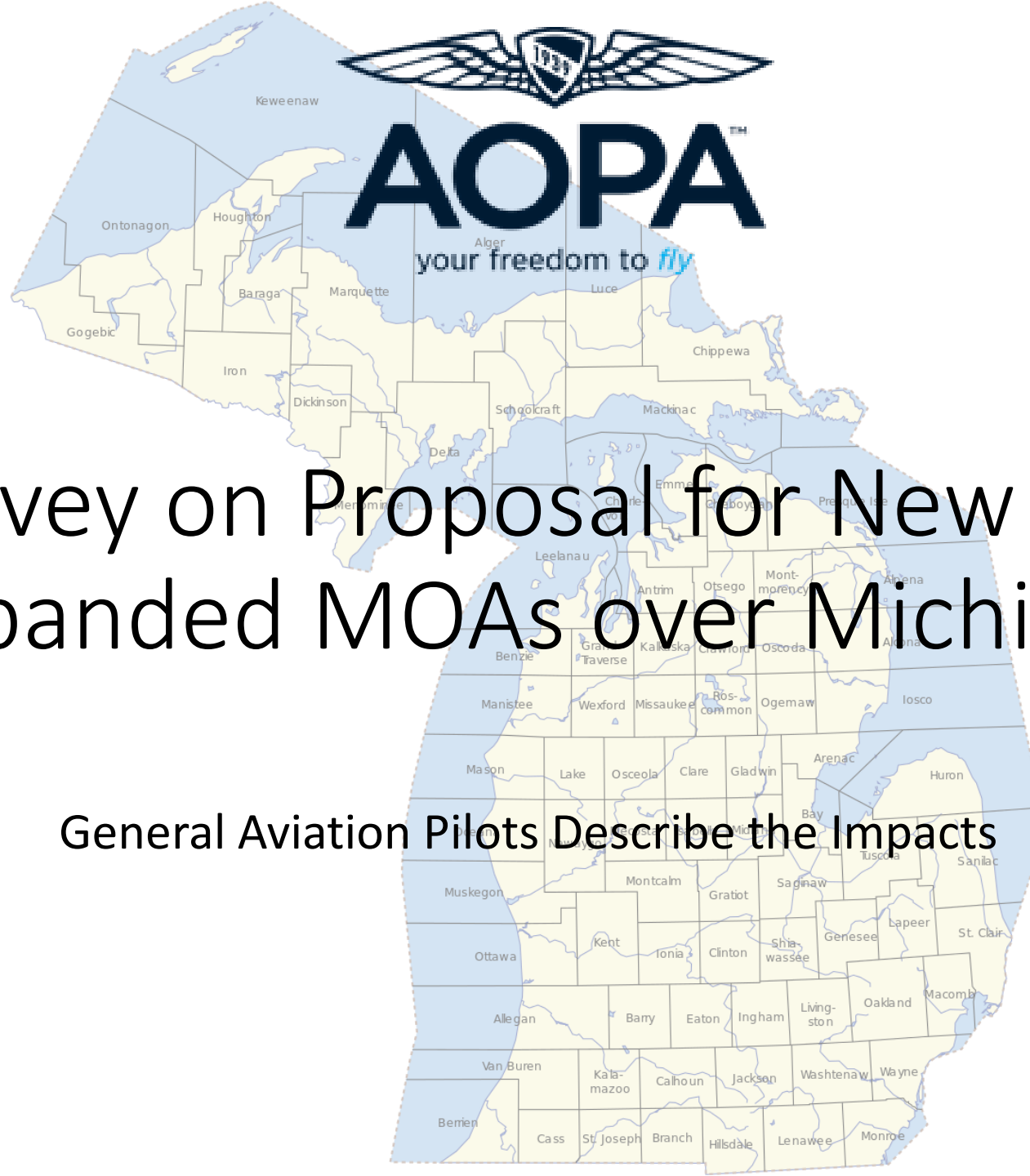




# AOPA™

your freedom to fly



## Survey on Proposal for New and Expanded MOAs over Michigan

General Aviation Pilots Describe the Impacts

# Executive Summary

76% of respondent fly in the area sometimes, often, or always

58% of pilots fly VFR all or most of the time

62% normally operate between surface and 6,000ft MSL

Percent of pilots who say airspace may negatively impact them

68% - Steelhead Low MOA

