FAA REAUTHORIZATION: SECURING THE FUTURE OF GENERAL AVIATION

(118–5)

HEARING

BEFORE THE

SUBCOMMITTEE ON
AVIATION

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

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CONTENTS

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Washington, DC 20515

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MARCH 3, 2023

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Aviation
FROM: Staff, Subcommittee on Aviation
RE: Subcommittee Hearing on "*FAA Reauthorization: Securing the Future of General Aviation*"

I. PURPOSE

The Subcommittee on Aviation will meet on Thursday, March 9, 2023, at 10:00 a.m. ET in 2167 Rayburn House Office Building for a hearing titled, "*FAA Reauthorization: Securing the Future of General Aviation*." The hearing will examine challenges facing the general aviation community in advance of Congress acting to reauthorize the Federal Aviation Administration's (FAA) statutory authorities, which expire on October 1, 2023. This year's FAA reauthorization bill is expected to include the first-ever general aviation title for which this hearing will provide an opportunity to hear from stakeholders of the general aviation community on issues and potential legislative solutions prior to the upcoming FAA reauthorization bill. The Subcommittee will hear testimony from witnesses representing the Aircraft Owners and Pilots Association (AOPA), the Experimental Aircraft Association (EAA), the American Association of Airport Executives (AAAE), and the National Air Transportation Association (NATA).

II. BACKGROUND

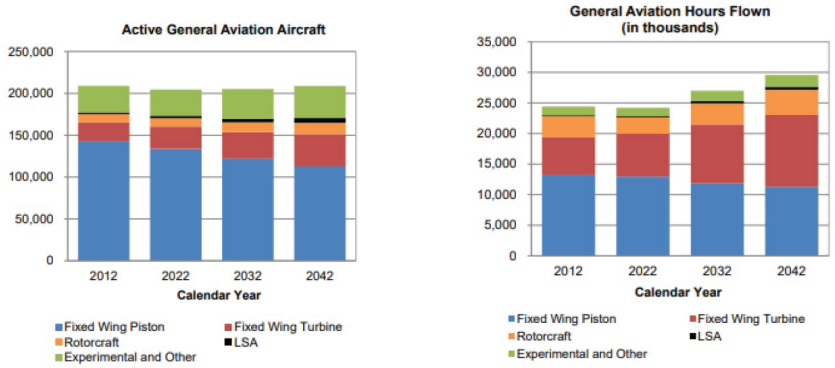
According to the FAA, "general aviation" describes a diverse range of aviation activities and includes all segments of the aviation industry except commercial air carriers and the military.[1] General aviation activities include training of new pilots and pilots interested in additional ratings or certifications, aerial firefighting, air tourism, crop dusting and surveying, movement of heavy loads by helicopter, experimental and sport flying, flying for personal or business reasons, and emergency medical services.[2] General aviation aircraft range from one-seat single-engine piston aircraft to long-range corporate jets.[3] It also includes rotorcraft, gliders, and amateur-built aircraft.[4]

General aviation is commonly referred to as the backbone of the aviation system as it underpins the aviation industry, and is an important part of our National economy. According to a 2018 study, general aviation supported more than 1.2 million

[1] FAA, *FAA Aerospace Forecasts FY 2003–2014*, Chapter 5 (2014), *available at* https://www.faa.gov/data__research/aviation/aerospace__forecasts/2003-2014/.
[2] *Id.*
[3] *Id.*
[4] *Id.*

jobs, generated $247 billion in output, and contributed $128 billion to the United States Gross Domestic Product.[5]

In terms of fleet size, "the active general aviation fleet, which showed a decline of 3.2 percent between 2019 and 2020, is projected to increase from its 2021 level of 204,405 aircraft to 208,905 by 2042," a 2.2 percent increase.[6] The FAA forecasts general aviation operations will increase an average of 0.6 percent a year through 2042, as increases in the use of turbine powered aircraft offset declines in piston aircraft use.[7] Specifically, "general aviation operations accounted for 57 percent of operations in 2021 . . . and has been increasing since the pandemic, from 51 percent in 2019 to 56 percent in 2020, and 57 percent in 2021."[8] Despite forecasted operational growth, the FAA projects that the number of general aviation pilots (excluding students and Airline Transport Pilots) will remain flat between 2021 and 2042, at around 306,400.[9]



Source: FAA Aerospace Forecast Fiscal Years 2022–2042

FUNDING FOR GENERAL AVIATION AIRPORTS

A general aviation airport is a public-use airport that does not have scheduled service or has scheduled service with less than 2,500 annual passenger boardings.[10] The current National Plan of Integrated Airport Systems (NPIAS) identifies 2,904 nonprimary airports that serve mainly general aviation activity, accounting for approximately 90 percent of existing NPIAS airports.[11]

Unlike commercial airports, general aviation airports do not have access to the passenger facility charge (PFC), which helps fund airport terminal and other capital projects at commercial airports.[12] However, general aviation airports included in the NPIAS are eligible for Airport Improvement Program (AIP) funds.[13] General aviation airports are able to receive funds through entitlements, or formula funds, to airports, which can be used for eligible airport development projects.[14] Usually, general aviation, reliever, and nonprimary commercial service airports are allocated 20 percent of AIP funds, subject to apportionment.[15] From that share, those airports receive the lesser of either $150,000 or one-fifth of the estimated five-year costs for

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[5] Dan Namowitz, *GA a Force in National, Local Economies*, AOPA, (Feb. 19, 2020), *available at* https://www.aopa.org/news-and-media/all-news/2020/february/19/ga-a-force-in-national-and-local-economies.

[6] FAA, FAA AEROSPACE FORECAST FISCAL YEARS 2022–2042 at 28 (June 28, 2022), *available at* https://www.faa.gov/sites/faa.gov/files/2022-06/FY2022__42__FAA__Aerospace__Forecast.pdf [hereinafter *Aerospace Forecast*].

[7] *Id.*

[8] *Id.*

[9] *Id.*

[10] 49 U.S.C. § 47102(8).

[11] FAA, UNITED STATES DEP'T OF TRANSPORTATION, NAT'L PLAN OF INTEGRATED AIRPORT SYSTEMS (NPIAS) 2023–2027, (Sept. 30, 2022), *available at* https://www.faa.gov/sites/faa.gov/files/npias-2023-2027-narrative.pdf. [hereinafter *NPIAS 2023–2027*].

[12] *See* 49 U.S.C. § 40117 (b).

[13] FAA, *Overview: What is AIP & What is Eligible?*, (last updated Aug. 2, 2022), *available at* https://www.faa.gov/airports/aip/overview/#eligible__airports.

[14] 49 U.S.C. §47114.

[15] *Financing Airport Improvements*, CONG. RESEARCH SERVICE (R43327), at 6 (2019), *available at* https://crsreports.congress.gov/product/pdf/R/R43327.

airport development for each airport as listed in the most recent NPIAS.[16] Any remaining funds are then distributed to each airport according to a state-based population and area formula.[17] General aviation airports that receive entitlements can also apply for discretionary funds, which are awarded on a competitive basis.[18]

GENERAL AVIATION SAFETY

Over the past four decades, general aviation has become significantly safer with the number of fatal and nonfatal accidents declining since 2000.[19] Experts suggest this is due to numerous factors, including advancements in aircraft equipment and technologies, improved pilot training, improved education programs, and advocacy efforts across the general aviation community.[20] Preliminary general aviation safety data shows the fatality rate per 100,000 flight hours has steadily declined in the past few decades.[21] The average fatality rate from 2012 to 2020 was 1.07, while the preceding decades were 1.29 and 1.49 respectively.[22] Despite these marked advancements, significant room for improvement remains. General aviation has the highest aviation accident rates within civil aviation. In 2012, the National Transportation Safety Board (NSTB) found that general aviation accident rates were about six times higher than small commuter and air taxi operations and over 40 times higher than larger transport category operations.[23]

As required by section 308 of the FAA Reauthorization Act of 2018 (P.L. 115–254), the FAA, in coordination with the NTSB, conducted a study of all general aviation accidents from 2000 through 2018.[24] The study showed there were 18,481 general aviation accidents that involved 18,613 aircraft over that period, resulting in 3,647 fatal accidents.[25] When taking all factors into consideration, the most common type of factors analyzed by the FAA and NTSB relating to general aviation accidents involved the pilot's control of the aircraft and actions or decisions—particularly those related to weather.[26]

III. GENERAL AVIATION: ISSUES FOR CONSIDERATION

DESIGNATED PILOT EXAMINERS

A designated pilot examiner (DPE) is an appointed individual who is authorized to conduct the flight tests necessary for issuing pilot certificates and ratings.[27] Several general aviation operators and flight schools assert there is a Nationwide shortage of the DPEs necessary to meet the needs of student pilots and pilots seeking additional certifications and ratings.[28] Significant wait times to schedule a check ride with a DPE can prolong an applicant's training time and costs.[29] A 2022 survey conducted by the Flight School Association of North America found that 38 percent of 519 respondents reported that their wait was more than a month to schedule an initial practical test.[30]

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[16] *Id.* at 6–7.
[17] *Id.* at 7.
[18] *Id.*
[19] BUREAU OF TRANSP. STATISTICS, UNITED STATES GENERAL AVIATION SAFETY DATA, *available at* https://www.bts.gov/content/us-general-aviationa-safety-data (last visited Feb 21, 2023), [hereinafter *General Aviation Safety Data*].
[20] *FAA Reauthorization: Aviation Safety and General Aviation: Hearing Before the Subcomm. on Aviation & Operations of the S. Comm. on Commerce, Science, & Transp.*, 114th Cong., (Apr. 28, 2015) (statement of Margaret Gilligan, Assoc. Admin. for Aviation Safety, FAA); *see also* John Zimmerman, *General Aviation Safety Trends: What Should We Worry About?*, PLANE&PILOT MAGAZINE (Dec. 13, 2021), *available at* https://www.planeandpilotmag.com/news/pilot-talk/2021/12/13/general-aviation-safety-trends-what-should-we-worry-about/; *see also General Aviation Safety Continues To Improve*, PLANE&PILOT MAGAZINE, (Dec. 18, 2019), *available at* https://www.planeandpilotmag.com/article/general-aviation-safety-continue-improve/.
[21] *General Aviation Safety Data, supra* note 19.
[22] *Id.*
[23] NTSB, *NTSB Most Wanted List: Improve General Aviation* (2012), *available at* https://www.ntsb.gov/Advocacy/mwl/Documents/ga__safety.pdf.
[24] Pub. L. 115–254, §308, 132 Stat. 3186.
[25] FAA, REPORT TO CONGRESS, FAA AND NTSB REVIEW OF GENERAL AVIATION SAFETY (Jan. 13, 2021), *available at* https://www.faa.gov/about/plansreports/ntsb-review-general-aviation-safety.
[26] *Id.*
[27] 14 C.F.R. §183.23 (2023).
[28] Janice Wood, *How much did you pay for your check ride?*, GENERAL AVIATION NEWS, (Oct. 19, 2022), *available at* https://generalaviationnews.com/2022/10/31/how-much-did-you-pay-for-your-check-ride/.
[29] *Id.*
[30] *Id.*

Section 319 of the FAA Reauthorization Act of 2018 required a review of all regulations and policies related to DPEs appointed under section 183.23 of title 14, Code of Federal Regulations.[31] From this review, a working group proposed 12 recommendations to improve the overall DPE system.[32] In response, the FAA accepted three recommendations, partially accepted five recommendations, rejected two recommendations, and noted that two recommendations were already implemented or in progress.[33] Several general aviation stakeholders were party to the mandated review and some have encouraged the Subcommittee to examine supply and demand of DPEs Nationwide.

TRANSITION TOWARDS AN UNLEADED FUTURE

According to the National Academies of Sciences, Engineering, and Medicine, "nearly all the country's approximately 170,000 active piston-engine aircraft burn a grade of aviation gasoline (avgas), designated as '100LL,' that contains lead."[34] Avgas remains one of the only transportation fuels in the United States to contain lead, with more than 222,600 registered piston-engine aircraft that can operate on leaded avgas.[35] This leaded fuel contains tetra-ethyl-lead, which is an additive used to prevent engine damage at higher power settings.[36] Because 100LL can be used by all kinds of piston-engine aircraft, this single grade is the only type of fuel consistently available for general aviation operations and is the only FAA-certified fuel for use by these aircraft.[37] Although the FAA does not have direct regulatory responsibility for aviation fuels, it provides the initial certification approval of the aircraft with the fuel it operates on, and it oversees aircraft operators to ensure use of the correct fuel.[38]

Section 177 of the FAA Reauthorization Act of 2018 directed the National Academies of Science to study avgas.[39] The committee conducting the study noted in its 2021 report "that currently there is no individual, certain solution to the aviation lead problem, and therefore a multi-pathway mitigation approach offers the greatest potential for tangible and sustained progress."[40]

In February 2022, the FAA, the Environmental Protection Agency (EPA), fuel suppliers and distributors, airports, and engine and aircraft manufacturers announced the Eliminate Aviation Gasoline Lead Emissions (EAGLE) Initiative—a collaborative initiative to permit both new and existing general aviation aircraft to operate lead-free, without compromising aviation safety and the economic and broader public benefits of general aviation.[41] Specifically, the initiative seeks to (1) establish the necessary infrastructure, efficient distribution channels, and widespread usage of unleaded fuels; (2) support research and testing of piston engine modifications and/or engine retrofits necessary for unleaded fuel operations; and (3) address fleet-wide authorization of unleaded aviation fuels of different octane levels.[42]

General aviation stakeholders, in coordination with the FAA, are working to move the piston aviation fleet towards a viable and safe unleaded future in an efficient and economical manner. The EAGLE Initiative proposes to achieve the widely held goal of eliminating lead emissions from general aviation by 2030.[43] As part of this effort, the FAA announced in September 2022 it had granted a supplemental type

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[31] Pub. L. 115–254, §319, 132 Stat. 3186.

[32] AVIATION RULEMAKING ADVISORY COMMITTEE, DESIGNATED PILOT EXAMINER REFORMS WORKING GROUP, A REPORT FROM THE DESIGNATED PILOT EXAMINER REFORMS WORKING GROUP TO THE AVIATION RULEMAKING ADVISORY COMMITTEE (June 17, 2021), *available at* https://www.faa.gov/regulations__policies/rulemaking/committees/documents/media/ARAC%20DPEWG%20Final%20Recommendation%20Report%20June%202021.pdf.

[33] FAA, FAA RESPONSE TO THE REPORT FROM THE DESIGNATED PILOT EXAMINER REFORMS WORKING GROUP TO THE AVIATION RULEMAKING ADVISORY COMMITTEE DATED JUNE 17, 2021, (May 25, 2022), *available at* https://www.faa.gov/regulations__policies/rulemaking/committees/documents/media/FAA%20Response%20to%20DPE%20RWG%20ARAC%20Report__FINAL__2022-05-25B__SenttoARM.pdf.

[34] NAT'L ACADEMIES PRESS, OPTIONS FOR REDUCING LEAD EMISSIONS FROM PISTON-ENGINE AIRCRAFT, (TRANSP. RESEARCH BOARD SPEC. REP. 336) (2021), *available at* https://nap.nationalacademies.org/read/26050/chapter/1#vii. [hereinafter *Nat'l Acad. of Sci. Report*].

[35] FAA, *Aviation Gasoline*, (last visited Feb. 21, 2022), *available at* https://www.faa.gov/about/initiatives/avgas.

[36] *Id.*

[37] *Nat'l Acad. of Sci. Report, supra* note 34.

[38] *Id.*

[39] Pub. L. 115–254, §177, 132 Stat. 3186.

[40] *Nat'l Acad. of Sci. Report, supra* note 34.

[41] Press Release, FAA, *FAA, Industry Chart Path to Eliminate Lead Emissions from General Aviation by the end of 2030*, (Feb. 23, 2022) *available at* https://www.faa.gov/newsroom/faa-industry-chart-path-eliminate-lead-emissions-general-aviation-end-2030.

[42] *Id.*

[43] *Id.*

certificate (STC) approval for the first unleaded fuel for use in every general aviation engine using spark-ignition; more are expected to follow.[44]

That said, some general aviation operators may be concerned about the continued availability of avgas at airports until unleaded alternative fuels are widely available to the piston aviation fleet. Concerns pertaining to the larger effort to remove lead from avgas include: (1) ensuring the reliable production and distribution of unleaded alternative fuels once approved; (2) educating general aviation pilots during the transition to prevent misfuelling; and (3) ensuring the installation of unleaded avgas storage and dispensing systems at thousands of small airports across the country.[45]

AIRPORT & AIRSPACE ISSUES

Airport Funding

As previously stated, since general aviation airports do not have access to the PFC to fund airport terminal and other capital projects, smaller airports are much more reliant on the AIP to meet their capital needs. The current NPIAS estimates that through 2027, there are $19 billion in AIP-eligible development costs at nonprimary airports which are estimated to service 58 percent of the active general aviation fleet.[46] Meanwhile, contract authority for AIP has remained flat, at $3.35 billion per year, for more than a decade. Moreover, there are growing concerns that inflation and rising construction costs continue to undermine the ability for general aviation airports to complete cost-effective projects and threaten the value these projects provide to the communities they serve.

Separately, there are nearly 2,000 public-use, general aviation airports not eligible to receive Federal funding for capital improvement projects.[47] These airports are often located in rural areas and potentially provide critical access to the communities they serve. Many general aviation operators and lawmakers are interested in ensuring continued air service and airspace access through the maintenance and modernization of infrastructure at all general aviation airports.

FAA Contract Tower Program

The FAA Contract Tower (FCT) Program is a public-private partnership that serves as an integral component of the air traffic management system managing over 25 percent of the Nation's air traffic control operations at towered airports.[48] The program currently provides for the contract operation of air traffic control services at over 250 airports in at least 46 states.[49] General aviation operators and airports continue to underscore the importance of the FCT program and advocate for critical infrastructure upgrades to ensure contract towers can continue to operate safely and efficiently.

Remote Air Traffic Control Towers

Technology could enable some airports to provide air traffic services remotely. Remote air traffic control towers propose to leverage cameras, microphones, meteorological sensors, and other monitoring equipment to provide air traffic control specialists with sufficient information to provide air traffic control tower services.[50] The controllers themselves are located at facilities which receive real-time data and video from these sensors and equipment.[51] For some locations, it has been proposed that the controllers would still be on-site, using the remote capabilities to erect a cheaper mast with sensors instead of a brick and mortar tower; at other locations it has been proposed that the controllers could be located off-site altogether. Regardless, the controller at the remote location would provide air traffic services to the airport the same way he or she would in a normal tower.[52] The FAA is currently

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[44] Julie Boatman, *GAMI Gains Avgas STC for Pistons on Unleaded Fuel*, FLYING MAG, (Sept. 2, 2022), *available at* https://www.flyingmag.com/gami-gains-avgas-stc-for-pistons-on-unleaded-fuel/.

[45] Jill Tallman, *FAA Approves Unleaded Fuel For Piston Fleet*, AOPA, (Sept. 1, 2022), *available at* https://aopa.org/news-and-media/all-news/2022/september/01/closer-to-an-unleaded-future.

[46] *NPIAS 2023–2027, supra* note 11.

[47] *NPIAS 2023–2027, supra* note 11.

[48] *The State of General Aviation: Hearing Before the Subcomm. on Aviation of the H. Comm. on Transp. and Infrastructure*, 117th Cong., (July 13, 2022) (statement of Chris Rozansky, Exec. Dir., Naples Airport Authority; on behalf of the American Assoc'n of Airport Executives).

[49] FAA, *FAA Contract Tower Program*, (last visited Feb. 27, 2023), *available at* https://www.faa.gov/about/office__org/headquarters__offices/ato/service__units/mission__support/faa__contract__tower__program.

[50] *Id.*

[51] *Id.*

[52] *Id.*

exploring using this technology at airports located in rural and remote areas, possibly improving safety and increasing access to the National Airspace System (NAS).

WORKFORCE DEVELOPMENT

Aviation Workforce Development Grants

Section 625 of the FAA Reauthorization Act of 2018 authorized five million dollars for a pilot workforce development program and five million dollars for an aviation maintenance technician workforce development program.[53] This workforce development program has enjoyed broad support from many general aviation stakeholders as it encourages collaboration between government, industry, and local entities to address skills gaps and encourage more Americans to pursue good-paying careers in aviation. Several stakeholders are concerned that the program is oversubscribed, with the FAA receiving hundreds of grant applications in the initial funding round, but only able to award 30 workforce development grants. Many general aviation stakeholders have expressed interest in continuing and potentially expanding this program in the next FAA reauthorization bill.

National Center for the Advancement of Aviation

A proposal to establish a "National Center for the Advancement of Aviation" (NCAA) is supported by a broad coalition of general aviation stakeholders, who believe that such a center would improve government and aviation industry collaboration on programs to enhance the United States aviation workforce and help maintain United States global leadership in aviation.[54] In the 117th Congress, the House passed H.R. 3482, a bill to establish the NCAA, a federally-chartered, independent entity focused that would promote aviation workforce development and aviation education.[55] The NCAA would fund scholarships, apprenticeships, aviation curriculum development, and other outreach efforts to encourage students to pursue careers in aviation. It would also launch initiatives to assist military personnel and veterans seeking a career in civil aviation. Furthermore, the NCAA would serve as a central repository for universities, industry, and other institutions to share information on workforce development and skills training. Many stakeholders have requested that the Subcommittee include the authorization for the NCAA in the 2023 FAA reauthorization bill.

OTHER ISSUES

In addition to the issues discussed above, the following subjects may also be raised at the hearing:

- *Aircraft Registry Backlog*: Several general aviation aircraft owners have been negatively affected by the aircraft registry backlog which has resulted in aircraft owners waiting upwards of six months to register, or re-register, their aircraft with the FAA.[56] As of February 20, 2023, the FAA's registry office was still processing some documents received on October 6, 2022.[57] Although the FAA's recently promulgated rule extending aircraft registration to seven years (up from three years) is expected to provide relief to the backlog, many lawmakers and general aviation stakeholders remain concerned about the Agency's ability to address the backlog in a timely manner.
- *Modernization of Special Airworthiness Certification (MOSAIC) Rulemaking*: The FAA is collaborating with the general aviation community to modernize regulations for Light Sport Aircrafts (LSAs) with the goal of providing greater operational capabilities and improving performance standards for these aircraft.[58] The forthcoming rule has been subject to delays, but it is widely anticipated that the FAA will make demonstrable progress this year.[59]

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[53] Pub. L. 115–254, §625, 132 Stat. 3186.

[54] Letter to Representative DeFazio and Representative Graves, Industry Letter in support of the Nat'l Center for the Advancement of Aviation, (Apr. 28, 2022) (on file with Comm.).

[55] *Nat'l Center for the Advancement of Aviation Act of 2022*, H.R. 3482, 117th Cong. (2021).

[56] *Time running out for 2022 aircraft registrations*, GENERAL AVIATION NEWS, (Dec. 6, 2022), *available at* https://generalaviationnews.com/2022/12/06/time-running-out-for-2022-aircraft-registrations/.

[57] FAA, *Aircraft Registration*, (last updated Feb. 6, 2023), *available at* https://www.faa.gov/licenses__certificates/aircraft__certification/aircraft__registry/.

[58] Press Release, EAA, *Pushing GA Forward with MOSAIC*, (Jan. 3, 2019), *available at* https://www.eaa.org/eaa/news-and-publications/eaa-news-and-aviation-news/news/2019-01-03-pushing-ga-forward-with-mosaic.

[59] Dan Johnson, *Proposed changes to LSA delayed*, GENERAL AVIATION NEWS, (Aug. 7, 2022), *available at* https://generalaviationnews.com/2022/08/07/proposed-changes-to-lsa-delayed/.

- *New Entrants in the National Airspace System*: The general aviation community supports the safe enabling and operation of new entrant technologies into the NAS, including unmanned aircraft system (UAS) and advanced air mobility (AAM) operations.[60] However, there are differences in opinion regarding the planned safe integration of these new entrants, with a recent focus on unmanned operations following publication of the final report issued by the UAS Beyond Visual Line-of-Sight (BVLOS) Operations Aviation Rulemaking Committee (ARC).[61] Of particular concern to some stakeholders are the BVLOS ARC's proposed changes to right-of-way flight rules and low altitude operations near structures.[62] Enabling BVLOS operations for UAS offers substantial opportunities and also raises important policy issues such as airspace rules and aviation safety.

IV. WITNESSES

- Mr. Mark Baker, President and Chief Executive Officer, Aircraft Owners and Pilots Association
- Mr. Jack Pelton, Chief Executive Officer and Chairman of the Board, Experimental Aircraft Association
- Mr. Rick Crider, Executive Vice President of Airport/Railport & Military Relations, Port San Antonio, *on behalf of the* American Association of Airport Executives
- Mr. Curt Castagna, President and Chief Executive Officer, National Air Transportation Association

[60] BVLOS ARC Coalition of Aviation Associations Statement of Non-Concurrence, Letter from AIA, AOPA, ALPA, GAMA, HAI, and Praxis Aerospace Corp. to BVLOS ARC Co-Chairs Eileen Lockhart and Sean Cassidy, (Mar. 3, 2022), *available at* https://www.faa.gov/regulations__policies/rulemaking/committees/documents/media/APPENDIX__F-Combined__Voting__Ballots__03242022.pdf.
[61] *Id.*
[62] *Id.*

FAA REAUTHORIZATION: SECURING THE FUTURE OF GENERAL AVIATION

THURSDAY, MARCH 9, 2023

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON AVIATION,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:02 a.m. in room 2167 Rayburn House Office Building, Hon. Garret Graves (Chairman of the subcommittee) presiding.

Mr. GRAVES OF LOUISIANA. The subcommittee will come to order.

I want to start out this morning, and I want to congratulate and welcome my good friend, Steve Cohen, as ranking member. I often remind him that he used to represent my sister, who then moved to an adjacent district to get better representation.

[Laughter.]

Mr. GRAVES OF LOUISIANA. No, seriously, Congressman Cohen and I have had the opportunity to work together on a number of initiatives and travel together over the years, and he is a good friend, and I am looking forward to working together with you this year.

I ask unanimous consent that the chairman be authorized to declare a recess at any time during today's hearing.

Without objection, so ordered.

I also ask unanimous consent that all Members not on the subcommittee be permitted to sit with the subcommittee at today's hearing and ask questions.

Without objection, so ordered.

As a reminder, if Members want to insert a document into the record, please also email it to DocumentsTI@mail.house.gov.

I now recognize myself for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. GARRET GRAVES OF LOUISIANA, CHAIRMAN, SUBCOMMITTEE ON AVIATION

Mr. GRAVES OF LOUISIANA. It is no secret that aviation is at a pivotal moment in history. Advancements in technology and innovation in aircraft design have not just made aviation or air travel safer, but it has also lowered the threshold and allowed more Americans than ever to be able to be given the opportunity to experience flight. The aviation sector wouldn't be where it is today without the general aviation sector.

Just last night I led a night tour, and I think I was in the rotunda around midnight, looking up at the frieze over the west front, the fresco or what have you that goes around the rim of the

rotunda. And it begins with a depiction of Christopher Columbus coming off the boat and discovering the New World, and it goes around, and it ends with the Wright brothers' discovery of flight. And it is such an important part of America's history that it is actually depicted right there in the Capitol, in the rotunda.

To see how far we have come over that period of time is remarkable. And what is even more exciting is that we have not fallen flat, not even close. Advancements in innovation are ushering in new users and use cases for the National Airspace System, including eVTOL, or electric vertical takeoff and landing aircraft, and drones.

I am excited to witness in real time the safe integration of these new technologies, these new entrants. And I am excited to learn more from our witnesses about how Congress can bridge any gaps to achieve the shared goal of moving forward on America's leadership in aviation.

We have the opportunity in the upcoming FAA bill to examine the challenges the general aviation community faces and address as many challenges as we can to put general aviation on a sound footing for many, many years to come, and we need to capitalize on this opportunity. I worry that kicking the can until the next reauthorization bill will set back American global leadership in aviation.

The time is now that we make smart investments in general aviation. We also have to ensure that all areas of the Federal Government are supporting our GA community.

I have been excited to work with our Livingston Parish Airport District as they move forward to create a new GA facility in our district.

But while the airport has received a commitment of funding from our State and locals through COVID response, I do have to say the Treasury Department has been a complete pain and given us the Heisman for months and months as we try and get confirmation on the eligible use of funds for support for drainage mitigation and other uses for the airport.

GA facilities are an incredible asset in our district, and I would like to take this opportunity to ask the Treasury Department: Return our phone calls and emails, please.

I look forward to working with the full committee chairman and members of the subcommittee in this effort.

[Mr. Graves of Louisiana's prepared statement follows:]

Prepared Statement of Hon. Garret Graves of Louisiana, Chairman, Subcommittee on Aviation

It is no secret that aviation is at a pivotal moment in history. Advancements in technology and innovations in aircraft design have not just made aviation safer, they have given more Americans than ever before the opportunity to fly. And the aviation sector wouldn't be where it is today without General Aviation (GA).

Just last night I led a night tour of the U.S. Capitol, and I was in the Rotunda around midnight, looking up at the Frieze of American History—the fresco that goes around the rim of the Rotunda. It begins with a depiction of Christopher Columbus stepping foot in the Americas and ends with the Wright brothers' discovery of flight. It's such an important part of America's history that it's actually depicted in the U.S. Capitol Rotunda.

Seeing how far we've come is remarkable, and even more exciting is that we have not fallen flat. Not even close.

In the upcoming Federal Aviation Administration (FAA) reauthorization bill, we have the opportunity to examine the challenges the general aviation community faces and address as many challenges as we can to put general aviation on a sound footing for many years to come.

We need to capitalize on this opportunity. I worry that kicking the can until the next reauthorization bill will set back American global leadership in aviation.

The time is now to make smart investments in general aviation, and we also have to ensure that all areas of the federal government support our GA community.

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GA facilities are an incredible asset in our district, and I would like to take this opportunity to ask the Treasury Department: return our phone calls and emails, please.

Innovative advancements are also ushering in new users of and use cases for the National Airspace System (NAS), including Electric Vertical Takeoff and Landing (eVTOL) aircraft and drones.

I'm excited to witness in real time the safe integration of these new entrants and to learn more today from our witnesses about how Congress can bridge gaps to achieve the shared goal of moving forward in America's leadership in aviation.

I look forward to working with the Full Committee Chairman and Members of the Subcommittee on this effort to support the GA Community and build a strong vision for the future of this important sector.

Mr. GRAVES OF LOUISIANA. I now recognize Ranking Member Cohen for 5 minutes.

Mr. COHEN. Thank you, Mr. Chair. It is a pleasure to be here as ranking member and to serve with you. You are my friend, and in spite of the fact that in Memphis we put our refuse in the river and send it downstream, and it goes to Baton Rouge.

Mr. GRAVES OF LOUISIANA. Rodney Davis, Jr.

Mr. COHEN. I have never had the opportunity to sit next to a former Governor, a present Governor, or a future Governor, so, it is a great honor.

[Laughter.]

Mr. COHEN. That frieze he talked about, if they did it in 1969 or 1972, would have stopped with FedEx. So, it would have continued on into aviation great moments.

OPENING STATEMENT OF HON. STEVE COHEN OF TENNESSEE, RANKING MEMBER, SUBCOMMITTEE ON AVIATION

Mr. COHEN. As we kick off our first Aviation Subcommittee hearing and continue our efforts to reauthorize the FAA, I welcome this opportunity to discuss the challenges facing the general aviation community.

As we have heard from our chairman of our subcommittee, and we will hear from our chairman of our full committee, Mr. Graves, our FAA reauthorization bill have the first-ever general aviation title, and I look forward to hearing from our witnesses on ways our committee can work with Mr. Graves the first on these important issues.

General aviation is an important sector of our aviation system, spanning from sport and recreational aviation to medical transport to business travel to aerial firefighting and more. According to the

FAA, the United States has the largest and most diverse general aviation community in the world with more than the 220,000 active aircraft.

Moreover, general aviation supports over 1.2 million jobs and is estimated to generate nearly $250 billion in economic output.

It is encouraging that general aviation has become significantly safer over the past four decades, with the number of fatal and nonfatal accidents declining since 2000. When we held our hearing on this topic in July of 2022, I appreciated hearing from the National Transportation Safety Board, Chair Jennifer Homendy. As she noted, however, the vast majority of the NTSB's aviation investigations involve general aviation accidents—this is because of the numbers, I guess—and the subsequent new regulations derived from their recommendations continue to contribute to improved aviation safety.

Since 2000, the NTSB has issued 294 safety recommendations addressing issues related to noncommercial general aviation operations. Of the 294 recommendations, 231 have been closed, while 63 remain open.

As we will hear today, it is important that we all continue to work together to maintain the positive trend in general aviation and continue to increase safety for all of our general aviation users.

I look forward to discussing ways in which we can continue to work together to transition towards an unleaded future. Aviation gasoline, or avgas, remains one of the only transportation fuels in the United States that contains lead, with more than 222,600 registered piston-engine aircraft that can operate on this type of gas.

The use of leaded avgas continues to remain a significant public health concern. It has been well documented by medical institutions and the CDC that lead exposure in children can lead to increased cognitive performance—decreased cognitive performance—I must have had a little lead around me at some time—and potentially lead to long-term learning and behavioral problems. I certainly did have it.

In the 2018 FAA Reauthorization Act, we directed the National Academies of Science to study aviation gasoline and how to transition away from it. In a 2021 report, the National Academies noted that there is currently "no [singular], certain solution to the aviation lead problem, and therefore a multipathway mitigation approach offers the greatest potential for tangible and sustained progress."

I applaud current efforts to research and develop alternative fuels, such as the Eliminate Aviation Gasoline Lead Emissions—or the acronym EAGLE—initiative and recognize it will take a collaborative effort to move forward to a safe transition towards unleaded fuel.

As we will hear today, there are several issues that need our attention as we work on our next FAA reauthorization bill. I look forward to working with the subcommittee, the full committee, particularly with my friend Garret Graves, and coming together with a bipartisan bill that helps America's fliers, and passengers, and everybody connected to aviation.

[Mr. Cohen's prepared statement follows:]

Prepared Statement of Hon. Steve Cohen of Tennessee, Ranking Member, Subcommittee on Aviation

As we kick off our first Aviation Subcommittee hearing and continue our efforts to reauthorize the Federal Aviation Administration, I welcome the opportunity to discuss the challenges facing the general aviation community.

As we've heard from our esteemed Chairman, Mr. Sam Graves, our FAA reauthorization bill will have the first-ever general aviation title, and I look forward to hearing from our witnesses on ways our Committee can work with you on these important issues.

General aviation is an important sector of our aviation system spanning from sport and recreational aviation to medical transport to business travel to aerial firefighting and more.

According to the FAA, the United States has the largest and most diverse general aviation community in the world with more than 220,000 active aircraft.

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As we'll hear today, there are several issues that need our attention as we work on our next FAA reauthorization bill, and I appreciate hearing the perspectives of important voices in our general aviation community.

Mr. COHEN. I yield back the balance of my time.

Mr. GRAVES OF LOUISIANA. Thank you, Mr. Cohen.

Our next opening statement, I am convinced—we were talking about the Wright brothers—if this guy had been around, after I spent a little time in Tarkio at his hangar, I am convinced that the Wright brothers' timeframe would have been cut in half, if he was involved in developing that plane.

I yield 5 minutes to the chairman of the full committee, Sam Graves.

OPENING STATEMENT OF HON. SAM GRAVES OF MISSOURI, CHAIRMAN, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Mr. GRAVES OF MISSOURI. Thank you, Mr. Chairman and Ranking Member.

So, I think everybody has pretty much heard that I intend to do in the next FAA reauthorization a GA title. It will be the first time that we have done that. And I am looking forward to doing the FAA reauthorization, I really am. We have got so many challenges out there, whether it's workforce, or air traffic control, or organization within the FAA, or some certification issues. But regardless, I am looking forward to it.

There are basically two tracks to get into the aviation industry, whether that is a mechanic, or a pilot, even air traffic control. You can come up through the military or you can come up through general aviation. And my concern within this committee's purview is, obviously, general aviation, and it is the cornerstone of aviation.

Everybody that pursues a career in aviation starts out as a GA pilot. That is just a fact. And they start out at that local airfield. And there are challenges throughout that. We have to make sure that we figure out how to break down those barriers to get young people involved, and young people excited again. And there are a lot of challenges out there, expense being one of them. But it is incumbent upon us in general aviation to do everything we can to encourage those young people to choose a career in aviation, and that is something that we need to be thinking about, and something that we need to do.

