

January 22, 2024

Federal Aviation Administration,  
800 Independence Avenue SW,  
Washington, DC 20591

SUBJECT: Comments to FAA–2023–1377: NPRM, Modernization of Special Airworthiness Certification

Members of the Aircraft Electronics Association (AEA) and the Aeronautical Repair Station Association (ARSA) are directly impacted by the above referenced rulemaking.

Overall, the associations support the proposed revisions to the sport pilot privileges and limitations, although as discussed later, the Agency defended a safe general aviation stall speed more than 10 percent higher than the current proposal which the associations support as a reasonable performance level for sport pilots.

The associations also support and encourage the enabling of enhancements in safety and performance, and the introduction and use of advanced technologies. However, the associations do not support some of the Agency’s efforts in this proposal, specific to the expanded size, speed, and operation of light-sport aircraft (LSA), as this is the fourth attempt at rulemaking aimed to accomplish a similar outcome. The FAA’s failure to adequately implement three earlier rulemakings does not justify additional rulemaking.

The associations fundamentally support the premise of the FAA’s proposal to amend the regulations for the manufacture, certification, operation, maintenance, and alteration of light-sport aircraft. However, the proposal as written duplicates regulatory changes made by the FAA three decades ago.

In 1989, (54 FR 9738, March 7, 1989) the FAA wrote that at the request of AOPA and EAA, it proposed to, and ultimately did, establish a new category of aircraft, and new simplified procedures for type, production, and airworthiness certification, and associated maintenance procedures. These aircraft would be of simple design intended for pleasure and personal use only and would be designated as primary category aircraft. These aircraft (airplanes, gliders, rotorcraft, manned free balloons, etc.) may be unpowered or powered by a single, naturally aspirated engine having a certificated takeoff rating of 200 shaft horsepower or less. The aircraft would have a maximum occupant capacity of four or less, a maximum gross weight of 2,500 pounds or less, and would have un-pressurized cabins.

The final rule (57 FR 41360, September 9, 1992)) codified the proposal by establishing a new primary category of aircraft, and new simplified procedures for type, production, and airworthiness certification, and associated maintenance procedures. “Aircraft in this category are of simple design intended exclusively for pleasure and personal use. Primary category aircraft (airplanes, gliders, rotorcraft, manned free balloons, etc.) may be unpowered or powered by a single, naturally aspirated engine, with a 61-knot or less stall speed limitation for airplanes and a 6-pound per square foot main rotor disc loading limitation for rotorcraft. Primary category aircraft may have a maximum certificated weight of no more than 2,700

pounds, maximum seating capacity of four, and unpressurized cabins. Although these aircraft may be available for rental and flight instruction under certain conditions, the carrying of persons or property for hire is prohibited. This final rule also adds a new section addressing the falsification of documents submitted as part of certification for products and parts.” (57 FR 41360 September 9, 1992)

The primary category final rule (57 FR 41360 September 9, 1992) allowed private industry to develop certification design standards through associations and consensus groups and submit those standards to the FAA for approval. The FAA agreed that the development of certification standards by the private sector represented the most productive and cost-effective manner of streamlining the certification process.

It is important to note that the primary category final rule introduced a design, certification, and production system similar to today’s light-sport aircraft system.

The associations acknowledge that primary category predated the wide-spread development of industry-led aviation consensus standards and as such, primary category has not been utilized to its intended purpose. The Agency’s guidance and policies regarding primary category are still legacy documents which have not been updated to reflect the use of consensus standards for light-sport aircraft introduced in 2004 (69 FR 44772, July 27, 2004) or the Agency’s adoption of industry consensus standards for normal category aircraft introduced in 2016 (81 FR 96689).

The associations suggest that the Agency’s arguments to amend the light-sport aircraft design and certification criteria are unnecessary, duplicative, and frivolous rulemaking. However, the technology arguments contained within this proposal are valid and should be considered for all aircraft of comparable size, speed, and operation regardless of the type of airworthiness certificate issued.

