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May 1, 2014

Mr. Kent M. Wheeler  
Manager, Operations Support Group  
ATO Central Service Center, AJV-C2  
Department of Transportation  
Federal Aviation Administration  
2601 Meacham Blvd.  
Fort Worth, TX 76137

Re: Proposed Establishment of the Powder River Training Complex Military Operations Areas, North and South Dakota, Montana, Wyoming, Airspace Study 14-AGL-06NR

Dear Mr. Wheeler,

The Aircraft Owners and Pilots Association (AOPA), the world's largest aviation membership association, submits the following comments in response to the Powder River Airspace Study 14-AGL-06NR. The proposed expansion of the Powder River Training Complex (PRTC) would be the largest Special Use Airspace (SUA) complex in the United States and would cover an area of approximately 28,000 square miles, roughly the size of South Carolina. AOPA is concerned that 39 airports would be faced with airspace access challenges, safety issues and a heavy economic burden. For these reasons, AOPA seeks mitigations to the PRTC proposal to minimize the impact to the flying public, and provides the following concerns and associated impacts of the proposed airspace expansion.

#### **Economic Impacts of the Proposal are Excessive**

The United States Air Force (USAF) is required to give public use airports that underlie Military Operations Area (MOA) airspace a three nautical mile radius and 1,500 foot exclusion area. However, this exclusion area does not allow for aircraft to transit the airport safely nor does it provide any accommodation to the 20 private use airports, all of which would be unusable during times of PRTC SUA activation. Without real time SUA data, locally based and transient pilots will lose flexibility in choosing departure and arrival times at airports underlying the PRTC. In the long term, this reduction in flexibility will result in businesses and private owners relocating their aircraft outside of the PRTC to avoid the expense and delay associated with operating through expansive SUA.

Fixed base operators (FBOs) rely on local and transient aircraft as their primary sources of income. When local operators begin relocating their aircraft to airports outside of the PRTC, income from fuel sales, hangars, and tie down fees will drop precipitously. Based on data contained in the 2007-2008 Montana Economic Impact of Airports Study, the average airport underlying the PRTC provides 5 jobs, \$81,000 in annual payroll, and nearly \$200,000 in economic activity to the surrounding community. With 19 publicly owned airports underlying the PRTC, this translates to approximately 95 jobs, \$1.5 million in annual payroll and \$3.8 million in economic activity in the surrounding communities directly attributed to the airport. This economic activity is not sustainable under the PRTC and will be eroded until reaching a point where operating an aviation business under the PRTC is no longer financially viable. Transient aircraft will be more likely to utilize an airport outside of the PRTC even if means renting a car and driving to their desired destination inside the PRTC. This will further erode the FBO's income through lost fuel sales and ramp fees. Operating margins for

an FBO are extremely thin and even a small decrease in normal traffic levels will have devastating consequences to these small businesses.

The PRTC will negatively affect the flight training industry at 39 airports underlying the proposed airspace. The USAF has stated that one of the key drivers of the PRTC is to avoid expensive, unproductive commutes to distant ranges. The same can be said for general aviation pilots who are paying for flight training as well. Flight instructors would be forced to choose between conducting a flight in an active MOA with low altitude military aircraft operating at speeds in excess of 500 knots, or commute as much as 50 minutes to conduct the flight training outside of the SUA. A typical general aviation training flight lasts approximately 1.5 hours. Adding an additional hour and forty minutes of flight time to every flight lesson, will more than double the cost of earning a pilot certificate. When faced with additional flight time expenses exceeding \$7,000 over the course of their private pilot training, potential student pilots will simply drive to an airport outside of the PRTC, or forego learning to fly altogether. This is too high a price for civil aviation to pay, and mitigations must be considered to be a responsible steward of the national airspace system (NAS).

#### **Reduce Charted Times of Use to Match Actual Planned Usage**

AOPA recommends that the FAA require the USAF to amended charted times of use to more accurately depict the actual usage of the proposed PRTC airspace, in order to minimize the impact to the flying public. The Powder River 1- 4 MOAs are proposed to be active Monday- Thursday 0730-1200; 1800-2330 and Friday 0730-1200, as well as other times by NOTAM. While this amounts to 44.5 hours per week the USAF has said they may use it as little as five hours per day. With the ability to activate the airspace by NOTAM at any time this could be modified to 24/7 and likely will be during large force exercises.

The proposed PRTC would consist of four primary MOAs, separated by Gap MOAs, mostly extending from 500 feet above ground level to, but not including Flight Level 180 with charted times of use amounting to about 44.5 hours per week. However, the USAF has stated that they expect to use most of what is proposed for just 15 hours per week. While charting 44.5 hours of use provides enormous flexibility for the USAF, it would increase operating expenses, increase delays, and degrade safety for 285 based civil aircraft and countless Visual Flight Rules (VFR) transient operators who will be required to traverse an active MOA to arrive or depart one of 39 airports underlying the PRTC. Pilots operating under Instrument Flight Rules (IFR) will be routed around the MOA's when they are in use and likely will incur delays as a result of reroutes. In addition, the proposal provides for the use of Notice to Airmen (NOTAM) to schedule SUA outside of charted times of use. With a minimal need provided in the justification for the proposed expansion, the extensive charted times as well as the allowance of additional flexibility seems excessive.

With a lack of real-time SUA activation data, general aviation pilots are forced to rely primarily on charted times of use for flight planning. However, this information does not reach most pilots and therefore does not mitigate the impact. AOPA would like to see the USAF amended charted times of use to more accurately depict the actual usage of the proposed PRTC airspace, in order to minimize the impact to the flying public.