I have said many times before that one of the worst things that happened when it comes to the FAA is when advocacy was removed from the mission statement. And that is absolutely a fact. We need more advocates within the FAA and throughout aviation than we do so many other things, whether that's inspectors, or enforcement, or whatever the case may be. We have to be good advocates, and we have to get these young people.

So, I want to thank all of our witnesses for being here. I am looking forward to hearing the testimony and reading through the testimony that has been provided. And this is our start to FAA reauthorization. And again, we are going to put some serious focus on the GA community, whether that's local airfields or, again, pilot training. And our organizations that represent general aviation are vital to that. And I appreciate all the input that we have gotten from the stakeholders and everybody from all of the organizations, and I, again, look forward to the testimony.

[Mr. Graves of Missouri's prepared statement follows:]

Prepared Statement of Hon. Sam Graves of Missouri, Chairman, Committee on Transportation and Infrastructure

I'm looking forward to passing a bipartisan FAA reauthorization this year, and I think most people know that I intend to include the first ever general aviation (GA) title.

We've got so many challenges facing our aviation system—whether it's the workforce shortage, air traffic control issues, or issues with FAA's organization and certification processes. To address these issues, we need a good pipeline of aviation professionals, and there are basically two tracks to get into the aviation industry. Peo-

ple can come up through the military or they can come up through general aviation, and my concern within this Committee's purview is obviously general aviation—which is the cornerstone of aviation.

So many who pursue a career in aviation start out as a GA pilot, starting out at their local airfield. But there are challenges to that, such as expense, and we have to make sure that we figure out how to break down barriers to get young people involved and excited in aviation again. It's incumbent upon us in general aviation to do everything we can to encourage young people to choose a career in aviation, and that's something we need to be thinking about in terms of this reauthorization bill.

I've said many times before that one of the worst things that happened with the FAA is when advocacy was removed from the mission statement. Safety will always be fundamental to FAA, but we need more advocates within the agency and throughout aviation, whether that's inspectors, enforcement, or whatever the case may be. We have to be good advocates and we have to get young people involved.

I want to thank all of our witnesses for being here. Here at the start to the FAA reauthorization process, we're placing some serious focus on the GA community, whether that's local airfields or pilot training, and our organizations that represent general aviation are vital to that.

Mr. GRAVES OF MISSOURI. And thanks for allowing me the time, Mr. Chairman. And with that I yield back.

Mr. GRAVES OF LOUISIANA. Thank you, Mr. Chairman. And I now recognize the ranking member of the full committee, another great friend.

And also, Mr. Larsen, I want to congratulate you for your position, and I look forward to working with you on the FAA bill this year.

I yield 5 minutes to the gentleman from Washington.

OPENING STATEMENT OF HON. RICK LARSEN OF WASHINGTON, RANKING MEMBER, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Mr. LARSEN OF WASHINGTON. Thank you, Chair Graves, and I appreciate the opportunity.

And Ranking Member Cohen, thanks for calling the hearing today on securing the future of general aviation.

So, in my home State of Washington and across the country, general aviation means good-paying jobs, and it is part of the key to long-term economic growth. A recent study found the GA industry supported an estimated $247 billion in economic output and 1.2 million jobs in the U.S. in 2018. It seems we maybe want to update that now.

In terms of fleet size, the active GA fleet is projected to increase from its 2021 level of more than 204,000 aircraft to 209,000 by 2042. This means more manufacturing, more maintenance, and more flightcrew training will be needed, resulting in opportunities for growth in communities with general aviation airports. And that, of course, means investing in the workforce and developing the future workforce in aviation.

But first and foremost, we must continue to champion aviation safety. Over the past few decades, general aviation has become significantly safer, with the number of fatal and nonfatal accidents declining since 2000. However, there is still room for improvement in GA, which has the highest aviation accident rate within civil aviation.

In 2021, the NTSB found that most aviation fatalities in 2020 took place during general aviation operations, where 332 people

were killed; compared to zero fatal accidents involving part 121 air carriers in that same year. I would note the accident of the Mutiny Bay crash in my own district, killing 10 last year as an example of that. With new technologies available for general aviation aircraft, the expansion of analytical tools to study safety trends and patterns, and improved training, we can, will, and, frankly, we should do better.

As well, general aviation also improves equity and access to the National Airspace System for people across the country. Many small and rural communities do not have access to commercial service airports or regularly scheduled air service. For instance, 82 percent of communities in Alaska are only accessible via air, yet only a handful have regularly scheduled commercial flights. General aviation and charter services provide these communities with lifelines to critical resources and services.

To that end, Congress specifically targeted general aviation in the Bipartisan Infrastructure Law, investing $500 million annually over 5 years for general aviation and nonprimary airports and $300 million for contract towers, creating jobs and increasing mobility. These types of investments are critical to ensuring that NAS is available to all people.

Unfortunately, as the NAS expands, we have to be cognizant of consequences. And as the ranking member discussed already with regards to leaded fuel, certain piston-powered general aviation aircraft still use avgas, which contains lead. So, while general aviation is the only transportation mode still using leaded fuel, we have to ensure that transition to newly available unleaded alternatives is safe and thoughtful.

To expedite this transition, the Eliminate Aviation Gasoline Lead Emissions—or EAGLE—initiative was launched in the last couple of years. This Federal and industry initiative aims to transition GA completely to unleaded fuel by 2030.

And the general aviation sector is also committed to addressing the industry's contributions to climate change. In recent years, the development of electric and hybrid-powered aircraft have been among the efforts to reduce carbon and noise emissions. For example, Arlington Municipal Airport in my hometown of Arlington, Washington, is home to Eviation, an aviation company which is developing the nine-seat, all-electric *Alice* aircraft. GA is also working to adopt alternative fuel sources to reduce carbon emissions, such as the development and distribution of SAF.

To support the sustainable growth of the general aviation sector, Congress must create a regulatory framework that prioritizes safety, invests in the necessary infrastructure, and helps to make our communities globally competitive well into the 2050s and beyond. So, while the future of U.S. aviation remains bright, general aviation is part of that picture, and still faces challenges that have to be addressed. And we have that opportunity, working with the FAA reauthorization, to work with GA to ensure that future remains bright.

Finally, before I yield back, Mr. Chair, I do want to recognize representatives from the Colgan family who are here to continue their valiant and necessary effort to ensure continued safety in the national airspace.

With that I look forward to tackling these issues together with everyone here.

[Mr. Larsen of Washington's prepared statement follows:]

Prepared Statement of Hon. Rick Larsen of Washington, Ranking Member, Committee on Transportation and Infrastructure

Thank you, Chairman Graves, for calling today's FAA Reauthorization hearing on "Securing the Future of General Aviation."

In my home state of Washington and across the country, general aviation (GA) means well-paying jobs and is key to long-term economic growth.

A recent study found the general aviation industry supported an estimated $247 billion in economic output and 1.2 million jobs in the U.S. in 2018.

In terms of fleet size, the active general aviation fleet, is projected to increase from its 2021 level of more than 204,000 aircraft to nearly 209,000 by 2042.

This means more manufacturing, maintenance and flight crew training will be needed, resulting in additional opportunities for growth in communities with general aviation airports.

First and foremost, we must continue to champion safety as our top priority.

Over the past few decades, general aviation has become significantly safer—with the number of fatal and nonfatal accidents declining since 2000.

However, there is still significant room for improvement as general aviation has the highest aviation accident rate within civil aviation.

In 2021, the National Transportation Safety Board (NSTB) found that most aviation fatalities in 2020 took place during general aviation operations, where 332 people were killed; compared to zero fatal accidents involving Part 121 air carriers in that same year.

With new technologies available for general aviation aircraft, the expansion of analytical tools to study safety trends and patterns, and improved training, we can and will do better.

General aviation also improves equity and access to the National Airspace System (NAS) for people across the country.

Many small and rural communities do not have access to commercial service airports or regularly scheduled air service.

For instance, 82 percent of communities in Alaska are only accessible via air; yet only a handful have regularly scheduled commercial flights.

General aviation and charter services provide these communities with lifelines to critical resources and services.

To that end, Congress specifically targeted general aviation in the Bipartisan Infrastructure Law investing $500 million annually over 5 years for general aviation and non-primary airports and $300 million for contract towers, creating jobs and increasing mobility.

These types of investments are critical to ensuring that the NAS is available to all Americans.

Unfortunately, as the NAS expands, we must also be cognizant of its consequences.

Certain piston-powered general aviation aircraft still use Avgas which contains lead—a neurotoxin that can be particularly detrimental to children.

While general aviation is the only transportation mode still using leaded fuel, we must ensure the transition to newly available unleaded alternatives is a safe and thoughtful one.

To expedite this transition, the Eliminate Aviation Gasoline Lead Emissions (EAGLE) Initiative was launched in February 2022.

This federal and industry initiative aims to transition general aviation completely to unleaded fuel by 2030.

The general aviation sector is also committed to addressing the industry's contributions to climate change.

In recent years, the development of electric and hybrid-powered aircraft have been among the efforts to reduce carbon and noise emissions.

For example, Arlington Municipal Airport in my hometown of Arlington, Washington, is home to Eviation, an aviation company which is developing the nine-seat, all-electric "Alice" aircraft.

The general aviation industry is also working to adopt alternative fuel sources to reduce carbon emissions, such as the development and distribution of sustainable aviation fuel (SAF).

To support sustainable growth of the general aviation sector, Congress must create a regulatory framework that prioritizes safety, invests in the necessary infrastructure and helps to make communities globally competitive well into the 2050s and beyond.

While the future of U.S. aviation remains bright, general aviation still faces several challenges that must be addressed.

Today's witnesses will provide much needed insight on the industry's priorities and how Congress can be a better partner in these efforts.

Thank you, and I look forward to tackling these issues together.

Mr. LARSEN OF WASHINGTON. I yield back.

Mr. YAKYM [presiding]. Thank you, Mr. Larsen.

I would like to welcome our witnesses today and thank them for being here.

Briefly, I would like to take a moment to explain how our lighting system works to our witnesses. There are three lights in front of you. Green means go; yellow means you are running out of time; and red means wrap it up and conclude your remarks.

I would ask unanimous consent that the witnesses' full statements be included in the record.

And without objection, so ordered.

As your written testimony has been made a part of the record, the subcommittee asks that you limit your oral remarks to 5 minutes.

And with that, Mr. Baker, president and chief executive officer of the Airline Owners and Pilots Association, you are recognized for 5 minutes for your testimony.

TESTIMONY OF MARK BAKER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIRCRAFT OWNERS AND PILOTS ASSOCIATION; JACK J. PELTON, CHIEF EXECUTIVE OFFICER AND CHAIRMAN OF THE BOARD, EXPERIMENTAL AIRCRAFT ASSOCIATION; RICK CRIDER, A.A.E., EXECUTIVE VICE PRESIDENT OF AIRPORT/RAILPORT AND MILITARY RELATIONS, PORT SAN ANTONIO, ON BEHALF OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES; AND CURT CASTAGNA, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NATIONAL AIR TRANSPORTATION ASSOCIATION

TESTIMONY OF MARK BAKER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIRCRAFT OWNERS AND PILOTS ASSOCIATION

Mr. BAKER. Thank you. Chairman Graves, Ranking Member Cohen, members of the subcommittee, thank you for the opportunity to provide the Aircraft Owners and Pilots Association's perspective on how to secure general aviation's future as you develop this year's FAA reauthorization.

First, let me thank the committee and the professional staff for all the work and effort that goes into compiling such an important, comprehensive bill that impacts every segment of aviation. We are very appreciative, and encouraged that the full committee Chairman Graves has announced his intention, for the first time ever, to include in the title general aviation for this year's FAA reauthorization. As a pilot himself, the chairman fully recognizes the service and the contribution GA brings to thousands of communities, and I am certain he hears from private pilots every day.

General aviation faces many challenges today, including the most significant: removing lead from aviation gasoline. The entire industry and the FAA are working on this issue every day, and we have made progress.

One thing I can report to the committee is that general aviation has never been safer. With over 26 million flight-hours transporting hundreds of millions of passengers, including more than 30 million takeoffs and landings, last year was the safest on record for general aviation, and this has been a positive trend.

We also believe that, in order to maintain the safest aviation system in the world, the committee should support investments in modernizing systems that are core to FAA's mission, whether it is ATC systems, the NOTAM system, the aircraft registration systems, the pilot medical system, all of which fall under the primary safety certification and regulatory functions of the agency. In order to secure the future of general aviation, the committee has an opportunity to address many of these issues that will set the course for years to come.

We have provided the committee with a list of priorities and legislative concepts as a starting point. Many of these are outlined in my written testimony. However, being respectful of everyone's time, let me briefly address the following issues: workforce development; the FAA's Designated Pilot Examiner program; hangar construction; and transient ramp space at public-use airports.

With respect to workforce development, I am very proud of AOPA's award-winning, 4-year high school STEM aviation curriculum, which we provide to high schools for free. Our curriculum now is in more than 400 schools in 43 States. And since the program's inception, we have reached more than 50,000 students, and more than 70 percent of those who have graduated report they are actively pursuing a career in aviation.

And while we appreciate the committee's leadership in addressing and investing in aviation workforce challenges, we don't believe these issues will fall under the core mission of FAA. We join the entire aviation industry in supporting the establishment of the National Center for the Advancement of Aviation, which this committee and the House passed with Congress with nearly 400 votes. This center would allow the FAA to refocus its core on safety missions and help create effectiveness and efficiencies for Government and many that work in the industry workforce programs.

In the 2018 reauthorization, the committee stood up an industry-wide FAA working group to address shortcomings of the Designated Pilot Examiner program. As you know, the DPE examines and checkrides for pilots to determine the pilot's knowledge and capability of flying aircraft. Just last summer, the working group developed 12 recommendations to improve the program, and we would like the committee to review and assist with possible implementation to avoid the years of delay in fixing this program. We simply don't have enough DPEs in the system to keep up with the demand. Pilots, whether new or experienced, shouldn't have to wait weeks or months to get a checkride.

AOPA conducted a national survey of 800 airports that found that 71 percent have a shortage of GA hangars. In many instances,

airports have the land to construct hangars but lack financial resources, and may have a waiting list years' long for hangars.

Finally, Mr. Chairman, I would like to bring the subcommittee's attention to an issue that has been and remains a top concern among every sector of the pilot community: the lack of transient ramp space at federally obligated public-use airports. While we support the FBO industry and most provide excellent services, I have a letter here that has over 300 organizations on board representing hundreds of thousands of pilots flying every category of aircraft from every region across the country, and I urge the committee to address this issue. This has been one of the most frustrating issues since the committee addressed the medical reform for GA pilots.

I want to be clear. This is a national problem, not a one-off or a local issue. All federally obligated airports are subject to rules and regulations that impact safety and the users of the national system. All of these airports should be required to treat all users the same when it comes to public access.

For pilot organizations like AOPA representing general aviation pilots, we believe that one should not be required to pay private business for services the pilot never asked for or needed. This is exactly what is happening at hundreds of public-use airports, especially those that have entered into lease agreements with large chain FBOs in a monopoly position. Not a day goes by that I don't hear from pilots about this. I have been in business all my life. I have never known anyone that charges a customer for services the person never wanted or asked for. So, I hear about it often.

On behalf of the organizations and the pilots across the country, we strongly support and request the committee to include a provision in the reauthorization bill that addresses public-use airports in these areas. Thank you.

[Mr. Baker's prepared statement follows:]

Prepared Statement of Mark Baker, President and Chief Executive Officer, Aircraft Owners and Pilots Association

INTRODUCTION

Chairman Graves, Ranking Member Cohen and Members of the Subcommittee, thank you for the opportunity to provide the Aircraft Owners and Pilots Association's (or AOPA) perspective on "Securing the Future 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.

AOPA was founded in 1939, and for 84 years, we have stayed true to our mission of protecting the freedom to fly. Safety remains AOPA's north star—guiding, protecting, and promoting this uniquely American experience, so we can pass it along, better than we received it, to the next generation of aviators. Introducing the next generation of Americans, especially young people from diverse backgrounds into aviation and aerospace is vital to our industry's future.

IMPACT OF GENERAL AVIATION:

General aviation in America provides a significant economic impact to the communities in which we all live and fly—GA is a $247 billion industry and supports more than 1.2 million jobs.

Through the network of more than 5,000 public-use airports across the country, which is 10 times the amount served by commercial airlines, as well as over 14,700 privately owned landing facilities nationwide, general aviation is an integral part of the transportation system that supports communities across the United States, especially in rural areas. GA is simply institutional in the fabric of America.

General aviation provides a great deal of public-benefit flying in times of need. These vital operations include emergency medical personnel and supplies delivery, disaster relief and recovery, search and rescue, humanitarian assistance, law enforcement, agricultural aviation activities, and much more. GA also provides the most efficient and cost-effective way to conduct wildlife surveys, map wetland losses and soil erosion, and detect pipeline spills.

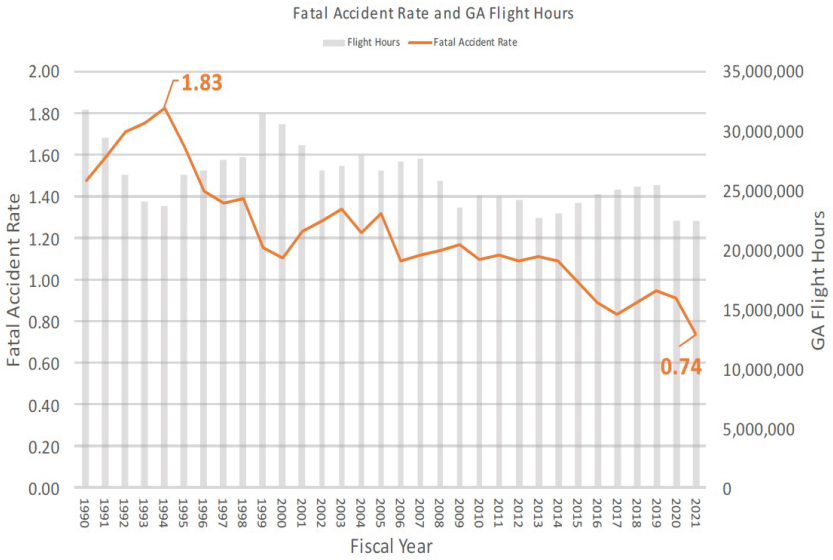
The Committee's leadership in several areas impacting GA are noteworthy including the BasicMed program, in which nearly 80,000 pilots in the United States having completed the requirements to fly safely since the program's inception.

We are encouraged Full Committee Chairman Graves announced he will include a standalone general aviation title in the upcoming FAA Reauthorization bill. I know others have also expressed support for this valuable inclusion, and we look forward to working with all Members of the Committee to help secure the future of general aviation.

IMPROVING GENERAL AVIATION SAFETY:

The FAA operates the largest, most complicated, and safest aviation system in the world. While every aircraft accident makes headline news, what does not make the news is that general aviation comprises 26 million flight hours per year, representing more than 30 million takeoffs and landings by hundreds of thousands of general aviation pilots.

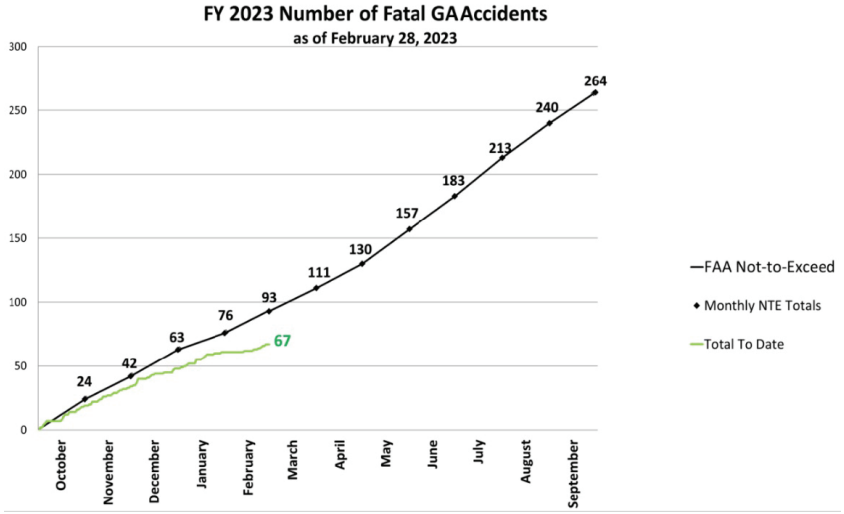
In short, general aviation has never been safer—and it's getting safer every day. According to the latest available data through fiscal year (FY) 2021—see chart below—the general aviation fatal accident rate has fallen to just 0.74 occurrences per 100,000 flight hours. This rate is less than half of what it was in the mid-1990s.



What is as impressive, and demonstrates this strong safety culture of GA, is that this ongoing, steady decline has happened while the skies are busier than ever. When I'm asked if GA is safe—I don't hesitate with a resounding "absolutely."

The General Aviation Joint Safety Committee (GAJSC), co-chaired by leaders from AOPA's Air Safety Institute (ASI) and the FAA, analyzes mishap data to develop safety recommendations and drive implementation across the industry. Once again, we are on track to exceed the safety goal established by the GAJSC which will result in another 10% reduction in fatal accidents over ten years.

As indicated in the chart below, the outlook for GA safety continues to improve as the number of fatal GA accidents so far in FY23 are below the goals established by the GAJSC.



While we have come a long way in general aviation safety and achieved impressive results there is always so much more we can do. Safety is embedded in our culture and our highly respected Air Safety Institute continues to work every day to educate and improve safety where we can.

FILLING THE AVIATION WORKFORCE PIPELINE:

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.

The Boeing Pilot and Technician Outlook for 2022–2041 predicts that the long-term demand for newly qualified aviation personnel remains strong, as 602,000 new pilots, 610,000 new maintenance technicians and 899,000 new cabin crew members will be needed worldwide over the next 20 years.

In North America alone, Boeing predicts the need for 435,000 personnel, including 128,000 new pilots, 134,000 new technicians and 173,000 new cabin crew members during this time period.

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. AOPA has taken a leadership role in attracting young people interested in aviation by making major investments in high school and STEM curriculum.

Through the AOPA Foundation, we have developed a rigorous four-year high school aviation STEM curriculum. AOPA High School Aviation STEM Curriculum is now in more than 400 schools in 43 states, engaging more than 16,300 students. Since the program's inception five years ago, we have reached more than 50,000 students, and a full 70% of those who have graduated report they are actively pursuing an aviation career.

Moreover, nearly half of our curriculum students are students of color, with more than 20% female. This participation represents a significant increase in diversity when compared to the current aviation workforce.

Congress and this Committee has played an important role to address the workforce challenges as well. The 2018 FAA Reauthorization law included two aviation workforce development programs (aircraft pilots and aviation maintenance technicians) which had strong bipartisan support. These programs, commonly referred to as Section 625 and authorized at $5 million per year through FY23 have helped introduce high school students and others to science, technology, engineering, math (STEM) aviation education and opportunities.

However, workforce issues are not a core mission of the FAA and with the Section 625 grant programs set to expire, now is the time to establish the National Center

for the Advancement of Aviation (NCAA) and let the FAA focus on modernizing the air traffic control system, the NOTAM system, the pilot medical system, the aircraft registration system, and airman and aircraft certification, these are the primary safety and regulatory functions of the FAA.

NATIONAL CENTER FOR THE ADVANCEMENT OF AVIATION ACT:

During the 117th Congress, bipartisan and bicameral legislation was introduced to establish a National Center for the Advancement of Aviation (HR 3482/S. 1752) to address the aviation workforce challenges our industry faces. We appreciate the leadership of this Committee to move the bill which overwhelmingly passed the House last September by a vote of 369–56.

A national aviation center would create programs to further build a diverse and skilled aviation workforce and ensure the deployment of STEM aviation educational opportunities for middle and high school students. In fact, the 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.

The NCAA has the support of the entire aviation industry from general aviation, airlines, unions, airports, and others.

We look forward to working with the Committee to advance this bipartisan legislation once again.

PUBLIC-USE AIRPORTS/TRANSIENT RAMPS/PRICING TRANSPARENCY:

Our nation's public-use airports are clearly a valuable and critical part of America's infrastructure.

AOPA has heard from thousands of our members and pilots across the country who are frustrated when they land at airports and learn of unexpected fees being levied by FBOs even when not receiving or requesting services and often surprised at the amounts being charged.

Fixed based operators (FBO) owned by small companies or by the airport sponsor do a great job making their parking fees transparent and provide excellent service to pilots of all types of aircraft. However there remains a general lack of transparency of parking fees charged by the major fixed based operators (FBO), as well as the lack of 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 FBOs to make their fees transparent and easily available to pilots like any other product or service today.

The type of fees charged to pilots by the FBOs include tie-down fees, facility fees, infrastructure fees, access fees, security fees, and handling fees. AOPA receives thousands of complaints from pilots who are often charged for services they don't even ask for or receive. There is absolutely no reason a pilot should be charged exorbitant fees to park his or her aircraft when receiving no services from the FBO. It doesn't happen on our nation's highway rest areas, and it shouldn't happen at public-use airports.

We believe pilots should have the information they need to make informed preflight planning decisions before landing at a public-use airport. In 2018, AOPA led a voluntary industry campaign known as "Know Before You Go" to encourage FBOs to publicly list their fees online. Most FBOs serve the general aviation community by balancing their need for profitability with the need to provide reasonable prices, and while a vast majority of FBOs now openly disclose their pricing, many still don't. After four years of direct outreach to the chain FBO companies to encourage parking fee transparency, at least 25% of these FBOs are still not complying with the "Know Before You Go" program.

While the call for fee and pricing transparency has been a voluntary effort, we believe pilots have a right to know, before they fly, what fees they should expect when arriving at an airport and what they cost.

In addition to fee and pricing transparency, we hear from thousands of members about the lack of GA transient aircraft parking space, especially at airports where a chain FBO controls the entire parking ramp or has a monopoly position. Upon landing at these airports, pilots are directed to the FBO parking ramp, where many only stay for a few hours and do not need or require the services of the FBO. It is no surprise these pilots are outraged when presented with a bill, in the hundreds if not thousands of dollars to simply park their aircraft or drop off a passenger.

AOPA was recently made aware of a pilot who flew his single engine turboprop-powered aircraft from Ormond Beach, Florida to the St Augustine airport for lunch—about a twenty-minute flight. He was directed to park at the only FBO on the airport, and after a one-hour visit, he was presented with parking and security fees totaling $280.00. A flight instructor and a student pilot landed at an airport

so the student could use the restroom—10 minutes—and the pilot was charged $80. We have thousands of examples like these.

We also dedicated considerable time and resources over the last four years to research how GA transient parking areas are depicted at the 700 public-use airports with published airport diagrams. Just last year, the FAA agreed to publish guidance to airports in using these terms to describe GA parking areas, which includes the term "GA Transient Apron". This term describes a parking area where transient general aviation operators can park their aircraft without FBO services and may be subject to a fair and reasonable fee if the airport decided to implement such a fee.

The FAA is planning to expand the number of diagramed airports from 700 to 3,000 in the near future and airport managers will be asked to choose the appropriate standardized labels for their diagrams. We appreciate the FAA's action in this area, but with the large number of complaints about high parking fees charged by chain FBOs and the lack of GA transient parking options at federally funded public-use airports, we believe the Committee should address these issues.

We believe public-use airports should be required to designate a transient GA parking area to be made available to pilots of all privately operated general aviation aircraft, regardless of make or model. Additionally, airports should retain the ability to either waive a transient fee or impose a transient fee, so long as that fee is fair and reasonable (essentially whatever it costs the airport to operate and maintain the ramp).

We have a national system of airports and designating GA transient parking should not be delegated to airports as a local issue. With the recent increase in FBO consolidation, including equity firms acquiring large chain FBOs and expecting a return on their investment, this lack of fair and reasonably priced GA transient parking at public-use airports is troubling.

At the few hundred airports that provide commercial air service, and also support high levels of GA aircraft, airport managers must satisfy TSA security requirements to maintain their FAA Part 139 certification. These airports should also be required to designate GA transient parking areas, and pilots wishing to use these GA transient parking areas should be allowed to apply for TSA security badges for access when they are located near commercial service activities. This would also eliminate the need for added security personnel and would help defray any additional security costs at these airports.

The Committee should consider addressing the transient ramp issue. Such a proposal should include the following:

1) All public-use airports should have a transient ramp space (construct or designate) and have the ability to charge a fair and reasonable fee (cost to operate and maintain);
2) Transient ramp space should be made available to all privately-operated aircraft, regardless of make or model;
3) Private pilots should have the ability to apply for a SIDA badge to defray security costs at airports where TSA security requirements are in place; and
4) Public-use airports should be required to either impose a fair and reasonable fee and continue to have the ability to waive fees (like many small and municipal airports do today).

Need for Additional GA Hangars:

Another area of concern to GA's future is the decreasing supply of general aviation hangars across the country. Aircraft hangars are integral to the utility of any airport and invite economic investment and growth to local communities. They are also increasingly important, and sometimes required by aircraft insurance companies, to protect the fabric or composite airframes of aircraft, new and old.

Airports wishing to build new hangars find that federal AIP funds are not prioritized for GA hangar construction, and the price to build hangars usually exceeds the airports' ability to pay for them outright.

In 2021, AOPA conducted a national survey of 800 airports and found that 71% of airports have a shortage of individual 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. Airport managers also report that hangars provide 45% of their gross revenue, making hangars a critical source of financial self-sustainability for any GA airport.

Even if an airport is in the National Plan of Integrated Airport Systems (NPIAS), hangars are generally not approved for AIP funding due to other priorities.

Certain airports are turning to the construction of corporate hangars and have developed plans, which the FAA has approved, to remove smaller less profitable hangars to make room for the larger more profitable hangars. Therefore, small aircraft hangars are systematically replaced with larger corporate hangars, forcing these air-

craft off the airport or parking outside where they are subjected to wind, rain, sun, and snow. This happened recently when over 70 GA storage hangars were replaced with corporate hangars at a Scottsdale, Arizona airport, and it is about to happen with 51 hangars at the Birmingham-Shuttleworth airport in Alabama.

Under current FAA policy, hangars are among the lowest priorities for AIP funding and grants for hangar development are rarely issued. With a nationwide shortage of small aircraft storage hangars, we need to protect the ones we have while also investing in the development of new GA hangars to meet the overwhelming demand.

We believe Congress should dedicate adequate AIP funding for GA hangar development. The result is securing the future of GA and a win-win as airports would gain a much-needed source of sustainable revenue, and pilots would be able to protect the investment in their aircraft. The new hangars would attract additional aircraft which would boost the airports economic contribution to the community and improve the airport's ability to achieve financial self-sustainability.

Crosswind Runways:

Crosswind runways enhance the safety and capacity of the National Plan of Integrated Airport Systems. Nearly one third of airports in the NPIAS have a crosswind runway in addition to the airport's primary runway. They were constructed at airports where changes in wind conditions during certain periods made the primary runway unsafe to use. Like all pavement, crosswind runways require periodic maintenance, or they deteriorate until they become unserviceable. Although runway projects are supposed to be among the highest priority projects, current FAA policy has created an insurmountable barrier for hundreds of airports in the system to maintain their crosswind runways.

GA's excellent safety record is attributable, in part, to the existence of more than 900 crosswind runways. They are critically important to light GA aircraft, particularly those with conventional landing gear. If crosswind runways are allowed to deteriorate, it will affect flight safety. Moreover, flight training will be hindered as student pilots will be grounded when crosswinds prevail.

Today's FAA policy fails to account for the diversity and limitations of GA aircraft. It focuses on the most demanding (usually heaviest or fastest) aircraft to use an airport. These aircraft can tolerate stronger crosswinds than lighter, smaller aircraft can. What may be a safe crosswind level for large aircraft is often not safe for light GA aircraft. Yet, once it is determined that the airport is safe for large aircraft, the needs of light GA aircraft are not considered unless very specific, unrealistic conditions are met.

As we look to make meaningful investments in airports, Congress should direct the FAA to make grants available for crosswind runway projects in a manner that serves all segments of aviation.

Non-Primary Entitlement Program:

The Airport Improvement Program provides federal grants for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems. Funding for small general aviation airports comes partly from AIP grants under the Non-Primary Entitlement (NPE) category and discretionary account. GA airports are each currently eligible to receive up to $150,000 in annual entitlements. The entitlements are often not enough to finance projects and are often unused and returned to the FAA discretionary account.

We believe Congress should reform the NPE program to ensure funds are spent at airports for which they are intended. This action will also help secure the future of general aviation.

AOPA works closely with our partners at DOT, FAA, and other federal agencies on the many issues that impact general aviation and pilots. We value the work that has been accomplished but more can be done to benefit the general aviation community.

Designated Pilot Examiners (DPEs):

For several years now, pilots have raised concerns regarding the lack of availability of designated pilot examiners (DPEs) across the country. To become a certified pilot, an individual must complete numerous flight examinations throughout their flight training which are typically performed by delegates of the FAA, known as DPEs.

The next generation of aviation professionals will be unable to meet their aviation dreams without adequate availability and access to DPEs to take and complete the required FAA flight examinations. While the FAA has implemented some programs that have provided limited relief, designee availability remains a challenge. To ensure the future growth of the pilot population, especially with the increased demand

for flight training and this nation's overall need for pilots, additional DPE reform is needed to ensure an adequate number of DPEs are available and accessible.

To address these concerns, Congress should require the FAA to implement the recommendations in the report from the Designated Pilot Examiner Reform Working Group to ensure an adequate number of designees are available. Additionally, the FAA should complete a review of current DPEs for their activity and replace DPEs not performing an appropriate number of examinations, while ensuring newly selected examiners can fully support applicants in their area. Additional focus must be placed on selecting DPEs who do not provide examinations exclusively to one school to ensure trained applicants at schools without examining authority have appropriate access to DPE services.

Flight Training:

The FAA has long recognized the importance of pilots obtaining flight instruction in the aircraft they intend to operate. Doing so ensures pilots have access to relevant training, experience, and flight testing in the specific aircraft to be flown, which is a significant factor in making our aviation system the safest in the world.

Unfortunately, pilots and flight instructors who operate certain categories of aircraft suddenly had their accessibility to flight instruction and flight testing restricted due to a 2021 FAA legal argument that instruction and testing as carrying a person "for hire" like a commercial carrier.

With the Transportation and Infrastructure Committee's leadership and support, the National Defense Authorization Act (NDAA) for Fiscal Year 2023 included language that addressed the 2021 FAA directive. Unfortunately, the final version only addressed a small sector of the general aviation industry and it did not fully return the flight training accessibility to what had been in place for over 70 years.

Since at least 1949, student instruction was not considered carriage of goods or persons for compensation or hire. For safety, we must restore this commonsense approach and Congress should direct the FAA to mandate that student instruction, flight training and testing shall not be considered carrying persons or property for compensation or hire. This clarification will restore safety in the National Airspace System through reducing barriers to training and will reduce the FAA's administrative burdens.

Aircraft Registration Renewal and Registration Numbers:

With the Committee's leadership to change the aircraft registration renewal from three years to seven years under the 2018 FAA Reauthorization Act, we are pleased the FAA has finally moved the aircraft registration renewal period to seven years. The extension from three to seven years will have a positive effect on reducing the FAA's unacceptable backlog of registration renewals of six months and sometimes longer.

However, while the FAA registry has been making progress to reduce the backlog from a high of over 190 days to under 120 days, there is still a long way to go for the FAA to get down to a reasonable renewal time. Congress should mandate a review of the FAA's aircraft registration system and require the agency to come up with a plan to bring the registration process time down to 30 days in the near term.

In addition, the FAA should ensure that once an aircraft owner submits a renewal application and it is accepted into the FAA registry for processing, the temporary registration remains in effect until the permanent registration is received, regardless of how long the FAA takes to provide the permanent registration.

Another concern is aircraft registration numbers (or N numbers) being routinely reserved via computers and held in bulk which can unfairly eliminate the possibility of general aviation aircraft owners from obtaining the registration numbers they request. Some companies reserving N numbers in bulk are then selling them for exorbitant fees to aircraft owners desiring the N number. The current process is unfair by not allowing aircraft owners to obtain desired registration numbers. To address this unfair and predatory practice, Congress should require the FAA to review how registration numbers are reserved and enact process changes to ensure fair participation by eliminating computer-generated bulk reservations for aircraft registration numbers.

UNLEADED AVIATION FUEL AND THE EAGLE INITIATIVE:

There is no more pressing issue that general aviation faces today than the need to transition to 100% unleaded fuel.

We in General Aviation want lead out of fuel but it must be done in a safe and smart way.

