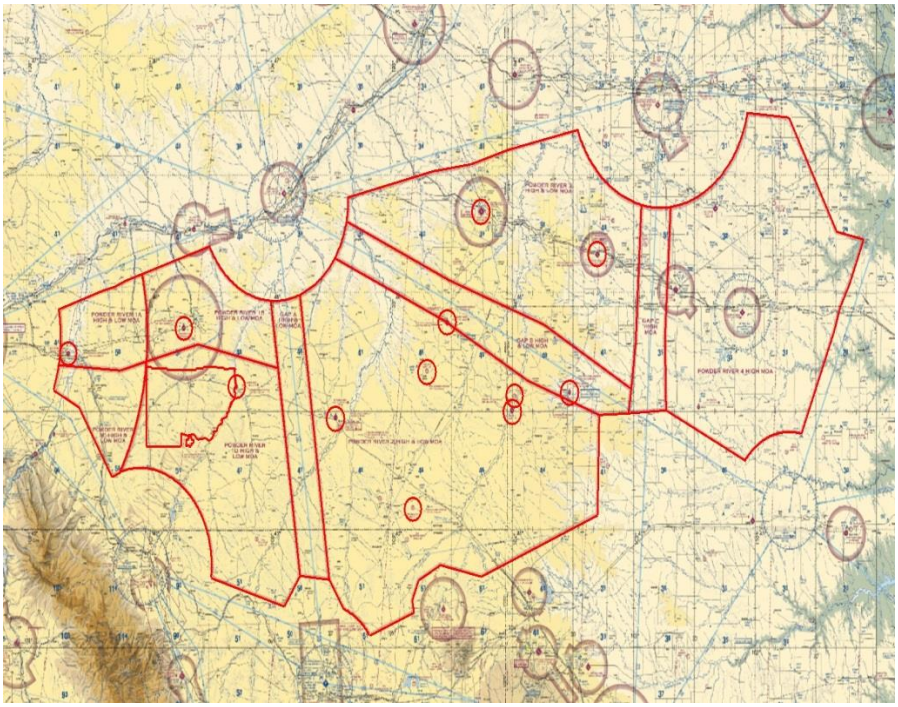
Powder River Training Complex Special Use Airspace General & Business Aviation Survey

February 2018



Survey and Report Completed By

Aircraft Owners and Pilots Association

National Business Aviation Association

Executive Summary

In February 2018, AOPA and NBAA collaborated to survey members about their experiences in the Powder River Training Complex (PRTC) Special Use Airspace (SUA) that spans across Montana, Wyoming, North Dakota, and South Dakota. We surveyed pilots to determine if the SUA had adverse impacts on general aviation (GA) pilots and business operators. To get a more granular look at the results, we separated responses by frequency of contact with the SUA, specifically, pilots who said they fly in the SUA often, fairly often, occasionally, almost never, and never. We received 329 responses and found many accounts of adverse impacts due to the SUA. Here are the major findings:

- **3 out of 4 Pilots Who Routinely Fly in the SUA Reported Adverse Impacts**
- **Inefficient Routing Through and Around the SUA Costs Pilots Money and Time**
- **Lack of Information about the Activation Status of the SUA Thwarts Flight Planning Efforts**
- **Most Pilots Flying VFR Would Use VFR Flight Following but They Are Often Dropped by Air Traffic Control (ATC) in parts of the SUA at Lower Altitudes**
- **ATC Sometimes Vectors Pilots into Severe Weather through Narrow Flight Corridors in the SUA**

More than half of the pilots who responded to the survey reported no adverse impacts or issues in the PRTC SUA. However, among pilots who said they fly in the SUA often or fairly often, 63% reported adverse impacts. Those pilots reported increased costs, lost time, and frustration due to lack of information/communication about the activation status of the Military Operations Areas (MOA), poor radar and communications coverage, and situations in which ATC vectored pilots into severe weather to avoid active SUA.