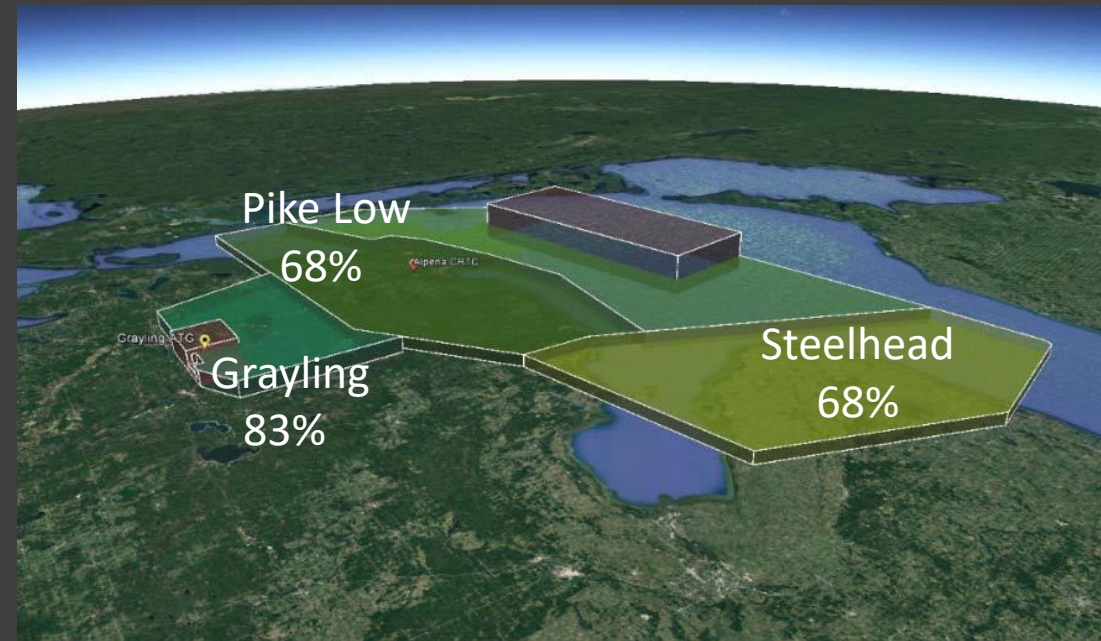
68% - Pike Low MOA

83% - Expanded Grayling MOA complex

63% - Would be affected if Victor Airways not available

80% - Concerns for the MOA's activation time

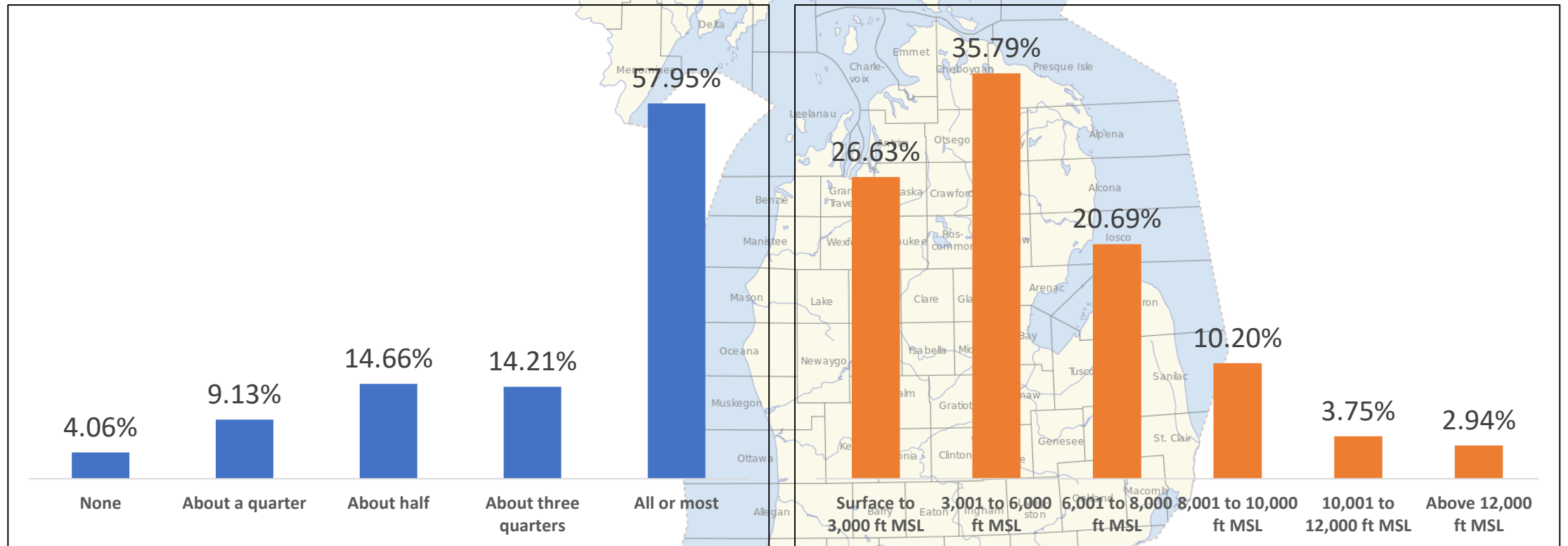
Most pilots concerned about GPS or ADS-B outages due to military GPS interference



# Pilots Who Responded Typically Fly VFR at Altitudes from the Surface to 6,000ft MSL

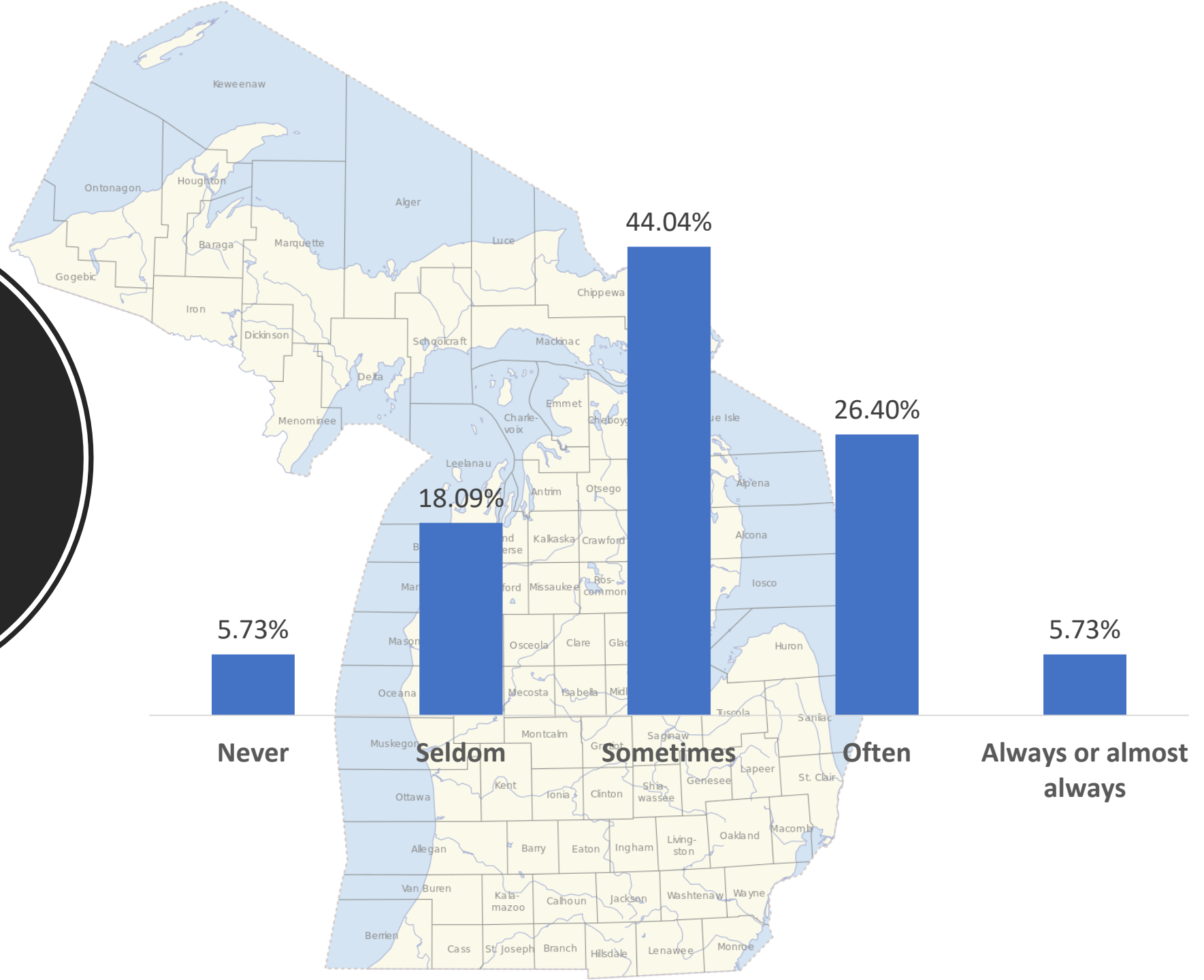
**What percentage of your flying is VFR?**