The general aviation community and FAA have been working to find an unleaded fuel for more than a decade, now with two approval pathways: the Piston Aviation

Fuels Initiative (PAFI), a public-private initiative, and Supplemental Type Certificate (STC), which allows the FAA to approve fuels developed by private entities. Congress has strongly supported the effort, and since FY12, Congress has appropriated $57 million to PAFI, which includes an additional $10 million provided in the FY23 Omnibus Appropriations bill.

Just last year, the FAA gave STC approval for virtually the entire GA piston fleet for a 100-octane unleaded avgas developed by General Aviation Modifications Inc. (GAMI) of Oklahoma. GAMI is currently working on commercializing its fuel, encompassing the refinement, logistics, and storage needed to get this fuel to our airports.

Swift Fuels is working on another 100-octane unleaded fuel and reports that it should gain STC approval later this year. In addition, two fuels are showing progress through the PAFI program. The industry's clear goal is to find a drop-in 100-octane fuel that can be safely used by all piston powered aircraft in the GA fleet.

The FAA, and hundreds of industry stakeholders representing every corner of aviation and those that have a vested interest in this safe transition, have come together under the public-private EAGLE initiative (which stands for Eliminate Aviation Gasoline Lead Emissions). This partnership has one goal in mind: removing lead from all aviation fuel no later than 2030 and no matter from where that fuel(s) come from.

I serve as co-chair of the Eliminate Aviation Gasoline Lead Emissions (EAGLE) program, along with the FAA's executive director of aircraft certification, and we are laser focused on the goal of removing lead from aviation gasoline by 2030, hopefully sooner.

While these are very positive steps, a real threat to general aviation safety is being played out in Santa Clara County, California, with other locales looking closely at what is happening there.

Santa Clara County's action last year to prematurely ban the higher-octane fuel (100 low lead) that is required by thousands of general aviation aircraft to fly safely is simply irresponsible. Putting the wrong fuel in an aircraft can cause catastrophic engine failure—placing the pilot and those on the ground in danger.

Aircraft needing this higher-octane fuel include those flying missions of search and rescue, disaster relief and law enforcement. We understand that some of these important missions from Reid-Hillview in Santa Clara County have shelved, which is unfortunate news to local residents who rely on these services. In addition, there has already been one reported aircraft accident in Santa Clara County that has been directly attributed to misfuelling, primarily because the fuel needed to fly safely was not available.

AOPA and the general aviation community, including airports, fully supports removing lead from aviation gasoline. As we transition, we also need to ensure the safety of pilots and require airports to fulfill their AIP grant assurances by making 100LL available until a fleet wide solution is readily available. Airports accepting funds are legally bound to not discriminate against any class of aircraft at their airports, including the fuel they need to fly safely.

The unfortunate action by Santa Clara County, left unchecked, could have an unfortunate domino effect across the 5,000 public-use airports across this country, thereby posing significant consequences to general aviation in the United States. By working together, we can achieve our goal of removing lead from aviation gasoline and ensuring a safe and smart transition to get us there.

CONCLUSION:

We have an opportunity with this year's FAA Reauthorization to set the course for securing the future for general aviation. I would like to again thank the Subcommittee for this important hearing today. AOPA looks forward to working with the Committee on the upcoming FAA Reauthorization bill on the issues outlined today and others that impact pilots and aircraft owners.

Mr. YAKYM. Thank you, Mr. Baker.

I ask unanimous consent to enter into the record the letter referenced by Mr. Baker in his testimony.

And without objection, so ordered.

[The information follows:]

Letter of March 9, 2023, to Hon. Sam Graves, Chairman, and Hon. Rick Larsen, Ranking Member, Committee on Transportation and Infrastructure, and Hon. Garret Graves, Chairman, and Hon. Steve Cohen, Ranking Member, Subcommittee on Aviation, from the Aircraft Owners and Pilots Association et al., Submitted for the Record by Hon. Rudy Yakym III

MARCH 9, 2023.

Honorable SAM GRAVES, Chairman,
House Committee on Transportation and Infrastructure,
2167 Rayburn House Office Building, Washington, DC 20515.

Honorable RICK LARSEN, Ranking Member,
House Committee on Transportation and Infrastructure,
2167 Rayburn House Office Building, Washington, DC 20515.

Honorable GARRET GRAVES, Chairman,
House Aviation Subcommittee,
2167 Rayburn House Office Building, Washington, DC 20515.

Honorable STEVE COHEN, Ranking Member,
House Aviation Subcommittee,
2167 Rayburn House Office Building, Washington, DC 20515.

DEAR MESSRS. GRAVES, LARSEN, GRAVES, AND COHEN,

We write today to express our strong support for an effort being led by the Aircraft Owners and Pilots Association (AOPA) that calls for the construction or implementation of transient parking ramps at public-use airports.

Our organizations represent hundreds of thousands of pilots who own and operate virtually every general aviation aircraft type in the fleet, and we cannot agree more with AOPA and applaud their efforts. We believe individual owner-operators of aircraft should not be required to pay fees to a private business on a public-use airport when their products and services are not used, needed, or requested.

Most Fixed-Based Operators (FBOs) provide excellent service and are integral to our nation's aviation fabric. Unfortunately, there is a lack of competition at many airports in our system which has led to increasing prices and above normal profits. We have and continue to see unprecedented consolidation in the FBO market, which has led to monopolistic behaviors at many of our nation's public-use airports. Clearly, private equity firms have prioritized returns on their investments and placed the burden on the backs of pilots.

Simply said, we need policies at federally funded airports that create competition and help incentivize aviation activity, not unfettered practices that allow users of our aviation system to be penalized. Unlike the airlines, private pilots do not have a process available to negotiate fees and charges at airports.

Today, pilots are subject to a multitude of fees including tie down fees, security fees, maintenance fees, building fees, handling fees, habitat fees (offset for FBO employees working in high-cost areas), and others even when no fuel is purchased or when their services have not been requested. Many FBOs waive or reduce these fees when fuel is purchased but those entities most often have extraordinarily high, above market, fuel prices.

Again, we firmly believe policies at federally obligated public-use airports should allow access without requiring private pilots to pay businesses for something they did not need or request. We also believe public-use airports should be required to provide access to an itinerant ramp for parking with the ability to impose a fair and reasonable fee.

In order for general aviation to grow and prosper in this nation, we respectfully request the House Transportation and Infrastructure Committee address this issue in the impending FAA Reauthorization.

We are more than happy to provide any additional information the Committee may need.

Sincerely,

AIRCRAFT OWNERS AND PILOTS ASSOCIATION.
AAA FLYING CLUB, INC. FORT WAYNE, IN.
ACANTHUS FLYING CLUB, MA.
ACORN MUTUAL FLYING CLUB, LANCASTER, PA.
AERIAL PERSPECTIVES, LLC, OK.
AERO CLUB VALKARIA, FL.
AERO FLIERS, INC., OH.
AEROFLYTE OF POMONA, INC., CA.
AESOP, LLC, OR.
A GREAT BONANZA, LLC, TX.
AIRBORNE AVIATION, NC.
AIR CARE ALLIANCE.
AIRCRAFT PILOTS OF THE BAY AREA, CA.
AKSARBEN FLYING CLUB, NE.
ALAMEDA AERO CLUB, OAKLAND, CA.
ALASKA AIRMEN'S ASSOCIATION.
AMERICAN BONANZA SOCIETY, KS.

Ambrose Air Charter, IA.
American Dream SkyRanch, SC.
Archer Aviation, LLC, IA.
Arizona Cloudbusters Flying Club, AZ.
Arizona Pilots Association.
Arkansas General Aviation Association.
Altron Industrial, LLC, VA.
Armed Forces Aero Club, San Diego, CA.
Associated Aviation Services, LLC, CA.
Association of Professional Warbird Operators, Inc., FL.
Augusta Flying Club, GA.
Austin Aviators Flight Club, TX.
Aviation Adventures Flight Schools.
Backcountry Aviation, LLC, VA.
Bakalar Flying Club, Columbus, IN.
Barnstormers Flying Club, Inc., TN.
Bates Aero Club, AL.
Bay Area Aero Club, Pearland, TX.
Beaver Valley Flying Club, PA.
Big Bear Airport Pilots Association, CA.
Black Hole, Inc., Flying Club, Georgetown, TX.
Bloomsburg Flying Club, PA.
Blue Horizons Flying Club, OH.
Blue Ridge Flyers, VA.
Boca Raton Pilots Association, FL.
Boyertown Flying Club, Pottstown, PA.
Bradley Flying Association, Peoria, IL.
Bridge City Flyers, IA.
Brighton Airport Association, MI.
Brighton Flying Club, MI.
Broomstick Aviation, LLC, IA.
California Pilots Association.
Caltech/JPL Flying Club.
Camas Washougal Flying Club, WA.
Capitol City Flyers, Inc., WI.
Capitol Flying, Inc., CA.
Cardinal Flyers Club, CA.
Carrabelle Flying Club, Inc., FL.
Cascade Flyers, Inc., WA.
Centex Aero, LLC, TX.
Central Oklahoma Aviators Flying Club.
Cereal City Flying Club, MI.
Chesaning Sportplane Association, MI.
Chesapeake Skyhawks, MD.
Chocks Away Aviation, LLC, MD.
Cirrus Owners and Pilots Association.
Citation Jet Pilots Association.
Civil Air Patrol Flying Association Inc, Hartford, CT.
Cloud Dodgers Flying Club, FL.
Collegedale Pilots Association, TN.
Colorado Pilots Association.
Columbia Aviation Association, OR.
Columbia Flight Club, MO.
Commemorative Air Force.
Compass Rose Aviation, KS.
Congressional Flying Club, MD.
Connell Aviation Group, Inc., IA.
Connellsville Flying Club, PA.
Consult Air, LLC, MS.
Corporate Aircraft Association.
Courtesy Aircraft Sales, Rockford, IL.
Craig Airport Pilot Association, FL.
Crossroads Flying Club, NM.
Crosswinds Flying Club, Inc., Bloomington, IL.
Dearborn Flying Club, MI.
Dee Howard Foundation, TX.
Deer Valley Skyhawks, AZ.
Delaware Valley Aviation, PA.
Denton Aviation, Inc., OK.
Departure Aviation Services, NC.
Desert Flying Club, NV.
Destin Airport Association, FL.
Downwind Flying Club, WA.
Dunedin Flying Club, Inc., FL.
Experimental Aircraft Association.
EAA Chapter 25, Lakeville, MN.
EAA Chapter 38, Perry, GA.
EAA Chapter 52, Sacramento, CA.
EAA Chapter 99, Vero Beach, FL.
EAA Chapter 150, Collegedale, TN.
EAA Chapter 193, Jacksonville, FL.
EAA Chapter 351, Enterprise AL.
EAA Chapter 485, Pensacola, FL.
EAA Chapter 724, Merritt Island Flying Club, FL.
EAA Chapter 731, Hickory, NC.
EAA Chapter 797, Live Oak, FL.
EAA Chapter 905, St. Simons Island, GA.
EAA Chapter 908, Fort Pierce, FL.
EAA Chapter 943, Amelia Island, FL.
EAA Chapter 977, Lake City, FL.
EAA Chapter 1023, Greenwood, SC.
EAA Chapter 1025, Covington, GA.
EAA Chapter 1027, Willits, CA.
EAA Chapter 1047, Wilson, NC.
EAA Chapter 1175, Grass Valley, CA.
EAA Chapter 1271, Spruce Pine, NC.
EAA Chapter 1355, Greenville, SC.
EAA Chapter 1432, Stockton, CA.
EAA Chapter 1494, Morristown, TN.
EAA Chapter 1646, Apalachicola, FL.
EAA Chapter 1674, Inverness, FL.
Eagle LLC, MT.
East Central Ohio Pilots Association, OH.
Eclipse Owners and Pilots Association.
EnginAires Aero Club, IL.
Every Aviation, LLC, TX.
Falcon RV Squadron, GA.
Fightertown, LLC, VA.
Final Approach Aviation, Inc.
Fliegend Flying Club, Inc., IN.
Flight Crew Aviation Services, IA.
Florida Aero Club.
Florida Bonanza Owners and Pilots.
Flyboys Flying Club, LLC, Georgetown, SC.

FlybyAir, LLC, LA.
Flying Club of Kansas City, KS.
Flying Educators, Inc., Ft. Lauderdale, FL.
Flying Engineers, Inc., Indianapolis, IN.
Flying Javelina Aero-Club, AZ.
Flying Knights Flying Club, OH.
Flying Ten Flying Club, AZ.
Friends of Boeing Field, WA.
Friends of Horry Airport, SC.
Friends of Lone Pine Airport, CA.
Friends of Oceano Airport, CA.
Friends of Pryor Field, AL.
Friends of Sikorsky Airport, CT.
43rd Aviation Flying Club—Brainard Field, Hartford, CT.
Gateway Flying Club, MN.
GB Aviation, LLC, OH.
GEM Flyers, Inc., IL.
General Aviation Council of Hawaii.
Gillespie Pilots Association, CA.
Gnoss Field Community Association, CA.
Golden Age Flying Museum, CA.
Golden Eagle Aviators, West Jordon, UT.
Golden Empire Flying Association, CA.
G.P.A. Aviation Club, NJ.
Green Lantern Aviation, LLC, TX.
Grumman Owners and Pilots Association.
Half Moon Bay Pilots Association, CA.
Hammond Flying Club, LA.
Hangar 6 Aviation, LLC, FL.
Happy Landings, LLC, GA.
Hartford Brainard Airport Association, CT.
Hemacinto Valley Flying Club, CA.
High Sierra Flying Club, CA.
Hill Country Flyers, TX.
Hokie Flying Club, Blacksburg, VA.
Hostess City Aviators, Inc., Savannah, GA.
Hotstuff Air Racing, LLC, SC.
International Flying Club, DuPage, IL.
Intrepid Red Barons Club, Green Bay, WI.
Iowa Aviation Association.
Jackson Air, LLC, TX.
JCP Flying Club, MD.
JKA Pilots Association, Gulf Shores, AL.
Kenedy Regional Airport, TX.
Kentucky Pilots Association.
Kimmel Aviation Insurance, MS.
Kingdom Pilots Association, MO.
Knoxville Aviation, IA.
Kootenai Flying Club, ID.
K–T Industries, Inc., IA.
Lake Shelbyville Flying Club, IL.
Lakeway Flying Club, TX.
Lancair Owners and Builders Organization.
Lantana Airport Advisory Board, FL.
Leading Edge Aviation Foundation, LLC, AR.
Legacy Aero Sport, LLC, NM.
Liga International, Flying Doctors of Mercy, CA.
Lima Whiskey Flying Club, PA.
Lockhart Flying Club, TX.
Long Beach Flying Club, CA.
Long Island Business Aviation Association.
Low Flying Angels, CA.
Mach 5 Aviation, CA.
Magic Valley Aero Club, ID.
Maine Aeronautics Association.
Marco Aviation Club, FL.
Marshall Aviation Services, Inc., IN.
Mid-Tenn Aero Club, Murfreesboro, TN.
Mighty Mule Flying Club.
Mineral Wells Flying Club, TX.
Minnesota Pilots Association.
Monroe County Airport Association, Aberdeen, MS.
Montana Pilots Association.
Monterey Pilots, CA.
Moresco Services, Inc., PA.
Morgantown Aero Club, PA.
Mountain Flyers, Inc., Asheville, NC.
Mother Lode Flying Club, Calaveras County, CA.
National Warbird Operator Conference, LLC, IL.
National WASP WWII Museum, Sweetwater, TX.
New Bedford Regional Pilots Association, MA.
New Braunfels Flying Club, TX.
New England Flying Club, MA.
New Jersey Aviation Association.
New Mexico Pilots Association.
New River Flying Club, WV.
NorCal Flight Club, CA.
North American Trainer Association.
Northeast Florida Aero Club, FL.
North Shore Aero Club, MA.
Oceanside Airport Association, CA.
Octopus Flying Club, MD.
Odyssey Aero Club, Sanford, NC.
150th Aero Flying Club, NJ.
Olds Forge Flyers, Inc., MI.
One Way Holding, LLC, VA.
Onslaught Air Racing, LLC, SC.
Oregon Aviation Industries.
Oregon Pilots Association.
Orlando Aero Club, FL.
Orlando Christian Flying Club, Inc., FL.
Pacific Bonanza Society, CA.
Pacific Gold Aviation Association, CA.
Page Field Association, Fort Myers, FL.
Palm Beach Aircraft Services, FL.
Panther Aviation, LLC, VA.
Payson Aero Club, LLC, AZ.

PDK Airport Association, Atlanta, GA.
Penn Yan Flying Club, NY.
Perkins Flying Club, AZ.
Petro Blend Corp, IA.
Phoenix Flying Club, AZ.
Pilatus Owners and Pilots Association.
Pinellas Pilots Association, FL.
Pine Mountain Aviation Association, CA.
Pittsburgh Flying Club, PA.
Plane Lease, LLC, IA.
Plymouth Flying Club, Inc., NH.
Premier Flight Solutions, FL.
Princeton Flying Club, NJ.
Recreational Aviation Foundation.
Red Baron Flyers, Inc., Caledonia, MN.
Redlands Airport Association, CA.
Redlands Flying Club, CA.
Reedsburg Area Flying Club, LLC, WI.
Reno-Tahoe Aviation Group, NV.
RFC Flying Club, Inc. Cedar Rapids, IA.
Ridgeland Aviation Community Association, SC.
Riverside Pilots Flying Club, CA.
RPM Flying Club, IL.
Runway Three-Six, LLC, IA.
Runyon Aviation, LLC TX.
RWJ Airpark Property Owners Association, TX.
Salem Aero Club, DE.
San Carlos Airport Association, CA.
Sandpiper Aviation, NV.
Sarasota Westwind Flying Club, FL.
Savannah Area Aviation Association, GA.
7 AC Club, Inc., Clearwater, FL.
Servos, LLC, VA.
Shenandoah Valley Soaring Club, VA.
Sheridan Pilots 307, LLC, Flight School, WY.
Silver City Aviation, LLC, KS.
Silver City Flying Club, CT.
Sky Bryce Flying Club, LLC, VA.
Skycrafters, Tri-Cities, TN.
Skyhawk Flying Club, NE.
SkyMaster Company, LLC, SC.
Skyriders Flying Club, CO.
Skyriders Flying Club, ID.
Sky's the Limit Flying Club, OH.
Skytrain Company, LLC, SC.
Sky-Vu Flyers, Inc., IN.
SoCal Pilots Association, CA.
South Shore Flying Club, Marshfield, MA.
Southern Heritage Air Foundation, MS.
SouthWings
Spirit Flyers, Inc., Chesterfield, MO.
Spirit of Meriden Flight Club, CT.
St. Augustine Airport Pilots Association, FL.
Strikehalk Aviation, AL.
Sun Country Aero Club, FL.
Swift Arrow Flight Club, TX.
Swift Museum Foundation, Athens, TN.
Syracuse Flying Club, NY.
Taildragger Flyers, Inc., MI.
Tailwind Aviation Solutions, Perry, GA.
Taunton Pilots Association, MA.
TBM Owners and Pilots Association.
TDM Aviation, LLC, TN.
TFC Flying Club, Inc., CT.
Tennessee Flyers Flying Club.
The Bluff City Flyers, Inc., TN.
The Nashville IMC Club, TN.
Thomasville Flying Club, GA.
Tidewater Flying Club, VA.
Tillamook Pilots Association, OR.
TLM Holdings, LLC, OR.
TopFlight Aviation, Inc., Nashville, TN.
Torrance Airport Association, CA.
Triangle North Pilots Association, NC.
Tuolumne County Aeronautical Association, CA.
Turris Flight Training, SC.
T–34 Association.
20 Awesome, LLC, NM.
United Flying Club, CA.
Upper Valley Flying Club, Inc., Lebanon, NH.
Upstate Flying Club, NY.
U.S. Aero Club, LLC, CA.
Valley Aircraft Restoration Society, Mesa, AZ.
Valley Pilots Flying Club, Inc., Concord, CA.
Van's Aircraft, Inc., OR.
Venice Aviation Society, Venice, FL.
Veterans Airlift Command.
Wachusett Flying Club, LLC, MA.
Warbird Adventures, SC.
Warbird Aviation Services, LLC, PA.
Warbird Museum, LLC, VA.
Washington Pilots Association, WA.
Washington Seaplane Pilots Association, WA.
Watsonville Pilots Association, CA.
WB Hangars, LLC, SC.
Western Air Flying Club of Los Angeles, Inc.
Western Flying Club, NC.
Western Reserve Flight Club, OH.
Westminster Aerobats Flying Club, Inc., MD.
Westwood Property Management, OR.
Whiteman Airport Association, CA.
Windwalker Aviation, AL.
Wind River Flyers, WY.
Wilmington Pilots Association, NC.
Wing And A Prayer Flying Club, Athens, GA.
Wingnuts Flying Club, Chesterfield, VA.

WINGS OVER WINYAH FLYING CLUB, SC.
YELLOW BIRD FLYING CLUB, OH.
YORK TRAVELERS FLYING CLUB, PA.
YOUTH EAGLES AVIATION, CA.
ZEPHYRHILLS FLYING CLUB, INC., FL.
ZEPHYRUS FLYING CLUB, NV.

Mr. YAKYM. Next we are going to hear from Mr. Jack Pelton, CEO and chairman of the board for the Experimental Aircraft Association.

You are recognized for 5 minutes for your testimony.

TESTIMONY OF JACK J. PELTON, CHIEF EXECUTIVE OFFICER AND CHAIRMAN OF THE BOARD, EXPERIMENTAL AIRCRAFT ASSOCIATION

Mr. PELTON. Thank you and good morning, Chairman Graves, Ranking Member Larsen, and the rest of the Aviation Subcommittee. Thank you for inviting EAA, the Experimental Aircraft Association, today to provide our input on "FAA Reauthorization: Securing the Future of General Aviation."

EAA is an organization that has been around for 70 years, who originally was founded for people who are building and restoring their own airplanes. Today, we essentially represent the entire spectrum of recreational aviation. We have over one-quarter of a million members, over 900 local chapters, and we host over 14,000 aviation activities each year. If you look at the fleetwide survey that was done by the FAA, the active fleet of amateur-built aircraft has grown by more than 30 percent in the last 20 years. And actually, on an annual basis, there are about 1,000 new amateur-built aircraft that enter the NAS.

One of the initiatives that we are well known for is our Young Eagles program, which is in its 30th year. Our Young Eagles program takes young people for their first experience in flight, through our members who provide their airplane, their time, and their fuel to provide these free introductory flights. We have flown over 2.3 million young people, and this experience has introduced them to general aviation, and then many of them have pursued careers as military or airline pilots, aerospace engineers, and a host of other aviation-related activities. So, we have created a generation, essentially, of people who have a deeper appreciation for aviation, thanks to their first flight with EAA.

We also participate in summer Air Academy residence camps in Oshkosh, Wisconsin. And we have online portals for young people and teachers to learn and understand more about general aviation.

A lot of people think of us as just the association that has an annual convention held in Oshkosh, Wisconsin, where over 10,000 aircraft arrive, and 600,000 people attend from 90 nations. I had the opportunity to take the equivalent of the FAA Administrator from Germany around, who looked at me and said, "You have more airplanes, general aviation airplanes, on the ground here than we have registered in the country of Germany."

Ranking Member Cohen had outlined general aviation's importance to the aviation industry, and I will not continue to go back over that. It is clear that we are positioned as a world leader, but we have concerns. One of the foundations is general aviation, and we must retain this position. We must take action to ensure that our general aviation remains safe, healthy, and robust, since we are the gateway to aviation.

We want to thank Transportation and Infrastructure Committee Chairman Graves for understanding this, and addressing GA specifically in the next reauthorization bill.

Key components to the industry's success is effective, efficient, and consistent regulatory oversight. FAA oversees and regulates almost all aspects of aviation, including air traffic control; aircraft design; production and maintenance; pilot, mechanic, and crew certification; and airport operations. Aviation struggles when FAA is unable to provide timely oversight or inefficiently exercises its regulatory authority. Industry is stymied by the delays in processing of aircraft registrations, or the issuance of pilot and mechanic certificates at all levels, and timely completion of aircraft certification programs.

Pilot training is a great example. As Mr. Baker mentioned, the shortage that we have with the Designated Pilot Examiners is a crisis that needs to be addressed. And we hope that in an FAA reauthorization, you can implement the recommendations of the Designated Pilot Examiner Reforms Working Group that came up with the recommendation to have national oversight as opposed to oversight at the local FSDOs.

We also think, as part of that specialty, DPEs should have the ability to go back to when we had the all makes and model authorization for experimental warbirds.

Our number-one issue is Modernization of Special Airworthiness Certificates. This is a regulatory rulemaking activity with a significant opportunity to grow general aviation with the expansion of existing aircraft categories called light-sport aircraft, the current class of aircraft whose size and weight limitations restrict their useful training and commercial viability in the market. We are asking Congress to ensure that critical rulemaking continues to have the support it needs by directing the FAA to publish, by the end of 2024, this very important regulatory change.

The EAGLE fuel program was mentioned, of which we are strong supporters and participants in. And what we do need is to make sure that Congress can help the safe introduction of the new fuel, while still maintaining the supply of 100 Low Lead, so that nobody is left grounded.

I greatly appreciate the opportunity to appear before this committee and provide our views, the challenges, and opportunities. I look forward to working with Congress and the FAA to ensure the United States remains the gold standard in aviation, and that general aviation continues as a vibrant foundation to that standard. Thank you.

[Mr. Pelton's prepared statement follows:]

Prepared Statement of Jack J. Pelton, Chief Executive Officer and Chairman of the Board, Experimental Aircraft Association

INTRODUCTION

Good morning Chairman Graves, Ranking Member Cohen, and members of the Subcommittee. Thank you for inviting the Experimental Aircraft Association (EAA) to be here today and to provide our input on FAA Reauthorization: Securing the Future of General Aviation. My name is Jack Pelton and I am EAA's Chief Executive Officer and Chairman of the Board.

Founded on January 26, 1953, in Milwaukee, Wisconsin, as a local club for those who built and restored their own aircraft, EAA has developed to become a vibrant and growing international aviation community representing virtually the entire spectrum of recreational aviation. Today, EAA is headquartered in Oshkosh, Wisconsin, as a non-profit 501(c)(3) corporation, we encompass more than a quarter million members in more than 100 countries, with over 900 local chapters. The Chapter network is the backbone of EAA and is responsible for more than 14,000 aviation activities each year.

While the initial purpose of EAA was to aid and assist amateur aircraft builders, we now encompass all of recreational aviation and the promotion of aviation safety throughout general aviation. EAA initially established the segment of general aviation called experimental amateur-built, supporting those people that choose to build and fly their own aircraft. According to the FAA's General Aviation and Part 135 Activity Survey, the active fleet of amateur-built aircraft has grown more than 30% over the past 20 years. This proves that the homebuilding community is an essential growth sector of general aviation—with challenges across the general aviation industry over the past few decades this steady gain is an impressive accomplishment. Today, amateur-built aircraft encompass more than 17% of the entire active single-engine piston fleet, and every year our members add approximately one thousand new amateur-built aircraft to the National Airspace System.

As we celebrate our 70th anniversary this year, our mission remains unchanged. We are as dedicated to growing participation in aviation as our founders were in the beginning. We strive to make aviation easier, more accessible, more rewarding, and more fun—igniting and nurturing interest by embracing "The Spirit of Aviation" in all that we do.

In 2022 we celebrated the 30th anniversary of our Young Eagles program, which provides free introductory flights to youth through a well-structured program utilizing our chapters and members who volunteer to provide these flights. Acting on our mission of growing participation, Young Eagles has to date provided nearly 2.3 million flight experiences. That's millions of young people who have been introduced to general aviation, many who have then pursued careers as military or airline pilots, aerospace engineers or a host of other aviation related professions. This program has created a generation of people who have a deeper appreciation for aviation thanks to that free first flight.

EAA's focus on youth education also includes our Air Academy residence camp, our online AeroEducate portal for young people and teachers, and numerous other youth-focused aviation programs based within our local chapters and at our headquarters in Oshkosh.

In addition, EAA's annual convention, EAA AirVenture Oshkosh, is the world's largest fly-in event, with 10,000 aircraft gathering in Oshkosh along with an annual attendance surpassing 600,000, from more than 90 nations. It is THE gathering place for general aviation in America each summer, where new innovations and technologies are unveiled, and more than 1,000 forums cover all facets of aviation.

General Aviation's Value to the United States

The general aviation industry contributes an estimated $247 billion in economic output and 1.2 million jobs in the United States. It provides a lifeline to many towns across the country and provides critical services in times of natural disasters such as hurricanes, flooding, and wildfires. Our nation is served by more than 5,000 public-use airports, 13,000 private airports and airstrips, and 5,500 heliports across the country.

General aviation is an integral part of the transportation system that supports communities across the United States, especially in rural areas, by providing essential air travel options to businesses and the public, forging links between thousands of companies, their suppliers, and their customers. General aviation operations include emergency medical personnel and supplies delivery, disaster relief and recovery, search and rescue, agricultural aviation activities, recreational pursuits, personal transportation, and more. General aviation also supports commercial aviation through the training of a significantly large percentage of airline pilots.

The United States as a World Leader in Aviation

The United States' position as the world leader in aviation is established on the foundation provided by general aviation. For the United States to retain this leadership position, we must take action to ensure that our general aviation community remains healthy and robust.

General aviation typically serves as the gateway to almost all others facets of aviation. The nation's local airports, located in big cities, small towns, and rural

areas repeatedly serve as the introduction to aviation for nearly everyone who enters or is associated with aviation. Ask any pilot or aircraft mechanic, commercial, military, or civilian, about how they were introduced to aviation, and it will likely involve an early encounter with general aviation at a local airport.

The United States' position as the leader in training of pilots and maintainers, designing and producing of new aircraft, and developing and implementing new technologies can only continue with a robust and healthy aviation industry, and that must include a robust and healthy general aviation component.

Challenges and Opportunities Facing General Aviation

A key component to the success of the aviation industry in the United States is to have effective, efficient, timely, and consistent regulatory oversight. The Federal Aviation Administration (FAA) serves as the regulatory agency with responsibility for the National Airspace System (NAS) and safety must always be its primary focus. To do so, the FAA oversees almost all aspects of aviation including air traffic control, aircraft design, production and maintenance, pilot, mechanic and crew certification, airport operations, and installation and maintenance of navigation aids.

Many sectors of general aviation struggle when the FAA is unable to provide timely oversight or to exercise its regulatory authority effectively or efficiently. Today, our industry is being stymied by delays in the processing of aircraft registrations, the issuance of pilot and mechanic certificates at all levels, and the timely completion of aircraft certification programs. In many cases, it is not just the delay, but the uncertainty of not knowing how long the delay will be.

For individuals preparing for practical tests, the delay adds cost to already expensive training programs. Additional training including instructor and equipment costs to maintain proficiency and, in some cases, needed travel expenses, adds stress and hassle to an already challenging situation. Companies developing new aircraft or components and undergoing certification, or those that rely on their aircraft and are awaiting approval of new equipment installations, are in the position of not knowing when they may be granted their approvals. From a business perspective, the uncertainty of not having a timeline is worse than having a very long timeline.

To be successful, industry must be able to rely on a consistent regulatory structure and timelines. These delays are the result of a combination of dated programs, lack of staffing, and a shortage of qualified individuals in many critical FAA offices. These delays are compounded by a lack of agency-wide reporting of key performance indicators that provide important statistics on the status, efficiency, and effectiveness of the FAA's oversight of the industry.

Designated Pilot Examiners

To address the issues in pilot certification, the agency should expand its use of the Designated Pilot Examiners by moving oversight from the local to national level to further leverage the resources and knowledge of the General Aviation industry. The aviation industry is currently facing a significant shortage of Designated Pilot Examiners (DPE) nationwide, with some Examiners maintaining a wait time of 4–6 weeks to schedule a practical test to issue a pilot certificate. The problem appears to be rooted in the systematic oversight of Examiners through the FAA Flight Standards District Office (FSDO) network.

The FAA should implement the recommendations of the Designated Pilot Examiner Reforms Working Group (DPERWG) as established by the Aviation Rulemaking Advisory Committee (ARAC) which includes the implementation of a national oversight program for all Examiners. Nationalizing Examiner oversight, moving oversight to the FAA Headquarters level, will address the issue of Examiner shortage by removing the requirement for an appropriately qualified Aviation Safety Inspector at each office. This program will also focus the FAA's resources ensuring Examiner deployment is adequately resourced and will standardize the selection process making for a more transparent national system.

Modernization of Special Airworthiness Certificates

EAA works closely with a number of FAA offices on the development and ongoing improvement of programs important to the growth and health of general aviation. One effort currently underway that presents a significant opportunity to grow the general aviation industry is the Modernization of Special Airworthiness Certificates (MOSAIC) rulemaking. MOSAIC is the expansion of the current Light Sport Aircraft (LSA) standards. LSA is a current class of aircraft whose size and weight restrictions limits their usefulness as training aircraft and their commercial viability in the market. MOSAIC, as envisioned and when implemented, has the potential

to demonstrate how an Agency can effectively expand a regulatory structure to support growth while maintaining safety.

Thanks to action taken by current FAA leadership, the MOSAIC Notice of Proposed Rulemaking (NPRM) is now expected in summer of 2023. We feel Congress should ensure this critical rulemaking continues to have the support it needs by directing the FAA to publish, by the end of calendar year 2024, a final rule that expands the utilization of light-sport aircraft, promotes their use in flight training and does so in a manner that ensures U.S. manufacturers are not at a disadvantage to foreign manufacturers.

FUTURE FUEL FOR GENERAL AVIATION

EAA remains firm in our support of efforts to remove lead from aviation gasoline, and it is our position that any transition from leaded to unleaded gasoline must be effectuated with safety as the highest priority.

In an exhaustive 2021 report to the FAA on options for reducing aviation lead emissions, the National Academies of Sciences, Engineering, and Medicine recommended that the "FAA should continue to collaborate with the [general aviation] industry, aircraft users, airports, and fuel suppliers in the search for and deployment of an acceptable and universally usable unleaded replacement fuel," urging a "holistic process" to develop and deploy such a fuel. Only through a government-industry effort that would involve the private sector, the FAA, and Congress could the aviation system eliminate lead emissions.

We agree with that conclusion, and accordingly the FAA, general aviation associations, and other aviation stakeholders have launched a public-private initiative titled "General Aviation Commitment to Eliminate Aviation Gasoline Lead Emissions," or "EAGLE," which intends to achieve its firm goal—elimination of lead emissions from general aviation aircraft by the end of 2030, or sooner if possible—through development and deployment of a viable high-octane unleaded replacement aviation gasoline that can be safely operated by the U.S. fleet with minimum impact.

The next 12 to 18 months will provide our industry with a better understanding of our unleaded future. Four high-octane unleaded fuels are currently in evaluation and/or deployment phases to determine whether they are a viable replacements for our current fuel. In September of 2022, the FAA approved the first high octane unleaded fuel after many years of testing. The developers of this fuel, working with industry partners, are now focused on the production and distribution infrastructure needed to support the commercialization of this fuel. Another of the four fuels has indicated that they expect to receive their authorization from the FAA sometime this year. They will then also be exploring the production and distribution of their fuels. The two additional fuels are in various stages of testing with results and potential authorizations anticipated in 2024.

Vital to a successful and stable transition to an unleaded fuel is maintaining the availability of our current avgas during this period of development, authorization for use, commercialization, and deployment. The FAA plays a vital role in protecting the avgas supply throughout this process, particularly on federally funded airports. It is imperative that the FAA ensure the safe and coherent operation of the National Airspace System by protecting the continued supply of aviation gasoline with the timely and expedient enforcement of airport grant obligations. We cannot undermine the vitality and importance of the general aviation community while making progress toward an unleaded future.

Additionally, the EAGLE initiative is currently looking at areas for potential federal investment to facilitate this transition and we would like to work with Congress as these initiatives are developed.

UNCREWED AIRCRAFT SYSTEMS (UAS OR DRONE) INTEGRATION

EAA remains committed to the philosophy that Uncrewed Aircraft Systems (UAS) should be integrated into the National Airspace System, while maintaining that the safety and sanctity of crewed aircraft must remain absolutely paramount. Any changes to existing airspace, procedures, or regulations that provide access to UAS cannot decrease the safety, encumber in any operation that is presently allowed, nor impose any equipment mandates on crewed aircraft beyond what is already required. EAA supports integration and recognizes the benefits of safely integrating UAS operations into the NAS. However, safety of crewed aircraft and the public must always be the first priority of integration.

We encourage Congress to ensure that the FAA continues to integrate UAS into the National Airspace System without burdening the general aviation community with cost or operating restrictions.