The continued airworthiness regulations of light-sport aircraft were designed and supported due to the limited size and complexity of the LSA aircraft as proposed in 2002 (67 FR 5368, February 5, 2002). The risk consequences of the proposal for an unbound, speed-based aircraft have not been developed for this proposal. The unintended consequences of this proposal will be mitigated by simply using the primary category regulations that are currently in place. The Agency has been developing a safety continuum for aircraft design, certification, maintenance, and operations for over 30 years. This safety continuum carries through light-sport aircraft, primary category aircraft and normal category aircraft. Any proposal on any one pillar of the safety continuum has an effect on the other pillars. As such, any proposal must be weighed as to its effect on the entire safety continuum.

Currently, all three pillars of the safety continuum are designed and manufactured to industry consensus standards. In each rulemaking, the FAA made the same argument regarding simplified certification, enhanced safety, and support of new technologies to justify the proposal and final rule. And yet, after 30 years of streamlining the design and certification process, the industry still struggles to leverage the FAA’s promised intent. Yet another regulatory change is neither warranted nor justified.

The Agency, in coordination with industry, must consider all three pillars of the recreational aircraft industry and develop policy and guidance to support the 30 years of promises made by the Agency.

*Primary Category NPRM (1989)*

*“This notice proposes to establish a new category of aircraft, and new simplified procedures for type, production, and airworthiness certification, and associated maintenance procedures. These aircraft would be of simple design intended for pleasure and personal use only, and would be designated as primary category aircraft. These aircraft (airplanes, gliders, rotorcraft, manned free balloons, etc.) may be unpowered or powered by a single, naturally aspirated engine having a certificated takeoff rating of 200 shaft horsepower or less. The aircraft would have a maximum occupant capacity of four or less, a maximum gross weight of 2,500 pounds or less, and would have unpressurized cabins.”...*

*“This notice emanates from a petition for rulemaking filed jointly by the Aircraft Owners and Pilots Association (AOPA) and the Experimental Aircraft Association (EAA). The intended effect of this proposal is to—*

- (1) Provide a category for aircraft that are less costly to certificate, produce, purchase, and maintain than current standard category aircraft;*
- (2) stimulate the introduction of new, less costly airplane designs;*
- (3) enable kit manufacturers to fill demand for low-cost aircraft; and*
- (4) improve the safety of kit-built aircraft presently being certificated as experimental-amateur built.”*

*(54 FR 9738, March 7, 1989)*

*LSA NPRM(2002)*

*“The FAA is proposing requirements for the certification, operation, maintenance, and manufacture of light-sport aircraft. Light-sport aircraft are often heavier and faster than ultralights and include airplanes, gliders, balloons, powered parachutes, weight-shift-control aircraft, and gyroplanes. This action is necessary to address advances in sport and recreational aviation technology, gaps in the existing regulations, and several petitions for rulemaking and for exemptions from existing regulations. The intended effect of this action is to provide for the manufacture of safe and economical aircraft and to allow operation of these aircraft by the public in a safe manner.”(67 FR 5368, Tuesday, February 5, 2002).*

*Part 23 NPRM (2016)*

*“The FAA proposes to amend its airworthiness standards for normal, utility, acrobatic, and commuter category airplanes by removing current prescriptive design requirements and replacing them with performance-based airworthiness standards. The proposed standards would also replace the current weight and propulsion divisions in small airplane regulations with performance- and risk-based divisions for airplanes with a maximum seating capacity of 19 passengers or less and a maximum takeoff weight of 19,000 pounds or less. The proposed airworthiness standards are based on, and would*

*maintain, the level of safety of the current small airplane regulations.”... (81 FR 13452, March 14, 2016)*

#### *MOSAIC NPRM*

*“The FAA proposes to amend rules for the manufacture, certification, operation, maintenance, and alteration of light-sport aircraft. The proposed amendments would enable enhancements in safety and performance and would increase privileges under a number of sport pilot and light-sport aircraft rules. These enhancements include increasing suitability for flight training, limited aerial work, and personal travel.” (88 FR 47650, July 24, 2023)*

The aircraft identified by the FAA which have received exemptions to the current LSA regulations, as well as the future aircraft the Agency discusses, already qualified for one or more of the existing simplified certification standards that have been codified.