**At what altitudes do you normally operate when flying?**

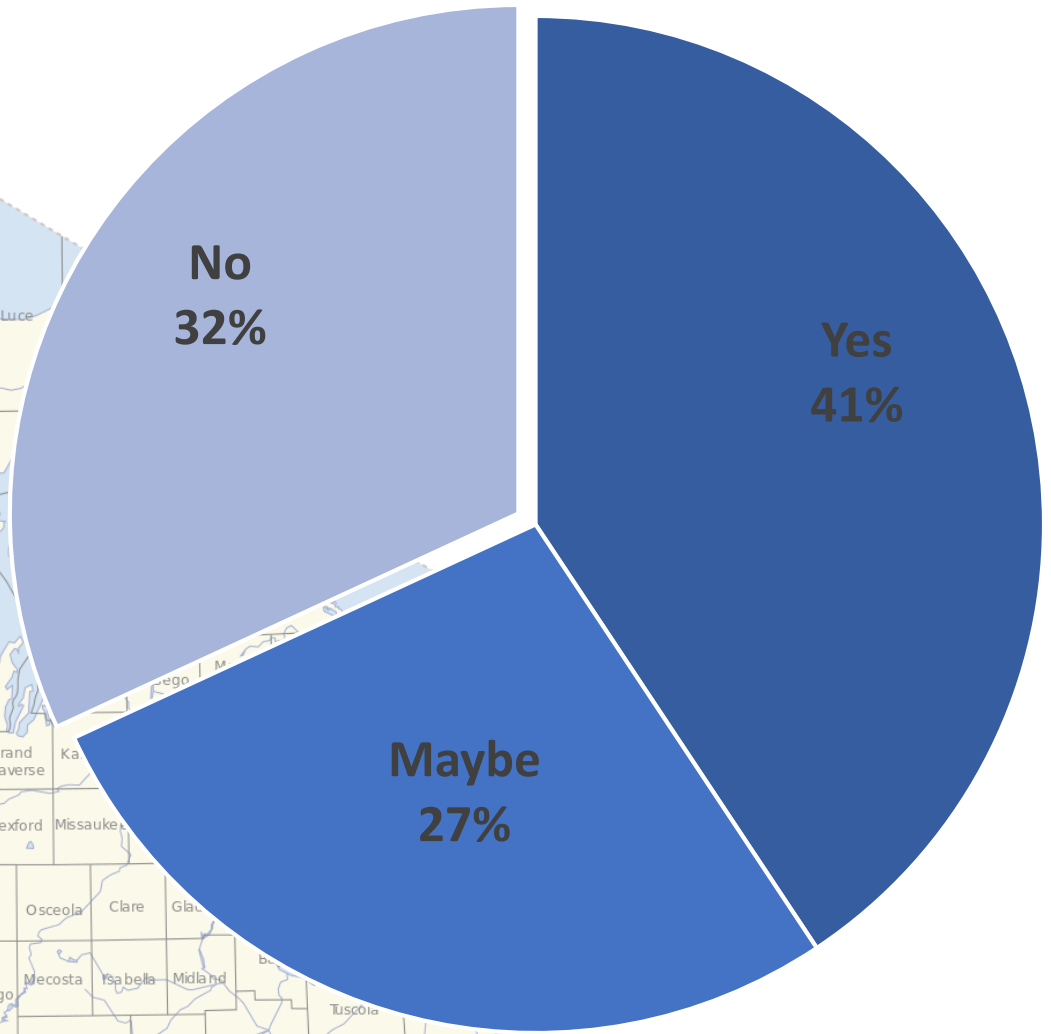


N=887

How often do you fly in the area proposed to have expanded SUA?  
 N=809



Will the lower floor altitude of the Steelhead MOA impact your flying?  
N=809

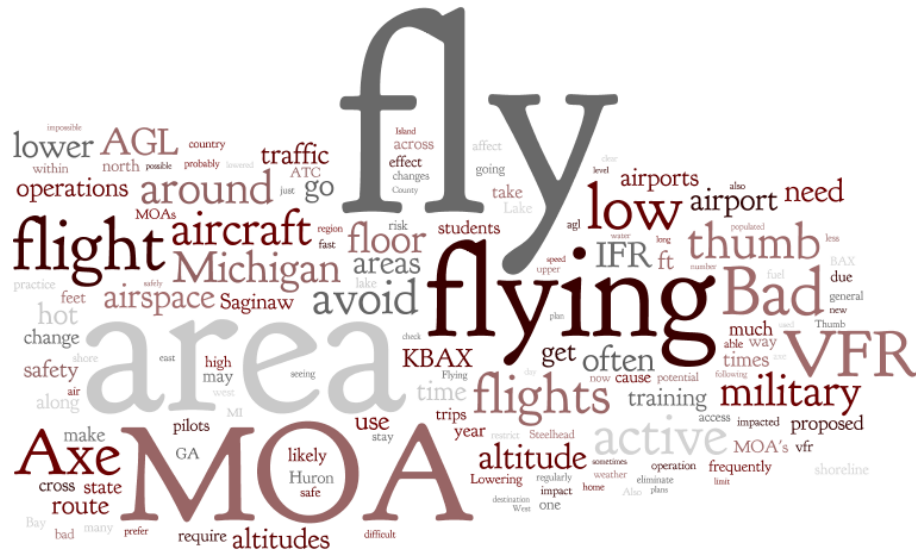


**Pilots are concerned that the new and expanded MOAs will have significant impacts on their flying**

- Limit visitation/tourism to the area – many pilots said they just won't fly there
- The MOAs will increase the cost of flying to or through the Michigan thumb area
- Flying in the new MOAs increases the risks (and consequently, the stress) associated with flying in the area



# How Will The Lower Floor Impact Your Flying?

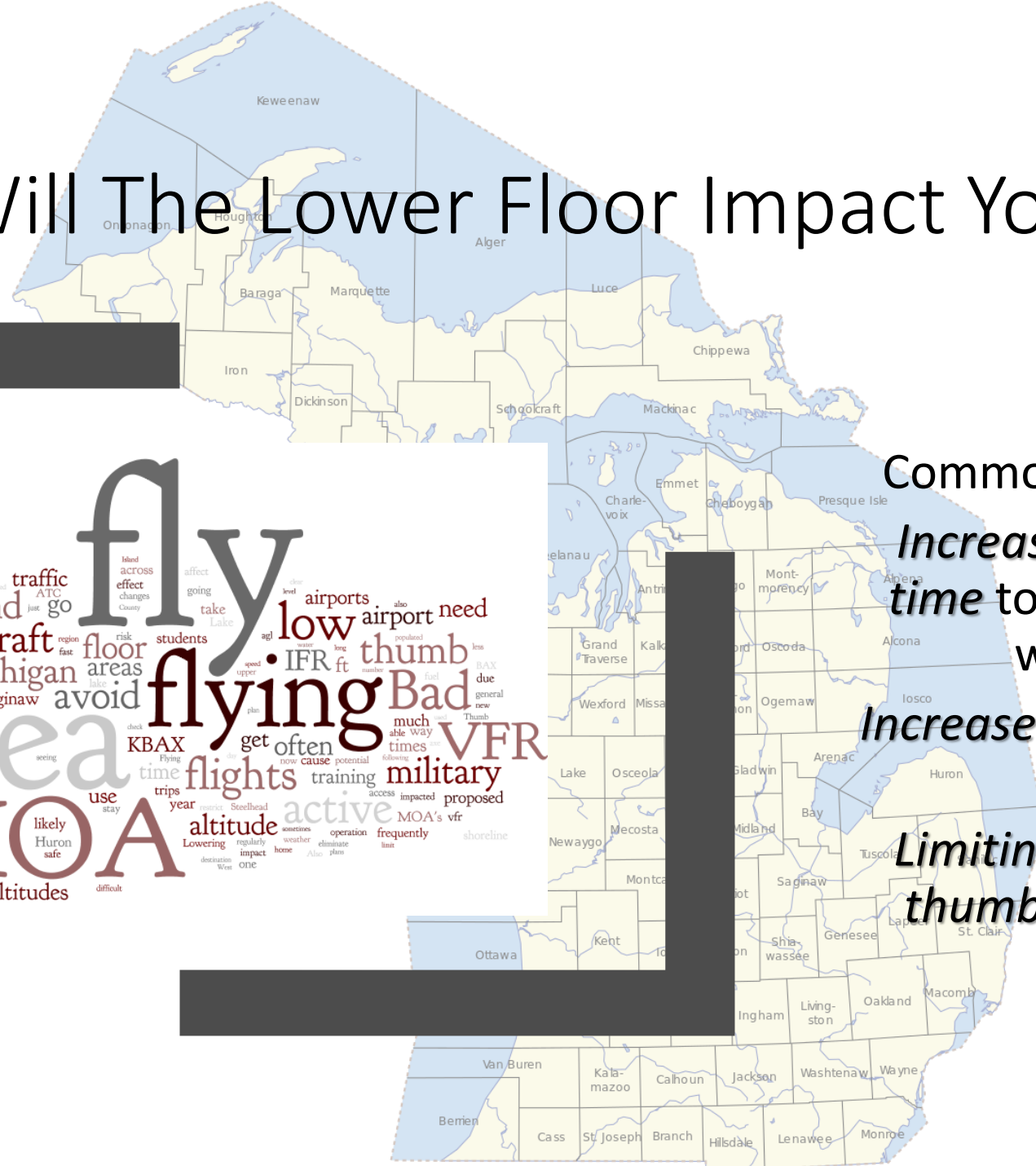


Common themes included...