FAA INDUSTRY ENGAGEMENT AND PRESENCE

With these challenges, we have seen a trend within the FAA to be hesitant to send staff to in-person industry meetings and events. At a time when the FAA is challenged to effectively administer programs, engagement and communication with industry should be increased, not decreased. We strongly encourage the FAA to continue to staff these important meetings to ensure that industry is kept abreast of the agency's challenges. It is through these meetings and discussions that FAA and industry can develop strategies to work together to find solutions and paths to most effectively utilize limited resources. Many of these events also allow the FAA to maximize travel expenditures by seeing numerous groups of the regulated community on the same trip, which otherwise would require multiple trips or would eliminate valuable face-to-face opportunities with the FAA.

CLOSING

We greatly appreciate the opportunity to appear before this committee and provide our views on the challenges and opportunities facing general aviation. Throughout our history, EAA has worked closely with the FAA to develop programs that enabled and expanded the scope of recreational aviation. We look forward to working with this Congress and the FAA to ensure that the United States remains the gold-standard in aviation and that general aviation continues as the vibrant foundation to that standard.

Mr. YAKYM. Thank you.

Mr. Rick Crider, testifying on behalf of the American Association of Airport Executives, you are recognized for 5 minutes.

TESTIMONY OF RICK CRIDER, A.A.E., EXECUTIVE VICE PRESIDENT OF AIRPORT/RAILPORT AND MILITARY RELATIONS, PORT SAN ANTONIO, ON BEHALF OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES

Mr. CRIDER. Thank you. Good morning, Vice Chair Yakym, Ranking Member Cohen, members of the subcommittee. Thank you for the opportunity to provide testimony and comment regarding general aviation issues and the upcoming FAA reauthorization process.

I am appearing today on behalf of AAAE and member airports across the country, along with my own perspectives from operating Kelly Field in San Antonio—one example of a vibrant, joint-use industrial GA airport. It is an honor to join this distinguished panel of industry leaders today and highlight the importance of general aviation and GA airports.

GA airports often serve as key operational hubs for law enforcement, firefighting, aerospace manufacturing, aircargo, agriculture, and pilot training. They are important community portals for business and private aircraft operations and, in some cases, play the role of economic engines, job centers, and R&D sites for new and emerging technologies.

While GA airports vary significantly in size, complexity, and configuration, each provide unique functions and vital capabilities. Industrial GA airports like Kelly Field provide critical services to aircraft operators that require fleet maintenance, refurbishment, updates, and modifications. Ten months ago, the Port San Antonio opened a state-of-the-art innovation center, which I described in my written testimony, aimed at sparking interest in STEM within the student populations of San Antonio and exposing opportunities in aerospace and advanced technologies to the workforce of tomorrow.

Kelly Field and other industrial GA airports are critical to maintaining our Nation's dominant position in global aerospace industry. When an aircraft is either delivered to its customer or returned to service, thousands if not millions of parts, components, and labor-hours are delivered to market.

The FAA NPIAS reports $12.5 billion in annual AIP and BIL-eligible projects at civil airports. Almost $4 billion of that total exists at nonprimary airports alone. When projects that are not AIP or BIL-eligible are added in, airport infrastructure needs to exceed well more than $20 billion annually. This is roughly twice what airports received in AIP grants, BIL funding, and PFC revenue every year.

Congress can help address this gap by increasing AIP funding to at least $4 billion annually, authorizing additional funds for supplemental grants, and providing airports with more flexibility on how they invest those dollars. We urge Congress to adjust the outdated GA entitlement, which has remained stagnant at $150,000 for more than 20 years, and have other recommendations that are more fully described in my written testimony.

I thank the subcommittee for its strong support of the FAA Contract Tower Program, a successful public-private partnership that enhances aviation safety at GA and commercial service airports around the country. Twenty-five Texas airports participate in the Contract Tower Program. On behalf of my colleagues in the Lone Star State, I urge you to take additional steps to address staffing challenges, upgrade outdated towers, and ensure controllers have access to equipment that can increase their situational awareness.

Like our counterparts at commercial airports, GA airports strive to be strong environmental stewards for their communities. Through AAAE, GA airports are participating in the EAGLE initiative to transition to lead-free avgas for piston-engine aircraft by the end of 2030.

Airports are also eager to transition away from using firefighting foam that contains PFAS to fluorine-free foam, which is safer for the environment and firefighters alike. The FAA is expected to approve fluorine-free alternatives soon, and we ask Congress to help airports with that transition and acknowledge FAA's longstanding mandate to use PFAS by providing airports with CERCLA liability protection.

The future of advanced air mobility is quickly becoming the present for the aviation industry. GA airports will likely play a major role in this new AAM ecosystem, and are excited to help make AAM a reality. However, to accommodate widespread use of eVTOLs in the future, we will need significantly greater electrical grid capacity and charging capabilities.

We will also need to work together to find ways to pay for this infrastructure without reducing funds for traditional airport projects.

Although travel has largely returned to pre-pandemic levels, stakeholders across the aviation system are still adjusting to the ripple effect caused by the pandemic. With the current FAA authorization set to expire on September 30th, I would like to commend this subcommittee for moving forward quickly to complete a multiyear bill on time. Short-term extensions bring about both un-

certainty and a lack of predictability for the aviation system, particularly for airports that rely on AIP funds to modernize our infrastructure.

On behalf of AAAE and all my colleagues at GA and commercial service airports around the country, we look forward to working with this subcommittee as you prepare for the next FAA reauthorization bill. And I thank you, and look forward to the questions that the subcommittee might have.

[Mr. Crider's prepared statement follows:]

Prepared Statement of Rick Crider, A.A.E., Executive Vice President of Airport/Railport and Military Relations, Port San Antonio, on behalf of the American Association of Airport Executives

Chairs Graves and Graves, Ranking Members Larsen and Cohen, and members of the subcommittee, thank you for the opportunity to appear before you today to highlight the perspective of an airport operator on securing the future of general aviation (GA). My name is Rick Crider, and I am the Executive Vice President of Airport/Railport and Military Relations at Port San Antonio, in San Antonio, Texas.

I am testifying today on behalf of the American Association of Airport Executives (AAAE), where I serve on the Executive Committee as Second Vice Chair. AAAE is the world's largest professional organization for airport executives representing thousands of individuals who manage and operate more than 850 public-use commercial and GA airports across the country.

THE IMPACT OF GENERAL AVIATION

Let me begin by thanking this subcommittee and its members for your steadfast support of GA airports and the broader GA industry. General aviation is an integral part of our National Airspace System (NAS). In fact, the U.S. has the largest and most diverse system of GA airports in the world, supporting more than one million jobs and helping generate nearly $250 billion in economic impact annually.

There are more than 4,400 public-use GA airports in the United States, providing communities small and large across the country access to the nation's air transportation system. While GA facilities are present and important in every state, I would note that in Vice Ranking Member Mary Peltola's state of Alaska, 82 percent of communities are not connected to the road system and are fully dependent on air service and GA facilities for life, health, and safety needs.

The benefits of GA airports to individuals, businesses, and communities, as connection points to the nation's air transportation system, cannot be overstated. While GA airports vary significantly in size, complexity, and configuration, each provides unique functions and vital capabilities. In many cases, GA airports are centers for industrial aerospace activities, training hubs for the next generation of pilots, and access points to the NAS for businesses in smaller and rural communities. GA airports serve as incubators for revolutionary technologies like electric vertical takeoff and landing (eVTOL) vehicles, and other applications of advanced technologies. Law enforcement, firefighting, aerospace engineering and manufacturing, air cargo, agriculture and recreation are other examples of activities that take place at GA airports every day.

KELLY FIELD AND WORKFORCE DEVELOPMENT

My role at Port San Antonio includes the oversight and development of the civil portions of Kelly Field, a joint use industrial airport in southwest San Antonio. Kelly Field is home to a vibrant private-sector maintenance, repair and overhaul campus that supports aircraft ranging from large commercial transport utilized by the federal government to military fighter and cargo to new commercial aircraft.

Kelly Field is an industrial airport, as described in recent Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS) reports, but classified as a GA airport. Industrial GA airports across the country provide critical services to aircraft operators, from airlines to corporate flight departments, that require fleet maintenance, refurbishment, updates, and modifications. At Kelly Field, these activities, combined with the Air National Guard and Air Force Reserve pilot training missions, generate over 11,300 jobs and $3.2 billion in annual eco-

nomic impact throughout San Antonio and the south Texas region, according to a 2021 report.

Without properly investing in infrastructure and developing an aviation workforce that meets the demand of industrial aerospace, those jobs and economic impact are at risk of migrating beyond our borders to places where excess capacity exists. This scenario could erode the leadership position our nation holds within the global aerospace industry. The direct correlation between airport infrastructure and aerospace commerce through the myriad of parts, components, and labor utilized is evident every time a new aircraft or an aircraft being returned to use after heavy maintenance or specialized service leaves an industrial airport.

Port San Antonio recognizes that the real limiting factor in industrial aviation growth and program retention is workforce. Ten months ago, the Port opened a state-of-the-art innovation center that houses, among other things, an arena for live performances and seminars, a competition gaming center for students, and an interactive science and technology museum. The sole focus of this development is to provide a space for students, specifically the socio-economically challenged students that reside in the southern areas of San Antonio, to be exposed to opportunities in the advanced technology realm. Flight simulators, robotic displays, a town built of Legos to highlight control systems and vulnerability to cybersecurity threats, a mock security operations center, and 3D printing present STEM through the lens of legacy aerospace and emerging industries.

The innovation center is owned by and resides on Port property and is just a few blocks from Kelly Field. The Port's vision is to excite and prepare a pipeline of future workers who are enthusiastic and engaged in the pursuit of technical careers. The 80-plus companies that call Port San Antonio home use this platform to introduce themselves to future talent, and in many cases provide internships to help young people make this transformational journey. We firmly believe that an effective workforce pipeline is critical to the future of our local economy, the region, and the continued vitality of the nation's aerospace and aviation sectors.

FAA Reauthorization Overview

With the current FAA authorization set to expire in less than seven months, AAAE and Airports Council International–North America (ACI–NA) have crafted a joint list of recommendations that would help GA and commercial service airports alike. This joint list—which is included at the conclusion of my testimony—contains various reforms that would benefit airports as well as the passengers and local communities they serve.

To help airports of all sizes build critical infrastructure, the two associations are calling for increasing Airport Improvement Program (AIP) funding; modifying the AIP formula to benefit both GA and commercial service airports should additional resources materialize; eliminating the outdated federal cap on local Passenger Facility Charges (PFCs); and expanding eligibility for both funding sources. AAAE and ACI–NA are also urging Congress to reduce federal red tape and streamline regulations; address noise and other environmental concerns; preserve and enhance small community air service; and enhance the FAA Contract Tower Program.

Although travel has largely returned to pre-pandemic levels at both GA and commercial airports, stakeholders across the aviation system are still adjusting to the ripple effects caused by the pandemic, including workforce shortages and significant changes in the distribution of travel. The next FAA reauthorization bill is an opportunity for this subcommittee and Congress to address both persistent and newly emerged challenges, and to help airports and the aviation industry prepare for the challenges and opportunities that lie ahead.

Given the importance of the aviation industry to the nation's economy and the crucial need for certainty and stability for the aviation system, we commend leaders and members of the subcommittee for your commitment to pass the FAA reauthorization before programs expire on September 30. As you know, a series of short-term extensions can have an adverse impact on airports and make it challenging for them to move ahead with critical infrastructure projects. With your leadership, we hope the next FAA bill will be finished on time. I'm sure all of you agree that the nation's aviation system is simply too important to operate on autopilot.

Rising Infrastructure Needs

As travel demand continues to rise at GA and commercial service airports, there is a growing need for infrastructure investment. The Infrastructure Investment and Jobs Act (IIJA) provided airports with $20 billion over five years for infrastructure and terminal grants, with $2.5 billion of that total specifically allotted for nonprimary commercial service and GA airports. We are grateful for that investment,

which will help airports of all sizes build critical infrastructure to meet increased demand.

While IIJA funding serves as an important down payment to help bridge the enormous funding gap for airport infrastructure nationwide and will help offset inflationary and cost escalation impacts, the need for additional federal investment remains. According to the FAA's most recent NPIAS, commercial service and GA airports have $62.4 billion in AIP and IIJA-eligible projects—or around $12.5 billion annually—over the next five years. Those totals do not include other non-eligible infrastructure projects and requirements, which increase total airport capital needs significantly.

According to the latest NPIAS, the capital needs for nonprimary and GA airports are more than $19 billion over the next five years. And that figure does not factor in rising inflation, increasing labor and construction costs, or supply chain constraints. As members of this subcommittee know, GA and smaller commercial service airports disproportionately rely on AIP funding to meet their infrastructure needs. The combination of stagnant authorization levels for traditional AIP funding for the past two decades and rising construction costs has greatly limited these airports from completing critical safety and improvement projects. As Congress prepares for the next FAA reauthorization bill, AAAE and ACI–NA are urging Congress to increase traditional AIP funding to at least $4 billion and to continue to authorize funds for supplemental discretionary grants to help GA and commercial service airports meet their ongoing infrastructure needs.

In conjunction with increasing AIP funding, we recommend Congress provide airports with more flexibility in how they are permitted to use that funding consistent with provisions in IIJA and in recognition of evolving airport infrastructure needs and existing limitations. Additionally, we recommend adjusting the AIP entitlement for nonprimary airports, including GA airports, since it has remained stagnant at $150,000 for more than 20 years despite rising costs and infrastructure needs. The current funding approach for nonprimary entitlements (NPE) also fails to recognize the dramatic differences in aircraft activity, operations, and economic impact within the wide spectrum of diverse GA airports.

The NPIAS categorizes nonprimary airports based on their activity level as either national, regional, local, or basic. Instead of the current one-size-fits-all policy, Congress should modernize GA entitlements by providing increased funding levels to airports with more activity or that serve larger aircraft. Specifically, we propose a tiered approach where the GA entitlement be set at $1 million for national airports, $500,000 for regional airports, $250,000 for local airports, and $150,000 for basic airports. It is important to note that our recommendation for this proposed formula change is contingent upon AIP funding of at least $4 billion annually.

The need for adjusting the $150,000 nonprimary entitlement is evident at Kelly Field, where design is underway for a consolidated facility that will promote eVTOL, along with other new and existing aircraft. But the investment in infrastructure required far surpasses the abilities of today's NPE formula. Notably, other GA airports are on the forefront of efforts to develop, test, and build electric and second-generation supersonic passenger aircraft.

Kelly Field is proud to support the very smallest of aircraft that operate today, but it also serves the very largest. Wide body aircraft operate from Kelly Field daily, requiring Airplane Design Group (ADG) V and VI infrastructure rather than ADG I or II prevalent at many GA airports that receive the same nonprimary entitlement. We need additional resources for a new taxiway and apron complex associated with a new terminal and hangars. Additional resources are also needed to expand our public aircraft parking apron used by industrial aviation activities and designed for ADG VI aircraft. Additional investment in GA airports will support the wide range of aircraft that operate today, but it will also stimulate the fertile ground of applied technology and allow the private sector to make the next leaps in aerospace advancement at Kelly Field and at other airports across the NAS.

Regulatory Reform

Airports need help cutting through unnecessary red tape and regulatory burdens imposed by the FAA that are time-consuming, delay critical infrastructure projects, and unnecessarily increase costs. As inherently public institutions with a primary goal of serving communities and travelers, airports have every incentive to use federal and local dollars responsibly and to pursue important policy objectives without the need for heavy-handed federal regulation.

Congress can help by directing the FAA to correct their misinterpretation of the airport land use streamlining provisions (Section 163) included in the last FAA bill, which has resulted in overly burdensome processes and inhibited airport develop-

ment. Commercial service airports should not be required to submit PFC applications for AIP projects already approved by the FAA, and we urge Congress to reject any proposals that would impose additional unnecessary grant assurances on GA and commercial service airports, which lead to costly, unfunded federal mandates that impede the delivery of critical infrastructure projects.

LEADED AVGAS

Like our counterparts at commercial service airports, GA airports strive to be strong environmental stewards for their community. For decades, the GA industry has been focused on a smart and safe transition toward an unleaded high-octane fuel that meets the needs of the entire GA fleet. So far, only low-compression engines can burn the unleaded fuels that are currently available, and 75 percent of the total GA aviation gas (avgas) consumption is by aircraft requiring 100-octane fuel, which presently can only be achieved with a lead-based additive.

Through AAAE, GA airports are participating in the Eliminate Aviation Gasoline Lead Emissions (EAGLE) initiative, a public-private partnership between the federal government and industry stakeholders to transition to lead-free avgas for piston-engine aircraft by the end of 2030. Like the blender's tax credit for sustainable aviation fuels, we believe similar incentives to scale up the production and distribution of these new GA fuels will be critical to a successful transition.

GA airports are eager to be part of the solution for transitioning away from leaded avgas and await a better understanding of what types of infrastructure improvements are needed to support the widespread use of the new fuel. Updated AIP eligibility criteria for new storage and distribution systems at GA airports will likely be needed, but a premature ban of leaded avgas before a viable replacement is approved will threaten the economic viability of most GA airports and should be rejected.

PFAS

Since the 1970s, FAA has required Part 139 commercial service airports to provide aircraft rescue and firefighting (ARFF) services using aqueous film forming foams (AFFF) that meet specific standards for firefighting. These approved foams contain PFAS. Many GA airports have relied upon and follow FAA guidance in using AFFF to ensure aviation safety, and like Part 139 airports GA airports, are anxiously awaiting the FAA to approve a fluorine-free foam (F3).

On January 12, the Department of Defense (DOD) and U.S. Navy released new performance standards for F3 fire-extinguishing agents, a significant milestone that is expected to ultimately allow airports to transition away from AFFF agents beginning later this year. However, there are still unanswered questions regarding supply chain constraints, standards and practices to decontaminate ARFF equipment, and new firefighting training, which could delay airports' ability to transition. That is why Congress, as part of the explanatory statement accompanying the FY23 omnibus appropriations bill, directed the FAA, in coordination with the Environmental Protection Agency (EPA) and DOD, to develop a transition plan within 120 days to provide airports with the necessary guidance to ensure an orderly and cost-effective transition over the next few years.

EPA could take future regulatory action that might impede a successful transition and lead to substantial financial costs for airports. This year, EPA is expected to issue a final rule designating two PFAS chemicals, PFOA and PFOS, as "hazardous substances" under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). For airports, which have used AFFF in accordance with federal law and the interest of public safety for decades, such a designation could trigger potentially costly litigation and cleanup efforts to address PFOA and/or PFOS-related contamination.

While the FAA is moving closer to approving an F3 agent, most, if not all airports, will still be using AFFF for the next several years because there are many factors and challenges in making an industry-wide transition, such as the lack of transition-related guidance from the federal government and supply constraints. A final rule from EPA, before the industry is prepared to transition, would be a draconian measure that puts airports in an especially untenable position of using a designated hazardous substance in an emergency situation in accordance with federal law.

We urge Congress to acknowledge the longstanding federal requirement for airports to use AFFF by providing liability protection, including CERCLA liability protection, for airports. This sensible request isn't new; in fact, the PFAS Action Act, which the House passed in the last two Congresses, included CERCLA liability exemption for airports. However, both efforts ultimately stalled in the Senate. Additional funding will be needed to help airports procure the new F3s, dispose of their

old AFFF, and clean up any potential PFAS contamination. These steps, coupled with much-needed guidance from the FAA and EPA, will help the airport community transition quicker to a PFAS-free future.

FAA Contract Tower Program

I would like to thank the leadership and members of this subcommittee for being strong supporters of the FAA Contract Tower (FCT) Program—a successful public-private partnership that enhances aviation safety at GA and commercial service airports around the country. The FCT program encompasses 262 airports in 46 states, including 24 in Texas. The program has been audited numerous times by the Department of Transportation Office of Inspector General, which has consistently validated that contract towers are cost-effective and maintain safety records comparable to FAA-staffed towers.

The IIJA included at least $300 million over five years to repair, replace, or relocate aging air traffic control towers at FCT airports—$100 million for sponsor-owned facilities and $200 million for FAA-owned facilities. Many air traffic control towers are 50 years of age or older, so this funding is a welcome step in the right direction. However, with the most modest control towers costing $10 million or more to construct, we urge Congress to provide additional resources to address outdated facilities that are in desperate need of repair or replacement.

We also call on Congress to require the FAA to deploy radar displays, Automatic Dependent Surveillance-Broadcast displays, and other technology at contract towers to increase situational awareness for air traffic controllers. Contract tower controllers should have access to the same technology advances and equipment used at FAA-staffed facilities. These actions would ensure that contract towers continue to operate safely and have information that is consistent with FAA towers, as air traffic operations continue to rise.

The pilot shortage has understandably received a great deal of attention but we're facing an increasing shortage of air traffic controllers as well. The companies that operate contract towers are experiencing intensifying staffing pressures brought upon by COVID–19, the rising cost of living, and frequent vacancies created when younger controllers leave their positions at FCT airports to serve at FAA-staffed towers.

The CONTRACT Act, which Congress passed as part of the FY23 omnibus appropriations bill, will certainly help by removing a disincentive for retired FAA controllers to continue serving at contract tower airports. We thank Rep. Julia Brownley (D–CA) and other members of this committee for their work in getting that bill enacted into law. We encourage the FAA to work with the companies that operate contract towers to allow innovative hiring and training processes to increase the stream of applicants to be qualified controllers.

We also recommend that the FAA collaborate with the Department of Labor to address the rising cost of living for controllers, by updating the outdated wage determination that has failed to keep up with inflation. It is important that the FAA work with contractors and minimize the adverse impact when the agency hires controllers from contract towers for FAA-staffed facilities. Further, we recommend that the FAA carefully consider how any proposed realignment of service areas could impact the successful FCT program.

Advanced Air Mobility

The future of Advanced Air Mobility (AAM) is quickly becoming the present for the aviation industry, with several companies currently developing eVTOL aircraft. These aircraft, which will range in size from single-passenger aircraft to large shuttles, will bring accessibility to cities, underserved communities, and geographically distant regions, while offering immense environmental advantages. Existing infrastructure, at GA airports in particular, will likely play a major role in this new AAM ecosystem.

Airports are excited to help make AAM a reality, though there are a few issues that Congress and FAA must ultimately address to set AAM up for success. To accommodate widespread use of eVTOL aircraft in the future, airports will need significantly greater electrical infrastructure and grid capacity to support the charging requirements of these new vehicles. This will require dedicated funding outside of the regular AIP program to ensure that airports are not sacrificing funding for critical safety projects and infrastructure modernization. Additionally, Congress must ensure that new entrants pay their fair share for the costs of air traffic control services, FAA resources, and infrastructure needed to accommodate their operations.

CONCLUSION

GA airports like Kelly Field are complex aviation centers, acting as national assets that play an indispensable role in meeting the unique needs of the communities they serve. I am grateful for the opportunity to provide these views of the GA airport community, on how we can maintain and grow GA operations across the country and offer suggestions on how to better position airports to meet current and future challenges and opportunities as part of FAA reauthorization legislation. Thank you for your consideration and the opportunity to testify.

ATTACHMENT

AIRPORTS COUNCIL INTERNATIONAL–NORTH AMERICA AND AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES

AIRPORT INDUSTRY POLICY RECOMMENDATIONS

JANUARY 2023

Infrastructure

Airport Improvement Program

- Increase the authorized funding levels to a minimum of $4 billion annually.
- Extend AIP eligibility to all activities allowed under the PFC program, as in the bipartisan infrastructure law, and require that FAA adjust its programmatic funding priorities to take the new eligibility into account.
- Authorize supplemental discretionary AIP funding and allow airports to use funds for more terminal projects and other PFC-eligible projects.
- Rebalance funding allocations by reducing the percentage of AIP entitlements large hub and medium hub airports with $4.50 PFC turn back to the program and then replenishing the Small Airports Fund with a commensurate amount of funding. The proposed formula change is contingent upon AIP funding of at least $4 billion annually.
- Provide additional funding for small hub and non-hub airports.
- Remove the $20 million cap on the amount of discretionary funds allowed in terminal projects at non-hubs and some small hub airports.
- Modernize GA entitlements by providing increased funding levels to airports with more activity ($1 million for national airports, $500,000 for commercial-service non-primary airports, $500,000 for regional airports, $250,000 for local airports, $150,000 for basic airports, and $0 for unclassified airports.) The proposed formula change is contingent upon AIP funding of at least $4 billion annually.
- Require the FAA to distribute AIP funding as quickly as possible and with as much flexibility as possible, in part by allowing airports to report on their usage of the funds for eligible activities, rather than directing airports on the agency's preferred use of the funds.
- Establish pilot program for the FAA to begin accommodating alternative-delivery and advance-construction methods that can expedite projects and reduce costs.
- Continue using Calendar Year 2019 enplanement figures (or current year figures, whichever is higher) to determine AIP entitlement apportionments for two additional years beyond Fiscal Year 2023.
- Support continued funding for ACRP.

Passenger Facility Charges

- Eliminate the federal cap on local PFC user fees.
- Extend PFC eligibility to include any lawful capital cost of the airport.
- Eliminate PFC exemptions for non-revenue passengers.
- Fully implement the PFC streamlining provision (Section 121) included in the FAA Reauthorization Act of 2018, which expands to all-size airports a streamlined process for imposing/using PFCs, as previously provided only to non-hub airports.
- Eliminate PFC application requirement when airports use PFCs for local match on AIP-approved projects.

Bag Fees

- Include airline bag fees in the domestic passenger ticket tax that helps fund the Airport and Airway Trust Fund.

Regulatory Reform

- Accelerate airport land use development by directing FAA to fully implement Section 163.
- Remove costly hurdles to implementation of Bipartisan Infrastructure Law:
  - DOT should reinstate a nationwide waiver for new Buy America provisions until at least 180-days after the FAA issues airport-specific guidance on implementation and a sound assessment of supply chains and product/material availability in the United States is made.
  - Since airports are involved in complex, multifaceted construction programs with a mix of federal, local, and private resources, there should be an exemption for airports to the applicability of Buy America to the entirety of a project. It is federal overreach to apply federal procurement law to a project or portion of a project funded with an airport's own resources.
  - Direct the FAA to accommodate alternative-delivery and advance-construction methods that can expedite and reduce costs for projects using federal funds, especially for projects already underway at many airports.
- Protect airports in Safety Management System implementation:
  - Provide liability protection for those airport personnel designated as responsible for SMS implementation.
  - Provide airports with public disclosure protection for the safety-related data generated as part of their SMS programs.
- Set a 45-day deadline for FAA to approve NEPA purpose-and-need statements.
- Extend the eligibility date for the TIFIA for Airports provisions to align with the authorization date of the new FAA reauthorization bill.
- Avoid the imposition of additional grant assurances on airports.

Environmental Issues

PFAS Firefighting Foam

- Direct the FAA, in collaboration with industry stakeholders, to develop a national transition plan to assist airports in moving to fluorine-free firefighting foams.
- Provide federal funds for an acquisition program for the new foam, a disposal program for the old foam, and PFAS remediation at airports.
- As the EPA continues to pursue plans to designate PFAS as hazardous materials, Congress should acknowledge the longstanding federal requirement on airports to use this firefighting foam by providing liability protection to airports, including CERCLA liability protection.

Voluntary Airport Low Emissions Program

- Expand eligibility to include all airports, including those outside of non-attainment areas, to enable efforts towards meeting Net Zero commitments.
- Broaden the program to address overall greenhouse gas emissions.
- Allow the program to include actions taken as part of a State Implementation Plan or Federal Clean Air Act requirement.
- Incorporate energy management and renewable energy projects where emissions reductions occur at a utility, rather than an airport.

Resiliency/Sustainability

- Provide separate, dedicated general funds (est. $1 billion annually) for projects eligible the under Voluntary Airport Low Emissions Program; Airport Zero Emissions Vehicle and Infrastructure Pilot Program; noise mitigation (such as public education programs and sound insulation); sustainability; resiliency projects and planning; and installation of electric charging stations.
- Establish funding program to support planning and development of electric capability and resiliency projects at airports.
- Direct FAA to work with NOAA and US Army Corps of Engineers on resiliency initiatives for coastal airports.

Noise

- Direct FAA to update Part 150 noise standards to reflect all relevant laws and regulations.
- Require FAA to help reduce impact of aircraft noise on local communities by: 1) implementing flight procedures that can attenuate aircraft noise; 2) working with airports on arrival and departure routes; and 3) discouraging local encroachment that could create future noise challenges and impact airport operations and aviation safety.

- Direct the FAA to clarify future noise policy/standards and seek feedback from airports and their stakeholders before implementing any changes per the recently conducted Neighborhood Environmental Survey that could affect airport operations.
- Direct FAA to evaluate the community impact of noise from AAM and UAS integration into the NAS, and not hold airports responsible for noise resulting from AAM and UAS operations not associated with airport operations.

Sustainable Aviation Fuel

- Establish funding program for planning and development of appropriate SAF infrastructure at airports, which will help promote greater SAF availability at airports as SAF production, transportation, blending, and storage needs increase.

Small Community Air Service/Workforce

- Modernize and maintain funding for the Essential Air Service Program.
- Enhance the Small Community Air Service Development Program:
  - Increase funding to at least $20 million annually.
  - Allow communities to receive multiple grants for the same purpose.
- Support the Contract Tower Program:
  - Provide incentives for retired federal controllers to continue working at contract towers.
  - Require FAA and Labor Department to review the outdated wage determinations for contract tower controllers.
  - Provide funds to install radar displays and other ATC equipment at contract tower facilities.
- Take steps to address the pilot and aviation workforce shortage, such as: 1) increasing federal student loan aid for pilot training; and 2) extending and increasing funding for Aviation Workforce Development Grants to $10 million annually.

FAA Facilities and Equipment/Operations

- Require the FAA to work with airports, aviation stakeholders, and TSA to ensure (1) new entrants are safely integrated into the National Airspace System, and (2) airports are protected from unsafe UAS activities.
- Ensure new entrants pay their fair share for the costs of ATC services and infrastructure needed to accommodate their operations.
- Increase funding for ATC towers and equipment.
- Expand the Remote Tower Pilot Program.

Mr. YAKYM. Thank you, Mr. Crider.

Mr. Curt Castagna, president and CEO of the National Air Transportation Association, you are recognized for 5 minutes for your testimony.

TESTIMONY OF CURT CASTAGNA, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NATIONAL AIR TRANSPORTATION ASSOCIATION

Mr. CASTAGNA. Chairs Graves and Graves, Ranking Members Larsen and Cohen, and distinguished members of the Aviation Subcommittee, as president and CEO of the National Air Transportation Association and as an aviation business owner, I appreciate the opportunity to offer solution-based testimony today drawn from member input.

I am pleased to join the other members of today's panel in advocating for a healthy general aviation ecosystem that supports collaborative partnerships between airports, aviation businesses, airport users, and local communities consistent with FAA policy, airport access, and self-sustainability.

As the voice of aviation business for more than 83 years, NATA represents a vital transportation industry that employs over 1 million individuals, creates $247 billion in economic output, and pro-

vides critical access to aeromedical emergency services, rescue, cargo, and on-demand passenger service to countless communities. Our 3,700 member locations include fixed-based operators, air charter providers, maintenance repair stations, and flight schools, as well as more than 300 general aviation airports. Collectively, NATA members serve the general public, recreational pilots, business aviation, airlines, and the military.

Today's hearing comes at a critical juncture for both general aviation industry, which is experiencing high activity levels and rapid innovation in aircraft design, safety, and alternative fuel sources, and, as well, the FAA, which provides critical regulatory oversight of our industry. NATA appreciates the many competent, collaborative, and committed FAA leaders we work with on a daily basis.

However, we also recognize the current antiquated systems hinder the agency's ability to perform timely certification, rulemaking, and oversight duties. The on-demand charter industry offers a perfect example. With 680 new certification requests currently in the FAA's backlog, it takes up to 2 years to secure a part 135 certificate under the existing process. Adding a new aircraft to an existing certificate also takes up to 1 year, even when that aircraft has been subject to ongoing FAA conformity. Lastly, part 135 operators cannot secure timely checks with FAA inspectors, and struggle to get their own check pilots approved, which compounds our acute workforce shortage.

Congress can legislate solutions for these problems by mandating FAA industry working groups, digitize processes and online dashboards, expanded use of third-party evaluators and carrier checks, and, in some cases, just simple implementation of existing FAA policy.

We also encourage Congress to address the needs of general aviation airports to modernize infrastructure, prepare for advanced air mobility, and increase sustainability. As my colleague Mr. Crider mentioned, the $150,000 AIP entitlement for GA airports has remained stagnant for over 20 years, and rising inflation and soaring construction costs make that current entitlement not very effective. We ask Congress to increase the GA entitlement and to adopt a tiered funding formula based on flight activity to account for the diversity of size and needs of GA airports.

As the industry grapples with dangerous PFAS chemicals in airport rescue trucks and hangar foam fire systems, we seek Federal guidance and assistance on a transition away from fluorinated foams, an exemption from PFAS-related litigation for airports, and, as well, aircraft hangar owners that have been subject to those regulations.

NATA is committed to removing lead from avgas. We support funding to accelerate testing and approval for unleaded fuel that meets the requirements of the entire piston fleet, as well as the investments in infrastructure now to make the existing unleaded fuel more widely available. We must take creative steps now for the adoption of alternative unleaded fuels, increasing their commercial availability and expanding infrastructure to accommodate them. For example, short-term tax credits for refiners, blenders, and dis-

tributors of approved unleaded fuel would incentivize production and accelerate deployment, much as in the case of SAFs.

Advanced air mobility holds enormous promise to reduce aircraft emissions, enhance cargo and medical transport in rural areas, and facilitate urban mobility. NATA sees a natural nexus between existing part 135 operators, general aviation airports, FBOs, and the AAM innovation. Both urban and rural general aviation airports offer ideal spaces to introduce eVTOL technology, and NATA members are preparing to support and maintain this next generation of aircraft.

Lastly, we ask Congress to help our industry efforts to recruit a diverse and resilient workforce by expanding section 625 grants, extending Federal loan programs to aspiring pilots and aircraft mechanics, and broadening the on-ramp to nontraditional technical jobs with new grants targeting other aviation workforce sectors.

Thank you for your opportunity to testify on behalf of aviation businesses, and I look forward to your questions.

[Mr. Castagna's prepared statement follows:]

Prepared Statement of Curt Castagna, President and Chief Executive Officer, National Air Transportation Association

Committee Chairman Graves and Ranking Member Larsen, Subcommittee Chairman Graves and Ranking Member Cohen, and distinguished Members of the Aviation Subcommittee:

Thank you for the opportunity to testify on behalf of the National Air Transportation Association (NATA) and its nearly 3,700 aviation business members. Of critical importance to the future of the general aviation industry is FAA Reauthorization legislation that will maintain the security and increase the resiliency of our National Airspace System while refining the focus and improving the efficiency of its regulatory agency. I deeply appreciate the Transportation and Infrastructure Committee's commitment to a timely, comprehensive, and bipartisan reauthorization process, and offer sincere thanks to Committee Chairman Sam Graves for his decision to include the first-ever general aviation title in the 2023 bill.

To support that effort, I am pleased to offer solution-focused testimony that reflects the direct input of NATA's membership and the recommendations of our member-driven policy committees, which convene thought-provoking industry leaders, examine contemporary issues, and pursue solutions to prioritize the safety and economic viability of our industry.

For more than 80 years, NATA has been the voice of aviation business. Our advocacy began in 1940, when the threat of war put general aviation in the United States at risk. As the U.S. Army sought to ban all flights by privately owned aircraft, 83 charter members representing all types of general aviation businesses united as a singular voice to successfully ask Congress and the Administration to keep the airspace open to this important industry.

Today, NATA continues to advocate for a broad cross-section of the general and business aviation industry, including fixed base operators (FBOs), part 135 on-demand air carriers, part 145 maintenance repair stations (MROs), aviation fuel producers and suppliers, flight schools, air medical operators, and airport sponsors at general aviation airports. I will briefly explain the function and impact of each of these general aviation industry segments.

Fixed Base Operators

Fixed base operators (FBOs), as the primary service and fuel providers to general aviation aircraft operators, provide mission-critical support and infrastructure to general aviation as well as to many essential public services including law enforcement, EMS, fire management, military, and National Guard units. FBOs often provide private general aviation passenger and customer service terminals; line service, such as aircraft parking, fueling, tie-down, and hangar space; technical services, such as airframe and engine maintenance; aircraft rentals, charters, management and/or sales; flight instruction; aircraft catering; ground transportation and parking; and amenities for pilots, passengers, and crew. In addition, FBOs at many commer-

cial airports perform line maintenance, cabin cleaning, and baggage handling for part 121 commercial, passenger, and cargo airline customers. NATA's FBO members range in size from single-location small businesses to regional, national, and international chains. In total, the domestic FBO industry includes nearly 3,000 business locations operating under lease with airport authorities around the country.