The maintenance and continued airworthiness of light-sport aircraft is the most restrictive requirement in aviation. Because of the definition of major repairs and alterations and the FAA’s delegation of approval to only the original equipment manufacturer (OEM), the ability to perform even the simplest instrument replacement with an FAA-approved instrument (TSO/PMA) meeting the same form, fit and function becomes a major alteration requiring OEM approval.

Because of the restrictive continued airworthiness limitations, this proposal would be detrimental to the component manufacturers’ development of new FAA-approved retrofit products since the proposal would replace one-third of the current light general aviation market with the more restrictive LSA.

Since the aircraft have little to no standardization, there is little opportunity for standardized upgrades and modifications as proposed by the Agency. Expanding the LSA category of aircraft to potentially replace one-third of all light general aviation aircraft would prohibit, or at a minimum deter, upgrading recreational aircraft with safety-enhancing technology.

Each of the former rulemaking efforts, and the current regulations, have found a balance in impact between general aviation manufacturers, operators, and maintainers. This proposal disregards the negative impact on design, certification, and installation of retrofit technologies, as well as the aviation maintenance service industry.

A section-by-section review of the proposal follows.

### **Part 1—Definitions and Abbreviations**

The associations DO NOT agree with this proposal as written.

By deleting “for the purpose of certificating light-sport aircraft” as stated in the current 14 CFR part 1 definition and applying it universally to all aircraft design, operation, production, maintenance, or airworthiness applications, the FAA has introduced an unintended consequence of explicit acceptance of thousands of consensus and industry standards that are used in EVERY segment of aviation. These include airports and fuels, design, certification, and production of electronic products and articles, maintenance and continued airworthiness tasks, and the training of technicians.

The Office of Management and Budget (OMB) has defined consensus standard for the Federal Government, in its Circular No. A-119. The FAA is encouraged to utilize the OMB definition. In addition, according to the OMB Circular No. A-119, not all “industry-developed standards” meet the definition of a consensus standards. While accepting the accepted OMB definition of consensus standards, 14 CFR § 23.10 contains the controls that the broad definition is trying to capture without the use of an improper definition.

*§ 23.10 Accepted means of compliance.*

*(a) An applicant must show the FAA how it will demonstrate compliance with this part using a means of compliance, which may include consensus standards, accepted by the Administrator.*

### **Part 21 - Certification Procedures for Products and Articles**

§ 21.190 Issue of a special airworthiness certificate for a light-sport category aircraft

The associations DO NOT agree with this proposal as written.

See discussion on part 22.

### **Part 22—Design, Production, and Airworthiness Requirements for Non-Type Certificated Aircraft (NEW)**

The associations object to the creation of part 22 as written. The proposal, as written, will create confusion and global disharmony. The associations also do not agree that this is an insignificant change to the regulation.

The FAA has invested millions of dollars and spent decades working with foreign civil aviation authorities to harmonize aviation regulations to the maximum extent possible. The universally accepted part 22 is for sailplanes.

- EASA: CS 22: Sailplanes and Powered Sailplanes.
- TCCA: Airworthiness Manual Chapter 522 - Gliders and Powered Gliders.

- CASA: Part 22 of the Civil Aviation Safety Regulations (CASR) sets out the airworthiness standards for sailplanes. Sailplanes include gliders and powered sailplanes.

While the global aviation industry has worked for decades to align regulatory structure to support globalization of the aviation industry, the Agency’s introduction of part 22 without consideration of harmonization and alignment with global standards is unacceptable.

Limiting part 22 to only non-type certificated aircraft will create unnecessary confusion throughout the global aviation industry. While this is not to suggest that 14 CFR part 22 could not be utilized for light-sport airplane certification standards, it should not be limited to LSA. Part 22 should be the repository for ALL aircraft not covered by the existing certification standards (parts 23, 25, 27, 29) to include sailplanes and primary category aircraft, and not limited to ONLY non-type certificated aircraft.