*Increased costs for fuel and time to go around the MOA when it's active*

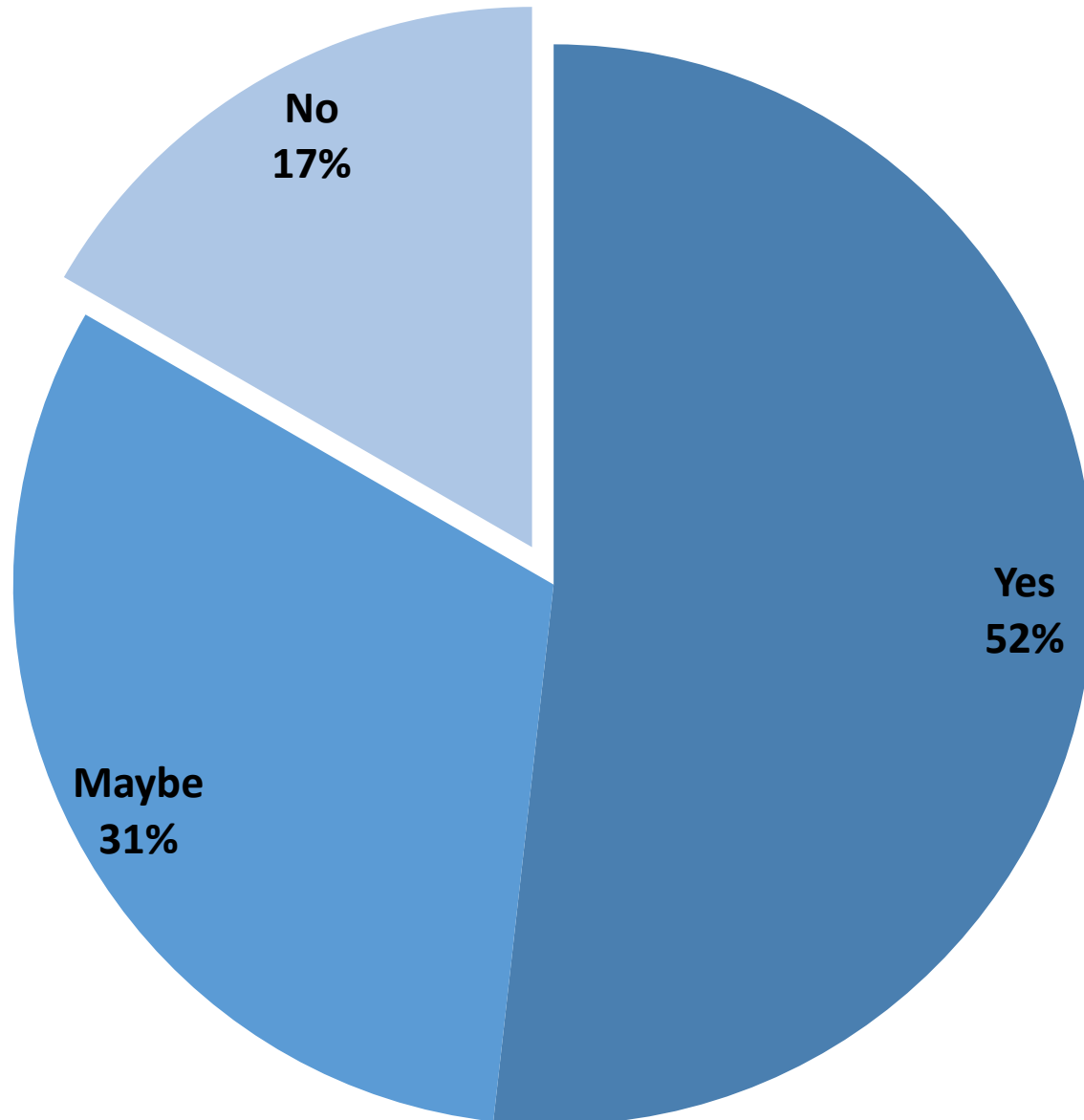
*Increased risk flying through it when active*

