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## **FREQUENTLY ASKED QUESTIONS**

### **Modification of the Cheyenne Low and High military operations areas in eastern Colorado and western Kansas**

#### **NATIONAL ENVIRONMENTAL POLICY ACT QUESTIONS**

**Q: What is an environmental assessment?**

An environmental assessment is a document that a federal agency must prepare pursuant to the National Environmental Policy Act to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement. Once the final draft environmental assessment is complete, the federal agency will either determine that an Environmental Impact Statement is required because the federal action has the potential to significantly impact the environment or will issue a finding of no significant impact.

In this case, the environmental assessment is a tool for the primary military user of the airspace, the 140th Wing of the Colorado Air National Guard (which flies the F-16C+ fighter jet), to make informed choices regarding their airspace action proposal to the Federal Aviation Administration, who makes the final decision to adopt in whole or in part this proposal for charting the new airspace redesign. The draft environmental assessment yielded a draft finding of no significant impact.

**Q: What environmental resources were analyzed in the environmental assessment?**

The environmental impact analysis process for this proposed action was conducted in accordance with the Council on Environmental Quality regulations to comply with the National Environmental Policy Act of 1969, Federal Aviation Administration Order 1050.1E, Change 1 of 2006, 32 CFR 989, and in conformity with Executive Order 12372, Intergovernmental Review of Federal Programs.

The draft environmental assessment analyzed resource areas and impacts to determine the potential environmental effects of modifying the military operations areas.

**Q: When will the draft environmental assessment be available to the public?**

The draft environmental assessment and draft finding of no significant impact will be available for public review May 1, 2012.

**Q: Where can I view a copy of the draft environmental assessment when it becomes available?**

A copy of the draft environmental assessment and draft finding of no significant impact will be made available in libraries in eastern Colorado and western Kansas within the affected areas; on the Colorado National Guard website: <http://co.ng.mil>; via a link on the Colorado Air National

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Guard 140th Wing website: <http://www.140wg.ang.af.mil>; via a link on the Kansas National Guard website: [http://www.kansastag.gov/ng\\_default.asp](http://www.kansastag.gov/ng_default.asp).

**Q: How can I become involved in the environmental impact analysis process or comment on the environmental assessment?**

You can provide your input regarding the draft environmental assessment to the Colorado National Guard either via mail, email or fax. Scoping comments are requested by May 30, 2012, to ensure your input is considered in the final environmental assessment. You may submit your comment by email to: [ngcopao@ng.army.mil](mailto:ngcopao@ng.army.mil). You may mail your comment to: Joint Force Headquarters/Public Affairs, Colorado National Guard, Attention: Cheyenne military operations area modification draft environmental assessment, 6848 South Revere Street, Centennial, Colo., 80112. You may fax your comment to the aforementioned office at: (720) 250-1059.

**Q: What is the environmental assessment schedule?**

The draft environmental assessment will be issued May 1, 2012, and a final environmental assessment will follow, after the incorporation of comments.

**AIRSPACE QUESTIONS**

**Q: What is a military operations area?**

A military operations area is a block of airspace where aircraft can perform military training activities (aircraft intercepts, turning and evasive maneuvers, and air combat maneuvers) separated from Instrument Flight Rule traffic.

**Q: What is a military training route?**

Military training routes are flight corridors developed and used by the Department of Defense to practice high speed, low-altitude flight, generally below 10,000 feet above mean sea level. They are described by a centerline, with defined horizontal limits on each side of the centerline, and vertical limits expressed as minimum and maximum altitudes along the flight track. Military Training Routes are identified as Visual Routes, which are flown under Visual Flight Rules, or Instrument Routes, which are flown under Instrument Flight Rules. Military training route locations, including defined entry and exit points, are published in the Federal Aviation Administration's Flight Information Publications so that non-participating pilots can be aware of their presence and plan flights accordingly.

No changes to military training routes are included in this proposal; however, they are defined on the map because they are an important component of airspace used for military training.