The associations suggest the establishment of an industry group through the Aviation Rulemaking Advisory Committee (ARAC) to develop the size, scope, and applicability of a new part 22 to 14 CFR.

While the associations object to the creation of part 22 as written, we are offering the following comments in support of the technical elements contained within the proposed part 22, rather than supporting the creation of part 22.

Independent of the associations’ current objection to the introduction of 14 CFR part 22, the associations do support the FAA’s proposal to define the airworthiness requirements for light-sport aircraft that are necessary for the safety of flight for LSA aircraft. As such, this is a significant shift in that the safety standards for LSA aircraft are transitioning from the consensus standards to 14 CFR part 22. However, where applicable, there should be consistency in the safety standards for all general aviation aircraft regardless of airworthiness certificate, e.g. LSA, primary category, or part 23.

#### § 22.1 Applicability.

In paragraph (c), the Agency states: “This part does not apply to aircraft issued an experimental airworthiness certificate, aircraft operating under a special flight permit, or unmanned aircraft.” However, this is not defined. The preamble to the rule does not provide insight into the limitations of part 22.

- Would the design and performance standards of part 22 apply equally to special-light-sport aircraft (S-LSA) as well as experimental-light-sport aircraft (E-LSA)?
- Is it the intent of the Agency that unmanned (drone) non-type certificated aircraft (UAS) will fall under part 22?

#### Subpart B—Light-Sport Category Aircraft

##### § 22.100 Eligibility.

The associations DO NOT agree with the extensive expansion of LSA aircraft criteria.

Most of the criteria and justification of the expanded criterion has already been approved via rulemaking in 1992 as the primary category aircraft.

This proposal, as written, is unnecessary. The FAA has already approved a simplified certification based on consensus standards for larger, faster, and more complex aircraft.

The primary category aircraft rulemaking predated the FAA's broad acceptance of consensus standards by 12 years. However, the failure of the Agency or industry to utilize the existing regulations does not justify a new rulemaking.

The premise of the MOSAIC rulemaking to address advances in technology such as electric propulsion is noteworthy and should apply equally to LSA, primary category as well as normal category aircraft.

While the associations find that the current weight of 1,320 pounds is arbitrary and contributes to an unsafe condition, an increase in aircraft weight is accounted for in primary category aircraft. As such, since the light-sport aircraft is intended to be a two-place recreational aircraft, it appears that a reasonable weight for these aircraft would align with the empty weight of a Cessna model 152. As such, the associations recommend that light-sport aircraft should have an empty weight of 1,080 pounds.

(2) The associations DO NOT agree with the increase in aircraft seating. Primary category aircraft already provides a pathway for aircraft with a seating capacity of four persons.

(3) The associations DO NOT agree with the increase of stall speed to 54 knots CAS. Primary category aircraft already provides a pathway for aircraft with a stall speed above 45 knots.

(4) The associations DO NOT agree with the increase in maximum speed of 250 knots CAS. Primary as well as normal category aircraft already provide a pathway for aircraft with a increased airspeed above 120 knots CAS.

#### § 22.120 Special requirements for light-sport aircraft used for aerial work operations.

The associations DO NOT agree with the option for aerial work as proposed. Aerial work is a commercial operation in which normal category aircraft already provides a simplified pathway for design, certification and manufacturing of the aircraft to be used in aerial work.

Aircraft Systems: § 22.135 Instruments and equipment; § 22.140 Controls and displays; § 22.145 Propulsion system; § 22.150 Fuel system; § 22.155 Fire protection; § 22.160 Visibility; § 22.165 Emergency evacuation; § 22.170 Placards and markings; and § 22.175 Noise.

The associations DO NOT agree with the aircraft system descriptions as written.

In 2017, the FAA amended normal category aircraft regulations by publishing minimum safety standards. Since the intended purpose of the LSA aircraft is aligned with level 1 part 23 normal category aircraft, as well as primary category aircraft, the FAA has not explained how the safety standard of a two-place LSA aircraft is justified to be different that the safety standards of a two-place level 1 normal category (part 23) aircraft.