*Limiting visits/flights in the thumb area to avoid MOA*

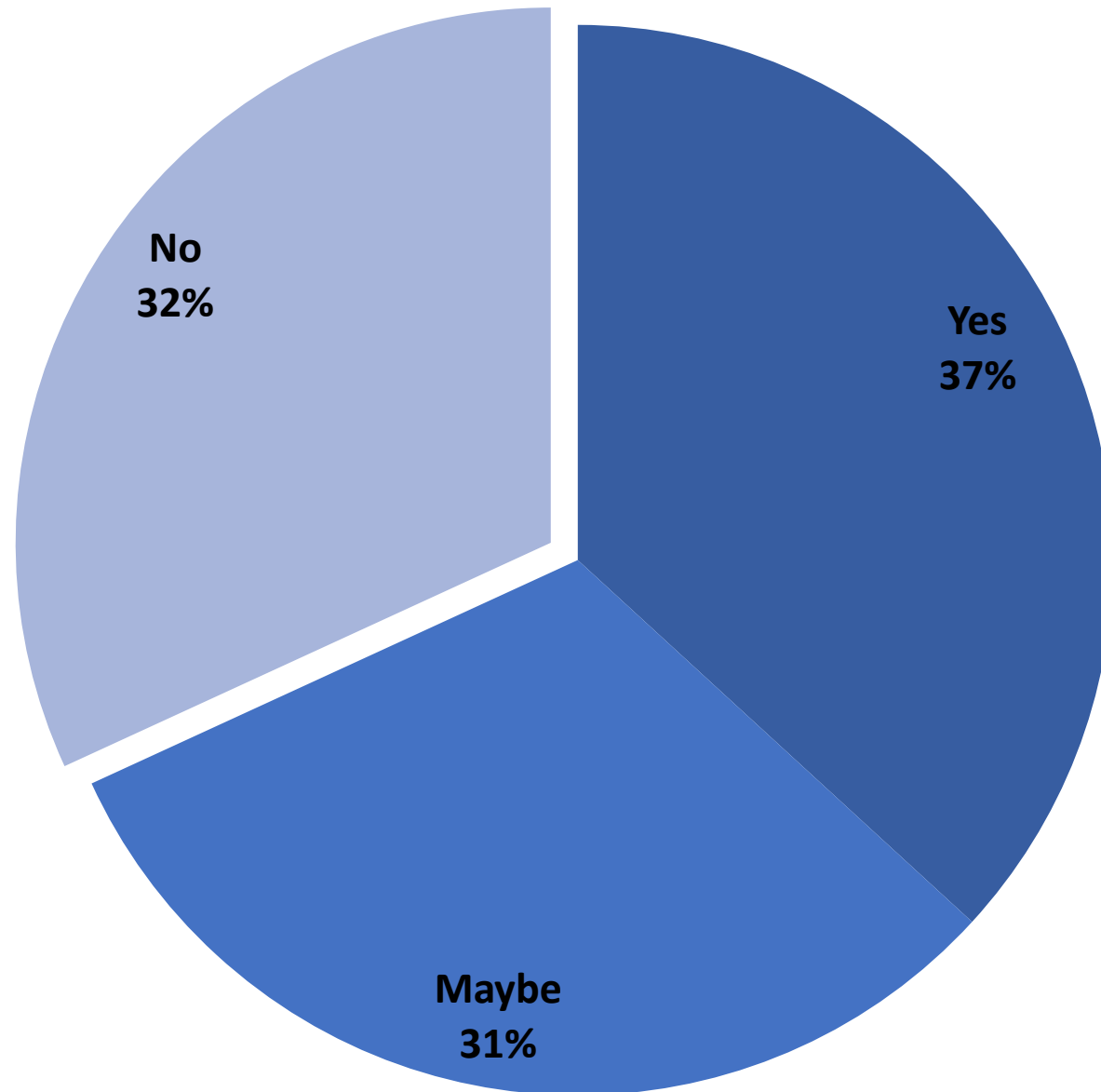


Will the new  
Grayling MOA  
complex  
impact your  
flying?