Part 135 On-Demand Air Charter

One of the most critical contributions of general aviation is providing on-demand transportation for freight and passengers, especially to communities that have no scheduled commercial air carrier service. Most operators using general aviation aircraft in a for-hire passenger and/or cargo capacity are certificated to operate under Title 14 of the Code of Federal Regulations (CFR) Part 135 and conduct numerous types of missions, including governmental, business, and recreational travel, as well as medical flights and disaster relief. NATA's air charter members regularly transport organ transplant surgical teams; private charter often offers the only transportation solution in such cases because of the short window of time to move organs from donor to recipient. The majority of NATA's air charter members are small businesses operating a range of aircraft from large turbo-powered business jets to small, single-engine piston-powered airplanes and helicopters. In total, nearly 2,000 FAA-certified charter operators operate in all 50 states and U.S. Territories.

Part 145 Maintenance/Repair Stations

The term "repair station" refers to a maintenance facility that has been issued an FAA certificate under 14 CFR Part 145 and engages in the maintenance, preventive maintenance, inspection, and alteration of aircraft and aircraft products. Another more general term used throughout the industry is MRO, referring to repair stations as maintenance, repair, and overhaul facilities. FAA certified repair stations receive class ratings under the categories of airframe, powerplant, propeller, radio, instrument, and accessory. At last count, there were approximately 5,000 FAA-certified repair stations located domestically and abroad.

General Aviation Fuel Suppliers

NATA represents all of the nation's major general aviation fuel suppliers who provide aviation businesses with Jet A, Avgas, refueler trucks, financing for fuel infrastructure, contract fuel, sustainability programs, and other logistical services. NATA's fuel members include domestic producers of sustainable aviation fuel (SAF) and alternative unleaded fuel.

Flight Training

In the U.S., flight training is provided under three different sets of regulations: 14 CFR Part 61, 141, and 142. Part 61 training is often provided by individual, for-hire flight instructors, as well as some flight schools and FBOs. The curriculum is flexible and can be tailored to a student's specific needs, such as the amount of time he or she can devote to training. In contrast, Part 141/142 certification mandates the use of a detailed, FAA-approved course outline, with students meeting specific performance standards. Across the country, accredited colleges and universities integrate flight training curriculums under 14 CFR 141 into the academic requirements for a degree in aviation science, catering to the full-time flight student who desires a structured training regimen. Together, these flight programs are educating and training the next generation of aircraft operators for both general and commercial aviation.

Aeromedical Services

Approximately 250 organizations in the U.S. are currently engaged in the transport of seriously ill or injured people to hospitals for emergency care. Air medical transport saves lives by bringing more medical capabilities to the patient than are normally provided by ground emergency medical services, along with faster transit times to the appropriate specialty care location—services not typically provided by commercial air carriers. These operators also support door-to-door service for organ transplant teams utilizing both helicopters and fixed wing aircraft.

General Aviation Airports

One of NATA's fastest-growing membership categories is that of general aviation airports. Our nation's 4,500 general aviation airports are vital economic engines, serving as arrival and departure points for economic developers; supporting agricultural, law enforcement, and fire-fighting missions; and providing access to critical medical care, especially in remote communities. By contrast, scheduled air carriers fly only to those places where the economics of operation justify service, approximately 500 airports nationally. The FAA defines general aviation airports as public-

use airports that do not have scheduled service or have less than 2,500 annual passenger boardings. General aviation airports vary greatly in scope and complexity of operations, from single-runway airstrips with little infrastructure to larger airports supporting more operations than some primary commercial airports. Regardless of size, however, they all provide a vital lifeline to communities across the country, driving local economies and supporting essential services.

General Aviation Industry

Together, NATA's diverse member businesses form a critical portion of the general aviation industry, which supports 1.2 million jobs; provides over $247 billion in economic output in the United States alone; and contributes to the nation's competitiveness, growth, and continued innovation. The title of today's hearing, "Securing the Future of General Aviation," is particularly apt for the current state of our vital industry, as record-high activity levels coupled with rapid innovation in aircraft design, safety systems, and alternative fuel sources signal an ever evolving, ever growing, and ever relevant general aviation sector.

The task before this Subcommittee—to craft legislation updating and modernizing the Federal Aviation Administration—comes at a critical juncture for both the Agency and the industry it regulates. U.S. aviation continues to set the gold standard for safety and efficiency, but evidence of FAA inefficiency and inconsistency is growing even as the aviation industry experiences unprecedented growth and innovation, with the next generation of aircraft and fuels around the corner.

FAA Certification and Oversight

I want to begin by expressing NATA's appreciation of the existing FAA workforce. Tasked with maintaining the gold standard of aviation safety for the world's most complex airspace system, the Agency presides over almost every facet of the general aviation industry. NATA finds FAA leaders at all levels within the organization to be competent, committed, and collaborative, yet the Agency's understaffed workforce is shackled by antiquated methods and lack of permanent leadership in key positions. The resulting backlogs of critical FAA certification, rulemaking, and oversight functions is evidence that the Agency struggles to meet current industry needs, much less prepare for the growth emerging technologies will bring in the coming years.

I expect all of the members of today's distinguished panel will testify to ways that their respective memberships have been impacted by FAA's inefficient processing of its basic functions for the general aviation industry; I will focus on its effect on NATA's part 135 on-demand charter members.

Part 135 Certification Process

Prospective entrants to the on-demand air charter industry must complete a five-phase certification process, beginning with a pre-application stage that utilizes the Certification Service Oversight Process (CSOP) to determine FAA resources for initial certification and continued oversight of the prospective operator. Applications are either assigned to a certification team or placed on a waiting list.

Currently, that CSOP queue contains approximately 680 new certificate applications—a number that has tripled over just the past twelve months. Even without this current backlog, completion of the four remaining phases can take an applicant up to two years, deterring new industry entrants and increasing the risk of dangerous, illegal charter activity.

This process, based on an outdated, inefficient principles lacking in transparency, results in an unnecessarily costly and lengthy experience for applicants seeking legal entrance to the regulated on-demand charter industry. Inconsistencies among Flight Standard District Offices (FSDOs) and the current allocation procedures for the regional FAA workforce further exacerbate the problem. We are concerned that with the rapid pace of Advanced Air Mobility (AAM) development, the demands for 135 certification and oversight will only continue to grow. To ensure U.S. global leadership in this emerging sector while maintaining the economic viability of the air charter sector, FAA must modernize its processes.

To facilitate, NATA asks Congress to mandate a collaborative FAA/industry working group to study methods for modernizing the part 135 certification process and to recommend long-term solutions for effective management of FAA resources. This working group should consider technological advancements to enhance efficiency, certification process benchmarks and timelines for both FAA and applicants, centralized management of FAA inspectors, and use of designee authority.

In the meantime, the FAA should provide immediate transparency to Congress and industry on the current certification backlog, allocation of FAA resources, and expected time to process all pending applicants. NATA believes an online certifi-

cation dashboard would provide this increased transparency and could be easily implemented. In addition to making public the total number of applicants in the CSOP queue, de-identified data for each applicant should include certification category, start and completion date for each certification stage, and FAA resources assigned.

Part 135 Check Pilot Functions

Once certified, regulations require all part 135 on-demand carriers to have sufficient qualified instructors and check pilots approved by the FAA to meet the training and checking needs of the carrier's pilots.[1] For operators with sufficient staff to perform checks themselves in accordance with existing regulatory requirements, the FAA has issued guidance to inspectors and operators to encourage the approval of more carrier check pilots. Only when the carrier lacks adequate resources should the FAA be required to provide these checks. Despite this, significant gaps persist in ensuring timely checks for air charter pilots, in particular completion of the pilot line check required by § 135.299.

One challenge is that the FAA imposes higher qualification requirements for a carrier's check pilots than it does for FAA inspectors conducting the same checks.[2] If the FAA standards, which presumably provide an acceptable level of safety, were applied to industry check pilots, many more carriers could provide their own line checks as the regulations intend. This would free up FAA workforce to attend to other duties and to assist smaller operators. Yet there also seems to be a persistent reluctance of local inspectors to approve qualified carrier personnel as check pilots—even when those carrier pilots meet the more stringent standards for industry check pilots.

In 2020, NATA petitioned the FAA to revise applicable regulations to align qualifications for carrier check pilots more closely with the qualifications required for FAA personnel providing checks.[3] The FAA has not acted upon that petition.

Dependency on the FAA for pilot checking tasks causes undue delays for operators waiting for an available inspector, diverts Agency resources away from other safety oversight tasks, and increases FAA costs as inspectors travel to the carrier to perform the check. The smallest of carriers, who by size are necessarily dependent upon FAA for checks, are subject to further unreasonable delays while the FAA workforce provides checks for larger carriers that are otherwise able and willing to supply their own check pilots.

NATA believes a Congressional directive could alleviate this problem by requiring FAA to engage with stakeholders, evaluate why check pilot approval continues to lag, and determine further actions to increase the number of carrier check pilots. This engagement could be a separate working group, an additional tasking for an existing rulemaking committee, or another appropriate assembly assigned to report recommendations back to the Agency.

The FAA should specifically review why it has different qualification standards for FAA inspectors than for carrier check pilots. In addition, it should consider information in the NATA petition for rulemaking as well as the recommendations provided by prior rulemaking committees such as the Part 135/125 Aviation Rulemaking Committee (ARC), the Flight Crew Member Training Hours Requirement Review ARC, and the Air Carrier Training ARC.

Part 135 Aircraft Conformity

In addition to backlogs related to certification and check pilot functions, NATA members also report difficulties and delays in adding new aircraft to existing certificates due to varied workloads at local FSDOs and inconsistent interpretations of FAA regulations and directives by Principal Inspectors. This problem will only become more acute when the current CSOP backlog of approximately 680 pending new carrier certifications breaks and the expected flood of new entrants from emerging technologies, such as electric vertical take-off and landing vehicles (eVTOL) and unmanned aerial vehicles (UAV), become operational. The FAA must adjust its policy to provide timely oversight on an ever-expanding and increasingly complex industry.

First, FAA regulations do not require aircraft configuration evaluation to be carried out by the Agency. These functions can—and should—be carried out in partnership between certified entities and local FSDOs in a manner that is efficient, timely, and consistent throughout the country. Policies can be adopted to enable carriers or third-party evaluators to certify the conformity of an aircraft being added to a

[1] *See* 14 CFR § 135.323 (a)(4)

[2] Carrier check pilots are individually authorized by local FAA inspectors and meet requirements of §§ 135.337 & 135.339. FAA Order 8900.1, Volume 1, Chapter 3, Section 6, Figure 1–2, Item 12, Operations Inspector Qualifications and Currency Requirements Matrix, provides FAA inspector qualifications.

[3] *See* https://www.regulations.gov/document/FAA-2020-0556-0001

certificate—a process that will relieve the Agency of quality assurance checks and refocus the FAA workforce on its legally mandated oversight duties.

In addition, aircraft often move from one part 135 carrier to another at the aircraft owner's discretion. Even if the aircraft has continuously been on a part 135 carrier's certificate and subject to Agency oversight, this process currently requires a full conformity review, resulting in unnecessary delays prior to the aircraft being used in service by the new carrier. An NATA member recently spent ten months attempting to add a new aircraft to its certificate—ten months that the aircraft was grounded for no reason other than regulatory red tape. Establishing policy honoring the previously accepted aircraft configuration evaluation would eliminate needlessly repetitive functions and, once again, free inspectors to perform necessary safety oversight. Best of all, NATA believe this policy change would not necessitate rulemaking.

GENERAL AVIATION AIRPORTS

NATA's member businesses operate at nearly 4,500 airports that support vital economic activity and connectivity in thousands of communities, many of which are not served by commercial aviation. In addition, our association represents nearly 300 general aviation airports, including more than 100 airport-sponsored FBOs. Although these general aviation airports vary in their complexity and frequency of flight operations, together with associated aviation businesses they support law enforcement and emergency services; non-emergency medical and organ transport; executive, recreational, and cargo transport; vocational and aeronautical schools; powerline and pipeline patrol; and agricultural and conservation efforts.

In addition, general aviation airports will be the first to implement Advanced Air Mobility (AAM) operations in both urban and rural areas, making it even more critical that Reauthorization legislation prioritizes the ongoing maintenance and urgent modernization of GA airport infrastructure. Our nation's general aviation airports require both federal investment and increased public/private partnership opportunities to meet current demands, create more high-skilled and high-paying jobs, and advance innovative aviation technology.

Airport Improvement Program Funding

Currently, the general aviation airport annual entitlement under the Airport Improvement Program (AIP) is $150,000—a figure that has remained stagnant for decades despite increased activity, rapid industry innovation, and inevitable inflation. Although the federal cost share of qualifying projects for non-primary entitlements is set at 90–95 percent and qualifying airports may stack AIP grands for four years, rising inflation and the soaring cost of construction make these funds insufficient for many urgent airport improvement projects. Furthermore, the non-primary entitlement fails to account for the diversity in size and needs of general aviation airport operations.

Much in our industry has changed since Congress set the $150,000 basic AIP entitlement more than twenty years ago. It is time for this Congress to take action to not only account for inflation but also for the changing needs of general aviation airports by adjusting the basic entitlement for all GA airports and by introducing a formula to further increase grants for larger GA airports based on flight activity. In addition, Congressional action to increase the federal cost share to 100 percent and extend entitlement grant expiration to four years would allow airports to amass more funding for eligible projects and assist the smallest GA airports that struggle to come up with matching funds.

PFAS at General Aviation Airports

Another challenge facing airports across the country is the presence of "forever chemicals." FAA regulations have long required part 139 certified airports to provide aircraft rescue and firefighting (ARFF) services utilizing aqueous film forming foam (AFFF) that contains per-and polyfluoroalkyl substances (PFAS) chemicals, even as the Environmental Protection Agency has taken steps to designate such substances as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Historically, many non-part 139 general aviation airports have voluntarily adopted FAA policies regarding AFFF, looking toward the Agency's regulations as safety best practices.

Furthermore, until last year, the National Fire Protection Association (NFPA) 409: *Standard on Aircraft Hangars*—the primary standard for hangar fire protection that is referenced by the international building code; the international fire code; and state and local statutes, ordinances, and regulations—required most modern general aviation hangars to maintain automatic foam fire suppression systems, many of which utilized fire-fighting foams containing PFAS chemicals. The presence of these

foam systems on airport property represents a risk to all stakeholders—airport sponsors and aviation businesses alike.

NATA's work in this area includes educating local authorities on alternative fire suppression methods and advocating for building requirements that accurately reflect the low risk of fuel fires in aircraft hangars, the propensity for costly accidental discharges of foam fire suppression systems, and the harmful environmental impact of such occurrences. Because of NATA's efforts, the latest edition of NFPA 409 incorporated some of the Association's proposed changes, providing aviation businesses with more tools to protect against fire without the use of foam systems.

But these efforts are not enough. NATA needs Congress to partner with airports and aviation businesses by requiring federal guidance on a transition away from fluorinated foams as well as protection from potential litigation.

Congress should provide exemption from PFAS-related litigation—including CERCLA liability—for all federally obligated airports that maintained AARF services, as well as for airport sponsors, owners of aircraft hangars, and landlords and lessees at public-use airports that were required to install and maintain foam fire suppression systems by authorities having jurisdiction.

In addition, Congress should direct FAA to provide guidance on PFAS removal, remediation, and disposal for airports and associated aviation businesses located on airport properties, as well as establish a short-term grant program available to both airport sponsors and private businesses located on airport properties to assist in PFAS removal, remediation, and disposal.

Aviation Industry Sustainability and Innovation

Alternative Fuels

NATA is an active supporter of efforts to accelerate production and adoption of sustainable aviation fuel (SAF) as well as development of a commercially viable, fleet authorization, unleaded alternative to 100LL. NATA commends the Congressional creation of SAF-specific tax incentives in 2022 and believes such credits should serve as a model to similarly incentivize production of a fleet-authorized unleaded aviation fuel.

As a stakeholder in the Eliminate Aviation Gasoline Lead Emissions (EAGLE) initiative, NATA is committed to laying out a clear plan to transition piston-engine aircraft to lead-free aviation fuels by the end of 2030—or sooner if possible—without compromising the existing U.S. transportation infrastructure system, aviation safety, or the economic and broader public benefits of general aviation. NATA supports funding to accelerate required testing and regulatory approval for the implementation of an unleaded avgas, as well as investments in infrastructure to make alternative unleaded fuel more widely available while we await an unleaded fuel that meets the needs of the entire piston-aircraft fleet. The association opposes any efforts to ban 100LL before a safe, fleet authorization alternative is widely available and strongly supports fuel production tax incentives once that alternative is approved.

NATA understands that we must take creative steps now to minimize the use of leaded fuel in affected communities. To facilitate the use of current unleaded fuels, which can service a portion of the piston-aircraft fleet, the Association has published a white paper educating fuel service providers on best practices for deploying multiple fuels at airports. In addition, NATA has updated its Safety 1st General Aviation Misfueling Prevention Program—a free, online training resource for pilots, line service professionals, and other aircraft refueling stakeholders—to address the risks associated with the introduction of an additional grade of fuel.

To increase the commercial availability of current alternative unleaded fuels, however, production must also increase. NATA strongly believes that short-term tax credits for refiners, blenders, and distributors of approved unleaded fuels would incentivize increased production and accelerated deployment to airports. The introduction of a second grade of fuel requires investments to expand existing fuel infrastructure. In addition to AIP funding, NATA believes the development of a short-term grant program available to both public and private entities could be used to support unleaded fuel infrastructure for airports and FBOs, incentivize flight school adoption of alternative fuels, and subsidize supplemental type certificate (STCs) or other end-user costs that could affect fuel adoption.

Lastly, Congress should also ensure a safe transition by requiring unleaded fuel alignment with engine and airframe original equipment manufacturers (OEMs) and American Society for Testing and Materials (ASTM) standards beyond any minimum standard determined by an STC. Such requirements best assure a universally acceptable standard for refinement and blending of products that can be consistently delivered to airports, FBOs, and aircraft operators.

Advanced Air Mobility

Also critical to the future of general aviation is Advanced Air Mobility (AAM), which holds enormous promise to reduce aircraft emissions and noise impacts, to speed up cargo and medical transport in rural areas, and to facilitate multi-modal urban mobility. However, we must swiftly prepare for its adoption in the existing aviation ecosystem if we hope to fully harness AAM's potential to reduce the aviation industry's environmental impact and maintain U.S. global aviation leadership.

NATA applauds Congressional passage of the Advanced Aviation Infrastructure Modernization (AAIM) Act and the Advanced Air Mobility Coordination and Leadership Act, and we thank the members of this Subcommittee, including Subcommittee Chair Graves and Ranking Member Larsen, for their leadership on those critical pieces of legislation in the last Congress. Now we ask Congress to take further action to ensure FAA development of a sound regulatory framework for AAM operations, as well as guidance for and investment in the physical infrastructure necessary to support them.

We see a natural nexus between existing part 135 on-demand carrier operations, existing general aviation airports, existing FBO infrastructure, and emerging AAM innovation. First, NATA believes both urban and rural general aviation airports offer logical spaces to introduce eVTOL aircraft and other AAM technologies. Second, NATA members from all sectors are preparing to support, maintain, fuel, and operate this next generation of aircraft, but many are seeking guidance on the necessary infrastructure and operational guidelines to do so safely and successfully.

In 2022, NATA formed its Advanced Air Mobility Committee to ensure a unified approach to modernization of both our infrastructure and operational framework. We believe communication, collaboration, and cooperation between government partners all aviation sectors stakeholders will be key to creating a healthy and vibrant AAM ecosystem. To that end, NATA hosted a town hall in January to foster connections between the AAM community, federal regulators, and leaders from NATA's other policy committees. The discussions on operations, ground infrastructure, safety, maintenance, security, and ground handling training will inform NATA's legislative and regulatory advocacy as we partner with Congress and the FAA to move this technology forward and help stakeholders prepare for its adoption.

AVIATION FUNDING STABILITY

Risks of Government Shutdown

As an operational Agency with a critical safety mission, the FAA must be protected from risks associated with budget battles and potential government shutdowns. The longest government shutdown in U.S. history (2018–2019) drew national attention to the dire consequences such shutdowns pose to the safety and security of the NAS, the effectiveness of the FAA, and the economic growth of the aviation industry. For 35 days, essential government employees such as air traffic controllers and TSA agents were required to work without pay, while nearly 18,000 FAA employees involved in a range of activities—from certification and safety inspections to NextGen deployment—were furloughed.

Legislation introduced in both the 116th and 117th Congresses authorizing the FAA to draw from the Airport and Airway Trust Fund in the event of a government shutdown enjoyed broad aviation industry support. NATA asks this Congress to take final action on this issue in FAA Reauthorization legislation to ensure that FAA's critical operations continue without interruption in the event of a government shutdown. Allowing the FAA to draw from the Airport and Airways Trust Fund would avoid the furlough of essential workers and maintain the Agency's vital safety and operational functions.

Fuel Fraud Diversion

To further maintain the stability of the Airport and Airway Trust Fund, NATA urges Congress to end the diversion of non-commercial jet fuel tax revenues. The Fixing America's Surface Transportation (FAST) Act (PL 114–94) directed the Government Accountability Office (GAO) to study the impacts of a 2005 highway bill provision that increased the tax rate on non-commercial jet fuel to 24.4 cpg. GAO's 2016 report[4] found that the change in tax law has the unintended effect of diverting these non-commercial jet fuel tax revenues from the Airport and Airway Trust Fund to the Highway Trust Fund. Specifically, the GAO report concludes the diversion results in an annual loss to the Airport and Airway Trust Fund of between $100 million and $200 million—one to two billion dollars over a decade. The report also cast doubt on the rationale behind the 2005 change in tax law and the provision's utility

[4] *See* https://www.gao.gov/products/gao-16-746r

going forward. NATA believes the GAO report serves as sufficient justification for repealing the 2005 provision or requiring a transfer of the appropriate tax funds to the Airport and Airway Trust Fund.

AVIATION INDUSTRY WORKFORCE

One of the greatest threats to our current and future general aviation industry is the workforce shortage that continues to plague NATA's member businesses at all organizational levels and across all industry segments. Of ongoing concern is the gap between the supply and demand for skilled aviation professionals such as aircraft pilots and A&P mechanics, which Congress recognized by the creation of the section 625 workforce grants in the 2018 FAA Reauthorization. Designed to bolster the pilot and mechanic workforce, these grants have enormous potential to affect change but are inadequately funded to meet even a fraction of the demand.

NATA thanks Transportation and Infrastructure Committee Ranking Member Larsen for his introduction of the Aviation WORKS Act to reauthorize the section 625 grants, extend them to other aviation sectors, and increase funding levels to $20 million annually. We ask this Subcommittee to include similar provisions in this year's Reauthorization; we also encourage Congress to allocate sufficient funding and resources for FAA to administer the grants more efficiently and effectively.

Congress should also consider the expansion of existing federal programs that can alleviate barriers to entry for aspiring pilots and aircraft mechanics, such as eligibility for federal student loans. Establishment of a National Center for the Advancement of Aviation will also help recruit the next generation of aviation workforce by raising awareness of aviation career opportunities and facilitating collaboration between all industry sectors. Legislation to create such a center passed the House of Representative by a wide, bipartisan majority in 2022; we encourage its inclusion in Reauthorization legislation.

Lastly, we ask the Subcommittee to carefully examine the recommendations made by the Women in Aviation Advisory Board and the Youth in Aviation Taskforce created by the 2018 FAA Reauthorization. Collectively, these provisions will help our industry develop and recruit the diverse, resilient workforce needed to advance the general aviation industry.

NATA appreciates the dedication of the Transportation and Infrastructure Committee and the Aviation Subcommittee toward an on-time reauthorization of the Federal Aviation Administration, as well as your commitment to meaningful engagement with general aviation stakeholders throughout the process. We look forward to continued collaboration on these and other solutions to the challenges facing our industry and the FAA. Together, we will secure a sustainable, safe, and successful future for our nation's general aviation industry and the countless communities it serves.

Mr. YAKYM. Thank you to our witnesses for taking time to come here today and provide testimony.

I now yield 5 minutes to myself for questions.

I know many different people have different entry points into the aviation world, whether it is a career or even just a hobby. And I want to share a little bit of my own story before I begin.

As an 8-year-old child, I was over at my Uncle Chuck's house and looked on the floor in the corner, and I noticed an F–16 sitting on the floor. It was a model F–16 that was a remote-controlled airplane. And I began asking questions. And from a little 8-year-old child, it spawned a lifelong fascination with aviation. I went on after that to fly anything you can fly with a remote control, everything from airplanes to seaplanes to helicopters, drones, I mean, you name it, and I fly it with a remote control. And as I sit here today, I am an FAA checkride and an FAA written exam away from having my own general aviation certificate.

But one of the things I am concerned about as I look at the next generation is the overall pipeline for the next generation of pilots and airplane mechanics. And I know there is a lot of focus on older students in aviation, but I would think 8-year-old Rudy would say that sometimes that interest is sparked at a much younger age.

And one of the things that my interest in model aviation taught me at a very early age is everything from physics to aerodynamics to control surfaces and flying, and just the overall fascination of how an airplane actually works. But the hobby, it didn't break the bank. And it seems to me that, even looking at the last FAA reauthorization bill, there were a lot of new regulations that were added to the hobby, and so, we may need to revisit that, and maybe even recalibrate that in the upcoming reauthorization.

I am not sure—maybe even perhaps you, Mr. Pelton, can speak to this—I know it is a little bit out of your lane. But even more broadly, I am curious to know, what are some of the efforts of your respective associations to reach even further down into the education system and reach even younger students today?

Mr. PELTON. Thank you for the question. And actually, it is in my lane. I am glad that I turned out to be a better pilot than my RC flying when I was a kid like you, because I crashed an awful lot of them.

But we have a program at EAA through our chapters, which we have collaborated with the AMA, the Academy of Model Aeronautics. It is called our Build and Fly Program. And we have RC models that are—we believe that part of our mission is getting kids to work with their hands in the learning of basic education, and they build an RC kit at the local EAA chapter, and then they collaborate with the AMA chapter in that area to actually go learn to fly that model, because we understand that the 8-year-old to the 15-year-old has to have a different type of learning experience for aviation, because you can't go out and take a written test, you can't start your flight training, or do any of that.

So, we are trying to fill that gap, where—Mark does such a great job, then, of taking the formal education piece in the post-secondary or in the high schools, and so, we collaborate, between the two of us, on that.

We do think that the modeling rules got wrapped up in the UAS craze of when hobby drones were so popular, and there was such a concern for the number of those being flown improperly and in incorrect areas that we did leave behind the fixed-wing RC airplanes that fly at designated model fields that are already out there and identified and confined to basically 400 feet around that airfield. And we should go back and re-address that, because it has really put a damper on the RC flying for young kids.

Mr. YAKYM. Thank you. And now I would like to yield 5 minutes to Mr. Cohen, the Aviation Subcommittee ranking member.

Mr. COHEN. Thank you, Mr. Chair. That was an interesting story about your having that experience when you were 8 years old. I understand President Zelenskyy had one, too.

Mr. Baker, in your testimony you mentioned that the general aviation industry is on track to exceed the safety goals established by the General Aviation Joint Safety Committee, which would result in another 10 percent reduction in fatal accidents over 10 years. In your opinion, which factors and policies contributed most to this decline, and how can we continue to decrease general aviation accidents?

Mr. BAKER. The question—I appreciate it—is about safety and how do we keep on track with the technologies that we continue

to move through and get approved to be used in general aviation aircraft.

For instance, ADS–B, which gives you traffic inside your aircraft, certainly it helps in terms of awareness, whether that comes into your cockpit today on your iPad or whatever device you are using. So, I think a big part of reduction of accidents is the situational awareness that you have today in your cockpit. And that is provided by the FAA for free. So, that has been a big, huge reduction in the accident rate.

We still have more to go. We all agree with that. But to see that we have got flight-hours up to 26 million flight-hours from 20 million flight-hours just 4 years ago, and have fatal accident rates way down, we see it as a huge improvement.

Mr. COHEN. I had a constituent who was a friend and a great member of our community in Memphis who died in a plane accident maybe 6 months, 1 year ago. And he was in one of those planes that had a parachute that could come out and help it come down. He was pretty independent, ornery, and refused to do it. He said, "I am landing this plane." Well, he didn't make it.

How are those parachutes coming? They can only be on very small planes. Are there any efforts to get them on a little bit larger planes and to use that as a capacity?

Mr. BAKER. Primarily used by the Cirrus company, the Cirrus Aircraft company out of Duluth, Minnesota, they use it on piston airplanes. They also have it on their small jet today. So, they are the only company that actually builds it into the aircraft today as part of a production model. There are some aftermarket models available, as well. But the Cirrus group has proven hundreds of lives have been saved by using the term "just pull." And it is hard to ingrain that in a lot of pilots, because we think we can figure it out.

Mr. COHEN. Yes.

Mr. BAKER. But at the end of the day, just pull.

Mr. COHEN. Thank you, sir.

Mr. [pause] Castagna?

Mr. CASTAGNA Castagna.

Mr. COHEN. Castagna. Thank you, I guess. In your opinion, what investments in safety equipment, either at airports or on aircraft, can be made by Congress to improve the safety record of general aviation?

Mr. CASTAGNA. Great question. I will use the State of Alaska——

Mr. COHEN [interrupting]. Your microphone is not on, I don't think.

Mr. CASTAGNA. Thank you, Congressman. If I may, I will use the State of Alaska as an example.

With more than 200 airports throughout that State, 80 percent of the communities are dependent on aviation for year-round access. Part 135 charter industries are critical to the life of Alaskans in that State, where we actually do medical service, deliver food, and, in fact, even take kids to school via aircraft. And the things that we can do in that area with the rugged terrain and the unpredictable weather are critical investments in weather cameras and weather stations that, while they are in place today, they need to be upgraded, and they need to be maintained.

Twenty years ago, we provided that system, and the agency announced there are eight new automated weather observation systems bringing continuous, real-time weather, which has a direct impact to safety of the operations of those flights. And while I use Alaska as just an example, those same automated weather systems and camera systems could be certainly used in the lower 48 States in more airports that would help enhance the safety of operations of general aviation activities.

Mr. COHEN. Thank you, sir.

Mr. Baker, you mentioned the AOPA's high school aviation STEM curriculum. Nearly half of your students are students of color. What steps can the committee take to continue to advance diversity in our aviation workforce?

And how can a proposed National Center for the Advancement of Aviation advance this goal?

Mr. BAKER. Something I am very proud of, and thank you for that question about the STEM program that AOPA provides free to any high school that wants it. All we are required to do is teach the teacher how to teach the class. We made this product free for the 9th through the 12th grade, because I wanted to make sure we could be in any school in the country. We do home schools in Alaska. We do inner city schools all over the country. About half the students are people of color that are taking this, and over 25 percent are young women are taking this class.

And it is a very hard and difficult class. In STEM education, you have to pay attention. And to have over 50,000 young people that have touched this class already, the opportunity of putting the NCAA together is to broaden the reach of every State. There are 43 today, but we have States like Oklahoma that have 70 high schools that are teaching this today. We have 16,000 students right now, sitting in classrooms around the country, learning about aviation education and then career opportunities that have never been better.

Mr. COHEN. Do you, by chance, know if they have that in Memphis?

Mr. BAKER. Sorry?

Mr. COHEN. Do they have that program in Memphis schools?

Mr. BAKER. Yes, they do.

Mr. COHEN. Excellent. FedEx can use those pilots.

Thank you, sir. I yield back.

Mr. YAKYM. Thank you, Mr. Cohen. I now yield 5 minutes to my colleague, Mr. Collins.

Mr. COLLINS. Thank you, Mr. Chairman.

Mr. Baker, what can we do to—and I am asking the question because I heard it twice in a row there, and I am a student pilot, so, I am not to my checkride yet. DPEs, what do we do to get more people into that?

Mr. BAKER. Into aviation?

Mr. COLLINS. Yes, sir.

Mr. BAKER. So, I think this high school program is a way—and Mr. Pelton and the team at EAA, in terms of giving rides, and bringing people to the airport, and having great events at the airport, and exposing young people to the idea that they have careers, whether they be military, airline, or flying for general aviation. The

opportunities have never been better, and so, that is why I am excited about what our high school program does. And working together with some of these EAA chapters around the country, getting kids out to the airport and seeing that they can be part of this great community, that is part of the exposure.

I think we have more opportunity. We are doing really well. This year, you are going to see a record number of pilot's licenses being granted.

Mr. COLLINS. OK. Did you want to add something to that, Mr. Pelton?

Mr. PELTON. You brought up DPE also?

Mr. COLLINS. No, sir.

Mr. PELTON. OK. Well, I—Mark covered it very well.

Mr. COLLINS. OK. All right. Mr. Baker, I want to venture over to some cybersecurity. NOTAM. It seems like the FAA had more focus on changing the name of that acronym, writing a 176-page rule, spending thousands and thousands of dollars to do that. Notice to Airmen was changed to Notice to Air Missions. I asked if it was a safety change, which—no answer was given. That is a 30-year-old software program. They could have spent time improving that, which they didn't. They spent time changing the name, because their focus was more on being woke than they are on safety.

On Tuesday, the TSA released emergency updates for aviation cybersecurity requirements for aircraft operators and airports. Do you think the FAA is being proactive to invest, direct, and implement cybersecurity requirements for aircraft?

Is the FAA doing enough to keep the pilots, crew, and passengers safe from potential cyber attack?

Mr. BAKER. So, from the perspective of the cyber attack, I was surprised, I think, as everybody else in aviation, that there was a single point of failure around the NOTAM system, which has been around for a long period of time. Very frustrating.

We know some of the systems that we use for aircraft registration and medical certificates are months and months and months behind. So, the FAA needs to focus on all of these systems that they are employing today to make sure that they are up to date.

Mr. COLLINS. I would open it up to anybody else.

Mr. PELTON. I think the concern we all should have is anybody that is running a business today knows what the threats are and what we are spending on an ongoing basis to prevent cyber attacks. And I think we ought to probably have the FAA go benchmark what are these large companies that have been held hostage by ransomware and other cyber attacks like that, to see what kind of plans they put in place. Because it is not only the protection, but it is also the ability to recover and stand your systems back up.

Mr. COLLINS. On February 7th, Representative Rouzer asked Acting Administrator Boulter that same question, basically. And it was a pretty insufficient response.

So, I think I will just ask it again to everybody: Do you think the FAA has an actual plan to cyber secure the aircraft that we all depend on to get to our jobs and see our loved ones? Or is the FAA falling behind on their responsibilities to keep Americans safe?

Mr. PELTON. I certainly don't have any insight as to what they are doing.

Mr. COLLINS. OK.

Mr. PELTON. That wouldn't be in my swim lane.

Mr. CASTAGNA. Congressman, I would say that the technology advancement in aircraft today that require Wi-Fi and other connectivity in the technology at our aviation businesses, there is a huge demand for creating more bandwidth. And with that bandwidth comes more risk for cybersecurity and attacks, where a lot of these software programs in the aircraft are dependent on that access at airports to upgrade their software systems. And so, I am not sure there is a plan that is in place today to accommodate that, but there is certainly a need for it.

Mr. CRIDER. I would echo that, too, that there is a focus on cybersecurity from the airport operators, because there is so much connection between airline information, user information, FAA information that all comes together, that platform. So, very much a focus of the airport industry and close collaboration with the FAA and CERCLA, as well.

Mr. COLLINS. Thank you. From what I have been hearing, people I have been talking to, it seems like there is a big disconnect between the mid-level management and the executive branch of the FAA.

Thank you, Mr. Chairman. I yield back.

Mr. YAKYM. Thank you, Mr. Collins.

I now recognize Mr. Larsen, ranking member of the full committee, for 5 minutes.

Mr. LARSEN OF WASHINGTON. Thank you, Mr. Chair.

First off, I want to make a note that I am very happy that FAA has changed the name of NOTAMs to Notice to Air Missions. It is inclusive, and we need to send a message to everybody to attract as many people into aviation as possible. And the problem with NOTAMs isn't the name change, the problem with NOTAMs is a lack of technology investment, which we have an opportunity to work together on to resolve. And we can stay focused on working together to resolve this problem as part of the FAA reauthorization. I am looking forward to doing that in a bipartisan manner.

Mr. Castagna, with the first unleaded fuel finally certified last year, the FAA's new goal for completely transitioning the GA fleet is 2030. Is that timeline still realistic?