The associations support the proposal for performance-based safety standards, however, and suggest that the safety standards should be aligned for aircraft of comparable size, speeds, and operations regardless of the airworthiness certificate the aircraft carries. The associations suggest using the established safety standards as published by the FAA for two-place airplanes in part 23, in the current amendment for level 1 aircraft, regardless of the airworthiness certificate issued.

§ 22.135 Instruments and equipment.

The associations suggest that § 22.135 Instruments and equipment should be amended to read:

*§ 23.2615 Flight, navigation, and powerplant instruments.*

*(a) Installed systems must provide the flightcrew member who sets or monitors parameters for the flight, navigation, and powerplant, the information necessary to do so during each phase of flight. This information must—*

*(1) Be presented in a manner that the crewmember can monitor the parameter and determine trends, as needed, to operate the airplane; and*

*(2) Include limitations, unless the limitation cannot be exceeded in all intended operations.*

*(b) Indication systems that integrate the display of flight or powerplant parameters to operate the airplane or are required by the operating rules of this chapter must—*

*(1) Not inhibit the primary display of flight or powerplant parameters needed by any flightcrew member in any normal mode of operation; and*

*(2) In combination with other systems, be designed and installed so information essential for continued safe flight and landing will be available to the flightcrew in a timely manner after any single failure or probable combination of failures.*

§ 22.140 Controls and displays.

The associations suggest that § 22.140 Controls and displays should be amended to read:

*§ 23.2300 Flight control systems.*

*(a) The applicant must design airplane flight control systems to:*

*(1) Operate easily, smoothly, and positively enough to allow proper performance of their functions.*

*(2) Protect against likely hazards.*

*(b) The applicant must design trim systems, if installed, to:*

*(1) Protect against inadvertent, incorrect, or abrupt trim operation.*

*(2) Provide a means to indicate--*

*(i) The direction of trim control movement relative to airplane motion;*

*(ii) The trim position with respect to the trim range;*

- (iii) The neutral position for lateral and directional trim; and*
- (iv) The range for takeoff for all applicant requested center of gravity ranges and configurations.*

§ 22.145 Propulsion system.

§ 23.2400 states that “engines and propellers installed on level 1 low-speed airplanes, which may be approved under the airplane type certificate in accordance with a standard accepted by the FAA that contains airworthiness criteria the Administrator has found appropriate and applicable to the specific design and intended use of the engine or propeller and provides a level of safety acceptable to the FAA.”

The associations suggest that the safety standards of § 22.145 Propulsion system as applicable to aircraft are also intended to satisfy the safety standards of § 23.2400, and therefore should be aligned with 14 CFR § 23.2400.

§ 22.150 Fuel system.

The associations suggest that the safety standards of § 22.150 Fuel system for aircraft should be amended to read:

*§ 23.2430 Fuel systems.*

*(a) Each fuel system must--*

- (1) Be designed and arranged to provide independence between multiple fuel storage and supply systems so that failure of any one component in one system will not result in loss of fuel storage or supply of another system;*
- (2) Be designed and arranged to prevent ignition of the fuel within the system by direct lightning strikes or swept lightning strokes to areas where such occurrences are highly probable, or by corona or streamering at fuel vent outlets;*
- (3) Provide the fuel necessary to ensure each powerplant and auxiliary power unit functions properly in all likely operating conditions;*
- (4) Provide the flightcrew with a means to determine the total useable fuel available and provide uninterrupted supply of that fuel when the system is correctly operated, accounting for likely fuel fluctuations;*
- (5) Provide a means to safely remove or isolate the fuel stored in the system from the airplane;*
- (6) Be designed to retain fuel under all likely operating conditions and minimize hazards to the occupants during any survivable emergency landing. For level 4 airplanes, failure due to overload of the landing system must be taken into account; and*
- (7) Prevent hazardous contamination of the fuel supplied to each powerplant and auxiliary power unit.*

