separation from aircraft on IR routes or rerouted to avoid the routes. VFR pilots should use extra caution when electing to transit active IR and VR routes. The key to current information about MTR routes, as provided by the appropriate military authority (times of use, altitudes and actual width), is the Flight Service Station (FSS). Air traffic control facilities and fixed base operators can provide FSS telephone numbers or air-to-ground radio frequencies for use in obtaining MTR information. Information on the status of MTRs is available, but is provided only upon pilot request.

7. OTHER MILITARY TRAINING AREAS.

a. Slow speed low-altitude training routes (SRs) - Routes used for military operations at, or below, 1,500 feet AGL at airspeeds of 250 knots or less. Pilots flying on these routes operate under the see-and-avoid concept. SRs are not charted, however, preflight information about the

locations of these routes is published in the DOD FLIP AP/1B. FSS's can provide information on the location and status of SR's within its respective flight plan area.

b. Low-Altitude Tactical Navigation (LATN) Areas - Areas wherein military aircraft practice random tactical navigation up to 1,500 feet AGL, at airspeeds at or below 250 knots. These areas are not charted.

8. WHAT ACTION SHOULD BE TAKEN BY CIVIL PILOTS TO AVOID POSSIBLE CONFLICTS WITH MILITARY TRAINING ACTIVITIES AND TO ENHANCE SAFETY? It is extremely important that, during preflight planning, pilots contact the FSS and check the latest issues of aeronautical charts and the AIM to familiarize themselves with military training activities. Special emphasis should be placed in SUA/MTR's along their proposed route of flight. FSS's can provide the frequency of the controlling agency which may be able to issue clearance to transit the area if conditions permit. A number of SUA areas have a specific frequency depicted on the sectional chart through which pilots may obtain up-to-the-minute status information. It should be noted that scheduled use does not necessarily reflect real-time utilization of these areas/routes. Operational requirements, weather, aircraft availability, etc., have a dynamic effect on military training activities; therefore, it is incumbent upon the pilot to always keep alert for other traffic. Pilots should not hesitate to call a FSS to determine the current status of SUA/MTR's in the vicinity of their flight.



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