#### **Eliminate GAP MOA's and Make Them Temporary**

As outlined in the Federal Aviation Administration (FAA) Order 7400.2K, Procedures for Handling Airspace Matters, 25-1-7 Temporary MOAs (TMOA) are designated to accommodate the military's need for additional airspace to periodically conduct exercises that supplement routine training. There are three Gap MOAs in the current PRTC proposal, which would be corridors between the larger MOAs, only utilized for large force exercises, approximately ten days a year. Eliminating the Gap MOA's, and making them TMOAs could address the military's need for training airspace while substantially reducing the impact on general aviation.

The USAF requests several TMOAs annually for military exercises nationwide, ranging from 10 days to 31 days. This leaves AOPA questioning the need to establish permanent SUA for the Gap MOAs when the

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request for TMOAs are routine for exercises that are longer in duration than what is being proposed for the PRTC. The full time establishment of SUA is extreme considering the MOA would be inactive 98% of the year. Establishing TMOAs would allow for true transit capability for non-participating aircraft that would be utilizing the PRTC airspace area.

### **Establish Special Use Airspace Communication Plan**

The lack of real-time information sharing makes it nearly impossible in the current airspace environment for non-participants to know the actual status of SUA at a given time. Not having the ability to obtain real-time airspace information forces civilian pilots to rely solely on charted times of use. According to a survey by AOPA, 67% of pilots circumnavigated SUA regardless of its activation status due to lack of timely and reliable information. Although the USAF plans to notify air traffic control when airspace is no longer active, there is limited communication coverage in the PRTC making it unlikely that general aviation pilots will be aware that the SUA has been deactivated, or is about to be activated. A Special Use Airspace Information Service (SUAIS) system is a 24- hour a day communication system which provides civilian pilots with real-time information regarding military flight operations. Since 1990, SUAIS has been successfully used in a large SUA complex in Alaska, which has greatly improved situational awareness for both civil and military airspace users.

AOPA believes that the FAA should require the USAF to implement a similar service to the PRTC airspace area. As part of a SUAIS system, a commitment would be essential by the USAF to implement radio coverage, allowing communication with range control, a tape recorded message that could be broadcast during hours when range control is unmanned, and radio repeaters to provide adequate coverage so there are no gaps in coverage at any altitude. All infrastructures would need to be installed and operational prior to finalizing the PRTC proposal.

### **IFR Access to MOA Airspace**

AOPA requests that no additional MOA airspace be added until provisions are made to provide real-time Instrument Flight Rules (IFR) access through active MOAs. While the access may be restricted to limited flight altitudes, it is essential that civil traffic, both emergency and routine, have access to communities both inside and adjacent to MOA airspace given the critical role aviation plays in Montana, Wyoming, North and South Dakota's transportation systems. For example, an aircraft needing to fly from point A to point B would normally make a relatively direct flight along certain airways, when the proposed MOAs would be active, aircraft would be re-routed, increasing the distance around the airspace. Due to the huge size of this MOA complex, lacking the ability to cross them using the protections of the IFR system is a significant safety as well as economic impact on the aircraft operators, and the customers that pay for the increased operational cost.

Expansive and frequently used SUA significantly impacts the availability to instrument flight operations. IFR aircraft are rarely routed through active MOA's and thus routed around at the expense of the operator. Increased MOAs that further block IFR airways create a significant burden on the NAS, IFR access is essential to improving access and aviation safety between communities that underlie the PRTC. Expansion of T-Routes and WAAS approaches are providing this access under a wider range of weather conditions, adding to the benefits of the IFR system. Those benefits are seriously degraded by expansions of MOAs that preclude IFR access for all but emergency or Lifeguard flights.

### **Reduce Impact of Powder River 3 Low MOA**

The proposed Powder River 3 (PR3) Low MOA would be from 500 feet above ground level (AGL) to, but not including 12,000 feet mean sea level (MSL). Powder River 3 Low would negatively affect underlying airports, including Baker Municipal Airport (BHK). Baker Municipal Airport provides several services to the local community, linking remote communities to larger cities in the region and accommodates extensive corporate aviation activities related to the area's petroleum industry. Currently, there is limited radar coverage under

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10,000 feet MSL, in the area that would be PR3 low, leaving a significant risk to non-participating aircraft legally transiting MOA airspace. Establishing radar coverage to the surface would help to alleviate this risk.

Eliminating the PR3 Low or only activating it by NOTAM would significantly reduce the impacts to BHK and other airports. Doing so would keep dangerous operations segregated from civil traffic and ensure the PR3 low was only used when necessary. Civil and military aircraft are dependent on see and avoid procedures to mitigate the risk of a mid-air-collision. The USAF plans to operate aircraft at speeds up to 540 knots within the PRTC rendering see and avoid extremely difficult and unsafe. Establishing radar coverage to the surface would help mitigate this dangerous combination of high speed, low level military aircraft with civil traffic.

Additionally, establishing corridors for ingress and egress to BHK would mitigate the impact to a host of services including aircraft fuel, maintenance, rental and aerial pipeline patrol.

### **Summary**

AOPA understands and respects the military's need to train. However, the massive scale of this airspace will have damaging impacts on the general aviation industry. Based on the economic impacts and safety concerns with the proposed expansion of the PRTC, mitigations are a must to reduce the impact of this expansive airspace design and its substantial effect on civil aviation. These mitigations, combined with previously agreed airspace modifications, would reduce the impact of the proposal on civilian aircraft.

Sincerely,

A handwritten signature in black ink that reads "Melissa McCaffrey". The signature is written in a cursive, flowing style.

Melissa McCaffrey  
Senior Government Analyst  
Air Traffic Services