*(b) Each fuel storage system must--*

- (1) Withstand the loads under likely operating conditions without failure;*

- (2) *Be isolated from personnel compartments and protected from hazards due to unintended temperature influences;*
- (3) *Be designed to prevent significant loss of stored fuel from any vent system due to fuel transfer between fuel storage or supply systems, or under likely operating conditions;*
- (4) *Provide fuel for at least one-half hour of operation at maximum continuous power or thrust; and*
- (5) *Be capable of jettisoning fuel safely if required for landing.*
- (c) *Each fuel storage refilling or recharging system must be designed to--*
  - (1) *Prevent improper refilling or recharging;*
  - (2) *Prevent contamination of the fuel stored during likely operating conditions; and*
  - (3) *Prevent the occurrence of any hazard to the airplane or to persons during refilling or recharging.*

§ 22.155 Fire protection.

The associations suggest that the safety standards of § 22.155 Fire protection for aircraft should be amended to read:

*§ 23.2325 Fire protection.*

- (a) *The following materials must be self-extinguishing--*
  - (1) *Insulation on electrical wire and electrical cable;*
  - (2) *For levels 1, 2, and 3 airplanes, materials in the baggage and cargo compartments inaccessible in flight; and*
  - (3) *For level 4 airplanes, materials in the cockpit, cabin, baggage, and cargo compartments.*
- (b) *The following materials must be flame resistant--*
  - (1) *For levels 1, 2 and 3 airplanes, materials in each compartment accessible in flight; and*
  - (2) *Any equipment associated with any electrical cable installation and that would overheat in the event of circuit overload or fault.*
- (c) *Thermal/acoustic materials in the fuselage, if installed, must not be a flame propagation hazard.*
- (d) *Sources of heat within each baggage and cargo compartment that are capable of igniting adjacent objects must be shielded and insulated to prevent such ignition.*
- (e) *For level 4 airplanes, each baggage and cargo compartment must--*
  - (1) *Be located where a fire would be visible to the pilots, or equipped with a fire detection system and warning system; and*
  - (2) *Be accessible for the manual extinguishing of a fire, have a built-in fire extinguishing system, or be constructed and sealed to contain any fire within the compartment.*
- (f) *There must be a means to extinguish any fire in the cabin such that--*
  - (1) *The pilot, while seated, can easily access the fire extinguishing means; and*
  - (2) *For levels 3 and 4 airplanes, passengers have a fire extinguishing means available within the passenger compartment.*

*(g) Each area where flammable fluids or vapors might escape by leakage of a fluid system must--*

*(1) Be defined; and*

*(2) Have a means to minimize the probability of fluid and vapor ignition, and the resultant hazard, if ignition occurs.*

*(h) Combustion heater installations must be protected from uncontained fire.*

§ 22.165 Emergency evacuation.

The associations suggest that the safety standards of § 22.165 Emergency evacuation for aircraft should be amended to read:

*§ 23.2315 Means of egress and emergency exits.*

*(a) With the cabin configured for takeoff or landing, the airplane is designed to:*

*(1) Facilitate rapid and safe evacuation of the airplane in conditions likely to occur following an emergency landing, excluding ditching for level 1, level 2 and single engine level 3 airplanes.*

*(2) Have means of egress (openings, exits or emergency exits), that can be readily located and opened from the inside and outside. The means of opening must be simple and obvious and marked inside and outside the airplane.*

*(3) Have easy access to emergency exits when present.*

§ 22.180 Special requirements for category aircraft with simplified flight controls.

Simplified flight controls is a new-technology term with applicability across all aircraft designs. The associations suggest that a definition of simplified flight controls must be developed to be universally applied across all aircraft: At a minimum, LSA, primary and normal category aircraft, however, ideally, the definition of simplified flight controls would be applicable to all fixed and rotor wing aircraft regardless of size.

§ 36.0 Applicability; aircraft that do not conform to a type certificate.

Paragraph (c): The associations DO NOT agree with this proposal as written.

