Aircraft Owners and Pilots Association

Subcommittee on Aviation

House Transportation and Infrastructure Committee

Hearing on: “The State of General Aviation”

Submitted by:

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your freedom to fly
INTRODUCTION

Chairman Larsen, Ranking Member Graves, Members of the Subcommittee, thank you for the opportunity to provide the Aircraft Owners and Pilots Association’s (or AOPA) perspective on the State of General Aviation.

AOPA is the world’s largest aviation membership organization, representing the general aviation interests of more than 300,000 aircraft owners and pilots across the country. Our members collectively operate over 85% of all general aviation (GA) aircraft in the United States and represent two-thirds of all pilots, making AOPA the largest civil aviation organization in the world.

AOPA was founded in 1939, and for over eighty years, we have stayed true to our mission of protecting the freedom to fly. Safety remains AOPA’s north star and helping to guide and protect this uniquely American experience so we can pass it along, better than we received it, to the next generation of aviators. Getting the next generations of Americans, especially young people from diverse backgrounds, interested and involved in aviation and aerospace is vital to our industry’s future.

IMPACT OF GENERAL AVIATION:

General aviation generates over $247 billion in total economic output, supports 1.1 million jobs, and includes a network of thousands of airports that help keep our communities across the nation connected, safe and protected
General Aviation operates a fleet of over 211,000 aircraft into the more than 5,000 public-use airports and over 14,500 private airports in the U.S., providing vital transportation to communities that do not have commercial service. According to the May 2022 FAA ATO Fact Book, the number of pilot certificates in 2021 increased by 4.2 percent to 720,603, mainly due to an increase in student pilot certificates from 222,629 to 250,197.

**IMPROVING GENERAL AVIATION SAFETY:**

The United States operates the safest aviation system in the world, and we are achieving impressive results in general aviation safety. Every aircraft accident makes headline news; however, what does not make the news is the 25 million flight hours a year flown by hundreds of thousands of GA pilots, accessing some 5,000 airports, safely.

In fiscal year 2021, general aviation had the safest year ever with a fatal accident rate of 0.74 accidents per 100,000 flight hours. That followed a decades-long trend of historically low accident rates, which have declined by some 50% over the last 25 years.
The General Aviation Joint Safety Committee, co-chaired by leaders from AOPA’s Aviation Safety Institute (ASI) and the FAA, analyzes mishap data to develop safety recommendations and drive implementation across the industry. This year, we are on track to again exceed the safety goal established by the GAJSC. A goal that will result in another ten percent reduction in fatal accidents over ten years.

These safety results are the product of strong industry collaboration to advance across all five elements of aviation safety: knowledge, training, proficiency, equipment, and culture. It is no coincidence that the FAA’s compliance program - which substantially improved the relationship with pilots and the FAA - took root during this period of sharp advances in GA safety. An open, trusting culture where pilots can admit mistakes, ask questions, and seek correction is critical to safety. We are hopeful this compliance
program will be accelerated, yet there are signs that we may be falling back to a more hardened “enforcement” culture, where the emphasis is on punishment over compliance.

We must accelerate our work to bring advanced equipment into GA cockpits. Modern technologies improve pilot situational awareness, help aid aircraft control in times of duress, and improve monitoring to identify critical components before they fail. Though we have seen improvements, our lag time and the bureaucratic process to approve installation of modern equipment is excessive. We must streamline the approval process and get more modern equipment into our GA fleet faster.

We have achieved impressive results and have come a long way in GA safety, but there is still so much more we can do. Safety is embedded in our culture and our highly respected Aviation Safety Institute works every day to educate and improve safety where we can.

**AVIATION WORKFORCE AND AOPA HIGH SCHOOL STEM CURRICULUM**

Aviation—whether GA, commercial, or military—cannot exist without qualified professionals to fly, design, build, operate, and maintain our crewed and uncrewed aircraft. Today, we face a critical shortage of workers in all these fields. Boeing predicts the need for 612,000 new pilots, 626,000 new maintenance technicians and 886,000 new cabin crew members over the next 20 years.
We applaud this Committee for including two aviation workforce development grant programs (aircraft pilots and aviation maintenance technical workers) in the 2018 FAA Reauthorization law. This is an outstanding provision intended to introduce high school students and others to science, technology, engineering, math (STEM) aviation education and opportunities, as well as training in aviation and aerospace skills.

Most people that aspire to become aviators start in general aviation, so it is important that we collaborate on efforts to ensure that this pipeline remains open to all. The aircraft pilot grant program supports the creation and delivery of curriculum designed to provide high school students with meaningful science, technology, engineering, math and aviation education and encouraging our nation’s youth to become the next generation of commercial, general aviation, drone or military pilots.