**Q: What role does the Federal Aviation Administration play in the proposal?**

The Federal Aviation Administration manages the National Airspace System and may review and comment on the draft environmental assessment.

**Q: How are altitudes measured or specified?**

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Altitudes may be specified in feet above ground level, feet above mean sea level, or as a flight level. Flight level is specified in hundreds of feet, and is approximately equal to mean sea level. For example, flight level 240 is approximately 24,000 feet above mean sea level.

## **PROPOSED ACTION QUESTIONS**

### **Q: What is being proposed?**

Under this airspace proposal, the Cheyenne Low and High military operations areas, national airspace assets, would be modified as shown on the attached map.

The existing Cheyenne military operations areas already overlie portions of seven counties: three in Colorado (Kit Carson, Cheyenne and Kiowa) and four in Kansas (Sherman, Wallace, Greeley and Logan). Several military training routes traverse the existing Cheyenne military operations areas.

The Cheyenne military operations area will change to the Cougar Low and High and Bobcat High military operations areas in the Colorado counties of Cheyenne, Kiowa and Kit Carson, and in the Kansas counties of Greeley, Logan, Scott, Wallace and Wichita.

The Cougar Low military operations areas will extend from 500 feet above ground level, up to but not including 11,000 feet above mean sea level.

The Cheyenne Low military operations area flight floor is currently at 300 feet above ground level, but the airspace between the 300-foot and 500-foot levels is no longer needed. This airspace, for which there is no longer a requirement, will be given up as part of the proposed action.

The Cheyenne High military operations area, which currently extends from 9,000 feet above mean sea level up to, but not including, 18,000 feet above mean sea level, would be extended west, southwest, south, southeast and east and be subdivided into the Cougar High military operations area in the east and the Bobcat High military operations area in the west.

Stacked atop the Cougar Low military operations area, the Cougar High and Bobcat High military operations areas would extend from 11,000 feet above mean sea level up to, but not including, 18,000 feet above mean sea level.

The current 1,500-foot above ground level flight exclusion bubble within five nautical miles of the Cheyenne Wells airfield, Colo., will be maintained within the Cougar Low military operations area.

The 140th Wing, through consultation with Native American tribes, agreed to maintain a 5-nautical mile radius buffer around the center of the Sand Creek Massacre National Historical Site in Colorado with a flight floor of 5,000 feet above ground level.

### **Q: What is the history of military operations areas in Colorado and Kansas?**

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Military operations areas have existed in Colorado and Kansas since the 1950s.

Between the 1950s and the 1980s, the Cheyenne Low and High military operations areas shrank and changed in shape to accommodate aircraft arrival and departure corridors for Denver International Airport, Colo.

The old Kit Carson military operations area extended into Kansas more than the proposed Cougar military operations area.

The Federal Aviation Administration, which controls the airspace, doesn't consider state lines in managing airspace.

**Q: How is the military operations area represented on the map?**

The shaded area represents the current Cheyenne Low and High military operations areas.

The solid line represents the proposed military operations area modification and reflects mitigation due to commercial and general aviation traffic into and out of airports in Goodland and Colby, Kan.

**Q: What factors influenced the choice of the proposed military operations area shape and location?**

Realistic mission-oriented training to meet military readiness requirements, mitigation of mishap potential with general aviation and minimization of the impact on arrival vectoring areas near Goodland Airport, Kan., and on departure/arrival corridors for Denver International Airport, Colo., were considerations for military operations shape and location.

Airspace modification proposals submitted to the Federal Aviation Administration must be based on a specific airspace requirement. The need for the proposed airspace must be definitive and sufficient grounds must be provided to justify any resultant imposition on nonparticipating aircraft and/or to afford priority to the airspace user. Before proposing the establishment of a new military operations area, proponents shall consider the use of an existing military operations area to conduct their mission.

The proposed action meets these Federal Aviation Administration requirements.