All aircraft within light-sport, primary, and normal category aircraft are designed and manufactured to consensus standards; as such, the noise standards are agnostic to the airworthiness certificate carried in the aircraft. If the use of a noise consensus standard is applicable and appropriate for a four-place propeller-driven aircraft with a normally aspirated engine, then the use of the noise consensus standards must be an acceptable means of compliance regardless of the airworthiness certificate the aircraft holds.

## **Part 43 - Maintenance, Preventive Maintenance, Rebuilding, and Alteration**

§ 43.1 Applicability.

Paragraph (B)(2): While the associations encourage owner-maintenance, aircraft that are used in commercial operations to include flight training and aerial work must NOT be exempt from part 43.1 (d).

#### **Part 45—Identification and Registration Marking**

§ 45.23 Display of marks; general.

This is unrelated to the Modernization of Special Airworthiness Certification; as such, the FAA has NOT provided appropriate notice as required by the Administrative Procedure Act with regards to the intended applicability of this change.

#### **Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors**

§ 61.316 What are the performance limits and design requirements for the aircraft that a sport pilot may operate?

The associations do not support the FAA’s proposal for a 54-knot CAS limitation for sport pilot privileges. The Agency has previously supported 61 knots CAS as an acceptable level of single-engine airplane performance for safe operation by general aviation pilots. Without justification, the FAA has proposed a different speed.

In supporting the arbitrary 54-knot CAS, the FAA argues that they “have granted multiple exemptions for light-sport aircraft based on safety considerations to include a VS1 stalling speed increase to 54 knots calibrated airspeed (CAS)” (88 FR 47652, July 24, 2023).

In supporting the proposed speed, the FAA states that 1.3 percent of landing accidents have resulted in a fatality. The FAA further states that it chose a VS1 of 54 knots CAS to strike a balance between allowing heavier aircraft to accommodate increased safety features, while increasing the stalling speed no more than necessary to retain low speeds during approach and landing.

While the FAA recognizes that low stalling speeds will reduce kinetic energy levels and serve to improve occupant survivability in the event of an aircraft accident, enabling the addition of safety-enhancing designs commensurate with increased weight could also improve occupant survivability (Federal Register/Vol. 88, No. 140 /Monday, July 24, 2023)

However, in a previous rulemaking, the FAA relied on a 50-year track record of safe general aviation flight operations to support a 61-knot CAS. In the 1992 rulemaking, the FAA agreed with the EAA that “a 61-knot or less stall speed limitation is appropriate and that it will encourage the production of safe primary category aircraft. The FAA is persuaded that the 50-year track record of the 61-knot stall speed limitation in part 23 has established it as an acceptable level of single-engine airplane performance for safe operation by general aviation pilots. Accordingly, the final rule adopts the 61-knot or less stall speed limitation.” (57 FR 41362, September 9, 1992)

If the Agency misrepresented their 1992 data, then this NPRM should provide evidence that its previous decision that 61-knot CAS was a safe operating speed for general aviation pilots was in error as support for its proposal to reduce the stall speed by more than 10 percent.

## **Part 65 – Certification: Airmen Other Than Flight Crewmembers**

### § 65.15 Duration of certificates.

In support of the portability of repairman certifications, the associations DO NOT agree with the proposal as written.

SEC. 582. FAA Reauthorization Act of 2018, the Portability of Repairman Certificates required the Administrator to assign to the Aviation Rulemaking Advisory Committee the task of making recommendations with respect to the regulatory and policy changes, as appropriate, to allow a repairman certificate issued under section 65.101 of title 14, Code of Federal Regulations, to be portable from one employing certificate holder to another.

The law further requires that not later than one year after receiving recommendations under subsection (a), the Administrator may take such action as the Administrator considers appropriate with respect to those recommendations. (Public Law 115–254—OCT. 5, 2018)

The FAA tasked the Aviation Rulemaking Advisory Committee to develop recommendations that would increase the portability of repairmen certification issued under § 65.101 across employing certificate holders. (ARAC Task Notice, March 19, 2021) The task group found that the fundamental impediment to portability of a repairman’s certificate is the regulatory language of § 65.15 (b) which states: “Unless it is sooner surrendered, suspended, or revoked, a repairman certificate is effective until the holder is relieved from the duties for which the holder was employed and certificated.”

