



MARINE CORPS / DEPARTMENT OF THE NAVY SUBMIT SPECIAL USE AIRSPACE PROPOSALS TO THE FEDERAL AVIATION ADMINISTRATION TO MEET MARINE EXPEDITIONARY BRIGADE TRAINING REQUIREMENTS

1. Why has the Marine Corps proposed the establishment or modification of Special Use Airspace at the Marine Corps Air Ground Combat Center (MCAGCC)?

- Marines must train as they fight to successfully deploy as a force in readiness anywhere in the world. Based upon battlefield experiences, the increased ranges of new weapons and battlefield transportation systems, and evolving war-fighting doctrine, the Marine Corps identified necessary training requirements for a Marine Expeditionary Brigade (MEB) that prepares Marines for what they will encounter in combat operations. Realistic training means Marines will have the best chance to successfully meet their mission in combat and return safely to the United States.
- To ensure that Marine Expeditionary Brigade (MEB) training requirements are fulfilled, both sufficient training lands and sufficient training Special Use Airspace (SUA) are required to support sustained, combined-arms, live-fire and maneuver and to contain these operations in support of public safety.
- A MEB is one type of a combined-arms force known as a Marine Air Ground Task Force. The Marines deploy to combat as a combined-arms unit, which includes air and ground combat elements (along with command and logistics elements). SUA is required to accommodate live fire training both of ground units and of aviation units.
- Advanced weapons systems provide military forces with greater capabilities for detecting and
 countering enemy threats at greater distances. This has required that range and airspace
 areas be expanded, where necessary and feasible, to enable these forces to train in an
 environment that is more representative of realistic combat conditions. For that reason, the
 Marine Corps requires corresponding training airspace to support MEB training.
- The increased ground training areas and special use airspace proposals are balanced to achieve MEB training while maintaining safe distances for public safety, and to ensure other uses for land and airspace in the MCAGCC environs. As is currently the case with MCAGCC SUA utilization, any newly modified or established SUA would be released for other users of the National Airspace System when not required for training.

2. What types of airspace are used to support military training at Marine Corps Air Ground Combat Center (MCAGCC)?

SUA is required both to support aviation training and ground training. Restricted Airspace is
used to support training with airborne weapons, such as guns, missiles and bombs, as well as
for the use of artillery, mortars, ground-launched missiles, tank guns, small arms and other
ground-based weapons.





- Restricted Area (RA): Non-military aircraft are prohibited from entering during military training activities that may involve live fire; MCAGCC releases it for use by all aircraft in the National Airspace System when not needed for military training.
- Military Operations Area (MOA): A military operations area is airspace designated outside of Class A airspace (18,000-60,000 feet) to separate or segregate certain nonhazardous military activities from Instrument Flight Rule (IFR) traffic and to identify for Visual Flight Rule (VFR) traffic where these activities are conducted.
- Air Traffic Control Assigned Airspace (ATCAA): Similar to an MOA (and usually overlaying an MOA) within Class A airspace (18,000-60,000 feet), non-military aircraft may fly in ATCAA during military training so long as air traffic controllers can maintain IFR separation from military aircraft; only non-hazardous military activities may be undertaken in ATCAA.
- Controlled Firing Area (CFA): This is airspace designated to contain activities that if not conducted in a controlled environment would be hazardous to nonparticipating aircraft. CFAs provide a means to accommodate, without impact to aviation, certain hazardous activities that can be immediately suspended if a nonparticipating aircraft approaches the area. Such areas may be established, for example, to support training during the period of the processing of an application for RA.

3. Is this Special Use Airspace proposal a done deal?

• The Federal Aviation Administration (FAA) will make a formal decision on the Marine Corps (USMC)/Department of the Navy (DON) airspace proposals after receiving further public comment during its own aeronautical and environmental review processes.