**Q: Which units and what aircraft use the military operations areas?**

The primary military user of the airspace is the 140th Wing, Colorado Air National Guard, based at Buckley Air Force Base, Aurora, Colo.

The 140th Wing defends our homeland by flying Air Control Alert missions over the U.S. and provides vital air support to ground forces worldwide—most recently in Iraq and Afghanistan—in the global war on terrorism during Air Expeditionary Force missions requiring large deployments of up to 16 aircraft.

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Citizen-Airmen at the 140th Wing protect our communities, state and nation by responding rapidly and appropriately to potential air threats in support of Operation Noble Eagle, the military response to the terrorist attacks of Sept. 11, 2001. Aircraft from the 140th Wing sit 24/7/365 alert, and their Air National Guard pilots are poised to respond to potential threats over U.S. cities. The Colorado Air National Guard provides the only centrally-located alert fighter location in the U.S., and protects our homeland at a quarter of the cost of a similar active duty unit.

The 140th Wing flies the F-16C+ fighter jet, which is a multi-purpose air-to-air, air-to-ground and all-weather combat aircraft. The unit has recently upgraded its onboard computer systems to be operationally comparable to the F-16CG Block 40 and 50 aircraft. These upgrades include advanced weapons targeting systems and the ability to link to the Western Air Defense Sector, Tacoma, Wash.

The Cheyenne Low and High MOAs are also utilized periodically by aircraft from various other ANG units including the 190th Air Refueling Wing (Kansas Air National Guard), in Topeka, Kan., and other units from other services such as the U.S. Air Force, Marine Corps and Navy. These units operate a variety of aircraft including the F-5, F-15, F-16, F-18 and KC-135. Other units must coordinate their use of the military operations areas with the 140th Wing and must train within the designated airspace.

**Q: Why is the 140th Wing looking to airspace over Colorado and Kansas to meet training requirements?**

The purpose of the proposed action is to provide:

- adequate training airspace for the 140th Wing to fulfill its mission utilizing existing aircraft capabilities
- local regularly shaped airspace which supports current and future realistic mission-oriented training scenarios

Advances in fighter aircraft technology coupled with the multitude of threats to our nation justify the requirement to increase the current size of the wing's training airspace.

With longer range air-to-surface as well as air-to-air weapons developed for the F-16, training airspace larger than the current military operations area in eastern Colorado and western Kansas is critical to be able to train to the full capability of the aircraft's new technology.

No current airspace around Buckley Air Force Base provides the necessary boundaries and altitudes to permit the current F-16 to operate all missions and to conduct realistic mission-oriented training to meet military readiness requirements.

The current Cheyenne airspace is too restrictive both laterally and vertically to adequately utilize new technology and radar coverage from the newly-installed software in the F-16C+.

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Modification of the Cheyenne military operations areas would help address the need for an optimal training environment and a regularly shaped airspace enabling the 140th Wing and other users to employ the full capability of their aircraft weapon systems to: execute the tactically-realistic scenarios required for air combat training, prepare for deployments in support of Operation Enduring Freedom in Afghanistan, and train to effectively counter 21st-century threats against our homeland.

Based on U.S. Air Force standards, Air National Guard units tasked with maintaining combat readiness for air-to-ground and air-to-air roles must have access to training airspace of suitable dimensions to conduct realistic and effective training. Readiness training relies on regular and frequent access to air-to-ground ranges and to airspace large enough to conduct air-to-air activities while providing a simulated airborne threat environment for realistic training.

**Q: What is the reason for military operations area expansion into Kansas?**

The Air National Guard seeks to regain a volume of airspace taken away many years ago to support a regional airline which no longer exists.

The Federal Aviation Administration suggested space to the east that would work best for all concerned as well as air traffic to and from Denver International Airport, Colo. The proposed action thus includes more airspace over Kansas.

**Q: Why are the Cheyenne military operations area dimensions deficient for training purposes?**

Though pilots flying their aircraft in the military operations areas will not carry live bombs, they need to exercise pilot and aircraft systems and to simulate defense against threats.

