October 10, 2011

Mr. Doug Stewart
Chairman, Society of Aviation and Flight Educators
P.O. Box 567
South Egremont, MA 01258

Re: The 2011 Pilot Training Reform Symposium Preliminary Report

Dear Mr. Stewart,

The Aircraft Owners and Pilots Association (AOPA) would like to express its support for the efforts of the Society of Aviation and Flight Educators (SAFE) to increase pilot training effectiveness.

AOPA has traditionally focused on encouraging the general public to begin flight training and helping certificated pilots stay active and safe. In response to the alarmingly low completion rates of those who pursue training, AOPA kicked off its Flight Training Student Retention Initiative in June 2010. AOPA published the findings of *The Flight Training Experience* research project in November 2010 and since that time, has hosted 12 regional meetings in six cities to get flight training provider and aviation community input, launched the *Flight School Business* newsletter, created the AOPA Flight Training Scholarship Program, and held two AOPA Flight Training Summits. Additional projects are under development, and others are seeking funding. AOPA has appreciated SAFE's support of this long-term, industry-wide initiative.

In turn, AOPA was pleased to participate in, and sponsor, the 2011 Pilot Training Reform Symposium. The recommendations gathered throughout the course of the symposium deserve further investigation into feasibility and implementation. AOPA agrees with the SAFE assertion that training reform can take place without revision to the existing regulations governing flight training.

SAFE has asked a number of the organizations who participated in the symposium to respond to the project proposals. Specifically, SAFE asked organizations to include how they will act on them. AOPA is pleased to include in this response actions underway by AOPA and industry that address these recommendations as well as future intended actions we are developing. Additionally, we are also including our thoughts on a number of areas that we feel should be further quantified by SAFE before the industry considers taking action.

Regarding the six project proposals included in the symposium's preliminary report, AOPA offers the following responses:

Project 1
Accident Root Cause Analysis: Conduct analyses to determine underlying root causes of general aviation accidents as a basis for implementing more effective mitigations.

AOPA agrees that conducting root cause analysis on aviation accidents is the key to identifying areas where recommendations can be made to have a measurable reduction of the general aviation accident rate.

AOPA has a long history of using accident analysis to develop training material through the Air Safety Institute (ASI). ASI's mission is to promote safety and pilot proficiency in general aviation through quality training, education, research, analysis, and the dissemination of information. ASI remains engaged in accident analysis and annually publishes the Joseph T. Nall Report, an in-depth analysis of general aviation accident statistics. ASI is the nation's largest non-profit organization dedicated exclusively to providing aviation education and safety programs for general aviation. In 2010, ASI reached the pilot community more than 1,900,000 times with its safety education programs.

AOPA is also intimately involved in the activities of the General Aviation Joint Steering Committee (GA JSC). As part of the Safer Skies Focused Safety Agenda initially launched in 1998, the Federal Aviation Administration (FAA) and the GA community jointly developed a goal of reducing GA fatal accidents. The GA JSC is the primary vehicle for government-industry cooperation, communication, and coordination on general aviation accident mitigation. The GA JSC meets about four times a year to review general aviation accident trends, establish areas for special emphasis, and share information.

Co-chaired by the FAA and ASI, the GA JSC combines the expertise of many key decision makers across different parts of FAA, various government agencies, and several general aviation associations including representatives from AOPA, the Experimental Aircraft Association (EAA), the General Aviation Manufacturers Association (GAMA), the Helicopter Association International (HAI), the National Air Transportation Association (NATA), the National Business Aviation Association (NBAA), and the Small Aircraft Manufacturers Association (SAMA). Government entities include NASA, the National Transportation Safety Board (NTSB), the

National Weather Service, as well as the FAA offices of Air Traffic Organization, Flight Standards Service, Aircraft Certification Service, and the Office of Airports.

Among the group's achievements are several Web-based resource guides, including the General Aviation Pilot's Guide to Preflight Weather Planning, Weather Self-Briefings, and Weather Decision Making, which provides advice to pilots on how to make safe weather flying decisions.

The GA JSC conducts its work through subgroups. Members of the subgroups include organizations or entities with expertise in the areas being reviewed such as aircraft and equipment manufacturers, government agencies (e.g., FAA, NASA, NTSB, and NWS), insurance company representatives, trade associations, universities, and other research organizations, user and training organizations.

The GA JSC currently has an effort underway to combat general aviation fatal accidents. The GA JSC is utilizing a streamlined Commercial Aviation Safety Team (CAST) model, a data-driven, consensus-based approach to analyze safety data to develop specific interventions that will mitigate the root causes of accidents. This CAST model has proven to be extremely effective in reducing the accident rate among air carriers and will now be utilized in general aviation. The GA JSC pointed to loss of control in flight, both during initial climb and maneuvering; stalls and spins while maneuvering at low altitudes, and controlled flight into terrain during enroute cruise as contributors to a large number of general aviation accidents. As a result, the GA JSC has tasked a Safety Analysis Team (SAT) and Loss of Control Working Group (LOC WG) with analyzing detailed root causes of these general aviation accidents and making recommendations for mitigation strategies which should offer the greatest effect in reducing the accident rate. The LOC WG is scheduled to complete their detailed analysis and make recommendations in 2012.