4. What is the FAA Review Process?

- USMC/DON submitted proposals for establishment and modification of Special Use Airspace to FAA Western Service Area, in April 2014.
- FAA will conduct an extensive review of the aeronautical and environmental effects of the proposals, a review that can take up to several years to complete. Some of the key steps are set out below:
 - FAA commences rule making (for Restricted Airspace) and non-rule making (for MOA/ATCAA) processes for aeronautical review by analyzing the submitted proposal.
 - o FAA circulates non-rulemaking proposal for 45-day public comment period.
 - o FAA undertakes environmental review, using the project's Environmental Impact Statement as one basis for analysis, on which FAA was a cooperating agency.
 - Coordination between FAA Headquarters and the Service Area on review of environmental review and aeronautical comments from stakeholders on rule making and non-rule making proposals





- o FAA publishes any notice of proposed rulemaking in the Federal Register, with a 45 day public comment period.
- o FAA's non-rule making determination is finalized and published in the National Flight Data Digest (NFDD)
- o FAA's rule making determination is finalized and published in the Federal Register.

5. How will this airspace decision be made?

- In preparation of the project's Environmental Impact Statement (EIS), both land and airspace issues and resource impacts were evaluated through the analysis of a range of reasonable alternatives. The FAA, as the nation's civil aviation authority, was an important cooperating agency in the project EIS.
- Throughout the EIS process, the FAA cooperated with the Department of the Navy during study of alternatives to establish or modify SUA. With the FAA's cooperation and expertise, the Department of the Navy was able to prepare an EIS that should provide significant analysis and information to support the upcoming FAA decision making, including aeronautical and environmental factors.
- The Department of the Navy's Record of Decision (ROD) based on environmental, training
 and other factors determined that SUA needs to be established and modified to meet the MEB
 training requirements.
- The FAA will conduct formal airspace customer feasibility forums, and undertake the appropriate processes, including formal established procedures to analyze the airspace proposal requests.
- If the FAA concludes that additional SUA should be established, or current airspace modified, at MCAGCC to support MEB training requirements, it would establish or modify such SUA per its published processes, including notice to the aviation community of the establishment and modification of the SUA utilized by MCAGCC in the prescribed publications.

6. Would these proposals result in any new restrictions being placed on commercial airline or civil aviation over flights?

- Through its long-standing working relationship with the FAA, the Marine Corps will continue to work to minimize disruption to the National Airspace System.
- Existing MCAGCC airspace impacts on commercial or civil aviation flights over or near MCAGCC might be extended over any newly-acquired land due to safety issues involved with live-fire, combined arms air-ground task force training.
- The Marine Corps will work with the FAA and aviation stakeholders on issues examined during the Environmental Impact Statement and in the process of evaluating the SUA proposal requests to FAA.
- The Marine Corps supports FAA efforts to optimize the safe use of airspace over the installation by commercial and civil aviation.





7. What SUA is proposed for establishment or modification?

• The graphics on the following pages depict the SUA proposals for establishment and modification of SUA for use by MCAGCC in conducting combined-arms, live-fire maneuver training for a MEB and during MEB Building Block training.

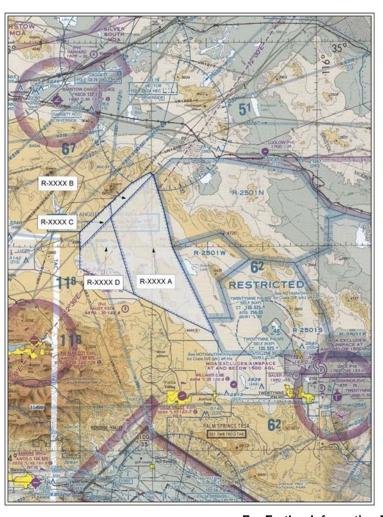




PROPOSED RESTRICTED AIRSPACE WITH PROPOSED PERIODS OF USE

- The Proposed RA would be activated intermittently through NOTAM for use of direct and indirect
 fire weapons (e.g., rifles, lasers, mortars, artillery, and demolition), unmanned Aerial Systems and/or
 close air support by rotary wing and fixed wing aircraft from surface to FL 400. Of this activity, 15%
 would be at night.
 - R-XXXX A would be activated from surface to FL 180 for up to 12 hours per day for up to 28 days per year, and from surface to FL 270 for up to 24 hours per day for 6 days per year.
 - R-XXXX B would be activated from surface to 8,000 feet MSL for up to 12 hours per day for up to 28 days per year, and up to 24 hours per day for 6 days per year.
 - R-XXXX A/D would be activated from surface to FL 400 and R-XXXX B/C would be activated from surface to 8,000 feet MSL for up to 12 hours per day for 6 days per year (not to exceed 40 hours per year).