The survey reveals opportunities for the military, ATC, and GA pilots to make improvements that will mitigate many of these reported issues in the PRTC SUA:

- Better communication about the activation status would reduce costs and time spent on inefficient routes.
- Additional education from aviation associations and the military could mitigate several pilot concerns.
- ATC infrastructure is needed to address the apparent issues with spotty radar and communications at lower altitudes in the SUA.
- Problems with ATC connection aside, most VFR pilots, about 85%, would utilize ATC's VFR flight following services in the SUA.
- Pilots made it clear they support the military and their need to train, while admitting the need for better information to safely transit the SUA in the most efficient and safe way possible.

Methodology

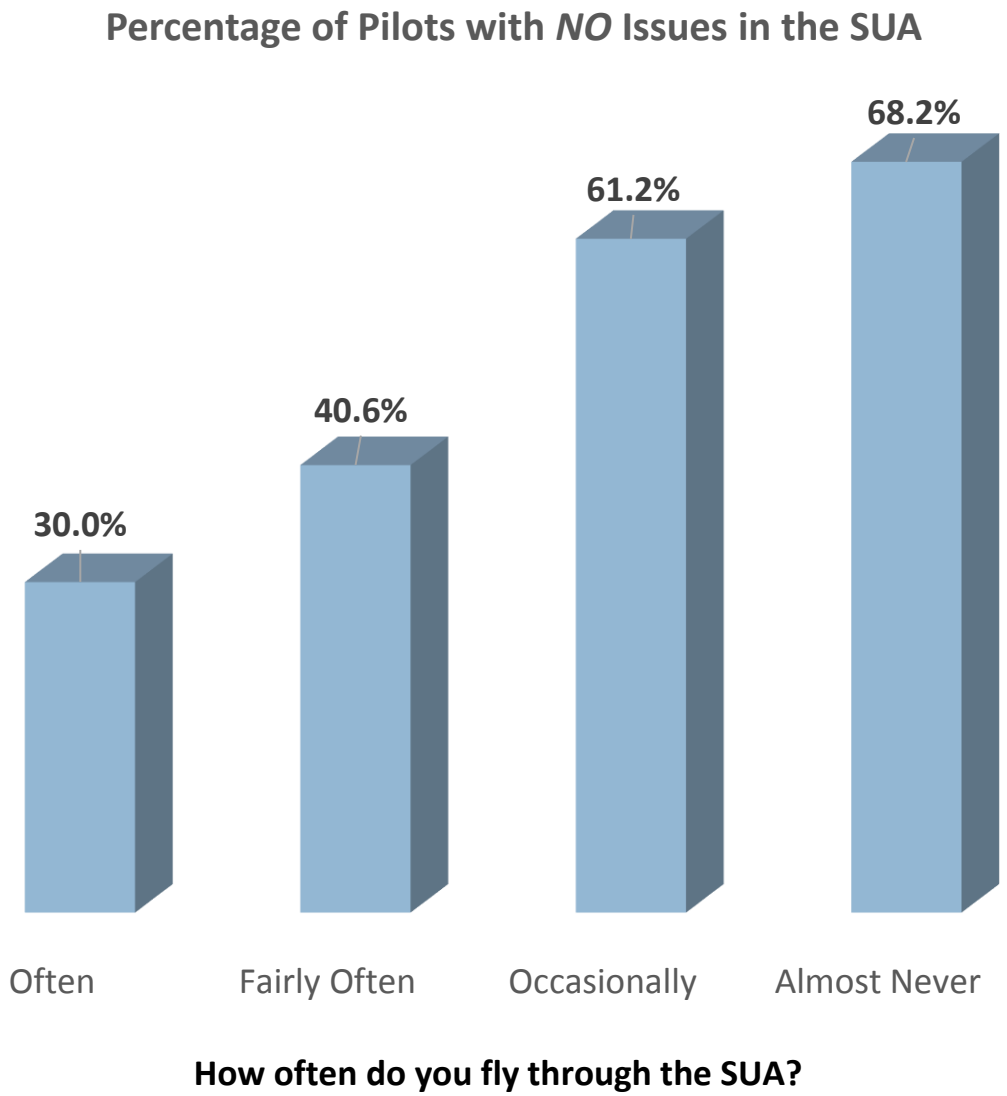
In February 2018, AOPA and NBAA partnered to survey members who use the PRTC SUA spanning Montana, Wyoming, North Dakota, and South Dakota. The objective of the survey was to determine the impacts the SUA had on general and business aviation operations.