N=786

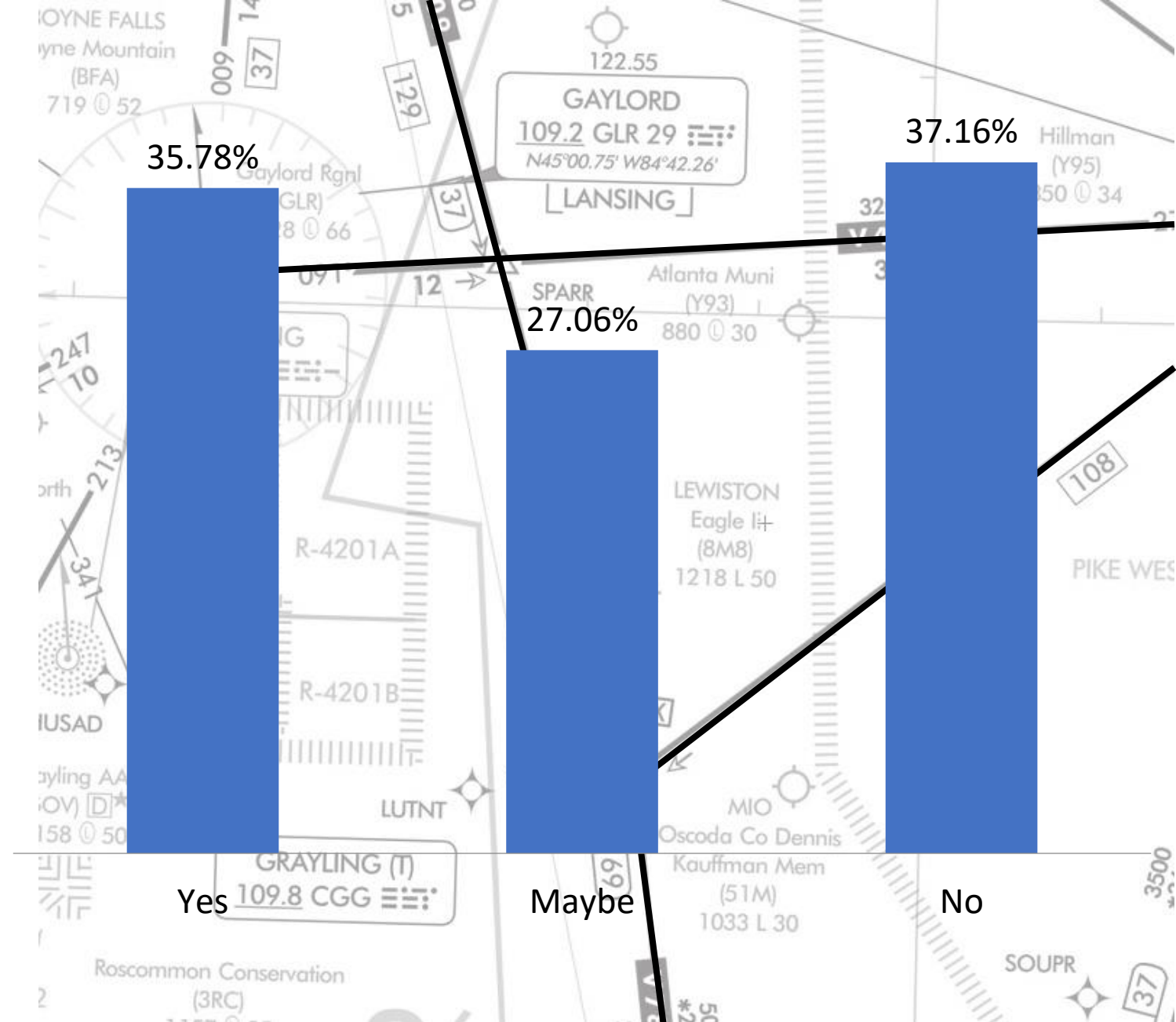


Will Pike Low  
MOA have an  
impact on  
your flying?  
N=766





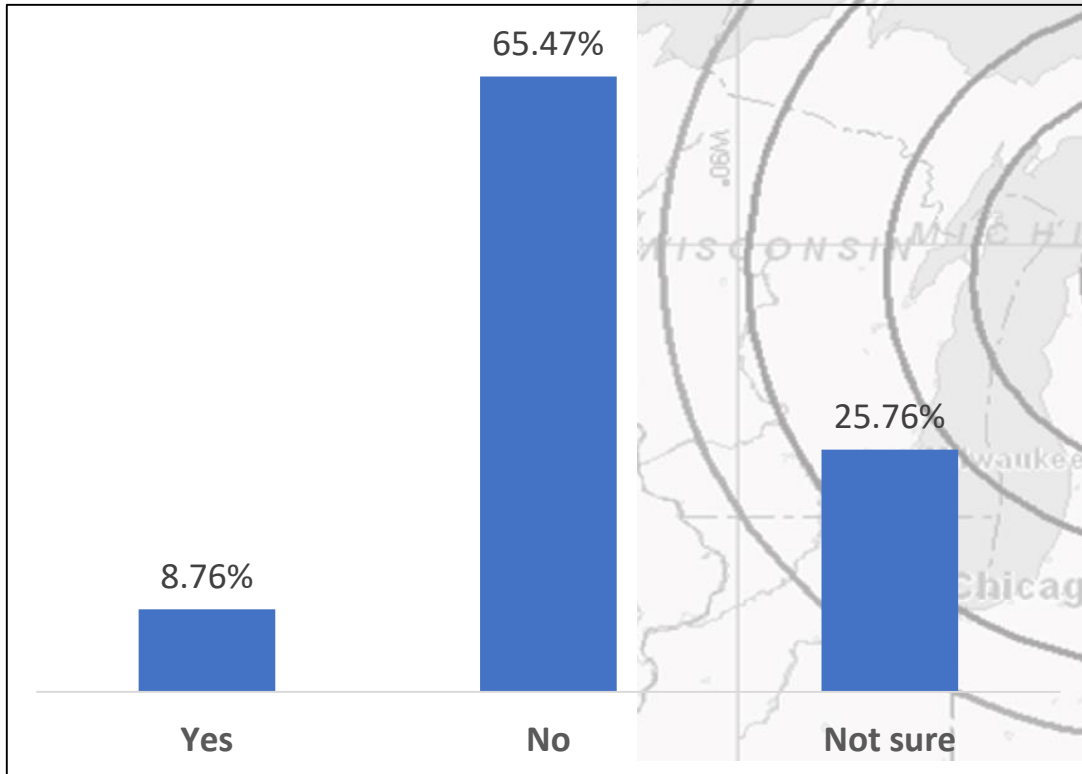
These new MOAs would affect the