DEPICTION OF PROPOSED RESTRICTED AIRSPACE



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Boundaries (perimeter) - Beginning
at lat 34° 17′ 26"N; long 116° 19′ 03"W
to lat 34° 30′ 00″N; long 116° 26′ 23″W
to lat 34° 35′ 12″N; long 116° 27′ 50″W
to lat 34° 40′ 30″N; long 116° 29′ 43″W
to lat 34° 40′ 47″N; long 116° 30′ 18″W
to lat 34° 36′ 15″N; long 116° 37′ 33″W
to lat 34° 32′ 09″N; long 116° 42′ 51″W
to lat 34° 29′ 44″N; long 116° 42′ 51″W to lat 34° 26′ 57″N; long 116° 42′ 51″W
to lat 34° 23′ 08″N; long 116° 33′ 06″W
to the point of beginning.
R-XXXX A - Beginning at lat 34\degree 17' 26"N; long 116\degree 19' 03"W
to lat 34° 30′ 00″N; long 116° 26′ 23″W
to lat 34° 35′ 12″N; long 116° 27′ 50″W
to lat 34° 40′ 30″N; long 116° 29′ 43″W
to lat 34° 34′ 20″N; long 116° 37′ 14″W
to lat 34° 23′ 08″N; long 116° 33′ 06″W
to the point of beginning.
Surface to FL 400.
R-XXXX B - Beginning
at lat 34° 40′ 47″N; long 116° 30′ 18″W
to lat 34° 36′ 15″N; long 116° 37′ 33″W
to lat 34° 34′ 20″N; long 116° 37′ 14″W to lat 34° 40′ 30″N; long 116° 29′ 43″W
to the point of beginning.
Surface to 8,000 feet MSL.
R-XXXX C - Beginning
at lat 34° 36′ 15″N; long 116° 37′ 33″W to lat 34° 32′ 09″N; long 116° 42′ 51″W
to lat 34° 29′ 44″N; long 116° 42′ 51″W
to lat 34° 34′ 20"N; long 116° 37′ 14"W
to the point of beginning.
Surface to 8,000 feet MSL.
R-XXXX D - Beginning
at lat 34° 34′ 20″N; long 116° 37′ 14″W
to lat 34° 29′ 44″N; long 116° 42′ 51″W
to lat 34° 26′ 57″N; long 116° 42′ 51″W
to lat 34° 23′ 08″N; long 116° 33′ 06″W
to the point of beginning.
Surface to FL 400.
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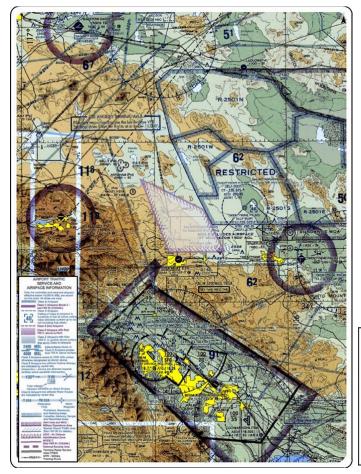




PROPOSED JOHNSON VALLEY MOA/ATCAA WITH PROPOSED PERIODS OF USE

- The Proposed Johnson Valley MOA/ATCAA would be activated by NOTAM in support of fixed wing, rotary wing and tilt-rotor aircraft training events at various altitudes from 3000 feet AGL up to and including FL 400.
- The Proposed Johnson Valley MOA/ATCAA would be activated as follows:
 - from 3000 feet AGL to FL 180 for up to 12 hours per day for up to 28 days per year;
 - from 3000 feet AGL to FL 270 for up to 24 hours per day for 6 days per year; and,
 - from 3000 feet AGL to FL 400 for up to 12 hours per day for 6 days per year (not to exceed 40 hours per year).