The aviation technical workforce grant program includes scholarships, apprenticeships, establishing new training programs, purchasing equipment for schools, and supporting career transition for members of the armed forces. These two programs are each authorized at $5 million per year through fiscal year (FY) 2023, and Congress appropriated full funding for these programs in FY20, FY21 and FY22. The FY23 Departments of Transportation, Housing and Urban Development, and Related Agencies Appropriations Bill recently, approved by the House Appropriations Committee, recommends funding the aircraft pilots grant program at $5 million while increasing the aviation technical workforce grant program to $10 million in FY23.
We appreciate the leadership of Chairman Peter DeFazio, Ranking Member Sam Graves, Aviation Subcommittee Chairman Rick Larsen, and Subcommittee Ranking Member Garret Graves, as well as the Members on the Committee, who have expressed their support for full funding of these aviation workforce grant programs.

In recent years, AOPA has also made major investments designed to fill the workforce pipeline, and that effort is paying dividends.

During the past school year alone, more than 12,000 high school students in 44 states used the rigorous four-year high school aviation STEM curriculum created by the AOPA Foundation to interest students in aviation careers and prepare them for success. These students studied in public, private, charter, and home-school settings in urban, suburban, and rural areas.

Fifty-four percent of these students attended Title I eligible schools, considered mid-to-high poverty by the Department of Education, while 21% were female and 41% were from minority backgrounds. This participation represents a significant increase in diversity when compared to the current aviation workforce.
HIGH SCHOOL AVIATION STEM CURRICULUM BY THE NUMBERS 2021-2022 SCHOOL YEAR

YEAR-OVER-YEAR GROWTH

- 62% increase in number of schools compared to previous year
- 22% increase in the number of states
- 12,000 students
2021-2022 Poverty Level Data

Schools and Students by Title I Eligibility Status

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<th>Schools</th>
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<td>n = 322</td>
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- >50% FARM: 50% 54%
- <= 50% FARM: 50% 46%

Student and School Demographics

School Location:
- Rural: 42%
- Urban: 23%
- Suburban: 33%

School Type 2021-22:
- Public: 77%
- Private: 13%
- Charter: 5%
- Other: 3%

Student Ethnicity 2021-22:
- White: 60%
- Students of color: 60%

Ethnicity Detail 2021-22:
- Hispanic: 13%
- African American: 6%
- Asian: 4%
- Other or Unknown: 4%
- White: 60%

School Gender 2021-22:
- Male: 79%
- Female: 21%
Among the graduating seniors who participated in the AOPA curriculum in the past two years, 58% reported plans to pursue careers as pilots (23%), maintainers (11%), aerospace engineers (15%), and in other aerospace fields (9%). Fully 75% reported plans to attend college or trade school.

To make this program accessible to students regardless of means, the AOPA Foundation provides it to schools completely free of charge. Comprehensive lesson plans, presentations, activities, assessments, and year-round teacher training and support are available to participating schools at no cost thanks to the generosity of donors.

While AOPA has made major investments to get high school students interested in aviation and Congress has provided support through the aviation workforce development grant programs, more needs to be done.

**NATIONAL CENTER FOR THE ADVANCEMENT OF AVIATION ACT:**

As the Committee is aware, in order to meet bold challenges, we need bold initiatives. Recognizing this, I am grateful that this Committee approved by voice vote the National Center for the Advancement of Aviation Act (NCAA). Mr. Chairman, the bipartisan and bicameral National Center for the Advancement of Aviation Act (H.R. 3482/S.1752), introduced in the House by you, Congressman Andre Carson (D-Ind.) and the late Congressman Don Young (R-Alaska), and in the Senate by Senators Inhofe (R-Okla.) and Duckworth (D-Ill.), is that bold initiative. Your bill has over 60 bipartisan
cosponsors, many who serve on this Committee, and I encourage all Members to cosponsor this important bill.

A national aviation center would bring the industry together by fostering such things as programs that create a diverse and skilled aviation workforce, ensuring the deployment of STEM aviation educational opportunities for middle and high school students, and provide a forum to support collaboration and cooperation between governmental, non-governmental, and private aviation and aerospace sector stakeholders regarding the advancement of the U.S. aviation and aerospace workforce. A national aviation center would do more to grow, develop, and promote aviation and bring the needed and long overdue collaboration of our collective industry that is so vital to our nation’s economy.

We strongly believe standing up such a center will facilitate cooperation, collaboration, and coordination across all sectors of aviation; civil, commercial, and military – and which is so desperately needed to address the workforce challenges facing the aviation industry.

In addition to the strong bipartisan support, more than 200 aviation organizations from general aviation, airlines, unions, and airports have expressed their support for the NCAA. Mr. Chairman, air travel delays and cancellations facing millions of Americans this summer are getting national attention and there are many factors involved including the shortage of pilots and other aviation workforce professionals. I strongly urge you,
and this Committee to do everything possible to ensure the House passes this NCAA bill before the end of the year.