The survey was sent to 5,209 AOPA members and all NBAA member businesses in the four states the SUA touches, including Montana, Wyoming, North Dakota, and South Dakota. We received complete

responses from 329 individual operators. We separated responders by frequency of SUA use, specifically, those who said they fly in the SUA often, fairly often, occasionally, almost never and never.

Pilots Who Routinely Fly in or Around the SUA Were Most Frustrated

The responses indicate the more flight hours a pilot spent transiting the SUA, the more likely they were to experience adverse impacts because of the SUA. Pilots who often traversed the SUA were more likely to experience delays, longer routes, increased fuel costs, lost time, and lost business. The most frequent reason for these negative impacts was inefficient routing by either ATC (23%) or by pilots' choices in flight planning (31%) resulting in increased time and fuel burn. Some estimated the annual added cost from longer routes at more than $20,000 annually.



Inefficient Routing Costs Pilots Money and Time

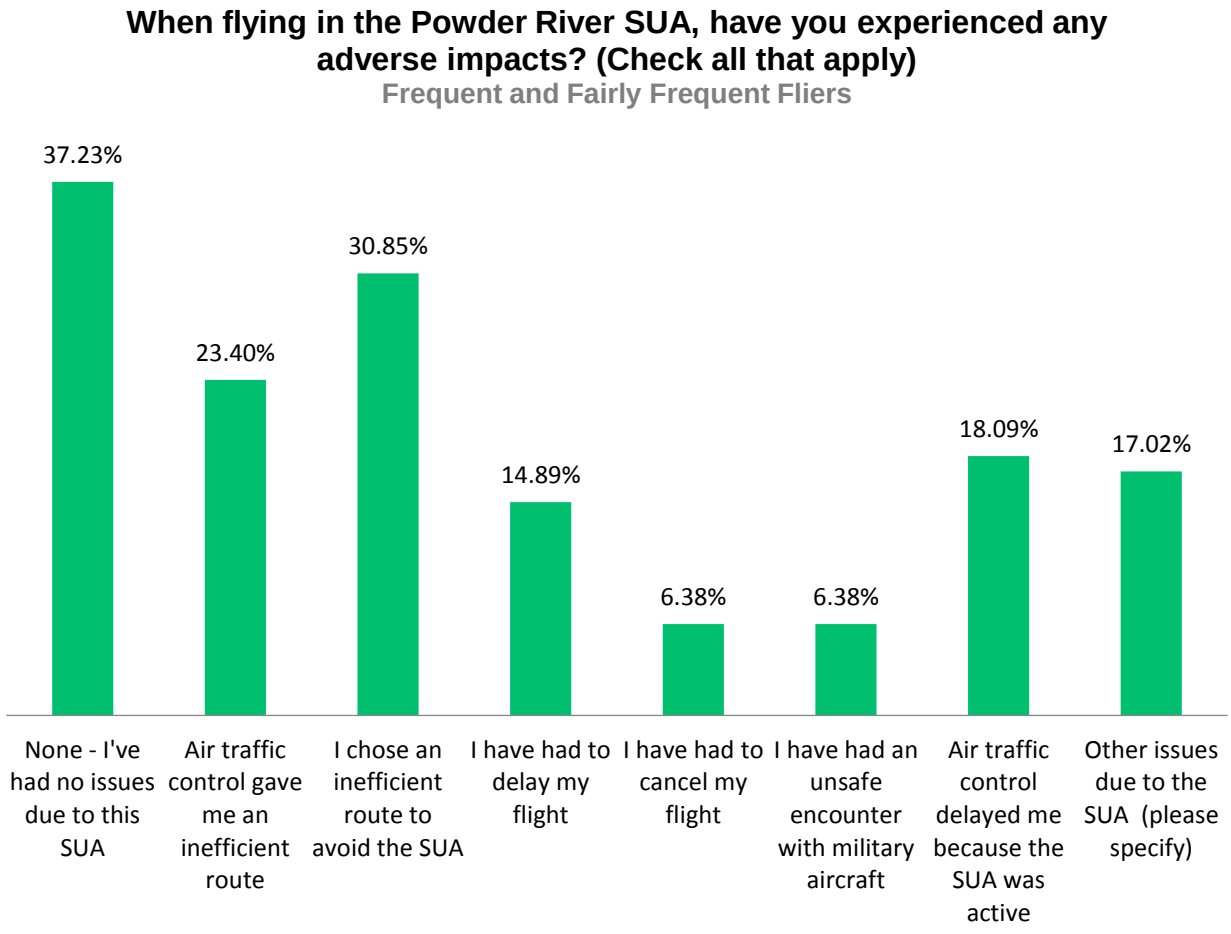
We asked pilots to tell us specific adverse impacts they experienced due to inefficient routing. Here are some representative comments about increased costs from frequent fliers in the SUA:

> *"Over the last 3 years I have flown approx. 600 flight hours between WY and MT, ND, SD. The Powder River SUA has impacted roughly one third of those flight hours, increasing my direct flight time by approx. .125% or more each time. My hourly operating cost is $1000. The diversions have cost my company no less than $25,000 dollars during that time."*

> *"We fly through the area several times weekly. We fly a jet aircraft and get rerouted north or south to avoid the area. Not sure exact dollar amount, but jet fuel isn't cheap, and jets burn a lot of it."*

> *"This SUA is blocking the primary route to ND from WY and is killing time and money. We have spent 20% more time and fuel in transit of this regular route."*

Increased costs remain a key factor for those transiting through or being routed around the SUA due to inefficient routing options.



Lack of Information about the Activation Status of the SUA Thwarts Flight Planning Efforts

There was a critical mass of pilots who commented on the lack of information about the activation status of the SUA. Among pilots who routinely transited the SUA, one third said they did not have access to enough information to reliably determine the SUA's activation status.

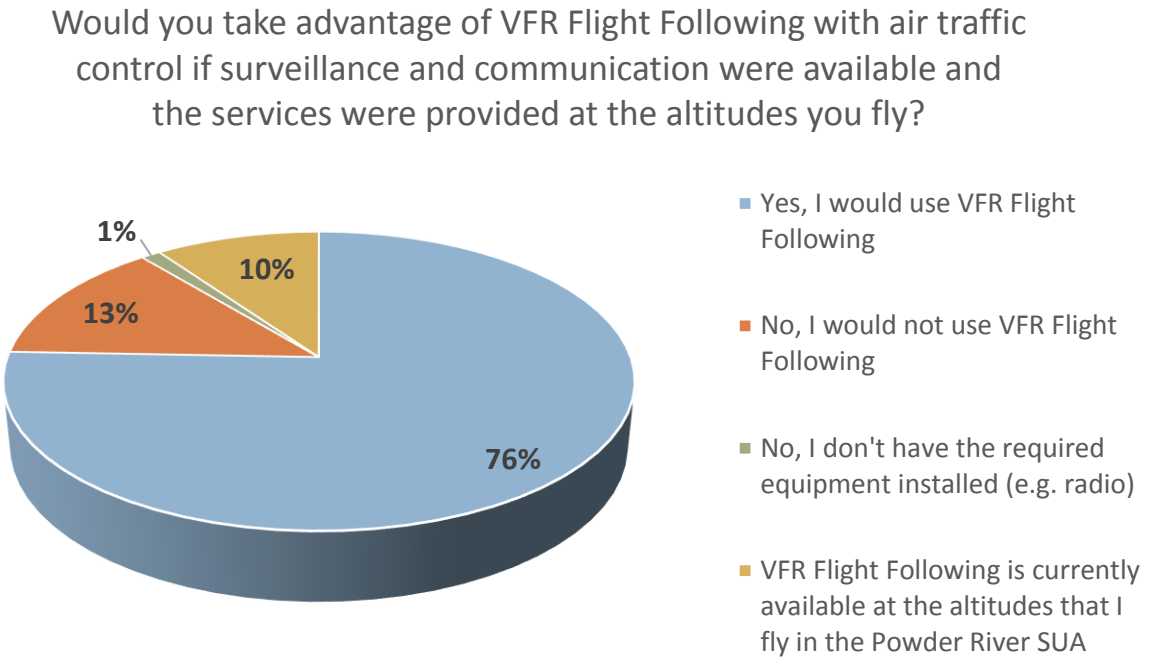
> *"In general, FSS is not very helpful with information about MOA activity. At best they will give a frequency or a telephone number to use. This still seems to be the situation with the Powder River SUA. FSS doesn't seem to be very familiar with the SUA and they don't seem to have a lot of confidence in their NOTAM information about the SUA."*