DEPICTION OF PROPOSED JOHNSON VALLEY MOA/ATCAA



Boundaries. Beginning at lat 34 23' 08"N; long 116 33' 06"W; to lat 34 17' 26"N; long 116 19' 03"W; to lat 34 09' 30"N; long 116 14' 15"W; to lat 34 09' 30"N; long 116 26' 51"W; to the point of beginning.

Altitudes. From 3000 feet AGL to FL 400.

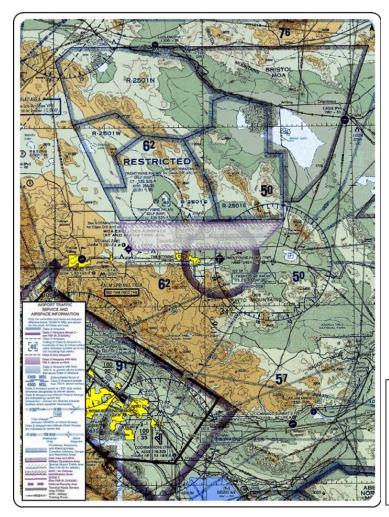




PROPOSED NEW SUNDANCE MOA/ATCAA WITH PROPOSED PERIODS OF USE

- The New Sundance MOA/ATCAA would be activated by NOTAM in support of fixed wing, rotary wing and tilt-rotor aircraft training events. Activation of the proposed New Sundance MOA/ATCAA would be at various altitudes from 1500 feet AGL up to and including FL 400. The proposed New Sundance MOA/ATCAA use would include day and night operations. New Sundance MOA/ATCAA would be activated as follows:
 - from 1500 feet AGL to 10,000 feet MSL intermittently via NOTAM;
 - from 1500 feet AGL to FL 180 for up to 12 hours per day for up to 28 days per year;
 - from 1500 feet AGL to FL 270 for up to 24 hours per day for 6 days per year; and,
 - from 1500 feet AGL to FL 400 for up to 12 hours per day for 6 days per year (not to exceed 40 hours per year).

DEPICTION OF PROPOSED NEW SUNDANCE MOA/ATCAA



Boundaries. Beginning at lat 34 14' 00"N; long 116 17' 03"W; to lat 34 09' 30"N; long 116 14' 15"W; to lat 34 09' 30"N; long 115 49' 17"W; to lat 34 13' 60"N; long 115 44' 03"W; to the point of beginning.

From 1500 feet AGL to FL 400

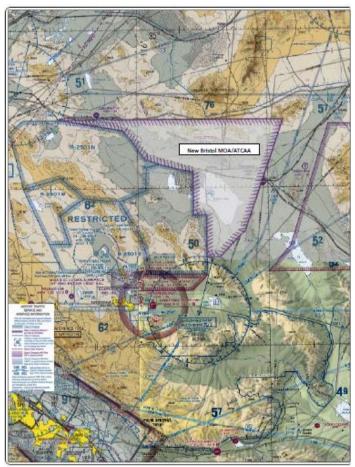




PROPOSED NEW BRISTOL MOA/ATCAA WITH PERIODS OF USE

- The New Bristol MOA/ATCAA would be activated 5000 feet MSL up to FL 220, 0700 1500 Monday through Friday and other times by NOTAM in support of fixed wing, rotary wing and tilt-rotor aircraft training events. Activation of the proposed New Bristol MOA/ATCAA at various altitudes from 1500 feet AGL up to and including FL 400 would be either by itself or in conjunction with the activation of existing and proposed restricted airspace and proposed and existing MOA/ATCAAs. The proposed New Bristol MOA/ATCAA use would include day and night operations. New Bristol MOA/ATCAA would be activated as follows:
 - from 5,000 feet MSL to FL 220 from 0700-1500 Monday-Friday; other times by NOTAM:
 - from 1500 feet AGL to FL 180 for up to 12 hours per day for up to 28 days per year;
 - from 1500 feet AGL up to FL 270 for up to 24 hours per day for 6 days per year; and,
 - from 1500 feet AGL to FL 400 for up to 12 hours per day for 6 days per year (not to exceed 40 hours per year).