Over the next five years, the FAA is focused on using the results compiled from the GA JSC subcommittees to reduce general aviation accidents using a non-regulatory, proactive strategy to improve safety through focused education and outreach in partnership with the general aviation community.

AOPA and ASI have long supported these efforts and participate on both the SAT and LOC working groups as well as serving as Co-Chair of the GA JSC. It would be in the industry's best interest to focus any energy gathered by SAFE and the participants of the symposium on the existing GA JSC initiatives which already have broad industry involvement and support and are utilizing proven methods for improving aviation accident rates.

Project 2
Flight Review Improvement: (1) Create a new flight review option that can be enabled as an FAA-sponsored pilot proficiency award program (14CFR61.56e). (2) Revise conventional flight review guidance.

(1) Create a new flight review option that can be enabled as an FAA-sponsored pilot proficiency award program (14CFR61.56e).

Currently, pilots may complete a phase of the FAA WINGS Pilot Proficiency Program and receive credit for a flight review. It is unclear whether the "new" program proposed in the SAFE recommendations would replace WINGS or if the suggested criteria would serve as another option in the current program. The idea of providing alternate options for obtaining a flight review is interesting, however many questions would have to be answered including: What quantifiable effect would such options likely have on the general aviation accident rate? How would such a program be implemented? What would the associated costs be? Would an additional program add complexity to existing processing requirements for instructors, FAA and/or pilots? How would standardization be assured? What would the flight time, training and duration requirements be? Although this recommendation may have merit, many questions remain; questions that would need to be answered before investing resources in developing an advisory circular or attempting to implement a new program.

(2) Revise conventional flight review guidance.

Advisory Circular 61-98A was revised in 1991 and includes significant updated material related to risk management and human factors considerations. The FAA-published *Conducting an Effective Flight Review* was revised in 2006 was and is intended for use with AC 61-98A. According to the document, it…

> *"…offers ideas for conducting an effective flight review. It also provides tools for helping that pilot develop a personalized currency, proficiency, risk management, and 'aeronautical health maintenance and improvement' program. A key part of this process is the development of risk management strategies and realistic personal minimums."*

AOPA supports an increased emphasis on risk management and offers training on decision making (among many other topics) through an ASI interactive online course and offers guidance on conducting and preparing for a flight review in the *Pilot's Guide to the Flight Review* Safety Advisor. ASI has also developed the "Flight Risk Evaluator," an online, innovative, and interactive tool that assists pilots in measuring risk prior to flight.

In addition, FAA guidance material provided to instructors was recently updated. Revisions to FAA guidance materials require much time, internal resources, and coordination. Executing frequent revisions to this guidance may not be the quickest or most efficient method to communicate the latest in training techniques. SAFE and others have provided training curriculum online free of charge as a public service to the aviation community as a result of the Pilot Training Reform Symposium. Perhaps a similar approach would offer the best and most timely option to presenting instructors with guidance that would augment the current FAA Flight Review training material.

Project 3
FAA Training Doctrine and Standards Modernization: Complete the modernization of FAA training doctrine and standards.
AOPA continues to engage the FAA and industry in efforts to improve training doctrine and standards. As highlighted in a meeting attended by AOPA, SAFE, NAFI as well as a host of professional instructors, examiners, and test preparation material providers in May of this year, the process that the FAA currently uses to develop and validate test questions for knowledge exams does not utilize input from industry representatives most closely involved with flight training and may not be the most effective method to validating pilot knowledge.

AOPA stated in a letter to the FAA dated March 3 2011,

> *"The knowledge test should be an effective measurement of knowledge, not just a test of rote memory. We would like to see students come out of flight training with the fundamental knowledge needed to operate their aircraft safely and, in the case of the Flight Instructor, to teach effectively. This may mean a full systematic change requiring cooperation of the FAA and industry."*

In the May industry meeting in Oklahoma City, as well as a follow up meetings since, AOPA has continuously insisted that a process must be developed that utilizes industry input into the development of doctrine and standards, just as SAFE calls for in their recommendations.

In June we brought experts in academia to the FAA to discuss the matter in greater detail. These academic experts have extensive specialized experience with a system of test development and validation that is currently in use by NBAA in their accredited aviation certificate programs. The methods used to develop these tests offer an excellent example of how industry and FAA can work together for the common goal of validating aviation knowledge, thereby increasing safety.

At the AOPA Aviation Summit in September, the FAA Administrator announced the formation of a knowledge test Aviation Rulemaking Committee (ARC), which is tasked with developing a process to write and validate aviation knowledge exams, utilizing expertise of both the FAA and industry.

AOPA is pleased to be a participant on the upcoming knowledge test ARC. We look forward to working with the FAA, SAFE, and all of the ARC participants to improve the process of aeronautical knowledge exam writing and validating, in turn, effectively focusing training and testing knowledge on material which will have the greatest impact to aviation safety.

Project 4
Flight Instructor Improvement: Improve flight instructor training, certification, and renewal requirements.