AIRPORT INFRASTRUCTURE AND TRANSPARENCY:

Our nation’s public use airports are clearly a valuable and critical part of America’s infrastructure. We applaud the Committee’s support to address our nation’s airport infrastructure as part of the Infrastructure Investment and Jobs Act (IIJA). The legislation provides $25 billion over five years from the Treasury general fund, with $15 billion in grants for airport infrastructure including $500 million a year for non-primary and general aviation airports. This is in addition to annual Airport Improvement Program (AIP) funding, as well as the supplemental discretionary AIP funding Congress has appropriated over the past few years.

There are over 211,000 GA aircraft that operate from more than 5,000 public use airports in our national airspace system, of which only 500 airports provide commercial passenger service. However, almost 2,000 of the 5,000 airports listed in the National Plan of Integrated Airport Systems (NPIAS) are not eligible to receive federal funding. These 2,000 airports located in more rural areas still provide critical access to the communities they serve and should not be forgotten.
Need for Additional GA Hangars:

AOPA is also actively monitoring several areas of concern for pilots at airports across the country. We conducted a national survey of 800 airports and found that 71% of airport managers report a shortage of GA hangars. In fact, 55% of those surveyed said they have the land to develop additional hangars but do not have the financial resources to do so. Even if an airport is in the NPIAS, hangars are generally not approved for AIP funding.

Airport managers also report that hangars provide 45% of their gross revenue (the other 45% is from fuel sales) making hangars a critical source of financial self-sustainability for any GA airport. To address this concern, Congress should dedicate funding for GA hangar development that brings the cost within reach of the small cities and counties the desperately need hangars as a way to boost their long-term financial sustainability.

GA Airport Fees and Ramp Transparency:

Another issue of concern that we hear from our members and GA pilots across the country is the lack of transparency of ramp fees charged by the major fixed based operators (FBO), as well as the lack of published transient parking areas at federally funded public use airports.

Everywhere I travel I hear from AOPA members who believe there needs to be a requirement for major FBO companies to make their fees transparent and easily available to pilots like any other product or service today.
In addition, we believe there should be a requirement for airports with published diagrams to identify where public parking for GA aircraft exists at these airports. AOPA has reached out to 700 airports with published airport diagrams, and while over 100 airport managers have adopted standard parking labels which were created by the aviation industry, more needs to be done.

AOPA members and GA pilots across the country view transparent ramp fees and parking areas at taxpayer funded public use airports as a pilot's right.

While our members appreciate the strong support from Congress to fund our nation's public use airports, providing dedicated funding for GA hangar development and requiring transparent ramp fees and GA parking areas will help GA thrive.

**Success of BasicMed:**

BasicMed is a great example of AOPA working with the government in developing a program that has assisted many general aviation pilots. Since its inception in 2017, BasicMed has become widely popular and used by many in the aviation community.

Since BasicMed became available in 2017, over 73,000 pilots have taken advantage of this medical reform while maintaining an excellent safety record, according to FAA's Civil Aerospace Medical Institute and AOPA's Air Safety Institute. AOPA continues to support BasicMed and its potential to offer many current and aspiring pilots alternative
and safe pathways to fly to the 5,000 public-use airports in the US. AOPA continues to work with Canada in accepting BasicMed for pilots entering Canada from the U.S. as The Bahamas and Mexico currently do.

There are several long-term issues on which AOPA, and on behalf of the general aviation community, continues to engage with the FAA to rectify.

**FAA Staffing Shortage:**

AOPA shares the concerns of our industry partners regarding the current low staffing levels across the FAA. From an aircraft ownership perspective, these low staffing levels directly affect aircraft registration, surpassing six months to process on many occasions, whereas it used to take 4-6 weeks.

The shortage of air traffic controllers has been causing delays for an extended time, and AOPA appreciates the FAA's current efforts to increase controller staffing. However, AOPA urges the FAA to review and revise its delay protocols, especially in the Eastern United States, to help reduce extensive deviations general aviation aircraft operators encounter.

Another major concern to AOPA members is the shortage of aviation safety inspectors (ASI), causing extended processing time for required acceptance and approval of documentation for operators, pilots, and mechanics. The ASI shortage also negatively affects the designee system due to not having enough managing specialists to provide oversight of designees, such as Designated Pilot Examiners (DPEs).
**Designated Pilot Examiners (DPEs):**

For several years now, the pilot community has voiced consistent concerns about the lack of availability of examiners across the country. Although the FAA has implemented some programs that have provided limited relief, designee availability remains challenging. To emphasize the continued lack of DPE availability, according to a 2022 Middle Tennessee State University survey, 92% of flight school provider respondents believe there are currently too few DPEs nationwide to service the needs of pilot applicants.