DEPICTION OF PROPOSED NEW BRISTOL MOA/ATCAA



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Boundaries. Beginning

at lat 34 40' 60"N; long 116 03' 03"W;

to lat 34 35' 30"N; long 115 58' 03"W;

to lat 34 34' 45"N; long 115 54' 46"W;

to lat 34 25' 00"N; long 115 47' 03"W;

to lat 34 25' 00"N; long 115 47' 03"W;

to lat 34 24' 60"N; long 115 44' 03"W;

to lat 34 16' 60"N; long 115 44' 03"W;

to lat 34 16' 60"N; long 115 44' 13"W;

to lat 34 21' 60"N; long 115 35' 23"W;

to lat 34 42' 50"N; long 115 26' 33"W;

to the point of beginning

Altitudes. From 1500 feet AGL to FL 400
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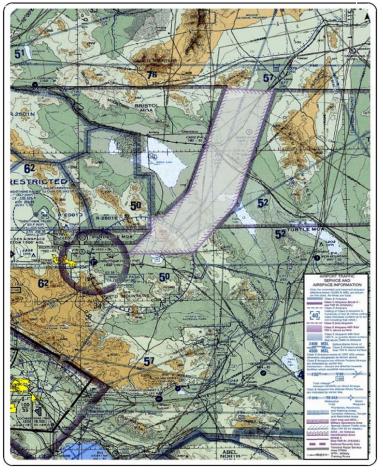




PROPOSED CAX CORRIDOR HIGH/LOW MOA/ATCAA WITH PERIODS OF USE

- The CAX Corridor High/Low MOA/ATCAA would be activated by NOTAM in support of fixed wing, rotary wing and tilt-rotor aircraft training events, to include day and night operations. Activation of the proposed CAX Corridor High/Low MOA/ATCAA would be either by itself or in conjunction with the activation of proposed and existing restricted airspace and MOA/ATCAAs.
- The proposed CAX Corridor High MOA/ATCAA would be activated:
 - from FL 180 up to FL 270 for up to 24 hours per day for 6 days per year; and,
 - from FL 180 to FL 400 for up to 12 hours per day for 6 days per year (not to exceed 40 hours per year).
- The proposed CAX Corridor Low MOA would be activated:
 - from 1500 feet AGL up to 8000 feet for up to 24 hours per day for 6 days per year; and,
 - from 1500 feet AGL up to 8000 feet for up to 12 hours per day for 6 days per year.

DEPICTION OF PROPOSED CAX CORRIDOR HIGH/LOW MOA/ATCAA



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CAX Corridor High MOA/ATCAA Boundaries.

Beginning

at lat 34° 42′ 50″N; long 115° 26′ 33″W;

to lat 34° 21′ 60″N; long 115° 35′ 23″W;

to lat 34° 16′ 60″N; long 115° 41′ 13″W;

to lat 34° 16′ 60″N; long 115° 44′ 03″W;

to lat 34° 13′ 60″N; long 115° 44′ 03″W;

to lat 34° 09′ 30″N; long 115° 49′ 17″W;

to lat 34° 09′ 28″N; long 115° 34′ 34″W;

to lat 34° 13′ 60″N; long 115° 30′ 03″W;

to lat 34° 19′ 00″N; long 115° 25′ 03″W;

to lat 34° 42′ 04″N; long 115° 15′ 48″W;

to the point of beginning

Altitude: From FL 180 up to FL 400
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CAX Corridor Low MOA Boundaries.