Mr. CASTAGNA. The process for the transition to unleaded fuel, as we know, is a complex process. We believe that there is a pathway forward to do that, and potentially the means to do that in advance of 2030.

I would say that there is a commercially viable unleaded fuel product that is out in the market today. While we know that it only serves 70 percent of the fleet, we know that those airports that are critically sensitive to environmental impacts—and if they do an inventory of their own piston fleet, in some cases, airports—their base piston aircraft could exceed that 70 percent.

So, our position is really to encourage airports to work together with FBOs and the user community to find ways to bring the commercially available product to the marketplace today, especially in those environmentally sensitive communities that are impacted, in advance of 2030, and ask Congress to put the resources necessary

into—whether it is tax credits or incentives—for the refinement and blending of that fuel to get it out into the marketplace sooner.

Mr. LARSEN OF WASHINGTON. Yes, thanks.

Mr. Baker, can you answer that same question?

Mr. BAKER. So, yes. I believe that we have one fuel that has an STC today that was approved in September of last year. I believe there is an attempt to start rolling that out, airport by airport, in a controlled environment, hopefully in the next several months. I believe that that is our first opportunity. There is another STC applicant right behind that, and the pathing process is still in process.

But I have more confidence today than I did a year ago, when we started the EAGLE, that we have got the whole industry working together to solve this problem as quickly as possible, but as safely as possible, because we cannot just transfer this to 94 octane and hope that the other airplanes find that fuel somewhere else. We have to keep low lead available while we have this process going on.

Mr. LARSEN OF WASHINGTON. Yes, and I appreciate that. The transition has to still result in aviation safety. That has to be the priority of the committee as we move forward. But if there are ways—because frustrated communities, angry communities because of leaded fuel—finding a way to move that timeline safely is going to be important. And I hope we put some focus on that, and not resist that as we move forward on FAA reauthorization.

I was going to ask—oh, yes. Mr. Crider, on the funding side of things through the BIL, are you satisfied—or maybe that is the wrong question, since you represent a lot of airports. If you had to pick your friends, which one would you have—no.

[Laughter.]

Mr. LARSEN OF WASHINGTON. The distribution of the dollars from the BIL for airports, from either a percentage or from an absolute numbers perspective, is GA getting its fair share—airports, smaller airports, nonprimary airports—getting this fair share? How would you assess that?

Mr. CRIDER. Well, I can speak to my own example at Kelly Field. That was a huge shot in the arm. We are putting that money to work for design of a consolidated facility which supports fixed-based operations, Federal inspection station, advanced air mobility, all those good things.

But I think, at the end of the day, we are looking at the formula, how GA airports are funded. The entitlement portion is really critical. And that is part of the testimony that many of us have touched on.

I represent a large industrial commercial—a lot of commercial activity. So, we have everything from the very largest design Group VI aircrafts, like 747–8s, all the way down to a Cessna 172. So, that $150,000 is really a drop in the bucket, frankly, on projects that respond to that scale. So, I think it is a mixed bag.

But certainly BIL was a great shot in the arm, and hopefully this reauthorization can have more good to come.

Mr. LARSEN OF WASHINGTON. Yes, thanks.

Mr. Pelton, on the safety issue, the safety within GA and Arlington Municipal, where I grew up, a small town, has a pretty active

experimental aviation crowd. They are doing good things. We also in the past have had some serious accidents, as well. Can you chat a little bit, maybe specific to your part of the industry, on safety and what you do to try to decrease incidents and accidents?

Mr. PELTON. Yes, absolutely. Thank you for the question.

The experimental amateur-built started out back in the 1950s, with a pretty poor safety record. One was because they weren't necessarily well engineered and designed products. They were people on their own in their garage coming up with designs to go fly.

As this industry has evolved, it really is now down to major aircraft kit manufacturers who have extremely well designed, tested, and proven products that are holding up well with the safety record.

They are also including now, because of the ability to not have to put certified products in the airplane, it has the latest up-to-date safety enhancements in the cockpits that we are seeing. So, that is improving also. And last year, we made a significant change to the flight testing program for anybody that does build a new airplane that really helps add a second pilot in the airplane that has experience in that make and model to ensure it is tested appropriately and properly.

So, we are seeing very good progress. We track it monthly.

Mr. LARSEN OF WASHINGTON. That is great.

Mr. Chair, I want to apologize for 2 days in a row going a full 54 seconds over my time, and I will do better in the future with that. I will not yield back, since I have no time to yield back. Thank you.

Mr. YAKYM. The Chair will reserve his comments. I now yield 5 minutes to my friend, Mr. Stauber.

Mr. STAUBER. Mr. Chair, thank you very much, and thanks to the witnesses.

We talked about the NOTAM bill that passed out of the House with 424 votes, bipartisan. I would encourage us all to talk to our Senators to get it across the finish line, because we can get that task force up and running very, very quickly, which will increase safety in the skies.

I am very excited that we will have a general aviation title in this reauthorization bill. General aviation is the backbone of our aviation system. As someone who started working on their private pilot license later in life, I want to encourage more and more individuals to get involved with aviation at a younger age, and I want to make it more accessible. That is why I would like to focus my time on the National Center for the Advancement of Aviation, or, as it is commonly referred to, the NCAA bill.

As you know, the NCAA bill was introduced in the last Congress by Mr. Carson and my former colleague, the late Don Young from Alaska. While nobody can fill Congressman Young's shoes, I am announcing today that I will be joining Mr. Carson to reintroduce the bipartisan, bicameral NCAA bill. I firmly believe this center will help coordinate industry and Government aviation workforce efforts, inspire and train the next generation of aviators, and boost innovation in American flight.

Mr. Baker, thank you for being here. It is always good to have a fellow Minnesotan on the panel. I know AOPA has long been a

champion of the NCAA. It also has been intimately involved in workforce programs such as your high school STEM program, which is quite impressive. Could you please speak to your AOPA STEM program a bit more, and share how the NCAA will help expand the STEM program and grow it?

Mr. BAKER. Thank you for the question, fellow Minnesotan.

The STEM program was started about 6 years ago, and we built the ninth grade curriculum, which is about introduction of all things aviation. By the 10th grade program, they start to learn about airfoils, building wind tunnels out of a box, covered box, with a fan. These are very low-cost ways to get young people to understand lift and drag and all those things that go into the components, and hopefully inspire people to be an engineer, as well as a controller, as well as a pilot, or whatever, mechanic, that comes out of the opportunities. And we show them the lifetime earnings by the time they are in the 11th grade, about the money you can make today in an aviation career everywhere.

And what I am really proud to say is we now know, because we have been doing this for 5 years, the graduating class, 70 percent of these young people are going into some form of aviation career pattern. One-third of them are actually looking at the military as one of the possibilities, as well. We work with the Air Force and their recruiting staff to make sure that we are tying these young people—there are over 80 colleges today around the country that will give you college credits for taking these classes in high school.

Mr. STAUBER. Yes.

Mr. BAKER. So, it really saves this young person a lot of money for their freshman year, or their junior year college credit.

So, we are really proud of the program. Today, with 400 high schools, I think the opportunity is to get to 2,500 high schools, about 10 percent of all the high schools in this country, working with the NCAA, which is coordinating all the other things that go on in this aviation industry, because we all care about the same outcome: workforce.

Mr. STAUBER. The return on the investment, 70 percent go into the aviation sector. That is tremendous. That is what is called great success.

In closing I will say that the National Center for the Advancement of Aviation overwhelmingly passed the House last year. It has the support of the entire aviation industry, from general aviation, airlines, airports, unions, manufacturers, and many others.

Again, I appreciate working on this issue to honor the late Congressman Don Young. I know myself and Mr. Carson will work with our colleagues to see this included in the FAA reauthorization.

And, Mr. Chair, I yield back.

Mr. YAKYM. Thank you, Mr. Stauber. The Chair now recognizes Ms. Brownley for 5 minutes.

Ms. BROWNLEY. Thank you, Mr. Chairman.

Mr. Crider, first, thank you for mentioning the CONTRACT Act in your testimony. I appreciate it very much. I am very glad that we got it in the omnibus package at the end of last year.

You mentioned in your testimony that controller staffing still continues to be a challenge. So, can you talk a little bit about what

else you think Congress can do to help ensure that we have enough controllers at contract tower airports?

Mr. CRIDER. Certainly. Well, first of all, Representative Brownley, thank you for your leadership on that appropriations language. That was important. The CONTRACT Act was very impactful.

But I think, to answer your question, looking at the wage scales, we have seen a period of inflation. And so, the Contract Tower Program has fell prey to that. So, Department of Labor focus on the wage scales that contract tower contractors are able to pay, I think, is important.

And I think better coordination between the FAA Tower Programs and the Contract Tower Programs—we understand that there is a migration of folks, especially young people, that start at the contract tower and then move up to the FAA. A better coordination about how that workforce happens, so that we don't unintentionally impact contract hours at smaller airports, GA airports, small commercial service airports. I think those are two important improvements that could be addressed.

Ms. BROWNLEY. So, what would that look like in terms of FAA and contract and that transition?

Mr. CRIDER. The transition? Well, one of the things we hear from the contractors is a little more flexibility in how they do the training. So, speed to market, if you will, the ability to do some on-the-job training and training more regionally, as opposed to being constricted by the flow of students that can go through Oklahoma City or other traditional.

So, part of it is just a more aggressive and more innovative approaches to training, I think, will help that workforce pipeline.

Ms. BROWNLEY. Thank you for that. And from your perspective, what do airports need from Congress to be able to expand the availability of sustainable aviation fuels?

Mr. CRIDER. Well, I think airports stand ready to be part of that conversation. We are excited to be part of EAGLE. It is a great collaboration of associations from OEMs, from the fuel manufacturers. So, being a part of that, I think, is important.

It was mentioned before that we don't want to throw the baby out with the bath water. Airports stand ready to make sure the infrastructure is in place for this transition. But we don't want to be premature about making the change. In other words, be a part of the conversation, help with the solutions, but also be mindful that we don't want to impede the important activities that happen at GA airports, many of those with avgas-burning aircraft.

Ms. BROWNLEY. Great. Mr. Baker, do you have anything to add with regards to that?

Mr. BAKER. I think, if I understand the question correctly, how does Congress help us grow aviation with these general aviation airports. As I mentioned a bit ago, a real hot button for our users of these airports today is the requirement that all federally obligated airports provide a transient ramp space for aircraft so that they can park their airplanes there, regardless of make or model, whether they need or don't need an FBO service, a place to park at these airports.

And as well, I mentioned hangars. We are woefully short on hangars on these federally supported airports. They need to have those spaces there.

I think there is opportunity to get badging requirements, so that we can work together with the FBO so that, instead of having a different badge for each airport, we could work with the TSA so we can expedite in and out of the airports with security needs that they may have at those airports.

Those are some of the things that Congress could really help us with.

Ms. BROWNLEY. Thank you.

Mr. Castagna, do you have anything else to add on sustainable aviation fuel?

Mr. CASTAGNA. Thank you, Congresswoman, for passing the blender's tax credit. I think that supply cannot meet demand today with SAF, so, we must continue to incentivize the commercializing of that product.

We also must continue funding FAA's ASCENT program and the Department of Energy's BETO office to continue their excellent work on SAF feedstocks and technology. And SAF represents the best way for today's aircraft to really reduce the environmental carbon footprint. And so, the investments in these areas, we think, are critical.

Ms. BROWNLEY. What about incentives for production of SAF?

Mr. CASTAGNA. So, those same tax incentives and credits would be for production and refinement and blending and, ultimately, delivery to the airports.

Ms. BROWNLEY. Very good. Thank you, Mr. Chairman. I yield back.

Mr. YAKYM. Thank you, Ms. Brownley. The Chair now recognizes Mr. Perry for 5 minutes.

Mr. PERRY. I thank the chair.

Mr. Baker, your testimony raises AOPA's concerns about Santa Clara County's decision to ban 100 Low Lead aviation fuel. And I think I am going to quote you here by saying, " . . . required by thousands of general aviation aircraft to fly safely . . . " and that the decision to ban it is " . . . simply irresponsible."

Now, look, if you want to have a private airport and ban airplanes, that is your business. God bless you. But if we are going to be federally funding your airport, then we ought to have something to say about it. And I find it particularly offensive—not only unsafe and irresponsible, but offensive—that for some insane Green New Deal ideology, you are going to ban anything. If you are going to have a partially federally funded airport, you are going to provide the fuel necessary.

And I don't know if anybody is familiar with catastrophic engine failure in flight, but I can guarantee you, it is an unpleasant experience.

Mr. Baker, can you explain the impact on those maybe flying law enforcement missions, disaster relief, search and rescue, understanding that we all would like to fly something that uses Jet A, that is awesome, but we all can't afford Jet A. Can you explain the impact?

Mr. BAKER. Yes, it is a huge impact. Thank you for the question. We believe, working with the FAA and trying to enforce the idea that a federally obligated airport, you are required to carry the fuel that allows for the safe transportation of all aircraft, not just some of the aircraft. And we have already had one accident in Santa Clara today. We have had other misfuellings that have had to refuel or defuel the airplane.

This ecosystem that goes together with these 5,000 public-use airports is so important that they all provide the same level of safety and fuel for these aircraft. We all believe we can get to this transition by 2030, but we need to make sure that we don't have gaps in that system in the meantime. So, that is one of the things we are pushing really hard, to make sure that we have a supply of low-lead fuel until there is an alternative fuel in place that can support all aircraft, not just some.

Mr. PERRY. And the alternative needs to be affordable, right, not just some alternative that meets the specific requirement but that nobody can afford to use, again, to go after the insane Green New Deal ideology.

Could you provide the subcommittee with some details surrounding the accident in question regarding Santa Clara's ban of 100 Low Lead, and the misfuelling that took place?

Mr. BAKER. As I understand it, a high-horsepower, approximately 300-horsepower engine, got to the airport, needed fuel to get on to the next airport, put on some fuel. And I don't know exactly what happened to the detonation of that engine, but the engine came apart shortly after takeoff.

Mr. PERRY. And what resulted at that point?

Mr. BAKER. Fortunately, there were no fatalities. But certainly any time you have an aircraft coming out of the space in an urban area, there is high risk.

Mr. PERRY. Yes, high risk. And I will tell you the pucker factor, if you are sitting in the seat or anywhere in the aircraft—and that is what we call it when we are in the seat, the pucker factor—like, you can't pull a fishing line out of your rear end with a tractor, all right? And that is not a position to put pilots in for, again, insane Green New Deal, woke ideology.

In the past few committee hearings, I have raised the issue and, unfortunately, these concerns that I have had have become reality.

The upcoming FAA reauthorization bill is something that we are looking forward to. And in your opinion—I know mine, but I want to hear yours, because you are representing folks that don't get to sit in these seats—what should Congress do to ensure these things don't happen?

Mr. BAKER. I think there are two things that Congress can do. One is to make sure that we don't lose availability of 100 Low Lead until there is a suitable, affordable replacement.

The second thing we could do is to try and work with some of these STC holders to try to go faster and get the fuel in these markets faster, so, we get some learnings done and some demonstrations done. I think there should be some money allocated to these STC holders to try and get that fuel in the market faster.

But in the meantime, we cannot allow slippage in any part of this ecosystem that doesn't keep 100 Low Lead available.

Mr. PERRY. So, should there be a penalty of sorts for airports federally funded that decide to ban it?

Mr. BAKER. That is correct.

Mr. PERRY. You would agree there should be?

Mr. BAKER. I agree.

Mr. PERRY. All right.

Thank you, Mr. Chairman. I yield the balance.

Mr. YAKYM. Thank you, Mr. Perry. The Chair now recognizes Mr. Stanton for 5 minutes.

Mr. STANTON. Thank you very much, Mr. Chairman, for holding this hearing today. Thank you to each of our witnesses for being here today.

General aviation is a key part of Arizona's aviation economy, supporting nearly 19,000 jobs and contributing $3.3 billion in economic activity just in 2019. And in Arizona, we have 3 of the top 10 busiest general aviation airports in the country. So, ensuring continued support for and growth of general aviation must be a top priority for FAA reauthorization.

Today, I want to focus on the Contract Tower Program, which is one of the FAA's most successful Government-industry partnerships and serves the general aviation community. In Arizona, we have seven contract towers, including Phoenix-Mesa Gateway, the busiest contract tower in the country, in terms of traffic.

This important air traffic safety program maintains and develops general aviation activity and supports DoD flight training operations and military readiness, as well as the pilot flight schools all across the country. And it is also important to note that contract towers account for approximately one-third of all tower operations in the Nation, and about 70 percent of contract controllers are veterans.

Mr. Crider, what benefits does the Contract Tower Program provide to the National Airspace System, especially for the general aviation community?

Mr. CRIDER. Well, I think it is a tremendous success story. It has been proven many times that the safety record is on par with the FAA towers. It really serves as an entry point for airports that have reached that point of operations where they need a tower. So, it is a great entry point for ATC activities.

We talked before about some of the workforce issues, but I think a renewed focus on reconstruction, rebuilding, refurbishing the towers that are in place, the workforce itself, as we talked about, but also the real-time equipment that the controllers need to integrate into our National Airspace System, make sure they have the situational awareness and the equipment that facilitates that safe transition.

Mr. STANTON. And you mentioned workforce. I know my colleague, Congresswoman Brownley, had a question about workforce earlier. Staffing shortages continue to be a major challenge throughout the industry, including the Phoenix-Mesa Gateway Airport.

We recently opened a brandnew $30 million air traffic control tower at Phoenix-Mesa Gateway, but staffing shortages have reduced operations at the tower by 4 hours each day because contract employees have, unfortunately, left, often with only a few weeks'

notice, to go work for the FAA instead. These positions cannot easily be filled, as it often takes 6 months to train a new controller. And that leaves airports like Phoenix-Mesa Gateway with difficult operational decisions in order to adjust. I want to ask a question about it, because you already talked about workforce issues.

But Mr. Crider, on a different note, your written testimony highlights the important role that the general aviation sector will play in the deployment of advanced air mobility. Can you elaborate on general aviation airports' potential infrastructure needs to help accommodate this new technology?

Mr. CRIDER. Absolutely. I think that what we are seeing, whether it is the eVTOLs, or some of the other emerging technologies, that R&D is done at GA airports. Typically, it is for reasons of operations, or available land, or for whatever reason. So, I think GA airports will continue to play a really important role in where those vehicles are built, where they are tested and proven. And ultimately, I think they provide a new dimension for underserved markets, for regional air mobility, for last mile, if you will, or connectivity to the hub and spoke system.

So, I think this entire discussion of advanced air mobility is truly ripe for the GA airport community and communities that are served by GA airports.

Mr. STANTON. My last question is for Mr. Castagna: What key elements should the FAA consider as it develops the necessary certification and operating standards for AAM?

Mr. CASTAGNA. Thank you, Congressman. Great question. I think that there is an extreme nexus between the current part 135 operators that exist today, and those regulatory processes, and the AAM community, where it is a natural segue, where we believe that that industry is going to rely on that same type of regulatory platform.

Our organization is prepared to—and we have already established a committee to meet with the AAM and the vertiport community to see how we can integrate those activities into our regulatory process to advocate for those. And to tap into what Mr. Crider said, the infrastructure required at airports, it requires the streamlining of building codes and other types of coordination, where we will be able to provide the necessary power grid to support those activities.

Mr. STANTON. I appreciate your answers.

I yield back.

Mr. YAKYM. Thank you, Mr. Stanton. The Chair now recognizes Mr. Burchett for 5 minutes.

Mr. BURCHETT. Thank you, Mr. Chairman. You all probably got up this morning and thought, "Wow, I am going to go to Congress. It is going to be really exciting." And then they brought you in here, and they didn't offer you any snacks. So, I will try to make this as painful as possible for each and every one of you.

[Laughter.]

Mr. BURCHETT. Mr. Crider, the FAA required airports to use a toxic firefighting foam. And now, of course, it is warning the airports that it may be held liable for doing so. Is that correct?

Mr. CRIDER. That is correct. I think that that is a big focus of airports, to make sure that there are protections in place.

Mr. BURCHETT. What do these airports need to do to transition to a new firefighting material?

Mr. CRIDER. Well, first of all, we need to patiently wait for the new materials.

Mr. BURCHETT. Say that again. I am sorry.

Mr. CRIDER. Well, I think, first of all, we are all patiently waiting for the new materials to be approved. So, having a viable alternative to PFAS materials is the first in line.

But generally, airports preparing to make the transition as far as vehicles and equipment, those are all big factors. So, again, it is another topic. You don't want to throw the baby out with the bath water. It is a regulated material. It is used to enhance safety. So, none of us want to jeopardize safety or an important tool to save lives until there is a valid alternative in place.

Mr. BURCHETT. But you are confident something is in the pipeline, so to speak?

Mr. CRIDER. Sir?

Mr. BURCHETT. You are confident that this new material is in the pipeline, so to speak?

Mr. CRIDER. Yes.

Mr. BURCHETT. Any idea when they will wave the magic wand and say it is OK?

Mr. CRIDER. No magic wand, sir. I can get you an IOU on that, certainly, but I don't have that in front of me.

Mr. BURCHETT. Right. Probably about the time the of the new one, they'll need another one.

Mr. Castagna, how do you say that name? Help me out there, brother.

Mr. CASTAGNA. Castagna, like lasagna.

Mr. BURCHETT. Castagna, I got it.

Mr. CASTAGNA. Castagna, there you go.

Mr. BURCHETT. I got you. Well, Burchett. Nobody gets it right, either, so, don't worry about it.

Do you think the FAA issues timely rulemakings? Of course, this is a leading question, so, go ahead.

Mr. CASTAGNA. So, the rulemaking process is certainly troubling for our members and needs refinement.

Mr. BURCHETT. What kind of timeline do you usually put on something like that, I mean, when you are sitting around at the coffee table at work?

Mr. CASTAGNA. Well, when we are looking at rulemaking today, you are looking at at least a year-long process or more.

Mr. BURCHETT. Well, if it is any consolation, it takes me over 6 months to get a response from the IRS. That's not for me, personally, it is for my constituents.

Do you feel like this affects America's influence on international aviation standards?

Mr. CASTAGNA. The rulemaking? I absolutely do, from the standpoint of our collective industry here has been the world's leading power in aviation. And the fact that we are slowing down the process, we are competing now with other foreign governments that are moving technology and moving activities at a much faster pace than we are.

Mr. BURCHETT. Mr. Pelton or Mr. Baker, do you have anything to add to any of this?

Mr. PELTON. As far as rulemaking is concerned, it is absurdly long. I mean, I don't think—when you talk about 12 months, it is usually 24 months. We have been working this MOSAIC issue, which is very important to the growth of general aviation, and I think everybody is in agreement as to what needs to be done. And it will be 2024 before we see it. Because of that, we will not be able to certify electric-powered airplanes, which, right now, this is some of the environmental issues that we are dealing with, along with new technologies that are being held behind.

What is probably the most offensive, as a U.S. citizen, is Brazil has already put this in place, and they did it in less than 1 year.

Mr. BURCHETT. Brazil has?

Mr. PELTON. They put the equivalent of MOSAIC improvements to LSA, the LSA category of airplanes.

Mr. BURCHETT. You mentioned the electric airplanes. I know that I saw something on hydrogen airplanes, hydrogen-powered, new green hydrogen or whatever that is. I mean, it is just a byproduct of water. But go ahead. I am wondering where is that in your all's figuring?

Mr. PELTON. Hydrogen has been around in development, and everybody jumped all the way to electric power, which I think we have all found that the battery density power is not where it needs to be, from a——

Mr. BURCHETT. Yes, I suspect the big boys at the table, corporate table, probably figured that out pretty quick, that somebody could fill up in Knoxville down there at Fort Loudoun Lake, and cut them out of their deal. So—but I am not a conspiracy theorist.

[Laughter.]

Mr. BURCHETT. And I am not bitter, either.

Mr. PELTON. I think that when you get back to the rulemaking piece, this is another example of there are many technologies out there that we need to explore, and let those who are ready to be able to be implemented, allow them to move forward without jumping to the far end of the technology curve.

Mr. BURCHETT. Thank you. Thank you, sir.

Mr. Baker, I have no time left, so, if you can say something quickly so you can earn your keep today.

You are good? All right. That is great.

Mr. Chairman, I yield back the remainder of my time. Thank you very much.

Mr. YAKYM. Thank you, Mr. Burchett. The Chair now recognizes Mr. Auchincloss for 5 minutes.

Mr. AUCHINCLOSS. Thank you, Chair.

And Mr. Baker, I will let you get a turn here. You mentioned in your testimony that modernizing the air traffic control system is among the primary safety and regulatory functions of the FAA. How can Congress use this FAA reauth bill to help modernize outdated air traffic control systems, and improve the workforce pipeline?

Mr. BAKER. So, the workforce pipeline—I think the support of the NCAA bill, which has been mentioned, is the number-one way that we can move that forward. And as was mentioned before, 400

Members of Congress approved it the last time around. It is important to get that done and pull the whole aviation community together to work on workforce, because there is a lot of young people that want to be in aviation.

As far as other things that the Congress can do, from a safety perspective and growing aviation, we think it is really important that we take these technologies, as Jack just mentioned, some of these things, these technologies, need to get approved faster and faster, and we are way too slow today in the rulemaking process.

Mr. AUCHINCLOSS. Thank you.

Mr. Crider, I am interested in ways that airports can more effectively manage curbside traffic to improve the passenger experience, and improve throughput from curb all the way to the gate. One way smart cities are tackling this issue is through remote enforcement of curb management policies: drop off, parking, et cetera. This allows cities to better manage the curb and in a more cost effective way.

How could large and medium-sized airports benefit from remote curbside enforcement?

Mr. CRIDER. Well, I think there is a myriad of technologies that are being deployed at airports, whether it is for TNCs, which speaks directly to curbside management.

Mr. AUCHINCLOSS. TMCs?

Mr. CRIDER. Transportation Network Carriers.

Mr. AUCHINCLOSS. Oh, TNCs, got it.

Mr. CRIDER. TNCs—I am sorry, the Ubers and Lyfts of the world, to wait time analysis, that give the passenger better information and a better experience.

So, I think the short answer is more technology and more integration of technology into the terminal.

Mr. AUCHINCLOSS. At the Federal level, are there proscriptions or laws that are impairing the ability of airports to do remote enforcement of curbside management?

So, obviously, you are allowed to get traffic——

Mr. CRIDER [interrupting]. Nothing I am aware of, but we can certainly get an answer back to you. I will be——

Mr. AUCHINCLOSS [interrupting]. I would appreciate that. If you could follow up with my office on impediments you see to the ability to use technology to do remote enforcement, I would appreciate that.

Mr. CRIDER. OK. So, specifically to remote enforcement?

Mr. AUCHINCLOSS. We would love your input on the entire curb management situation, but particularly on whether airports are interested in trying to do remote enforcement and are held back by existing Federal law or regulation from FAA.

Mr. CRIDER. OK.

Mr. AUCHINCLOSS. And then, again for you, Mr. Crider, you mentioned in your testimony that capital needs for nonprimary and GA airports are more than $19 billion over the next 5 years. And I agree that supplementary discretionary grants and increased AIP funding could help support commercial and GA airports' ongoing infrastructure needs, coupled with additional flexibility in how airports can spend AIP funds.

Could you walk us through why airports need that additional flexibility, especially larger airports like Logan at Boston?

Mr. CRIDER. Well, I think there are some trends—regulatory process, environmental clearances, part 163 requirements—that slow down development, and candidly, add cost to the development. So, I think those are some areas that—a better collaboration between the airports community, the FAA, and Congress to find the right mix.

Certainly, we don't want to go backwards in the advancements of the reasons for those laws. I think a streamlining of the regulatory process and approval process is really what we are asking for.

Mr. AUCHINCLOSS. Terrific. I am going to yield back, actually, the rest of my time.

Mr. YAKYM. Thank you, Mr. Auchincloss. The Chair now recognizes Mr. Molinaro for 5 minutes.

Mr. MOLINARO. Thank you, Mr. Chairman. I appreciate that.

I spent the last 12 years overseeing one of the largest general aviation airports in New York State: Poughkeepsie, New York. Recognizing the valuable role general aviation plays in the aviation community, I can tell you in my district alone, it is responsible for hundreds of jobs and $60 million worth of economic activity. It is very much the backbone of America's aviation world and, in many ways, the pipeline to jobs. And so, I would like to continue down the workforce development path for a moment.

Mr. Pelton, we recognize that there is increased obvious demand for pilots and moving them through that pipeline. U.S. flight schools are oversubscribed, both large and small, we know. We are not able to meet the demand. And in many cases, of course, this is slowing down the ability to move pilots from general aviation to other occupations in the commercial sector.

Could you just talk briefly about what happens to America's aviation system, if you will, if these flight schools don't exist?

And quite frankly, also what we might do to expand capacity.

Mr. PELTON. Well, thank you for the question. I think, when you forecast forward what we are seeing as far as the needs and demands from pilots, whether it be the military or commercial aviation over the next 10 years, the facts pretty much stand for themselves as to, if we are not able to keep that pipeline going, then our commercial travel will be slowed down because of the shortage of pilots to be able to operate in the commercial sector.

So, that is really where we will see it, long term. And that is an effort that is compounded by the retirement of airline pilots in the baby boomer era, and then the lack of new pilots coming forward. So, it is critically important that we have a viable training sector, that we support it.

Again, some of our earlier discussion around the ability to have Designated Pilot Examiners, which are a shortage right now, is one of the leading factors to it.

And we also believe that MOSAIC, which is the regulatory change, rulemaking change, that we are hoping will be able to bring new aircraft into the market that are more affordable and more efficient for the flight training market.

Also hoping to be able to reduce the costs associated with training with those new developments.

Mr. MOLINARO. I appreciate that. So, we developed, in conjunction with our community college—and I certainly would like to see more of this across the country—an experiential hangar for pilot training and airframe mechanics.

Mr. Baker, could you just—following up on your testimony regarding AOPA, the aviation STEM curriculum, speak specifically to the value of the section 625 workforce development grants, how they help to prepare the next generation of aviation workforce.

Mr. BAKER. So, yes, our STEM program, which was funded exclusively by donors to the AOPA Foundation, was built over 4 or 5 years to create STEM education from the 9th to the 12th grade. And again, it is free to all the schools that want to do it. Today, we are in 400 schools. I think the opportunity to be in 2,500 high schools around this country with about 1 out of every 10 is the opportunity if we get the NCAA moving along the right way.

I think we can get a lot of energy around this, because these opportunities can be used in high school to get college credits, whatever career it is, whether it is mechanic, technician, controller, pilot, engineer, all these career opportunities have never been better, and these young people are excited about it.

And today, we have got over 40 percent of these young people are people of color. We have got over 25 percent young women taking these tough classes in high school.

Mr. MOLINARO. Yes, it is truly tremendous. And the truth of the matter is, I think America does itself a disservice by not putting value on this education in K–12, and certainly then connecting to higher education in those flight schools to build out not only the workforce, but to create that connection to jobs that, quite frankly, pay exceptionally well.

With the last name Molinaro, I only feel badly, Mr. Castagna, that I had nothing to ask you. But if you wanted to add, I feel like Mr. Baker was given an extra 8 seconds a few moments ago, feel free to jump in.

Mr. CASTAGNA. If I may.

Mr. MOLINARO. And then I yield, Mr. Chairman.

Mr. CASTAGNA. As an adjunct professor for over 30 years, and having taught at the collegiate level for aviation and airport management, I would encourage us, as we look for opportunities to increase the workforce development, that we go beyond the traditional air traffic controller, pilot, flight attendant, mechanic, and look for the thousands of technical jobs that are available to our workforce in the airport and aviation community, and that we expand those grant opportunities beyond the traditional roles, and we look for more widespread use of technical jobs that might not require 4-year educations.

Mr. MOLINARO. Thank you.

And thanks, Mr. Chairman.

Mr. YAKYM. Thank you, Mr. Molinaro. The Chair now recognizes Ms. Titus for 5 minutes.

Ms. TITUS. Thank you, Mr. Chairman.

Well, I represent Las Vegas, so, you know how important general aviation is to my district. Without it, we wouldn't have corporate

planes bringing people to our conventions or individuals coming out for big events. Now we are going to have the Grand Prix right down the Strip in the middle of my district, and the Super Bowl, also in my district. So, I am going to see a lot of you all's planes coming in and out, I feel like. So, this is important, and I appreciate all the testimony.

Last session of Congress, I worked with Mr. Larsen and Mr. Graves—Mr. Garret Graves—to include the Advanced Aviation Infrastructure Modernization Act. And that gave money to local governments, Tribal governments to modernize airports. And I wonder, as this program rolls out, if you could talk about the potential infrastructure needs that general aviation has, as opposed to regular commercial airports, when it comes to AAM technology.

Mr. CRIDER. Well, I can start. I think, in our example at Kelly Field, we are building a consolidated facility that has advanced air mobility attributes to it, so, preparing the electrical grid and the capacity for charging electrical vehicles.

I would like to give a shout out, too, though, to the FAA. I think they have been very thoughtful. We talked about hydrogen earlier. Electric vehicles are the current. But we don't know what is going to be in the future. So, I think a thoughtful consideration about how a hydrogen vehicle or a solar vehicle or a hybrid vehicle might utilize that infrastructure, I think, is also well informed. So, those are the ideas.

And I think, as airports like Kelly do more with advanced air mobility and connect up with other ecosystems like the military that is doing great things in advanced air mobility, and airports that are doing the research and development, the production, that building out the ecosystem and recognizing that AAM is an important part of the future and funding it appropriately is the right thing to do.

Ms. TITUS. Thank you.

Anybody else?

Mr. CASTAGNA. I would just add that, in the design and the build of these facilities, the necessity for standards in the technology for, let's say, charging systems and connectivity to the grid between the various different user groups that we are dealing with, much like we do with aircraft, traditional aircraft, there is a standardization process there that we follow.

And so, from a development standpoint of aviation facilities for AAM at airports, one of the things we are really looking to understand is what are the infrastructure requirements, what are the power needs, down to the connectivity to the actual charging unit, to the aircraft so that we can bring those technologies to market faster.

Ms. TITUS. It is always better to do it in advance than to have to go back and rehab it down the road. So, I appreciate that.

Also, I would like to build on something that Ms. Brownley started asking about. And in the Inflation Reduction Act, we have a credit for sustainable aviation fuel. And I wonder if there are any barriers that you all particularly face in general aviation transitioning from leaded gas, and also if there should be allocations for GA use.

Mr. CASTAGNA. So, I will start with the SAF piece of that.

Ms. TITUS. OK.

Mr. CASTAGNA. So, we greatly appreciate the efforts of Congress to provide the tax credits, I believe, for 5 years. We would really like to see those get pushed out, and the incentives, for 10 years.

The supply chain obstacles that we have in getting that product to market sooner is one of our challenges. In lieu of that, we are working with book and claim programs, so that our users can buy the fuel where they can, and book and claim it and use it in markets where the fuel is currently not available.

Ms. TITUS. OK.

Mr. CASTAGNA. So, the credits and the incentives to bring that product to the entire country, where right now it is really on either coast line is—bringing it to the center of the country will make it more widely distributed—it will also make it—the price point of it more competitive.

Mr. BAKER. I think there is an opportunity for Congress to look at—as these new fuel users come online, there are going to be very small batches of fuel being built. It is not going to be very competitive, and could cost, probably, a little bit more than the current supply.

We want to get the transition going as fast as possible and as safely as possible. So, having some money set aside for these new fuels to come on board, get them introduced, whether they need tanks, things like that, I think would be an important part of the discussion.

Ms. TITUS. Thank you.

Well, thank you, and I yield back.

Mr. OWENS [presiding]. Thank you, Ms. Titus.

Mr. Mann?

Mr. MANN. Well, thank you all for being here this morning. I represent the "Big First" district of Kansas, which is 60 primarily rural counties, a little bit eastern, a lot in the central, and the entire western part of our State. Transportation infrastructure is vitally important.

There is a strong relationship between the Kansas economy and aviation, has been for decades. Our State system of commercial service and general aviation airports provide the gateway to the Nation's air transportation system and the world's economy for our businesses. Aviation ranked second in economic impact in our State of Kansas, only after agriculture. The "Big First," my district, is home to 39 general aviation airports, with Kansas having a total of 73. Our airports support thousands of jobs and billions of dollars in economic activity, which is why it is imperative that aviation safety remain a top priority.

One of the FAA's most successful Government industry partnerships, in my view, is the FAA Contract Tower Program, which enhances safety in our country, improves air traffic control services, and has increased savings to taxpayers. There are currently 262 airports in 46 States that participate in the Contract Tower Program, which you all know. Eight of those are located in Kansas. This critical air traffic safety program is important to maintain and develop general aviation activity, and supports DoD flight training operations and military readiness, as well as pilot flight schools all across the country.