The current dimensions (approximately 30 nautical miles x 60 nautical miles) of the Cheyenne military operations areas are below the recommended dimensions (50 nautical miles x 70 nautical miles) for advanced medium-range air-to-air missile tactics thereby limiting the 140th Wing and other users from completing such realistic training scenarios consistent with Air Control Alert and Air Expeditionary Force missions.

The current dimensions of the Cheyenne military operations areas are also below the optimal airspace dimensions required for long-range training missions such as Air Interdiction (60 nautical miles x 40 nautical miles), Opposed Surface Attack Tactics (80 nautical miles separation), and Defensive Counter Air (70 nautical miles x 60 nautical miles) missions.

In addition, the irregular shape of the Cheyenne military operations area along the western edge of the airspace funnels aircraft toward the center of the military operations area, limiting aircraft maneuverability.

The dimensions of the new military operations area will still not meet these requirements but will entail a significant improvement.

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**Q: Why can't pilots train elsewhere?**

The 140th Wing needs a local training airspace of suitable dimensions to support realistic mission-oriented training scenarios for Air Control Alert and Air Expeditionary Force missions.

Deploying pilots from the 140th Wing to other bases within the U.S. that have airspace dimensions sufficient to provide an optimal training environment was eliminated from the list of reasonable alternatives as it was prohibitively expensive (e.g., lodging, fuel, time).

Because the 140th Wing is mostly comprised of traditional Guardsmen or Citizen-Airmen whose primary employment is in the civilian sector, it is also not feasible for these pilots to deploy for the greater amounts of time that would be required to train as opposed to training in the local area.

The use of flight simulators to complete pilot training is also not a reasonable alternative. Simulator technology is not advanced enough to provide the necessary mental or physiological realism to achieve combat readiness.

**Q: How often and when is the military operations area used?**

When the 140th Wing does not need to utilize the military operations areas for training, it notifies the Federal Aviation Administration to release the regional airspace to other non-military users.

The Federal Aviation Administration will manage times of use and de-conflict non-military air traffic activities while military activities are utilizing the airspace.

The 140th Wing exercises good stewardship of this airspace and returns it when not in use.

The 140th Wing generally trains during two to three time periods each operating day five days per week (Tuesdays to Saturdays) from 7 a.m. to 10 p.m., and on one weekend a month.

The 140th Wing typically does not train on weekends or during holidays outside of drill weekend, which is usually the first weekend of each month (generally excluding holidays), however, pre-combat deployment training may necessitate training during weekends and holidays or other times of the day or week. This type of training is infrequent and minimized to the greatest extent possible.

**Q: Will there be an increase in the military's usage of the military operations areas?**

The proposed action would not result in any increase or decrease in the total number of sorties flown in the military operations areas. Therefore, the utilization data would remain the same as current conditions, where usage is typically scheduled during the week and on one weekend a month for two to three time periods each operating day, although training is not always executed, and additional pre-combat deployment training may be required. As a result of the military

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operations area modification, military use will be spread over a wider area. Any given location beneath the military operations area would be expected to be over flown relatively infrequently.

**Q: How low will military aircraft fly in the military operations areas and why is that necessary?**

Normal fighter operations occur less than 10 percent of the time below 1,000 feet above ground level.

Aircraft will only be able to fly as low as 500 feet above ground level in the military operations area during the day. This is a change from the current military operations area flight floor of 300 feet above ground level.

Pilots need to be able to use their radar systems to look at low-altitude threats down to 300 feet above ground level to fulfill realistic training requirements though they will fly no lower than 500 feet above ground level in the military operations area. The visual aspect of flying low to the ground, while working the aircraft systems to detect, identify and target air and ground threats requires a skill set that can rapidly deteriorate if the opportunity to train to the threat regularly at low altitude is not made available.

**Aircraft flight restrictions prevent any operations from occurring at night below 1,000 feet above ground level.**

**Q: How many military aircraft will fly in the military operations areas at any one time?**

A typical training mission in the military operations areas employs as few as two jets to as many as 16 jets.