To ensure the continued growth of the pilot population, especially amid increased demand for flight training and the current and projected increase in the pilot shortage, we believe the Aviation Rulemaking Advisory Committee's DPE Reform recommendations should be implemented as soon as possible to ensure an adequate number of designees are available.

As we continue to transform the aviation system to meet the needs of the future, we must ensure pilots have access to the services they need, whether for air traffic control, aircraft certification or for the host of other tasks required to keep the aviation sector operating.
Drone Integration:

AOPA fundamentally supports the safe enabling of drone operations into the U.S. National Airspace System (NAS), and we are working to ensure the future success of this segment of the aerospace community. However, the general aviation community has significant concerns that some of the proposed concepts to integrate Beyond Visual Line of Sight (BVLOS) drones will negatively impact the safety and efficiency of all NAS users.

For example, the BVLOS Aviation Rulemaking Committee recently recommended, over the objections of several members including AOPA, that BVLOS drones should have no responsibility to detect and avoid other aircraft that are not actively transmitting their location through Automatic Dependent Surveillance-Broadcast (ADS-B). Even after the 2020 ADS-B mandate, thousands of general aviation aircraft are either not required or are restricted from using ADS-B, such as ultralights and experimental aircraft. Allowing BVLOS drones to lessen their responsibility to detect and avoid manned aircraft operating routinely and safely at lower altitudes would introduce a serious safety hazard into the NAS.

AOPA urges the FAA to ensure BVLOS drone operations meet their responsibilities to see/detect and avoid all aircraft, just as current airspace users are obligated to do. Doing so will provide a more direct path to safely integrating uncrewed BVLOS aircraft into the entire NAS without further equipment requirements/mandates, unnecessary changes to the right-of-way rules, or airspace segregation.
**Modernization of Special Airworthiness Certification (MOSAIC):**

MOSAIC is long overdue and necessary to create changes to aircraft certification processes that will promote the installation of advanced and lower-cost technologies thereby enhancing safety and situational awareness. It will also increase personal flying opportunities and enjoyment.

AOPA urges the Committee to help ensure the FAA moves forward with MOSAIC in a timely manner and without further delay.

**Real-time Special Use Airspace (SUA):**

Dissemination of real-time special use airspace (SUA) information to pilots and flight planners is a critical priority for the aviation industry, including both the commercial and private sectors.

A MITRE Corporation study has suggested that implementing a system to provide this information could save $100 million annually in fuel burn, resulting not only in significant financial savings for airline, military, and general aviation operations, but also in reduced travel times for passengers and a considerable reduction of carbon emissions.

While the National Defense Authorization Act of 2021 (P.L 116–283) requires the implementation of a real-time system, AOPA is concerned as there appears to have been little measurable progress beyond some fact-finding activities.
This is unfortunate given the enormous benefits associated with implementing such a system. We believe FAA and DOD must redouble their efforts to implement a solution as quickly as possible and we appreciate the Committees support on this particular matter.

**UNLEADED AVIATION FUEL AND EAGLE INITIATIVE:**

There is no more pressing issue that general aviation faces today than the need to transition to 100 percent unleaded fuel – in a safe and smart way that works for the entire fleet of 200,000 aircraft.

This is a matter of safety.

I and my colleagues want lead out of our fuel, and have been diligently working on this important goal for several years. To bring this vision to reality, AOPA and the entire general aviation industry are collaborating with the federal government -- and many other public and private stakeholders -- in the EAGLE initiative (which stands for Eliminate Aviation Gasoline Lead Emissions).

While the EAGLE effort calls for the elimination of leaded fuel by 2030, I want – and expect – this to be done sooner. We have several candidate fuels currently in the program that are undergoing rigorous testing.
But let’s be clear -- this transition to unleaded needs to be safe and smart, as many of the 200,000 aircraft in the current GA fleet require higher octane fuel to fly safely. These include aircraft performing important missions of disaster relief, emergency operations, search and rescue, and law enforcement.

We are troubled by the actions taken by Santa Clara County in California in unilaterally preventing the sale of 100LL while the industry and the Biden Administration work together toward finding and deploying a fleetwide unleaded solution no later than 2030. With 100LL unavailable, there is also a higher risk of misfuelling, which can cause catastrophic engine failure, endangering those in the air and on the ground. Moreover, Santa Clara County has clearly violated AIP grant assurances with its actions and if left unchecked by the FAA, we are concerned about the terrible precedent and domino effect at other airports across the country, which would have a devastating impact on the general aviation community and local communities. We implore the Committee to ensure that this situation in Santa Clara County is addressed appropriately so that we can move forward with a safe and smart transition to an unleaded fuel solution.

CONCLUSION:

I would like to again thank the Subcommittee for this important hearing today and look forward to continuing to work with you on issues important to pilots and the general aviation community.