It is also important to note that contract towers account for approximately one-third of all tower operations in the Nation, and about 70 percent of contract controllers are veterans.

A couple of questions for Mr. Crider. What benefits does the Contract Tower Program provide the National Airspace System, especially or specifically for the general aviation community?

Mr. CRIDER. I think it is a huge part of enhancing safety. I mean, as I mentioned before, many airports that grow in operations to the point that they need air traffic separation, it is a great entry point. So, having that contract tower then interface with the National Airspace System, talking to centers and TRACONs and FAA tower facilities, that is all really important.

So, I think, one, it plays a tremendous role in safety. It plays a tremendous role in enhancing a system of separation—air traffic separation. But I think the challenge is that the program is a few years old now, so, the towers that first entered that program are aging. They need refurbishment, in some cases, replacement. So, an investment in that regard—BIL, again, touches on that. But there is more work to be done.

You mentioned the 200-plus, 260-plus towers across the country. So, there are pretty vast needs out there for refurbishment, for replacement, for equipment that helps the integration of the controllers and workforces as we discussed earlier.

Mr. MANN. I agree. The nine in Kansas—I have not toured all of them, but I have toured quite a few of them, and a lot of them need updating as the technology continues to change.

The second question, and you touched on this, Mr. Crider, staffing shortages. Labor is tight in a lot of parts of the country, Kansas is no exception. Staffing shortages continue to be a challenge throughout the aviation industry, including with contract towers.

Do you have any thoughts on how FAA and the industry can work collaboratively to really address staffing challenges at these towers?

And what do we need to do to really help improve the situation and to truly move the needle?

Mr. CRIDER. Well, I think there are some specifics like we discussed earlier, looking at the labor rates, increasing the pipeline. But whether it is pilots or controllers or maintainers, I think the system—and Mr. Castagna touched on this—it is really a system and a network of labor that is important.

And I think communities—one example in San Antonio I mentioned in my testimony, we opened an innovation center that invites and brings young people to the airport, a couple hundred yards from Kelly Field, in an environment that introduces them to STEM and technologies, and robotics, and cybersecurity, and flight simulators, gaming, all the things that are transportable to the skill sets in aviation. And I think that maybe that is transportable to other communities and other States because, at the end of the day, communities and airports have the opportunity to integrate some of the great curriculum, the great touches that we have talked about earlier, locally.

In our case, Kelly Field has a legacy of being the ladder to the middle class. So, we are really anxious and passionate about getting the thousands of young people and students that come from,

frankly, socio-economically depressed communities through the innovation center, get them excited about aerospace, excited about robotics, excited about applied technologies, because our industries that are there on the campus like Boeing and Standard Air and others, they need that workforce for the future.

And so, I think that communities can play that role in that workforce pipeline.

Mr. MANN. I agree. Thank you—again, you all—for being here. And with that, I yield back.

Mr. YAKYM [presiding]. Thank you, Mr. Mann. The Chair now recognizes Mrs. Peltola for 5 minutes.

Mrs. PELTOLA. Thank you, Mr. Chairman. Good morning. This has been fun listening to this morning. It seems like the prerequisite to get on this subcommittee is to have logbook hours, but no pilot's license. That is the trend I am seeing here.

But I really appreciated your comments, Mr. Baker, and especially your comments in regard to improving weather cams and weather stations in Alaska. Even 20 years ago or 10 years ago, pilots—let's say out of Bethel—would call the village agent to find out what the weather was. And my favorite answer was, "It is good; I can see my four-wheel."

[Laughter.]

Mrs. PELTOLA. So, I know agents are being trained to be a lot more specific about, like, visibility, and ceiling, and wind direction, and all of that, but we are really grateful for the weather cams and weather station improvements. Weather can be fast-changing, as it is everywhere. But in Alaska, you fly such great distances to get where you are going. I really appreciate how many comments have been made about the dependence Alaskans have on our airfields.

But I am wondering, Mr. Baker, if you could share with us what the committee can do to help these efforts.

Mr. BAKER. Thank you on that question. Yes, I have flown the great State of Alaska on a floatplane every year, and it is a great place to fly. But those weather cameras are critical, and looking into those canyons, and understanding if there is a fog bank, or rain, or moisture, or whatever else is going to inhibit your ability to stay VFR flying through that part of Alaska. So, we have had some interruptions from time to time, where they haven't been able to keep them up. They seem like they are better today than they have been for a while. But it is really critical.

We are now starting to take some of that learning from Alaska, and employ those cameras in the lower 48 in some of the Rocky Mountain areas, where there is no weather forecasting or broadcasting, or no station to do that.

So, it is one of the areas of funding for the FAA to make sure that they can support that, from a safety perspective, in the lower routes for Alaska, particularly, where the weather is down an awful lot, as we know, and the rain. But they have now just put in some lower routes in Alaska, so, you can take a VFR corridor, and stay at a very low altitude, and know where you are at.

So, I think the Congress can do—between the things that we need to get the funding for, like I mentioned before, the hangars and transient ramp spaces, and things like that that keep aviation

safe and moving, as well as keeping people aware of all the weather things.

Mrs. PELTOLA. Thank you, Mr. Chairman. I yield back my time. Thank you.

Mr. YAKYM. Thank you, Mrs. Peltola. The Chair now recognizes Mr. D'Esposito for 5 minutes.

Mr. D'ESPOSITO. Thank you, Mr. Chairman, and good morning, everyone. It is still morning.

I represent the Fourth Congressional District on Long Island in New York. My district is just blocks away from JFK Airport, and most of my constituents, if they are flying anywhere, would utilize LaGuardia, JFK, or perhaps MacArthur out in Islip.

On January 13th, two planes had a close call at JFK Airport. A Delta flight had to abort its takeoff when an American Airlines flight had crossed over into its path from an adjacent taxiway. They were approximately 1,000 feet from one another, which is, obviously, dangerously close. Thanks to the staff at the tower, the Delta plane was able to cancel their trajectory before any serious damage occurred.

A few days later, a JetBlue plane scheduled to depart from JFK bumped into an unoccupied aircraft. The airlines and the FAA say this happened during pushback, which occurs when an aircraft is pushed back from its parked position at the gate before heading toward the tarmac to take flight. Thankfully, no one was hurt. However, these events underscore the importance of runway safety.

Mr. Baker, what additional measure can the FAA do to ensure we have runway safety measures in place at our airports? Because it seems like these issues are happening more often.

Mr. BAKER. Certainly, there are a lot of new players and people in aviation today, and making sure that the training is in place at all of these different activities, whether it be at control tower, whether it be the ramp management.

The good news is aviation is growing and booming. The other thing that comes along with that is a lot of new players.

Mr. D'ESPOSITO. Understood.

Mr. BAKER. So, reinforcing the training.

Mr. D'ESPOSITO. OK, thank you. And what are the AOPA's priorities for the FAA reauthorization that will advance implementing safety measures, as well as training?

Mr. BAKER. So, again, the big things that we believe in safety—the number-one thing is keeping low-lead fuel available until we have the safe transition to the unleaded fuel. It is the number-one priority, because we believe we should get rid of low-lead fuel, but we need to do it in a safe, meaningful, methodical way, an airport at a time. And to get the funding in place to make sure that that happens is the number-one safety issue that we look at for the Congress to give guidance to.

Mr. D'ESPOSITO. OK, thank you.

Mr. Chairman, I yield back my time.

Mr. YAKYM. Thank you, Mr. D'Esposito. The Chair now recognizes Mr. Johnson for 5 minutes.

Mr. JOHNSON OF GEORGIA. Thank you, Mr. Chairman, for holding this hearing. And I thank the witnesses for your time and attention, and for your testimony.

While commercial aviation consumes much of our attention, it is general aviation that plays a huge role in providing foundational flight activities such as business travel, humanitarian aid, environmental conservation, and many others.

DeKalb-Peachtree Airport is in my district in Georgia, and has averaged about 228,000 operations per year over the past 30 years. It is the second busiest airport in the State of Georgia in its number of operations, only behind Hartsfield-Jackson Atlanta International Airport. Only 8 miles from the heart of downtown Atlanta, this airport makes it the airport of choice for general aviation operators visiting the Atlanta metropolitan area.

I have some questions. Mr. Castagna, you mentioned that there was a huge workforce shortage in aviation. Is that correct?

Mr. CASTAGNA. Yes, sir. We are experiencing workforce shortages, from the ramp worker to the pilot community.

Mr. JOHNSON OF GEORGIA. And do you find, generally, that the aviation workforce is underrepresented in terms of people of color and women?

Mr. CASTAGNA. So, our position is we believe that a diverse workforce is certainly a resilient workforce. And the efforts that have been made in the last few years in working with different groups, the Tuskegee Airmen and the Women in Aviation groups, and bringing more persons of color and women into this aviation industry is certainly important to our organization. I think all of us here at the table feel that that is a critical role.

I think it ties to the going back into the schools and into the younger—and introducing aviation in all different workforces at all levels and attract them. We were mentioning the air traffic control and what can we do to increase that. It really opened the kimono, introduced the air traffic control world down to those community groups, and opened them up. The FAA had a program that's, I don't think, active now during the pandemic, where you could actually book tours and go visit air traffic control facilities and bring student groups to go see those. Doing that and bringing inner city school kids, and bringing kids from high schools to that will certainly open the door of interest.

Mr. JOHNSON OF GEORGIA. OK, thank you.

How about you, Mr. Baker? In terms of the pilots, do you find the same dilemma exists?

Mr. BAKER. Yes, I am very excited, though, that our high school initiative, which is about 40 percent young people of color that are taking these classes, STEM education, because they see the career opportunities, and the opportunities have never been richer and better. And 25 percent young women, which is a category—we only have 5 percent of our whole pilots that are women today. So, it is really a new opportunity.

But you have to bring that to them to show them the pathways exist for them to get onto this program. So, that is why it is really critically important we get the support of the NCAA to get this thing rolled out to 2,500 high schools around this country.

Mr. JOHNSON OF GEORGIA. Yes, because, I mean, it is a fact that our country is becoming more diverse. And if we don't target underrepresented groups—and they may be underrepresented for whatever the reason might be, but if we fail to reach out to try to re-

cruit or try to inspire folks, we are doing ourselves and our industry a disservice.

And so, I just want to apologize to everyone for sinking into just a small bit of wokeness. I am so sorry.

Now, Mr. Pelton, what impact does limited airport infrastructure funding have on general aviation airports?

Mr. PELTON. I am probably not the best served to answer that, but the immediate need is if we believe that our 5,000 current general aviation airports are critical to the infrastructure of this country, we need to make sure that we maintain them as we do with our road systems or any of our other infrastructure. So, it is critically important, because a lot of these areas, that is a vital link, whether it be for medical services or rescue or other issues.

So, we should be making equal investments in our 5,000 public-use airports around the country, other than the major airports. Otherwise, we are letting our infrastructure deteriorate.

Mr. JOHNSON OF GEORGIA. Thank you, and my time has expired.

Mr. YAKYM. Thank you, Mr. Johnson. The Chair now recognizes Mr. Kean for 5 minutes.

Mr. KEAN OF NEW JERSEY. Thank you, Mr. Chairman.

My district starts, really, 20 minutes away from the Newark Airport, and has many other local airports within its boundaries. And I think we all certainly understand that general aviation is the backbone of the United States aviation system, as it contains pilot training, workforce training, and emerging technologies for safe skies, and as general aviation supports more than 1.2 million jobs and contributes approximately $128 billion to the United States GDP.

On the issue of so many middle class families in my district and across the country being impacted by the inflation rate when they are sitting around their dining room tables, but many do not realize that the inflation is hitting the aviation and the aviation construction industry, as well.

Mr. Crider, can you please tell us about how inflation and rising construction costs continue to undermine the ability for general aviation airports to complete projects, thus hurting the communities that they are intended to serve?

Mr. CRIDER. Absolutely. I think the short answer is that the dollar just doesn't go as far with inflation and, frankly, competition.

One of the unintended consequences of so much investment in infrastructure is that airports compete with road projects and many other dimensions to get those needed pieces of work done.

I think, back to the funding level, if you look at the basic AIP entitlement for general aviation airports, it has been about $150,000 for the last 23 years. So, to your point, sir, $150,000 23 years ago, what that buys you today is radically reduced. So, I think a focus on both changing those formulas—because you have some very large airports, we talked earlier about Peachtree, Kelly Fields is another great example. We have large-scale commercial aircraft that operate from those GA airports. Understanding and differentiating how that entitlement and that funding works is important.

And then also recognizing that there is both pressure on competition and inflation at play that just doesn't buy you as much as it did a few years ago.

Mr. KEAN OF NEW JERSEY. So, as a follow up, therefore, do you think that there should be more flexibility in how airports are permitted to use AIP and IIJA funding in recognition of these evolving needs?

And specifically, what type of flexibility should this committee consider?

Mr. CRIDER. I do. I think, as we talked before about the regulatory process, getting approval to build projects, but also where those funds are directed, relying on airport sponsors to invest those dollars most appropriately. That speaks to eligibility items and, frankly, a recognition of facets like industrial airports, infrastructure that supports large job centers and commerce that is essential to our system.

I think those are some areas for improvement, but greater flexibility overall, the ability to invest wisely, appropriate to that specific community and airport.

Mr. KEAN OF NEW JERSEY. OK. Thank you, and thank you for the panel for being here today.

I yield back. Thank you, Mr. Chairman.

Mr. YAKYM. Thank you, Mr. Kean. The Chair now recognizes Ms. Holmes Norton for 5 minutes.

Ms. NORTON. Thank you, Mr. Chairman.

Mr. Castagna, as cochair of the Quiet Skies Caucus, I am glad you brought up advanced air mobility and the ability of new aircraft designed to limit aviation noise. Can you speak more to the benefits of AAM technologies and the necessity of integrating them into the regulatory system of the FAA and the infrastructure of general aviation airports?

Mr. CASTAGNA. Thank you, Congresswoman. Airports in urban communities are certainly challenged by the continued need to maximize their economic potential and opportunities in workforce development, and at the same time mitigate to the best of their abilities environmental impacts to their neighborhoods such as noise and other issues.

AAM provides a huge opportunity to airports, if the infrastructure can be brought in to support the electric aircraft or hydrogen and these new technologies, which are ultimately going to reduce the footprint of noise in these neighborhoods because those aircraft are significantly quieter.

So, the advent of electric aircraft or hydrogen aircraft and these technologies will have, ultimately, a direct impact to airport operations, where airports themselves are the natural introduction point for these types of activities. Where they ultimately want to establish footholds inside communities off-airport, the airport provides the first opportunity for the AAM community to introduce operations into the airspace system.

Ms. NORTON. Thank you.

Mr. Baker, in your testimony you mentioned the need to maintain a qualified workforce in the general aviation sector. You reported that nearly half of AOPA Foundation's curriculum students are students of color, and 20 percent are women. What measures

are AOPA and others in the general aviation sector taking to increase diversity in training and hiring to meet the employment goals of companies like Boeing?

Mr. BAKER. So, I believe that the opportunity for the whole industry—and again, under the form of the National Center for the Advancement of Aviation—is getting everybody on the same page. We see lots of young people that want to be in these aviation careers. And we have seen the success of our program in the 9th to the 12th grade.

And again, many inner city schools, rural schools, home schools, all kinds of high schools—we are now in 400. I think the opportunity to be in 1 out of every 10—2,500 high schools in this country—is a real opportunity to create that exposure, create the pathways, and get the whole industry working together to solve this problem and create opportunities that have never been better.

Ms. NORTON. Thank you for that response.

Mr. Crider, you mentioned that Port San Antonio has expanded its outreach to recruit students in lower socio-economic status in order to build up the industry's workforce. How has this recruitment to underserved communities benefited the maintenance of your workforce?

Mr. CRIDER. Well, I think it has been a success. The innovation center I described earlier not only introduces young people to careers and opportunities of the future, it provides a place and a space for industrial aerospace operators to recruit.

So, we have experienced a variety of internships, hands-on experiences, as well as just direct awareness of opportunities. So, it is really connective tissue. The innovation center serves as a place to introduce students, but it also allows great organizations like AOPA, EAA, Ninety-Nines, Girls Inc., many of those communities that have the diversity that the companies desire, it brings them together and allows a recruiting forum so that a pathway to success is established. And that may be internships, that may be exposure, that may be just counsel. So, it is really a space where all those things can happen.

Ms. NORTON. Thank you very much. My time has expired.

Mr. YAKYM. Thank you, Ms. Norton. The Chair now recognizes Ms. Davids.

Ms. DAVIDS OF KANSAS. Thank you, and thank you to our witnesses today for coming.

And we have heard a lot about the FAA reauthorization that is coming up. And it is, obviously, a critical piece of legislation for the entire country. But I definitely appreciate the opportunity to have a discussion about the future of our national airspace and what that might look like.

And obviously, we all want the United States to continue to be the gold standard, but we are going to have a challenge—we have heard a little bit about this—of constructing, well, constructing things, but also of constructing a bill that is going to promote these innovative technologies that we have and, certainly, the businesses that are right here at home that can do that.

One of the things that I have been very focused on and was very happy and proud to get to work on in the last session of Congress with now chairman of this subcommittee, Garret Graves, was the

Advanced Air Mobility Coordination and Leadership Act. And we got that across the finish line. It is going to establish an interagency working group to plan and coordinate those efforts. And again, we have heard a bunch about this already.

And so, I do want to—Mr. Castagna, I know in your written testimony, you talked about NATA's Advanced Air Mobility Committee. And then we heard you, I think, when Mr. Stanton was asking about the recommendations that you all might be making. I am definitely very curious about not just the role that your Advanced Air Mobility Committee is going to be playing, but how you think we should be integrating and looking at the issues or problems, and then those recommendations. Because I think right now, with such new technology, it might surprise folks to know that the Federal Government is not always on the cutting edge of these things, and I would hate to see what happened when drones were really starting to come on the scene to similarly happen with advanced air mobility. So, if you want to, talk a little bit about that.

And Mr. Crider, I know you have some comments and thoughts. If you want to expand on those, because I know you started talking a little bit about the infrastructure needs that we are going to have going forward.

Mr. CASTAGNA. Thank you. I would just start by saying, so, we established the committee, since we have existing members that are flying traditional aircraft for charter and other types of activities, where we see there is a nexus between those operators following those same Federal guidelines that would apply to the AAM community. So, having those two community groups talking to each other, and where we could support one another for that integration, we thought, was critical.

As well, the AAM community needs to work through the certification process for their aircraft, and we know that that has been a challenge. Just from the traditional aircraft process, we know that they are in that same complicated network, and it is delaying their integration into the airspace.

And then lastly, I would just say, for our businesses that are based at the airport, introducing those two into the airspace in such a way that we can introduce them to communities and establishing, let's say, arrival and departure procedures and things that are sensitive to an airport's community and can operate safely and efficiently, that is the natural course where we believe it should start.

But we ultimately know that AAM wants to branch out beyond the airport boundaries, out into communities to operate. But the airport environment provides that first exposure to do so, and introduce it safely.

Mr. CRIDER. And on that a little bit, I think an intentional investment and funding that addresses AAM is prudent. We don't want to be in a situation where investment in advanced air mobility reprioritizes or shuffles or subordinates safety projects and other needed projects. But I think an intentional investment in that is important.

We are, as I mentioned before, investing in a facility that accommodates AAM, in addition to other things. But I think more of that, as the vehicles come online, and also an awareness that it is

electric today, but it is going to be—who knows what the future will bring.

Ms. DAVIDS OF KANSAS. Thank you. And Mr. Castagna—lasagna, Castagna, I was trying—I probably will want to follow up, because I am running out of time, about those certifications. Which part the certifications will come under as we look at AAM, and trying to make sure that we are—just that this committee and the folks on the T&I Committee in general understand what that process is looking like for you all as you are trying to work through it. I know it is with the FAA, but——

Mr. CASTAGNA [interrupting]. I would be happy to have our staff reach out to you, as well as——

Ms. DAVIDS OF KANSAS [interposing]. Thank you.

Mr. CASTAGNA [continuing]. Our sister organization, GAMA, the General Aviation Manufacturers Association. So, it is part 23 of the Federal process.

Ms. DAVIDS OF KANSAS. OK. Thank you so much.

I yield back.

Mr. YAKYM. Thank you, Ms. Davids. The Chair now recognizes Mr. Payne for 5 minutes.

Mr. PAYNE. Thank you, Mr. Chairman, and congratulations on being chosen as vice chairman of this committee.

Mr. Castagna, how is that? That's close? All right. As a cosponsor of Mr. Larsen's Advanced Aviation Infrastructure Modernization Act, I was pleased to read in the testimony of your support of adding electric vertical takeoff and landing, or eVTOL, aircraft into our air system.

Is it possible that commercial vertical vehicle service could begin in the next few years under the FAA reauthorization?

Mr. CASTAGNA. So, we know that there are a number of participants in the AAM space. There are several hundred, in some cases, of these manufacturers. We know there is going to be a lot of consolidation in the manufacturing world. But at the top of the pinnacle today of those different companies, some are farther along in their certification process. Some have aspirations to being in the air on the west coast, where there is a large focus for the Olympics, where they introduced this model for transportation.

So, to answer your question, I think it is realistically possible. I don't think it will be widespread throughout the country, but I think you will see it in certain urban markets, where they see an opportunity where the connectivity to the urban air mobility for various transportation modes can take place.

Mr. PAYNE. Thank you. And in light of this, what priorities should the committee consider that would make this transportation successful and sustainable?

Mr. CASTAGNA. So, I think the conformity or consistency in the regulations that exist today that we are operating under for part 135 and in other types of regulations, including the certification, that we apply those standards consistently to those operators so that they are following the same path as our traditional aircraft operations are.

Mr. PAYNE. Thank you.

Mr. Crider, are airports ready to add this service?

And what else can this committee do to help you add these new aircraft to your operations?

Mr. CRIDER. Well, I would say it is a mixed bag. There are some airports that are very, very aggressive in seeking these new technologies and setting up systems, Kelly Field being one of them. But there are others out there that are anxious to integrate those vehicles into the system. There are others that are waiting to see. So, it is definitely a mixed bag.

But I think, as Mr. Castagna said, that being ready for that through electrical grid, through standards, through standardization of charging stations, the takeoff and landing processes and the procedures, all that standardization and all that pre-work, it is not too early to start. So, I think that that is the work before us, as was said here today.

Mr. PAYNE. Thank you.

And now, Mr. Baker, over the past few years we have seen a huge increase in the commercial use of uncrewed systems, both remotely piloted and autonomous. How can this committee help prepare the general aviation pilots to deal with these new entrants to our airspace?

Mr. BAKER. So, we welcome all the new entrants into the airspace. We think it is good for the economy. We think it is good for the technology that we can apply to general aviation, as well.

One of the things that we feel very strongly about is we don't want to add any more technology into the cockpit of a busy airplane, the busiest time, when you are below 500 feet coming and going from an airport. So, by not requiring any, mandating more equipment—we already have ADS–B. What we have always done in general aviation is see and avoid or detect and avoid. Those rules still have to apply as we add new entrants to the airspace.

Mr. PAYNE. Thank you.

And Mr. Chairman, I am excited. I am actually going to yield back 32 seconds. Thank you.

Mr. YAKYM. Very well done, Mr. Payne. I am impressed. The Chair now recognizes Mr. Carbajal for 5 minutes.

Mr. CARBAJAL. Thank you, Mr. Chair. I will take those extra seconds. I am kidding.

Mr. Crider, as we move forward with advancements in technology, specifically low- and zero-emission aircraft and sustainable aviation fuels, SAF, we have an opportunity to decarbonize our skies to make air travel greener. Some of the new developments include full or hybrid-electric aircrafts, which the FAA is working to develop a regulatory framework for certification and operation of them.

From your perspective, what are the infrastructure needs to promote SAF and the use of hybrid or fully electric aircraft?

And do you have any specific recommendations for us as we draft the FAA reauthorization?

Mr. CRIDER. Well, I think for the fuels, the fuels piece, certainly the infrastructure, the fuel systems being prepared for that transition, again, not prematurely, but being ready for when the transition takes place.

On the electric and the emerging technologies front, electrification is going to be the big thing, especially at commercial airports

that are already facing demands for electric charging stations, for vehicles, for rental cars, for privately owned vehicles. So, that is only amplified by the electric vertical takeoff and landing, which have a fairly high requirement for electricity.

So, I think capacity in the grid, ability to charge, compatibility from one aircraft to the other, standards, those are all things that are important next steps, and perhaps opportunities for this reauthorization bill to consider.

Mr. CARBAJAL. Thank you. Mr. Crider, the Airport Improvement Program is a critical source of Federal funding for capital airport projects. In your written testimony, you have an extensive list of recommendations to improve that program. One of your recommendations to this committee is that we increase the authorized levels of Airport Improvement Program to $4 billion annually. Can you elaborate on the needs to increase the authorization?

Mr. CRIDER. Yes, sir. Yes, I think that recent history has proven that there are many great projects that absorb supplemental appropriations, discretionary appropriations, the BIL work. More work has yet to be done, though.

I think we have had a fairly stagnant level of basic AIP for the last few years—so, $3.35 billion, I believe is the baseline. So, increasing to $4 billion, in our opinion, makes great sense on a number of fronts. Its recalibration of the formulas, the formula for GA airports, but also medium and large-hub airports. So, a bit of a recalibration, if you will, that recognizes the different level of investment required at airports of a wide variety, and a variety of activity levels.

So, yes, we think $4 billion is certainly warranted, in addition to the supplemental appropriations that we have seen in the last few years.

Mr. CARBAJAL. Thank you.

Mr. Baker, you have made great points on the impacts of the general aviation industry. It is an economic driver and supports more than 1.2 million jobs. But you also discussed workforce gaps and the need to train the next generation of pilots. How can Congress help support this, and what partnerships can we increase with schools across the country to achieve that goal?

Mr. BAKER. OK, a couple of those things are important. Thank you again for that question and the point of view.

We still believe we have got an opportunity today to make general aviation even better by having transient ramp spots at all these airports, so people can come and go to all these 5,000 public-use airports unencumbered by some of the FBO costs that we see today.

But we look at the opportunity to grow aviation and bring young people into aviation. I think the NCAA bill, which nearly passed the House last year with 400 votes, should get through today in Congress to support a bigger, broader way of bringing high school education to more than 2,500 high schools, more than 10 percent of the high schools that exist in this country, giving everybody a pathway and an opportunity to join this great career: aviation.

Mr. CARBAJAL. Thank you very much, Mr. Chair. I yield back.

Mr. YAKYM. I thank the gentleman for yielding.

Are there any further questions from members of the subcommittee who have not been recognized?

Seeing none, that concludes our hearing for today. I would like to thank each of the witnesses for your testimony.

I ask unanimous consent that the record of today's hearing remain open until such time as our witnesses have provided any answers to questions that may have been submitted to them in writing.

Without objection, so ordered.

I also ask unanimous consent that the record remain open for 15 days for any additional comments and information submitted by Members or witnesses to be included in the record of today's hearing.

Without objection, so ordered.

The subcommittee stands adjourned.

[Whereupon, at 12:18 p.m., the subcommittee was adjourned.]

SUBMISSIONS FOR THE RECORD

Statement of Gregory Pecoraro, President and Chief Executive Officer, National Association of State Aviation Officials, Submitted for the Record by Hon. Garret Graves

Chairmen Graves and Graves, Ranking Members Larsen and Cohen, and members of the Subcommittee on Aviation, thank you for the opportunity to share my thoughts on behalf of the National Association of State Aviation Officials (NASAO) regarding the future of general aviation.

For the past 92 years, NASAO has represented state government aviation agencies in all 50 states, Guam and Puerto Rico. Like you, in your roles on this subcommittee, we serve the public interest. State aviation agencies play a critical role in managing the National Aviation System, from developing state-wide aviation system plans to performing airport safety inspections on behalf of the Federal Aviation Administration (FAA) of general aviation airports.

In addition to these activities, state aviation agencies work closely with the general aviation airports in their states in a variety of ways. General aviation airports often lack the staffing and expertise available to larger airports and rely on their state aviation agencies for a wide range of technical support and guidance, as well as for assistance in interacting with the FAA. For example, ten states administer block grants for FAA Airport Improvement Program (AIP) grants to general aviation airports, many others act as channeling states [1] for the FAA where they work with the airport to accept and distribute grant funds, and most states provide funds to help meet the matching requirements for FAA AIP grants.

This testimony will focus on the top three policies that state aviation agencies believe would have the greatest impact on general aviation in their states if enacted: (1) increase Airport Improvement Program (AIP) funding levels; (2) modernize the Nonprimary Entitlement (NPE) Program; and (3) invest now to prepare for the next generation of aircraft. NASAO has also developed a list of recommendations for Congress to consider as you craft a FAA reauthorization bill, which is included at the end the testimony.

CONTINUE INVESTMENTS IN AIRPORT INFRASTRUCTURE

NASAO urges Congress to increase funding levels for the Airport Improvement Program (AIP) to a minimum of $4 billion annually. The AIP funding levels have remained stagnant for a decade at $3.35 billion a year. While funding levels have remained stagnant, construction and material costs continue to rise. There continues to be a great need for federal investment in our nation's airport infrastructure as there is more than $62 billion in AIP and IIJA-eligible projects from now until 2027 [2]. Our general aviation airports have unmet needs for construction, repair, and maintenance of runway, taxiways, and other AIP eligible projects. Looking to the future, general aviation airports must transform into greener, more sustainable facilities, as well as increase their connection to a multi-modal transportation

[1] State channeling of federal airport grants occurs in various forms within numerous states. Normally, when an airport is in a channeling act state, the sponsor submits payment request information to the state, who then submits the request to the FAA. In this case, the FAA makes payments to the state, and the state then distributes the payment to the sponsor. In some cases the state may also provide technical oversight and review, which may include state submittal of grant applications and/or closeout requests. This is based on state enabling legislation, rather than federal law. In many cases, the state also signs the grant agreements. Channeling agreements based on state enabling legislation do not need approval from the FAA Airport District Office (ADO). AIP Handbook, Chapter 2, https://www.faa.gov/airports/aip/aip_handbook/?Chapter=2

[2] Federal Aviation Administration, National Plan for Integrated Airport Systems (2023–2027), p. 3, https://www.faa.gov/sites/faa.gov/files/npias-2023-2027-narrative.pdf

system. This will take much needed focus and increased investments for this to happen.

State aviation agencies also urge Congress to reauthorize supplemental discretionary airport infrastructure grants and ensure 50 percent of funds are used for non-hub and small hub airports and general aviation airports. These funds go a long way for non-hub and small hub airports that are not able to leverage other funding sources, like the Passenger Facility Charge (PFC) fees and bonds.

MODERNIZE THE NONPRIMARY ENTITLEMENT (NPE) PROGRAM

General aviation, nonprimary commercial and reliever airports rely on the Nonprimary Entitlement (NPE) Program for minimal level of a capital funding. Unfortunately, the NPE program has not changed since its inception in the early 2000s. It needs to be modernized to meet to the current needs of general aviation airports. The NPE program provides up to $150,000 annually from AIP to general aviation, reliever, and nonprimary commercial service airports for critical projects that would otherwise go unfunded. However, in today's environment, these annual NPE grants are so small that they must be carried over for a period of years to accumulate up to $600,000 to go toward an airport project. More meaningful paving projects are starting at $1 million today. For example, in Louisiana, John H. Hooks Jr. Memorial Airport is in need of a runway rehabilitation due to pavement and base challenges. The cost estimate for the runway rehabilitation was nearly eight times the maximum amount of entitlements that could be accrued. In Missouri, many of the National Plan of Integrated Airport Systems (NPIAS) airports that are planning projects have had to break the projects in half or phase them due to the yearly NPE funds not being enough to meet the current construction prices. This greatly increases the overall cost of the pavement maintenance due to paying for mobilization, bidding, and design twice. If the NPE program is to provide airports with a meaningful opportunity to make improvements in a cost-efficient way, the program must be reformed to ensure that these airport projects are moving forward.

NASAO proposes modernizing the program by increasing the funding levels to airports with more activity: $1 million for national airports, $500,000 for commercial service non-primary airports, $500,000 for regional airports, $250,000 for local airports, $150,000 for basic airports, and $0 for unclassified airports. Equally important is increasing State Apportionment at the same proportion to ensure that an increase in NPE does not further reduce State Apportionment funds. Raising overall AIP funding levels *above* $4 billion annually will be critical to implementing this proposal.

NASAO also urges Congress to include language that would allow for the option of airport sponsors to transfer unused NPE funds to State aviation agencies and make them available to NPIAS airports within their state. This will ensure that this funding that was intended for the state remains in the state.

PREPARING FOR ADVANCED AIR MOBILITY

Congress has recognized the importance of this new era of aviation by enacting the Advanced Air Mobility Leadership and Coordination Act and the Advanced Aviation Infrastructure Modernization Act. NASAO is grateful for Congress' action on these two important bills to continue to keep the United States at the forefront of aviation.

State aviation agencies and airport sponsors have an important role to play in facilitating AAM and need assistance with this transformational challenge. They will need access to expertise and funding to plan for airport transformation, charging for eVTOL aircraft, electrification of ground support equipment, on airport clean power generation, and EV charging for airport parking facilities. Congress should encourage and fund the development and implementation of these solutions by directing the FAA to develop plans and policies and identify how to make federal funding available to support both on and off airport development for AAM. With both electric and hydrogen propelled aircraft in development, it is critical that the FAA start planning how it will support airports and off airport transportation nodes with these new infrastructure needs.

It is also vital that Congress continues to support integration of these new technologies by tasking the FAA with establishing national standards to address AAM airspace coordination and control. Established standards will help the system to expand more rapidly as AAM aircraft become certified. Federal expectations and rules for this new technology must be developed and shared with all stakeholders soon, and it is critical for state and local governments to be part of the conversation in integrating these technologies into the larger transportation system.

As planning will be an initial crucial step in facilitating AAM, we need to ensure that FAA sets infrastructure standards that can be applied across the nation in order for states and other stakeholders to conduct more in depth planning for the facility requirements. Some of this planning will require airport sponsors or vertiport managers to study their existing electrical grid to see what needs to be done to upgrade power or bring in additional power for electric vehicles, ground support equipment, public transportation and electric aircraft. NASAO urges Congress to charge the FAA to provide states baseline standards to assist with the infrastructure planning requirements to accommodate AAM, such as electrical requirements and charging standards.

In closing, Congress has an opportunity with an FAA reauthorization bill to help set general aviation airports on a path that will enable them to not only improve the current infrastructure but prepare for the future of aviation. We appreciate the Subcommittee's focus and support of the general aviation community. NASAO looks forward to continuing to work with you in the upcoming FAA reauthorization bill. Thank you for your consideration.

NASAO'S FAA REAUTHORIZATION PROPOSALS

Provide Robust Aviation Funding

- *Increase Airport Improvement Program (AIP) investment to not less than $4 billion annually*. The cost of construction has risen over the years, but we are spending less through the Airport Improvement Program (AIP) on airport infrastructure than we did in past years. An increase would enable states to not only update existing infrastructure but upgrade that infrastructure to take advantage of new aeronautical technologies that will keep the United States in the forefront of global aviation.
- *Reauthorize supplemental discretionary airport infrastructure grants and ensure 50 percent of funds are used for non-hub and small hub airports and general aviation airports*. These funds will go a long way for non-hub and small hub airports that are not able to leverage other funding sources, like Passenger Facility Charge (PFC) fees and bonds, to address their infrastructure needs.
- *Continue to apportion AIP funding based on airports' calendar year 2019 or 2020 or 2021 passenger enplanements*, whichever is highest, for FY 2024 to 2026 (consistent with the Bipartisan Infrastructure Law). This would ensure that airports continue to remain eligible for AIP and are able to fund critical airport safety projects.
- *Raise and index the Passenger Facility Charge (PFC) rates at commercial service airports*. Raising the PFC cap would give small airports, who have less options to raise airport revenue, a greater share of AIP entitlement funds. Large commercial service airports would be able to collect and use PFC revenue for airport infrastructure and forgo their AIP entitlements.