The density of aircraft in the military operations areas will decrease due to the proposed military operations area expansion.

**Q: Will aircraft flying in the military operations area carry live bombs?**

Aircraft flying in the military operations area will not carry live bombs.

Pilots fly their aircraft to exercise pilot and aircraft systems and to simulate defense against threats.

The fighter aircraft are equipped with flares to decoy heat-seeking missiles during training scenarios. The flares cannot be deployed below 2,000 feet above ground level. Flares burn out before they reach the ground. However, during periods of high fire risk, the use of flares is suspended completely.



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Military pilots have been using flares in the military operations area since the 1950s without incident.

**Q: Will construction occur within the military operations areas?**

No construction activity is proposed as part of this action.

**Q: Are personnel, including family members, expected to relocate to the area as a result of the proposed action?**

No additional personnel are anticipated to move to the area as a result of the proposed action.

**Q: Who is going to pay for all of this training and equipment?**

There are no proposed new aircraft/equipment/construction/personnel costs associated with this proposed action

**IMPACT RELATED QUESTIONS**

**Q: What effects on noise levels will the proposed action have?**

The proposed action will result in a reduction in noise levels within the training airspace so noise and vibration levels (from military aircraft over flights) experienced by people and animals on the ground are expected to be lower than current conditions.

The current flight floor of 300 feet above ground level in the Cheyenne Low military operations area will increase to 500 feet above ground level in the Cougar Low military operations area so aircraft will fly higher in the new military operations area.

Military aircraft will be more spread out within the airspace, so average noise levels will decrease in the military operations areas.

When the military operations area is in use by military aircraft, it cannot be used by commercial or civilian aircraft flying under Instrument Flight Rules. This will decrease the noise level from such air traffic in areas currently used by commercial and civilian aircraft.

Also, the expansion of the military operations area will decrease the probability of a military aircraft above a single point. Any given location beneath the military operations area would be expected to be over flown relatively infrequently.

Studies show that military aircraft contribute the least amount of aircraft noise due to the low frequency of over flights.

Low altitude over flights occur approximately 10 percent of the total utilization time in the military operations area.

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Short-term exposure to low-altitude military aircraft over flights (500 feet above ground level) would be introduced to new areas outside the Cheyenne Low military operations area that will now be included in the Cougar Low military operations area.

However, noise levels will remain below significance thresholds established by the Federal Aviation Administration and the Environmental Protection Agency.

Federal Aviation Administration and U.S. Air Force regulations require aircraft utilizing the military operations areas to avoid airfields, towns, noise-sensitive areas and wilderness areas by prescribed vertical and/or horizontal distances to the extent practical.

**Q: If citizens have noise complaints, how will they know whom to call?**

Citizens wishing to make noise complaints should contact the Buckley Air Force Base noise hotline at (720) 250-1398 or (800) 582-8507. Unlike complaints about noise from commercial and general aviation over flights, citizens have direct access to Air National Guard flight operators who will research and resolve noise issues.

**Q: Will fighter aircraft go supersonic?**

The proposed action includes only subsonic activity.

**Q: What effect will this action have on the Sand Creek Massacre National Historical Site in Colorado?**

The Colorado National Guard respects the significance of the Sand Creek Massacre National Historical Site which was created to preserve and protect the cultural landscape of the site, enhance public understanding and minimize such incidents in the future.

The Sand Creek Massacre National Historical Site is already located in the Cheyenne military operations area. In order to minimize potential noise-related disturbance to this site, the 140th Wing, through consultation with Native American tribes, has agreed to maintain a 5-nautical mile radius buffer or 10-nautical mile diameter buffer around the center of the Sand Creek Massacre National Historical Site with a flight floor of 5,000 feet above ground level.

The Proposed Action would not change the current magnitude, duration or frequency of noise events at the Sand Creek Massacre National Historical Site.