> *"While a NOTAM may be published about an area of the MOA scheduled to be active, it may not be active (for whatever reason). Centers will know if military aircraft are in the MOA areas. Center knows whether the military aircraft are present; FSS only knows about the NOTAMs."*

> *"They don't make it clear when it is active or not. I regularly get official weather briefings online for flights into Gillette and NOTAMS for Powder River are not included. I have to go searching for them and then they only say the proposed time. The FAA's special use airspace website is not clear either and often wrong. I usually just have to wait until ATC says I need to be rerouted."*

Clearer information about the activation status of the SUA would help pilots plan more effectively and fly more efficiently and safely in the SUA. The military, FAA, and the associations should collaborate on education materials explaining what resources are available and how real-time information can be accessed.

Most Pilots Flying VFR Would Use VFR Flight Following



Most pilots flying VFR said they would use VFR flight following in the SUA. In fact, only 14% of pilots surveyed said they would *not* use VFR flight following. VFR flight following allows ATC to provide pilots with information about the activation status of SUA, traffic advisories, and additional safety benefits. Flight following can improve safety in the SUA and can assist with limiting self-imposed re-routes that will continue to cost pilots time and money. VFR pilots who operate at lower altitudes, less than 8,000 feet mean sea level, voiced concerns about spotty radar in some parts of the SUA and being dropped by ATC. Pilots suggested establishing a VFR fly way through the SUA to allow for routine, efficient, and safe access through the area.

Pilots Complain ATC Vectors Them into Severe Weather

Several pilots commented in the survey that ATC vectored them, in narrow corridors, into thunderstorms and areas of reported icing.

> "*ATC tried to force me to fly through a thunderstorm because I was on one of the narrow airways through the airspace when it was active. There was a thunderstorm that developed along that path and ATC wasn't going to give me a turn until I got insistent with them."*
>
> *"ATC vectored airplane toward hazardous weather – thunderstorm"*
>
> "*I have, on more than one occasion, had to decline an ATC heading because of airframe icing limitations and had to continue a course that would have led me to penetrate an active portion of the Powder River MOA in a small VFR airplane."*

Finding a way to route traffic through the SUA to avoid dangerous weather conditions, especially when it's active, would make the area safer for both civilian and military aviators. Some pilots suggested military operations should cease when severe weather is expected in the area.

Conclusion

The PRTC is very large SUA impacting pilots in Montana, Wyoming, and North and South Dakota. While many pilots never experience issues related to this SUA, about half of all pilots and three-quarters of pilots who routinely fly in the SUA have experienced adverse impacts. Pilots rely on information from the FAA to determine whether to fly through or around the SUA, but the information is difficult to find and sometimes inaccurate. Pilots relying on ATC to provide assistance are often given longer routes that cost additional time and money and, at times, route them directly in the path of severe weather. The FAA and military user, in collaboration with operators and associations, could do more to make the PRTC SUA a more efficient and safer airspace for all by ensuring: (a) pilots have accurate and timely information about the SUA's activation status; (b) routes are monitored and adjusted when severe weather conditions are present; and (c) improving radar and communications coverage where it is unavailable within the SUA. GA pilots could improve safety in the SUA by employing VFR flight following in the SUA where and when available, and most indicated that they would take advantage of the service.