availability of Victor Airways in this area, would that affect your flying?  
N=248



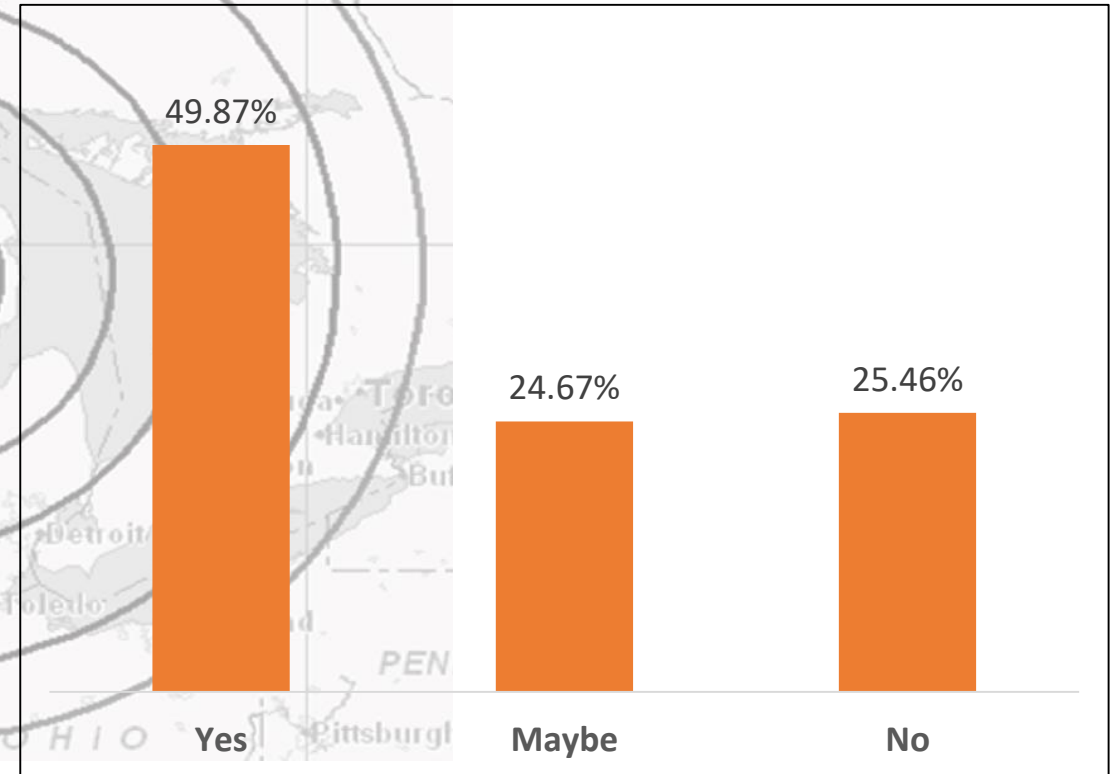
Note: Includes only pilots who fly VFR about half the time or less