Modernize the Non-Primary Entitlement (NPE) Program

To ensure that the Non-Primary Entitlement (NPE) program better meets the needs of non-primary airports, NASAO urges Congress to:

- *Increase the funding levels to airports with more activity ($1 million for national airports, $500,000 for commercial service non-primary airports, $500,000 for regional airports, $250,000 for local airports, $150,000 for basic airports, and $0 for unclassified airports) and correspondingly increase State Apportionment to ensure that an increase in NPE does not further reduce State Apportionment funds*. The General Aviation (GA) entitlement portion of AIP is divided into two categories: State Apportionment and Non-Primary Entitlement (NPE). NPE grants are available for general aviation, reliever, and nonprimary commercial service airports at up to $150,000 per year. The remainder of the funds are then allocated for State Apportionment and go to the highest priority projects that are determined through a sound and established planning formula. These grants have been very effective at preserving an important component of the nation's aviation system. However, NPE grants must be carried over for a period of years to provide adequate funding for most airport improvement projects given that the buying power of these funds has decreased significantly since the program was established. In addition, State Apportionment has seen year-over-year reductions since the inception of the NPE program in 2001. It will be critical for Congress to address both NPE and State Apportionment funding levels when looking at enhancing the NPE program. Increasing the funding levels of these two programs will ensure that these airports are able to begin critical shovel-ready improvement projects sooner rather than later.

- *Allow for the option of airport sponsors to transfer unused NPE funds to State aviation agencies and make them available to National Plan of Integrated Airport Systems (NPIAS) airports within their state*. Non-primary airports can bank/carryover these funds for up to four years to accumulate $600,000. When non-primary airports have expired NPE funds, these funds are transferred to FAA's discretionary fund for use by FAA in that fiscal year. This proposal would ensure that these funds are invested in the respective states as intended.

Prepare for a New Era of Aviation

To ensure that the United States is ready for the next generation of aircraft and the states and localities are able to adequately prepare for these new aircraft, NASAO urges Congress to:

Advanced Air Mobility (AAM)

- *Task the FAA with developing plans and policies and identify how to make federal funding available to support both on and off airport development for AAM*. With both electric and hydrogen propelled aircraft in development, it is critical that the FAA start planning how it will support airports and off airport transportation nodes with these new infrastructure needs.
- *Charge the FAA with providing states baseline standards to assist with the infrastructure planning requirements to accommodate AAM, such as electrical requirements, and charging standards*. Planning that could be accomplished now at airports and within communities will help speed up the incorporation of AAM aircraft as they become available.
- *Require the FAA to establish a national standard to address advanced air mobility (AAM) airspace coordination and control informed by the ongoing work of the Advanced Aviation Advisory Committee*. Allowing for third party providers operating under the guidance of the FAA and the established standards would enable the federated system to expand more rapidly as AAM aircraft become certified while maintaining the appropriate level of safety.

Uncrewed Aircraft System (UAS)

- *Require the FAA to establish an outline for a constructive Federal regulatory framework for drone integration strategies that support the application of a low-altitude drone activity and require the FAA to work collaboratively with states to develop an acceptable framework*. The role of state government in integrating UAS technology into the airspace has been recognized by the inclusion of NASAO designees on the relevant UAS advisory and rulemaking committees. NASAO believes that a constructive federal, state, local partnership can be reached by the levels of government proactively working with industry stakeholders.
- *Authorize a grant program that provides not less than $100 million to state, local, and tribal governments to purchase drones for infrastructure inspection purposes and not less than $100 million to community colleges/universities to support drone education and workforce training programs*. State aviation agencies recognize the value in and are looking to leverage drone technology to inspect ageing infrastructure. This grant program will support the efforts of state, local, and tribal governments to capitalize on those benefits while investing in workforce development programs to bolster the workforce of the future.

Sustainable Aviation Fuel (SAF)

- *Continue federal support of SAF development and production* to significantly reduce harmful greenhouse gas (GHG) emissions and ultra fine particulate matter. SAF is a viable bridging strategy to reduce carbon emissions while AAM aircraft have time to mature.

Ensure Air Service to Small Communities

- *Allow communities that successfully exited EAS and were then locked out of EAS due to provisions in the FAA Modernization and Reform Act of 2012 (P.L. 112–95) to rejoin the program to help restore scheduled air service that has been reduced or suspended as a result of the pandemic*.
- *NASAO urges Congress to continue investments in the Essential Air Service (EAS), Small Community Air Service Development (SCASDP), and the Contract Tower Programs*. These programs ensure small communities have access to commercial air service.
- NASAO urges Congress *to address the aviation workforce shortage, including the pilot shortage*.

Provide Federal Support for PFAS Clean-up Efforts at Airports

- *Implement federally assisted clean-up programs for PFAS contamination at airports stemming from FAA-required use of firefighting foams containing PFAS, including airports that were not required to, but used the FAA-approved firefighting foam as a best practice. In addition, NASAO urges Congress to review and provide liability protections for all U.S. airports faced with this challenge*. While some progress has been made in identifying PFAS as an emerging contaminant, direct federal support of all airports (separate from the Airport Improvement Program) is needed to accelerate the clean-up process at contaminated sites. Not only are airports faced with difficult choices when called upon to extinguish fires using the only FAA-approved firefighting foams, airports are now subject to environmental enforcement actions in many states, harming the viability of the national transportation system. Airports should not be held liable for PFAS contamination as a result of complying with a federal requirement.

Enhance Infrastructure Investment and Jobs Act (IIJA) Implementation

- *Provide administrative funding to States to assist with implementation*. States' workload has doubled since the pandemic with the flow of federal funds to airports, which has strained State aviation agencies' resources and staff. Many States are concerned about the inadequate staff levels that they currently have to implement IIJA. Regardless of a State aviation agencies' status (e.g., Block Grant State or Channeling State), program funding assistance to States is needed to ensure IIJA funds is efficiently and effectively rolled out.
- *Ensure funds are spent efficiently by allowing airports to transfer IIJA funds between airports, including the option for State aviation agencies to assist in transferring funds between airports in their State*. The IIJA does not address the issue of transferring funds, but FAA's FAQ states that airports are not allowed to do this. Without being able to transfer funds between airports, we may see many airports carry over funds year to year and are trying to complete projects in year 4 and 5, which could create a shortage of contractors and increase prices because many airports are trying to complete projects at the same time. Allowing those State aviation agencies who are willing to assist airports within in their States to transfer funds will also help ensure that funds are spent efficiently. Several States have been using this tool successfully for many years with AIP entitlement funds.

Improve Weather Observation Resiliency and Redundancy

- *Direct the U.S. Government Accountability Office (GAO) to review the Automated Surface Observing Systems (ASOS) and Automated Weather Observing System (AWOS) and provide recommendations on how to improve the reliability and redundancy of the system*. The ASOS[3] (jointly managed program by the National Weather Service (NWS), FAA, and U.S. Department of Defense) and AWOS (airport-owned and managed system that compliments ASOS) are the country's primary surface weather observing network supporting weather forecast activities and aviation operations (e.g., regional air carriers and cargo operators). Both systems are aging and in need of updated infrastructure. While the FAA/NWS are in the process of updating ASOS, States and airports are facing challenges in updating its AWOS infrastructure as the lack of suppliers and cost of installing and maintaining the systems is becoming unmanageable. For example, when a weather station goes down, it can take up to a week before flights can resume due to delays in acquiring and installing replacement parts. A study is needed to address the complexity of the challenges of this critical weather reporting system as it's an integral part of ensuring safety in our aviation system. The need for and importance of affordable weather reporting will only grow as vertiports are integrated into the National Airspace System.
- *Direct the FAA to provide aviation weather observer training to interested candidates to improve access to the program, thereby ensuring aircraft operation safety at rural airports*. Aviation weather observers detect and track weather conditions to back up the ASOS system. Having aviation weather observers available to support weather observations when an ASOS experiences an outage due to repair/replacement or unexpected downtime is critically important to ensuring aircraft operations continue at airports. To become an aviation weather

[3] ASOS reports basic weather elements such as sky conditions, visibility, present weather conditions, visual obstructions, barometric pressure, ambient temperature, wind speed and direction, and precipitation. With more than 900 ASOS sites in the United States, these automated systems are critical to providing weather information at airports.

observer, interested candidates must pass a background check and the FAA Weather Observation Certification Test. The NWS previously managed the program and provided aviation weather observation training to assist those interested in obtaining an aviation weather observer certification and prepare them to pass the certification test. However, obtaining this certification has become much more difficult under FAA as the agency places the burden on the candidate to find the necessary observer certification training.

Enhance the State Block Grant Program

- *Authorize the FAA to provide funding to participating Block Grant States to be used to administer the State Block Grant Program (SBGP)* to bring the administrative costs borne by the States more in line with other modal programs of the U.S. Department of Transportation. *NASAO recommends an amount that is equal to an amount that the FAA would have spent to perform the delegated responsibility or three percent of the total funds administered by the Block Grant States, whichever is higher*.
- *NASAO also recommends that the FAA should provide SBGP states with program administration training sufficient to carry out the obligations of the SBGP at no cost to the SBGP states*.

Improve the Timeliness of FAA Issuance AIP Grants

- *Direct the U.S. Government Accountability Office (GAO) to review FAA's process for releasing/issuing grants and provide recommendations on how FAA can improve its process to ensure timely grant issuance*. The FAA has had a history of issuing grants late in the federal fiscal year due to a variety of factors. This poses a problem, especially for the northern states, as the construction period is very short. For instance, when bids open in June and FAA then issues the grant in September, those construction projects may not start until the following Spring, thus driving up construction costs even further. Delays in FAA issuing grants has caused airport sponsors to have to request that contractors provide a written extension to further hold/lock in the bid prices past the usual 60 or 90 days. In today's construction environment, bid holds exceeding 120 days are no longer being granted by contractors, and airport sponsors are having to re-bid projects or sign a local contract with the contractor at risk without the grant from FAA to lock in bids. Contractors have stated that they are including contingency in their bid prices if an airport sponsor requests 120 days for a bid hold since materials costs fluctuate almost daily.

APPENDIX

QUESTIONS FROM HON. SAM GRAVES TO MARK BAKER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIRCRAFT OWNERS AND PILOTS ASSOCIATION

Question 1. In the 2018 Federal Aviation Administration (FAA) Reauthorization bill, language was inserted to extend the duration of aircraft registration certificates from three years to seven years. It took the FAA four years to implement something as simple as a mandated date change in the regulations.

This change is long overdue and certainly welcome given the unacceptable backlog that has built up in the aircraft registry office in recent years. As of the March 9, 2023, Subcommittee hearing, the office was processing documents received the week before Thanksgiving last year. Do you expect this date change to alleviate the backlog? Additionally, what can Congress do to help the aircraft registration office get back on track?

ANSWER. The extension from three to seven years will have a positive effect on reducing the FAA's unacceptable backlog of registration renewals and we appreciate Chairman Graves getting this provision in the 2018 FAA Reauthorization bill. The FAA registry has been reducing the number from a high of over 190 days in late 2022 to 148 days by the end of January 2023. As of the end of July 2023, aircraft registration renewals were down to 41 days.

While the decline is good news and long overdue, AOPA continues to help keep aircraft registration delay reduction a high FAA priority. We are grateful to Chairman Graves for including two provisions in the House passed FAA Reauthorization bill that will further improve aircraft registration. Sec. 241 *Aircraft Registration Validity During Renewal* will allow an aircraft to continue to be operated on or after the registration's expiration date as long as the operator is awaiting a pending registration renewal application and meets certain criteria. AOPA also supports Section 248 *Deadline to Eliminate Aircraft Registration Backlog* that sets a deadline for the FAA to eliminate the aircraft registration backlog so that on average, applications are processed not later than 10 business days after receipt.

QUESTIONS FROM HON. BRUCE WESTERMAN TO MARK BAKER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIRCRAFT OWNERS AND PILOTS ASSOCIATION

Question 1. As the committee formulates plans for the FAA Reauthorization, we all want to ensure that our nation's airspace is the safest in the world. The US airspace is extremely safe, of course, but we can always do better. I'm especially concerned with the safety of General Aviation (GA) pilots who are routinely flying to and from small, regional, non-commercial airports. I'm concerned that the FAA isn't taking strong enough steps to ensure safety of these pilots at small airports.

For example, there's an airport in my district in Mena, Arkansas, where pilots lose contact with the Memphis Air Route Traffic Control Center when below 4,000 feet. Radio signals are blocked by mountains in the area. Instead of fixing the problem by installing a Remote Center Air/Ground site closer to Mena to ensure reliable radio contact, pilots have been instructed to land without communication with controllers. Once they get on the ground, they're supposed to check-in with Memphis to close their flight plans. Of course, the airport manager in Mena tells me that doesn't always happen, and he's been called after hours at times to verify a safe landing. When he's out of town, the sheriff's office has been known to take on this task.

I've read myriad news stories referencing a Boeing study showing that takeoff and landing are statistically the most dangerous portions of a flight. I realize that was

a commercial aircraft study, but I'm assuming there's a similar concern with GA aircraft during takeoff and landing. As such, as a GA expert, can you tell me the following:

Question 1.a. What safety concerns do you have with the situation I've outlined above?

ANSWER. The circumstance outlined above is not an abnormal situation. Communication with ATC is not available at all airports (including at Mena Intermountain Municipal Airport, which is an uncontrolled airport) and is not required for the safe operation of aircraft, including during arrivals and departures. While the presence of a remote communications outlet (RCO) or Remote Communications Air/Ground (RCAG) would be helpful, pilots are trained very early to operate safely at uncontrolled airports.

It may, however, affect efficiency and convenience. When ATC is aware of an arrival or departure at an airport, and cannot communicate with that aircraft, they typically shift to a "1 in, 1 out" operation—in other words, no other arrivals/departures are permitted until radio/radar contact has been established.

Flying in and out of airports surrounded by mountainous terrain does require additional consideration and planning. Less experienced pilots should use care, or even seek additional training, before operating at these airports. However, these operations are common and are not unsafe.

The takeoff and landing phases of flight are widely considered to be the most critical phases of flight, both in commercial and private operations. However, as noted above, communication with ATC is a separate consideration—aircraft can conduct completely safe takeoffs and landings while not communicating with ATC. In fact, the vast majority of airports in the United States are uncontrolled airports, where pilots are not in contact with ATC (although they do utilize a common traffic advisory frequency to announce their position and intentions to other nearby aircraft).

Question 1.b. Would your operation of an airplane be as safe without continuous radio contact as it would be with that contact?

ANSWER. The answer to this depends on the type of operation being conducted. Pilots are trained to operate an aircraft while not in contact with ATC (as mentioned above). Flying an aircraft in or out of an airport where ATC services are not available is in no way unsafe. Rather, it is more a matter of convenience and efficiency.

That said, it can be argued that there is an additional layer of safety when a pilot has the ability to communicate with ATC, whether in the event of an emergency or just for additional situational awareness.

Question 1.c. In a bad weather situation with limited visibility, would you be more comfortable as a GA pilot if you were in continuous radio contact with controllers versus no contact below 4,000 feet?

ANSWER. Again, this would depend on the experience level of the pilot and on the circumstances. Less experienced pilots would likely welcome communication with ATC, giving them the ability to ask for assistance if needed. More experienced pilots would feel perfectly comfortable in instrument meteorological conditions (IMC) and out of contact with ATC.

The specific circumstances might affect the comfort level as well. For a single pilot flying a single-engine aircraft, in IMC, perhaps in icing conditions, contact with ATC might be preferred. It might allow for more timely updates of airport conditions or for guidance in the event of an emergency.

Question 1.d. In many parts of rural America, cell phone signals aren't 100% reliable. What would you do if you had no radio contact, only spotty cell phone contact with the controllers, and it was after hours at the airport? Would this affect your decision to fly into this airport?

ANSWER. This question speaks to the importance of thorough pre-flight planning. Pilots are trained to be prepared for the conditions they are expected to encounter. Pilots know they need to close a flight plan after arrival and need to be prepared to do so. If a pilot is flying into an airport in a rural area, this might mean they need to carry a satellite phone, or perhaps they need to call ahead and find out where the nearest land line phone can be found.

The absence of a convenient means to contact ATC on the ground might very well impact the decision about whether or not to make the trip. To address the concern, the airport could provide an outdoor courtesy landline for pilot use or encourage the cellular carriers to improve their coverage in the area.

Question 1.e. What would you suggest the FAA do to fix this issue?

Question 1.f. If you have any other concerns or statements to make on this issue, I welcome your expertise.

ANSWER to 1.e. & 1.f. Flying in general is an exercise in managed risk. There is risk in every human endeavor and flying certainly carries its share of them, but safety is always the top priority for pilots. The key for pilots is to examine each flight and determine if the risks are acceptable and to look for ways to mitigate or eliminate any residual risks.

There may very well be a case for FAA to provide an RCO at the airport in question. Doing so would certainly improve the convenience for pilots and could, arguably, improve the level of safety. However, it is important to stipulate that the lack of radio communication with ATC, via an RCO, is not unsafe.

The cost of an RCO should also be considered—both the capital expenditure to provide it and the ensuing annual operating expenses. If the concern is primarily one of ensuring pilots can close flight plans after arrival, it is likely to be more cost-effective for the airport to provide an outdoor courtesy phone for use after hours.

QUESTION FROM HON. HILLARY J. SCHOLTEN TO MARK BAKER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIRCRAFT OWNERS AND PILOTS ASSOCIATION

Question 1. Can you talk about the role smaller airfields, and more broadly, general aviation, play for economic development for a community, and how we can encourage further growth in the general aviation space?

ANSWER. General aviation (GA) in America provides a significant economic impact contributing $247 billion to the economy and supporting more than 1.2 million jobs. Hundreds of thousands of GA pilots fly over 26 million flight hours, including more than 30 million take offs and landings while also transporting hundreds of millions of passengers.

Through the network of more than 5,000 public-use airports across the country, which is 10 times the amount served by commercial airlines, as well as over 14,700 privately owned landing facilities nationwide, GA is an integral part of the transportation system that supports communities across the country.

General aviation airports play a vital role in our national airspace system, and they are economic engines for local communities by creating jobs, generating local revenue, and attracting businesses. Thousands of small airports across the country, many of which are in rural areas, are often the lifeline for businesses. In Michigan alone, general aviation airports support over 33,000 jobs resulting in more than $1.4 billion in labor income throughout the state.

General aviation and these small airports forge links between thousands of businesses, their suppliers, and their customers and allow those businesses to move people, equipment, and products with a degree of speed and efficiency available through no other mode of transportation. In fact, an estimated 65% of general aviation flights are conducted for business and public services.

GA airports are currently eligible to receive up to $150,000 in annual entitlements from the Airport Improvement Program's Non-Primary Entitlement (NPE) program. Unfortunately, even with a four-year rollover provision, these funds are not enough to meet costly safety projects. Therefore, millions of dollars of unused NPE funds are returned annually to the FAA discretionary account where they are spent at airports across the country including at primary airports.

To help smaller airports, Congress should ensure that any NPE carryover funds be spent exclusively on non-primary airport projects at GA airports, which will allow these airports to better serve the surrounding community and foster a welcoming environment for businesses.

Also, aircraft storage is integral to the utility of any airport, and 71% of airports across the country report a waiting list for general aviation aircraft hangars. Congress should invest in local airports by dedicating specific funding for new GA hangar development. Airport managers have reported that hangars provide 45% of their gross revenue, making them a critical source of financial self-sustainability for any GA airport.

In addition, Congress should address the lack of transient (visiting) parking for aircraft at federally funded public-use airports. Today, airport access is limited for many GA pilots due to the fact that pilots are being forced to park their aircraft at commercial fixed based operators (FBOs) and, in many cases, pay unreasonably high fees for services they never requested or needed. Congress should require public-use airports to provide transient parking areas for visiting GA aircraft and if airports choose to impose a transient parking fee, it must be fair and reasonable. Congress should also pass legislation that would expand security badging for private pilots so they can escort themselves and their passengers off secure areas at airports where TSA requirements are imposed.

Congress should also create a Public-Private Partnership Airport Pilot Program that authorizes funds for marketing and education programs to attract private sector investment at smaller airports. Public-private partnerships can also go a long way to help local communities that are cash-strapped to inject new life into their airports and benefit the local taxpayers by increasing the airport's economic output.

QUESTION FROM HON. SAM GRAVES TO JACK J. PELTON, CHIEF EXECUTIVE OFFICER AND CHAIRMAN OF THE BOARD, EXPERIMENTAL AIRCRAFT ASSOCIATION

Question 1. Airmen in the past have been issued letters of authorizations (LOAs) with the authorization for "all makes and models of single-engine and multiengine, piston-powered authorized aircraft," commonly known as an unlimited LOA. The Federal Aviation Administration (FAA) changed its policy in 2007 and no longer allows such an authorization. Can you explain why it is important to the experimental community for the FAA to bring back "all makes and models" authorizations?

ANSWER. Thank you, Chairman Graves, for your question and the opportunity to provide a response.

The "all makes and models" Letter of Authorization (LOA) is important for the experimental aircraft community, specifically for those historic warbird aircraft with experimental airworthiness certificates. This community is limited in size and scope by the rare nature of the aircraft operated.

Currently, some experimental aircraft operating limitations require that before acting as Pilot in Command (PIC), a pilot must receive an aircraft authorization for each specific make and model on his or her pilot certificate. The process is similar to seeking a type rating in a type certificated aircraft. The rarity of aircraft and small size of the community often leads to a lack of qualified and experienced Experimental Aircraft Examiners and/or FAA Inspectors qualified in specific aircraft who may issue the aircraft authorization.

EAA supports the FAA reinstating the "all makes and models authorization." Allowing skilled and knowledgeable pilots with operational experience and authorizations in a significant variety of other similar experimental aircraft to be issued the "all makes and models" authorization can address the shortage of qualified examiners.

As a part of reinstating, EAA encourages that the FAA be directed to work with industry to develop the suitable framework of such a program. Engaging experienced and knowledgeable industry experts will help ensure that the correct parameters are established with an eye towards ensuring safety while implementing this enhanced form of PIC qualifications in experimental aircraft. Industry is well positioned with familiarity and understanding of these aircraft and can assist in developing the appropriate qualifications and training as well as suitable currency requirements to ensure safe operations by those that hold these authorization.

QUESTION FROM HON. HILLARY J. SCHOLTEN TO JACK J. PELTON, CHIEF EXECUTIVE OFFICER AND CHAIRMAN OF THE BOARD, EXPERIMENTAL AIRCRAFT ASSOCIATION

Question 1. Can you talk about the role smaller airfields, and more broadly, general aviation, play for economic development for a community, and how we can encourage further growth in the general aviation space?

ANSWER. Thank you, Representative Scholten, for your question and the opportunity to provide a response.

General aviation serves as the gateway to aviation and as an economic generator for many small communities. Local airports, and the general aviation aircraft and pilots they serve, provide a transportation infrastructure and business network well suited to supporting commercial and business development in surrounding communities. Aircraft based at these general aviation airports, and the airports themselves, support small and large businesses providing fast and efficient access to customers, facilities and markets.

Local flight schools, maintenance facilities, and small aviation businesses found at most general aviation airports serve as the introduction to aviation for the vast majority of people. Additionally, across the country these businesses train the vast majority of new pilots and provide the training ground for large numbers of new maintenance technicians and serve as an important, and often overlooked, compo-

nent of addressing the current and future shortage of pilots and aviation professionals.

EAA feels that there are a number of actions that can be taken to encourage growth and to promote general aviation.

MODERNIZATION OF GENERAL AVIATION AND FLIGHT TRAINING AIRCRAFT

EAA sees the FAA's Modernization of Special Airworthiness Certificates (MOSAIC) rulemaking currently underway as an area of critical importance to the future of general aviation. Small flight schools around the country are most people's entry point to the world of aviation. Many of these flight schools have found themselves priced out of new, versatile training aircraft. A new generation of Light-Sport Aircraft (LSA) could change that.

Current size and weight regulations limit the usefulness of LSA as training aircraft for flight schools. Changing the limitations of LSAs will allow for larger and more capable aircraft and permit a wider range of students and instructors to fly them, significantly increasing access to flight training. Additionally, this change should also stimulate production of these aircraft by providing the needed market to bring existing manufacturers of kit and amateur-built aircraft into the LSA market and stimulate current manufacturers to increase production.

The first MOSAIC Notice of Proposed Rulemaking (NPRM) is now expected in summer of 2023. Congress should direct the FAA to publish, by the end of calendar year 2024, a final rule that expands the utilization of light-sport aircraft, promotes their use in flight training and does so in a manner that ensures U.S. manufacturers are not at a disadvantage to foreign manufacturers.

PROTECT AND GROW GENERAL AVIATION AIRPORTS

Supporting and growing general aviation airports through the funding of additional infrastructure, promotion of compatible use of surrounding land and protecting the availability of access to aviation gasoline through 2030.

General Aviation Airport Funding

EAA supports the request of many of the general aviation associations in encouraging Congress to increase the maximum funding available to general aviation airports in the FAA's Airport Improvement Program (AIP). AIP funding for general aviation airports has been consistent at $150,000 and has not been increased for many years. An increase in this amount would meet increased cost factors and serve as an investment in the infrastructure needed to improve and expand the economic and commercial engines of many small communities and their associated businesses.

Education and Promotion of Compatible Land Use Surrounding Airports

Many challenges facing general aviation airports and stressors on the relationships between these airports and their surrounding communities stem from improper land use allowed near these airports. Airports, once originally built far from residential communities, now find themselves surrounded by residents, schools, and other noise sensitive land uses. These situations could have been mitigated with proper zoning promoting more compatible land uses such as agricultural, industrial or commercial. These types of land uses are generally less noise sensitive, many benefiting from groupings with similar uses. The FAA should continue to educated airport sponsors to ensure proper zoning and land use around airports to mitigate future concerns resulting from incompatible land use.

Protect the Availability of Avgas at Airports through Transition to Unleaded Fuel in 2030 or Sooner

EAA remains firm in our support of efforts to remove lead from aviation gasoline and it is our position that any transition from leaded to unleaded gasoline must be effectuated with safety as the highest priority. The FAA, General Aviation Associations, and other aviation stakeholders have launched a public-private initiative titled "Eliminate Aviation Gasoline Lead Emissions," or "EAGLE," which intends to achieve its firm goal—elimination of lead emissions from general aviation aircraft by the end of 2030, or sooner—through development and deployment of a viable high-octane unleaded replacement aviation gasoline that can be safely operated by the U.S. fleet with minimum impact.

The continued use of leaded avgas through the transition period will undoubtedly result in growing pressure on airports and operators at the state and local levels. A patchwork of airport-specific requirements leading to inconsistency in what fuels are available would lead to airports that may or may not carry the necessary fuels, thus creating a situation where aircraft cannot be adequately fueled or could be

misfueled, leading to safety, efficiency, and operational concerns. Vital to a successful and stable transition is maintaining the availability of 100LL avgas during the period of unleaded fuel development, authorization for use, commercialization, and deployment. The FAA plays a vital role in protecting the avgas supply throughout this process, particularly on federally funded airports.

Congress should direct the FAA to ensure the safe and coherent operation of the National Airspace System by protecting the continued supply of aviation gasoline with the timely and expedient enforcement of airport grant obligations. Airport owners or sponsors who accept funds from FAA-administered airport financial assistance programs agree to grant assurance obligations that require them to maintain and operate their facilities in accordance with specified conditions. Obligated airports who no longer provide reasonable access to 100LL aviation gasoline should be found in non-compliance with their grant obligations and appropriate action taken by the FAA.

NATIONAL CENTER FOR THE ADVANCEMENT OF AVIATION

EAA strongly supports and encourages Congress to establish and fund the National Center for the Advancement of Aviation (NCAA), originally introduced in H.R. 3482. The NCAA is envisioned to be a national, independent forum facilitating collaboration and cooperation between all sectors of aviation and aerospace stakeholders and related partners thus coordinating, promoting, and supporting the future of aviation. The NCAA is proposed to focus on four key areas: aviation and aerospace STEM curriculum; workforce development, economic and safety data and research sharing, and being a forum for cross-disciplinary collaboration. The NCAA would help promote an understanding of the aviation industry, including general aviation, while ensuring that the United States remains a global aviation and aerospace leader.

EAA'S EFFORTS TO PROMOTE AND GROW GENERAL AVIATION

I would like to take this opportunity to discuss a few of the initiatives and programs that EAA has developed and implemented that encourages further growth in the General Aviation space. At EAA we feel strongly that general aviation is best positioned to be an economic engine for local communities when our industry is well understood and when the relationships between our communities and their airports are jointly beneficial.

EAA Chapters—General Aviation Engaging with their Communities

EAA has over 900 local chapters located throughout the country at many of the nation's general aviation airports. The Chapter network is the backbone of EAA and is responsible for more than 14,000 aviation activities each year. Many of these events are social events, open to the public and advertised within the local community. These include open houses, breakfast socials, youth activities and educational opportunities.

Young Eagles—30 Years of Introducing Young People to Aviation

Our Young Eagles program provides free introductory flights to youth through a well-structured program utilizing our chapters and members who volunteer to provide these flights. Acting on our mission of growing participation, Young Eagles has to date provided nearly 2.3 million flight experiences. This number represents an entire generation of young people who have been introduced to general aviation, many who have then pursued careers as military or airline pilots, aerospace engineers or a host of other aviation related professions. This program has created a generation of people who have a deeper appreciation for aviation and a better understanding of the value of their local airport thanks to that free first flight.

AeroEducate—Inspiring Aviation Professionals of the Future

AeroEducate is a free resource filled with age-based activities and clear pathways to aviation and aerospace industry careers where K–12 students can discover and ignite their curiosity in aviation. Being a pilot is only one of many exciting careers in aviation. There are a variety of career possibilities, from aeronautical engineering to air traffic controlling to airplane maintenance to aviation management—and a real path to that dream. Whether the interest is science, technology, engineering, or math, or just a curiosity about how things work, AeroEducate offers engaging aviation-based activities developed and tested by some of the top minds in the country.

QUESTIONS FROM HON. HILLARY J. SCHOLTEN TO RICK CRIDER, A.A.E., EXECUTIVE VICE PRESIDENT OF AIRPORT/RAILPORT AND MILITARY RELATIONS, PORT SAN ANTONIO, ON BEHALF OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES

Question 1. Can you talk about the role smaller airfields, and more broadly, general aviation, play for economic development for a community, and how we can encourage further growth in the general aviation space?

ANSWER. There are more than 4,400 public-use general aviation (GA) airports in the United States, providing communities across the country access to the nation's air transportation system. The benefits of GA airports to individuals, businesses, and communities as connection points to the nation's air transportation system are significant. While GA airports vary significantly in size, complexity, and configuration, each provides unique functions and vital capabilities. In many cases, GA airports are centers for industrial aerospace activities, training hubs for the next generation of pilots, and access points to the NAS for businesses in smaller and rural communities. Law enforcement, firefighting, aerospace engineering and manufacturing, air cargo, agriculture and recreation are other examples of activities that take place at GA airports every day.

GA airports are also playing a key role with the development of Advanced Air Mobility (AAM). Recent hearings before the Committee have highlighted the immense promise that AAM offers to travelers, small communities, and the environment. AAM has the potential to reduce the need on aviation's reliance for fossil fuels, reduce commute times for the traveling public, and promote both economic and workforce development opportunities globally. The utilization of emerging technologies such as electric vertical takeoff and landing (eVTOL) aircraft will help create new methods in transporting people, cargo, and local emergency response teams between urban and rural areas. GA airports can serve as incubators for these revolutionary technologies and will undoubtedly play a key role as the industry evolves to include the development and utilization of vehicles powered by batteries, hydrogen fuel cells, and hybrid electric systems. GA airports have the fundamental infrastructure in place to support "Day 1 Operations" and generally have less concerns with airspace congestion compared to commercial service airports.

The leaders and members of the Committee have long supported the general aviation community and we are grateful that Committee leaders have indicated a desire to include a GA title in the upcoming FAA reauthorization bill. AAAE and its member airports of all sizes from across the country look forward to working with the Committee as part of the FAA reauthorization process to advance the priorities outlined in my written testimony for the hearing. Specifically, we are seeking increased funding for the Airport Improvement Program and more flexibility to airports in how they are permitted to use AIP funds; an adjustment to the AIP entitlement for nonprimary airports, including GA airports; and continued support and funding for the Contract Tower Program.

Question 2. The Bipartisan Infrastructure Law which passed last Congress is bringing billions of dollars to airports across the country. Most of this will go to improving commercial services at larger airports, but there is $500 million set aside annually for non-primary airports. How can we use this funding to also strengthen general aviation infrastructure?

ANSWER. As travel demand continues to rise at GA and commercial service airports, there is a growing need for infrastructure investment. The Infrastructure Investment and Jobs Act (IIJA) provided airports with $20 billion over five years for infrastructure and terminal grants, with $2.5 billion of that total specifically allotted to and allocated among the thousands of nonprimary commercial service and GA airports spread out across the country. We are grateful for that investment.

While IIJA funding serves as an important down payment to help bridge the enormous funding gap for airport infrastructure nationwide and will help offset inflationary and cost escalation impacts, the need for additional federal investment remains. According to the FAA's most recent NPIAS, commercial service and GA airports have $62.4 billion in AIP and IIJA-eligible projects—or around $12.5 billion annually—over the next five years. Those totals do not include other non-eligible infrastructure projects and requirements, which increase total airport capital needs significantly.

According to the latest NPIAS, the capital needs for nonprimary and GA airports are more than $19 billion over the next five years. And that figure does not factor in rising inflation, increasing labor and construction costs, or supply chain constraints. As members of the House Aviation Subcommittee know, GA and smaller

commercial service airports disproportionately rely on AIP funding to meet their infrastructure needs. The combination of stagnant authorization levels for traditional AIP funding for the past two decades and rising construction costs has greatly limited these airports from completing critical safety and improvement projects. As Congress prepares for the next FAA reauthorization bill, AAAE and ACI–NA are urging Congress to increase traditional AIP funding to at least $4 billion and to continue to authorize funds for supplemental discretionary grants to help GA and commercial service airports meet their ongoing infrastructure needs.

In conjunction with increasing AIP funding, we recommend Congress provide airports with more flexibility in how they are permitted to use that funding consistent with provisions in IIJA and in recognition of evolving airport infrastructure needs and existing limitations. Additionally, we recommend adjusting the AIP entitlement for nonprimary airports, including GA airports, since it has remained stagnant at $150,000 for more than 20 years despite rising costs and infrastructure needs. The current funding approach for nonprimary entitlements (NPE) also fails to recognize the dramatic differences in aircraft activity, operations, and economic impact within the wide spectrum of diverse GA airports.

The NPIAS categorizes nonprimary airports based on their activity level as either national, regional, local, or basic. Instead of the current one-size-fits-all policy, Congress should modernize GA entitlements by providing increased funding levels to airports with more activity or that serve larger aircraft. Specifically, we propose a tiered approach where the GA entitlement be set at $1 million for national airports, $500,000 for regional airports, $250,000 for local airports, and $150,000 for basic airports. It is important to note that our recommendation for this proposed formula change is contingent upon AIP funding of at least $4 billion annually.

The need for adjusting the $150,000 nonprimary entitlement is evident at Kelly Field, where design is underway for a consolidated facility that will promote eVTOL, along with other new and existing aircraft. But the investment in infrastructure required far surpasses the abilities of today's NPE formula. Notably, other GA airports are on the forefront of efforts to develop, test, and build electric and second-generation supersonic passenger aircraft.

QUESTION FROM HON. HILLARY J. SCHOLTEN TO CURT CASTAGNA, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NATIONAL AIR TRANSPORTATION ASSOCIATION

Question 1. Can you talk about the role smaller airfields, and more broadly, general aviation, play for economic development for a community, and how we can encourage further growth in the general aviation space?

ANSWER. Approximately 4,500 general aviation (GA) airports provide transportation options and support critical services for diverse communities across the nation, including in many remote regions that are not serviced by commercial airlines. These airports serve as powerful economic drivers in their communities by offering arrival and departure points for business developers and employing a well-paid, skilled workforce. At the same time, GA airports support law enforcement and emergency services; non-emergency medical and organ transport; executive, recreational, and cargo transport; vocational and aeronautical schools; powerline and pipeline patrol; and agricultural and conservation efforts. GA airports also serve as the proving ground for emerging technology, offering space to safely test and implement the next generation of aircraft and aviation innovation. All told, GA airports and the associated GA industry are responsible for 1.2 million jobs and nearly $250 billion in economic output.

To help GA airports meet increasing demand and prepare for emerging technologies, both federal investment and public/private partnerships must be leveraged. Expanding the Contract Tower Program and increasing the Airport Improvement Program's long-stagnant GA airport entitlement are first steps toward that goal. Creating innovative public/private grant opportunities will further allow aviation businesses to partner with airport sponsors on the infrastructure needed to charge electric aircraft, offer sustainable and unleaded fuels, install solar panel projects, and more. The GA ecosystem is a valuable resource not only to individual communities, but to our national economy and global aviation leadership. Equipping GA airports to foster innovation, improve sustainability, and meet the transportation and service needs of their surrounding communities is a critical investment in our nation's future.

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