Beginning
at lat 34° 42′ 50″N; long 115° 26′ 33″W;
to lat 34° 21′ 60″N; long 115° 35′ 23″W;
to lat 34° 16′ 60″N; long 115° 41′ 13″W;
to lat 34° 16′ 60″N; long 115° 44′ 03″W;
to lat 34° 16′ 60″N; long 115° 44′ 03″W;
to lat 34° 13′ 60″N; long 115° 44′ 03″W;
to lat 34° 09′ 30″N; long 115° 49′ 17″W;
to lat 34° 09′ 28″N; long 115° 34′ 34″W;
to lat 34° 13′ 60″N; long 115° 30′ 03″W;
to lat 34° 19′ 00″N; long 115° 25′ 03″W;
to lat 34° 42′ 04″N; long 115° 15′ 48″W;
to the point of beginning

Altitude: From 1500 feet AGL up to 8000 feet
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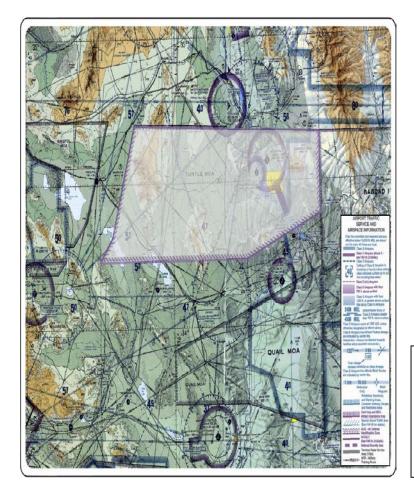




PROPOSED NEW TURTLE MOA/ATCAA WITH PROPOSED PERIODS OF USE

- Activation of the proposed New Turtle MOA/ATCAA at various altitudes from 1500 feet AGL up to and including FL 400 would be either by itself or in conjunction with the activation of proposed and existing restricted airspace and MOA/ATCAAs; and would include day and night operations.
- New Turtle MOA/ATCAA A is depicted graphically on this page, with latitude/longitude boundaries and proposed periods of use. New Turtle MOA/ATCAA B & C are depicted graphically on the next page, with latitude/longitude boundaries and proposed periods of use.
 - ◆ The New Turtle MOA/ATCAA A would be activated from 11,000 feet MSL to FL 220 from 0600-1600 Monday-Friday; other times by NOTAM.

DEPICTION OF PROPOSED NEW TURTLE MOA/ATCAA A



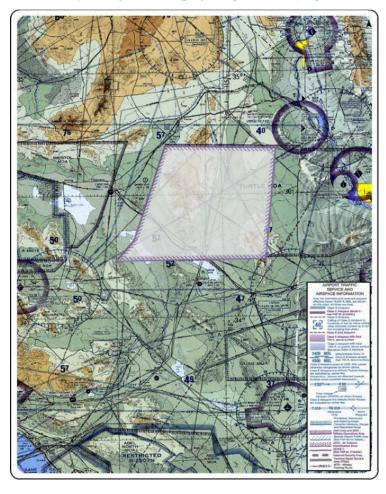
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Turtle MOA/ATCAA A Boundaries. Beginning
At lat 34' 42' 04"N; long 115' 15' 48"W;
To lat 34' 19' 00"N; long 115' 25' 03"W;
To lat 34' 13' 60"N; long 115' 30' 03"W;
To lat 34' 14' 00"N; long 114' 30' 03"W;
To lat 34' 23' 00"N; long 114' 00' 03"W;
To lat 34' 40' 00"N; long 114' 00' 03"W;
To lat 34' 40' 00"N; long 114' 00' 03"W;
To the point of beginning,
Altitude: from 11.000 feet MSL to FL 220.
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- The New Turtle MOA/ATCAA B and C would be activated by NOTAM in support of fixed wing aircraft training events from 1500 feet AGL to FL 270 for up to 24 hours per day for 6 days per year. (Turtle MOA/ATCAA A would also be active 11,000 feet MSL to FL 220 during these times.)
- The New Turtle MOA/ATCAA B and C would be activated by NOTAM in support of fixed wing aircraft training events from 1500 feet AGL to FL 400 for up to 12 hours per day for 6 days per year (not to exceed 40 hours per year). (Turtle MOA/ATCAA A would also be active 11,000 feet MSL to FL 220 during these times.)