# Intentional GPS Interference

**Have You Experienced a GPS Outage Attributable to a Known Military Interference Event? N=753**



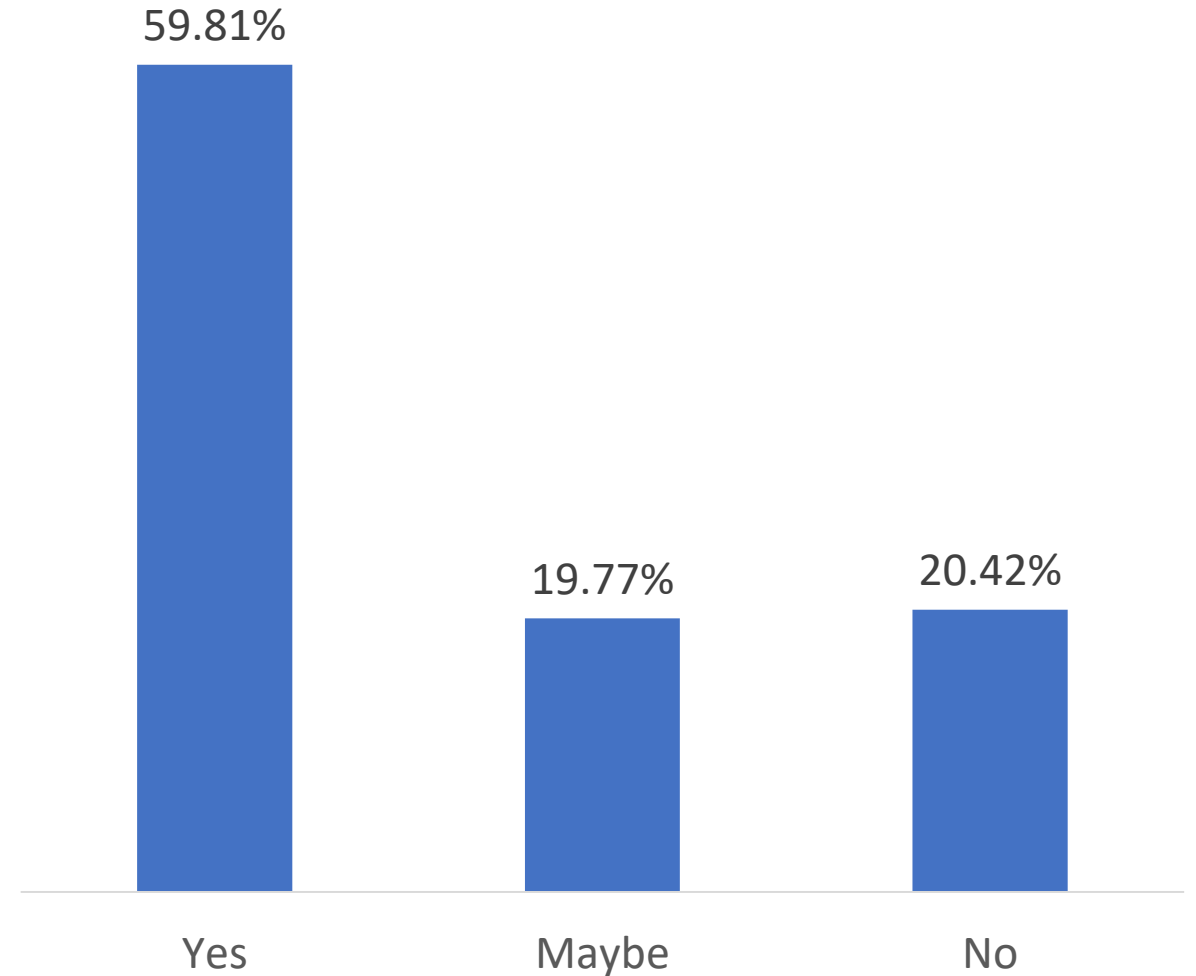
**Are You Concerned about Military GPS Interference Events Impacting Your Ability to Fly with GPS or ADS-B? N=758**



Do you have concerns  
about the activation  
times of the Pike Low,  
Steelhead Low, and/or  
the Grayling MOAs  
N=678

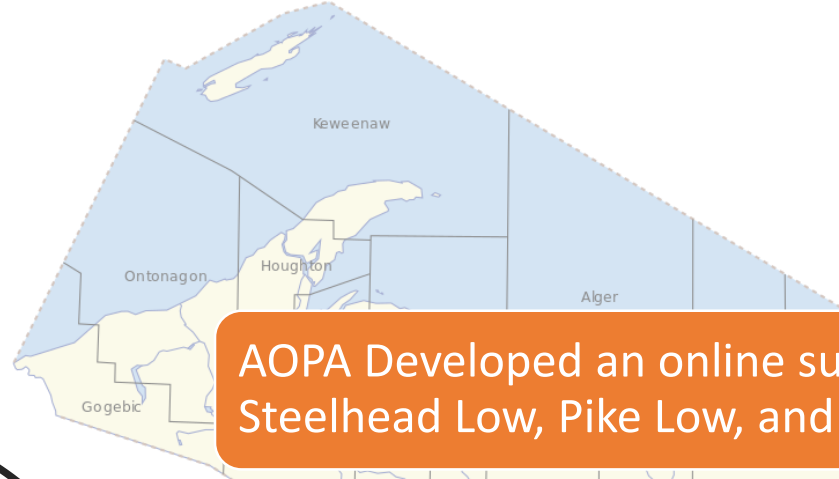
**Airports within the MOAs could be negatively impacted**

- Alpena County Regional Airport
- Atlanta Municipal Airport
- Eagle II Airport
- Hillman Airport
- Huron County Memorial Airport
- Iosco County Airport
- Oscoda County Dennis Kauffman Memorial Airport
- Oscoda-Wurtsmith Airport
- Presque Isle County Airport
- Sebewaing Airport



Note: Includes only those pilots who indicated that they fly in these SUA sometimes or with greater frequency

## Methodology



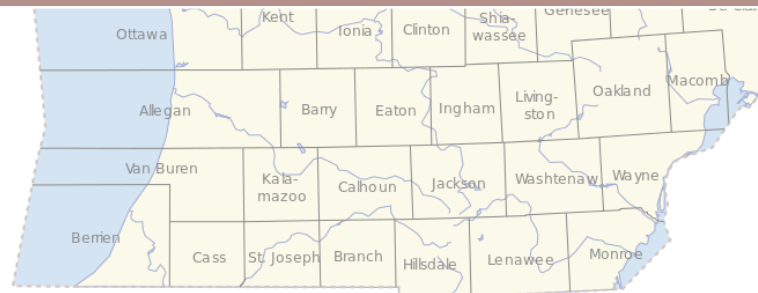
AOPA Developed an online survey instrument to ask GA pilots how the Steelhead Low, Pike Low, and Grayling MOAs will impact their flying

AOPA emailed a link to this survey to every pilot in Michigan and 20% of pilots in Illinois, Indiana, Ohio, and Wisconsin

We received 887 survey starts and 753 completed responses

Response rate was 6.3%, for a margin of error of +/- 3.5%

40% of Pilots who participated in the survey provided an email address when asked if they wanted AOPA to keep them updated



# Timeline

- October 2018**
  - National Guard Bureau shares informal proposal with AOPA
- November**
  - AOPA submits feedback after consulting with local airports and operators – Recommended numerous changes
- December**
  - Military conducts outreach meetings with local stakeholders
- January 2019**
  - Local news stories increase interest
- February**
  - AOPA conducts survey ahead of formal comment periods