AOPA believes the flight instructor's role is incredibly important to student success and safety. When AOPA began work on the Flight Training Student Retention Initiative in June 2010, the first goal was to gain a more objective, in-depth look at today's training environment. According to *The Flight Training Experience* research report, "instructor effectiveness" and "instructor support" are two of the top three factors when considering impact on students. The AOPA Air Safety Institute has already incorporated a module based on lessons learned from the Flight Training Student Retention Initiative into their Flight Instructor Refresher Clinics.

Regarding other recommendations listed under this project, AOPA agrees that not everyone can safely operate an airplane. With that said, flight training providers have told AOPA they could benefit from guidance on identifying and adapting to student learning and communication styles. When a student is not performing to standards, it may not be because he or she is incapable of doing so, but rather due to incompatibility of the flight instructor's approach. AOPA believes that providing guidance to flight instructors on identifying and adapting to student learning and communications styles is equally, or perhaps more, valuable than guidance on discontinuing students' training programs.

As AOPA moves forward utilizing the information gathered from the Flight Training Student Retention Initiative, we will continue to work with the flight training community to develop this type of guidance.

Project 5
Flight Instructor Accreditation: Develop a voluntary, entry-level flight instructor accreditation process that goes beyond the minimum FAA requirements and emphasizes the providing of better value to students, while improving flight instructor credibility.
The flight training industry currently has two flight instructor accreditation programs: The SAFE-supported Master Instructor Program offered through Master Instructors LLC, and the NAFI Master and Associate Master Flight Instructor Accreditation Program. The FAA Gold Seal Flight Instructor Certificate is another option for flight instructor recognition. We encourage either or both of these programs to develop material targeted at entry-level instructors.

Although there is value in encouraging and rewarding excellence in flight instruction, AOPA does not believe that flight instructor accreditation alone can reform flight training. We believe it is important to begin with a train-the-trainer concept, providing resources to help flight instructors be most successful. With that said, an accreditation program is of value if the financial and non-financial cost-benefit ratio is appropriate for both program managers and participants.

SAFE created an advisory committee for this project, and AOPA's Director of Flight Training Initiatives accepted an invitation to serve. The specifics of AOPA's support will be determined once key program details are outlined.

AOPA has developed information-resource-related materials to support flight schools and flight instructors. On March 1, 2011, AOPA launched the bi-weekly *Flight School Business* e-newsletter. The AOPA Air Safety Institute continues to publish the quarterly *CFI to CFI* newsletter (formerly known as *Instructor Report*), which reaches over 90,000 flight instructors. At the 2011 AOPA Flight Training Summit, AOPA kicked off a project that will identify business best practices (including sales and customer service) and create related resources. Additionally, AOPA is planning enhancements to its existing Project Pilot student mentoring program and we support SAFE's aviation educator mentoring program.

Project 6
Curricula and Training Improvements: Restructure standard industry curricula and training infrastructure to reduce fatal accidents and promote increased student starts and retention of students.

AOPA has taken a number of steps since the beginning of our Flight Training Student Retention Initiative to address the training infrastructure and promote increased student starts. In order to take a holistic approach to growing the pilot population, AOPA created *The Pilot Lifecycle* as a model to remove barriers and create support in all phases.

The Pilot Lifecycle © 2010 AOPA

To support phase one, General Aviation Awareness, AOPA plans to create a presentation that communicates the value of the GA experience by the end of 2012. AOPA will continue to reach prospective pilots in phase two through its *Let's Go Flying* website and related earned media coverage. Student pilots in phase three will be supported by programs in AOPA's Flight Training Student Retention Initiative, including the AOPA Flight Training Scholarship Program and the soon-to-be launched *MyFlightTraining* online support system. Once a pilot is certificated, AOPA protects his or her freedom to fly through advocacy, information, and education. AOPA also supports its members who are returning to flying after their currency has lapsed.

Regarding other recommendations listed under this project, the AOPA Air Safety Institute is currently conducting research in angle of attack (AOA) training. AOPA encourages the use of flight simulators, and is supportive of an effort to credit additional simulator training hours toward pilot certification. We also believe that scenario-based training, as well as maneuver-based training, both have their place in flight training. To be most effective, an instructor should be given the training, tools, and flexibility to incorporate these techniques in an individualized

flight training curriculum that best suits a student's particular learning style and needs. AOPA supports a focus on developing and promoting this type of material.

Summary

AOPA is actively engaged in efforts to reform the current flight training system so that the industry as a whole benefits, including pilots, pilots in training, flight instructors, flight schools, and communities as a whole. The recommendations that were gathered during the Pilot Training Reform Symposium are supportive of the efforts currently underway and present some interesting questions regarding initiatives that could be developed in the future. AOPA looks forward to seeing a number of these ideas further developed by SAFE and will support efforts that will offer real benefit to the flight training community.

This response is intended to be viewed in its entirety. We would appreciate it if you would contact us prior to quoting from (or taking excerpts from) this document.

Sincerely,

Robert E. Hackman
Vice President, Regulatory Affairs
Aircraft Owners and Pilots Association