DEPICTION OF PROPOSED NEW TURTLE MOA/ATCAA B AND C



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Turtle MOA/ATCAA B Boundaries. Beginning
       At lat 34' 42' 04"N; long 115' 15'
   to lat 34' 19' 00"N; long 115' 25' 03"W;
   to lat 34' 13' 60"N; long 115' 30' 03"W;
   to lat 34' 14' 03"N; long 114' 48' 07"W;
    to lat 34' 41' 13"N; long 114' 44' 42"W;
    to the point of beginning.
Altitude: from FL 220 to FL 400.
Turtle MOA C Boundaries. Beginning
   at lat 34' 42' 04"N; long 115' 15' 48"W;
   to lat 34' 19' 00"N; long 115' 25' 03"W;
   to lat 34' 13' 60"N; long 115' 30' 03"W;
   to lat 34' 14' 03"N; long 114' 48' 07"W;
    to lat 34' 41' 13"N; long 114' 44' 42"W;
    to the point of beginning.
Altitude: from 1500 feet AGL to 11,000 feet
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MARINE CORPS REQUIREMENTS DRIVE THE 29 PALMS LAND/AIRSPACE PROJECT

1. What is the training requirement driving the project?

- A MEB training exercise requires sustained (48-72 hours), continuous offensive action (combined arms, live fire and maneuver) with three battalions moving abreast—in three different corridors—and with, at a minimum, two battalions converging on a single objective. The MEB includes a Ground Combat Element, an Air Combat Element, a Command Element and a Combat Logistics Element.
- The MEB elements constitute about 15,000 personnel.
- Combined arms means that ground-based and airborne weapons systems, including direct and indirect fire, will be used in the training exercise.

2. What do you mean by "Marines must train as they fight?"

- Training is mission rehearsal. In order to win, Marines must be able to train like they fight, under conditions that closely approximate those of the battlefield.
- By training as they fight, Marines become proficient in tactics, techniques, and procedures both as individuals and as units. This training concept is as essential for success in military operations as it is in nearly all other team activities.
- Marines will instinctively do as they are trained. Because Marines are equipped and deployed to combat as a Marine Air-Ground Task Force (MAGTF), they must train to the MAGTF training standards before deployment.
- Marines need to train as a MAGTF to succeed. Doing less will jeopardize their safety and degrade mission readiness. A MEB, one type of MAGTF of about 15,000 Marines, is the Marine Corps' primary contingency response force.
- A MEB must train realistically, with all elements ground combat, air combat, logistics and command involved in the sustained, combined-arms, live-fire and maneuver training exercise.

3. Why did Congress select Alternative 6?

- Alternative 6 was selected in the Record of Decision because it was the optimal alternative considering operational and environmental impact factors together. With slight changes in response to public comments on the Draft EIS and the Final EIS, it remained the preferred alternative and was submitted to Congress for approval. Congress largely adopted this proposal in the Fiscal Year 2014 National Defense Authorization Act, somewhat expanding the Shared Use Area that allows for recreation activities and preserving public access to important off road recreation areas when it is not needed for MEB training. Congress' modification allows for reopening approximately 56,000 acres of the acquisition area to public recreation use for 10 months a year.
- Alternative 6 did not meet the MEB training operational requirements as well as Alternative 1, but Alternative 1 did not provide for public access to any of the training lands that would





be acquired. (From an operational perspective, Alternative 1 was the best alternative.) Similarly, while Alternative 5 was the environmentally preferred alternative, it was a very poor alternative from an operational perspective due to terrain restrictions that would limit training activities.

4. Would additional noise impact the outlying communities?

- The Marine Corps studied potential noise impacts in preparation of the Environmental Impact Statement analysis and the study determined that noise impacts of land acquisition or any airspace establishment or modification would likely remain on board the installation. This does not mean that some noise would not be heard off base, but the noise would not be significant.
- MCAGCC currently issues public announcements when there may be a temporary increase in training noise. This courtesy will continue with any training related noise that may be heard off base.

5. What is the significance of impacts to airspace?

- The Marine Corps has tailored its proposals to the FAA to minimize impacts to the National Airspace System while meeting the Marine Corps' MEB and MEB Building Block training requirements.
- Some civil aircraft (commercial and general aviation) will need to be routed around newly established or modified SUA during any approved training periods just as they are now with respect to the currently established SUA supporting MCAGCC training.