The Bobcat High military operations area would be scheduled on a case-by-case basis with Denver Center and the Federal Aviation Administration. The Bobcat High military operations area will be used only minimally due to Denver Center and Federal Aviation Administration requirements for commercial aviation traffic use.

**Q: How does the Air National Guard know that wildlife won't be impacted from the noise of the low-level flights?**

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There has been no impact on wildlife in the current Cheyenne military operations area which occupies a significant portion of the proposed military operations areas.

In accordance with National Environmental Policy Act rules, the Air National Guard has prepared a draft environmental assessment to assess any impact on wildlife in coordination with federal and state agencies having responsibility for the affected area.

**Q: What effect will this action have on livestock feedlots in the affected area?**

The draft environmental assessment shows that there will be no significant effects on livestock activities and feeding under the proposed military operations area. The effects of noise on livestock have been studied for at least 50 years. Any effects are transient with many variables involved. Effects reduce over time as livestock habituates. Based on noise study findings, the animal husbandry practice of not confining livestock would tend to minimize any behavioral responses to low altitude over flights.

There are no significant effects on livestock feedlots under the current Cheyenne military operations area.

**Q: What effect will this action have on commercial aviation in the affected area?**

Civilian pilots in the area are accustomed to sharing airspace with military traffic on existing low-level routes within the Cheyenne Low military operations area.

When the military operations area is active, civilian aircraft under Instrument Flight Rules will divert around the military operations area or will plan in advance to avoid it.

The proposed action would not use or interfere with any airfields underlying the proposed military operations areas.

Military pilots are trained to see and avoid aircraft at the speeds they would be traveling within the affected airspace. The current safety record within the affected airspace suggests that military and civilian aircraft can operate safely together within this military operations area.

General aviation pilots who fly exclusively outside the military training routes would have the potential to encounter low-altitude military flights as they currently do, but over a wider area. However, the overall likelihood of interaction between military and civilian Instrument/Visual Flight Rules traffic would be minor because military utilization of low-altitude areas as a whole (in the military operations areas and military training routes combined) would remain the same.

Therefore, the proposed action would not significantly increase the chance for mid-air collisions with civilian aircraft.

**Q: What effect will this action have on existing and future wind turbines in the affected area?**

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Currently, no wind farms exist within either the existing or proposed military operations areas.

The 140th Wing does not oppose the development of wind farms and other sources of renewable energy that do not adversely impact military readiness or training.

The military operations area will have minimal effect on future wind farm development.

Developers of wind farms must adhere to Federal Aviation regulations when wind farms are built above 200 feet above ground level whether below a military operations area or not.

Wind turbines within the confines of the military operations area will be incorporated into training scenarios as the airspace will be shared. The 140th Wing will request marking and lighting according to Department of Defense specifications.

Military training routes are outside the scope of this airspace modification project.

The construction of wind turbine(s) within the confines of a military training route at 200 feet or more above ground level presents challenges based on the number of wind turbines, specific location, density, maximum height, orientation to the flight path, markings and lighting. The most significant challenges are those that pose a safety or flight hazard. Any wind turbines greater than 200 feet above ground level must be coordinated through the Federal Aviation Administration under its regulations.

The 140th Wing, as the manager of most military training routes that originate in and traverse Colorado, and as the sole user of these military training routes, will work with all users of the airspace during the development phase to mitigate hazards and ensure the safety of all airspace users.

Steps may be taken to mitigate flight safety hazard to include: identification of towers on applicable maps, charts and mission planning programs; properly marking towers for day and night operations such as installation of night vision device-compatible lighting and day/night visible lighting; decreasing the number of turbines situated in the military training route; positioning towers to one side of the military training route, etc.

The occurrence of wind turbines in the military training route is not counter to 140th Wing training requirements. Wherever 140th Wing pilots deploy they will encounter wind turbines and therefore this can be incorporated into training scenarios. It is standard procedure to include wind farm project locations into onboard navigation systems on military aircraft, which enables pilots to avoid them much as they would any other surface threat.