On September 22, 2023, the ARAC submitted the Preliminary Recommendation Report – Repairman Certificate Portability Working Group which included the following recommendations regarding 14 CFR part 65:

- Amend 14 CFR § 65.15 by deleting paragraph (b).
- Amend 14 CFR § 65.101(a)(2) to read: Be specifically qualified to perform, supervise, or approve for return to service, the maintenance and/or alteration of aircraft, aircraft engines, propellers, or appliance.
- Delete 14 CFR § 65.101(a)(3).

In 1998, the FAA proposed to delete the provisions within 14 CFR part 145 which require that each person recommended must be at or above the level of shop foreman or department head or be responsible for supervising the work performed by the repair station and would permit a repair station to recommend any employee who meets the requirements of current § 65.101 for certification as a repairman. Subsequently, the FAA recognized that this proposal would recognize the level of professional expertise of maintenance personnel currently employed at repair stations. The proposal also would enable repair stations to be more flexible in their hiring and placement practices. (64 FR 33156, June 21, 1999)

In 2001, the FAA codified the proposal by removing the provisions of part 145 which required that each person recommended [as a repairman] must be at or above the level of shop foreman

or department head or be responsible for supervising the work performed by the repair station. (66, FR 41103, August 6, 2001)

It is incorrectly assumed that the proposal was consistent with current § 65.101, which does not require that an individual be employed in a supervisory position at a repair station to meet the eligibility requirements for a repairman certificate. However, 14 CFR § 65.101(a)(3) does require that a repairman “b[B]e employed for a specific job requiring those special qualifications....” which is contrary to the FAA’s position in the 2001 14 CFR part 145 rulemaking.

- Amend 14 CFR § 65.101(a)(4) to read: Be recommended for certification by the employer, to the satisfaction of the Administrator, as able to satisfactorily perform, supervise or approve for return to service maintenance and/or alteration of aircraft, aircraft engines, propellers, or appliance under the employer’s certificate.
- Amend 14 CFR § 65.103(a) to read: A repairman may perform, supervise or approve for return to service the maintenance or alteration of aircraft, aircraft engines, propellers, or appliance for which a rating has been issued and within the limitations of the certificate while employed by a certificated repair station, commercial operator, or air carrier.

#### § 65.81 General privileges and limitations.

This proposal is unrelated to the Modernization of Special Airworthiness Certification; as such, the FAA has NOT provided appropriate notice as required by the Administrative Procedure Act with regards to the intended applicability of this change and the persons affected by this proposal.

In addition, since the Agency chose to propose rulemaking unrelated to the Modernization of Special Airworthiness Certification, the Agency should have provided notice to the maintenance industry that the regulation was being reviewed and the opportunity for the industry to comment and suggest other improvements.

The associations recommend this proposal to update the title of a certificated mechanic to a certificated aviation maintenance technician.

#### § 65.107 Repairman certificate (light-sport): Eligibility and training courses

The associations DO NOT support this proposal as written.

The eligibility of a LSA repairman with a maintenance rating was developed and implemented with the limitation of a light (less than 1,320 pounds) simple, low horsepower, normally aspirated engine. With the unbound expansion of the “new” LSA aircraft, the eligibility of the LSA repairman with a maintenance rating must be revised to require that the repairman is type-rated on the aircraft they are authorized to maintain.

#### § 65.109 Repairman certificate (light-sport): Privileges and limitations.

The associations DO NOT support this proposal as written.

The eligibility of a LSA repairman with a maintenance rating was developed and implemented with the limitation of a light (less than 1,320 pounds) simple, low horsepower, normally aspirated engine. With the unbound expansion of the “new” LSA aircraft, the eligibility of the LSA repairman with a maintenance rating must be revised to require that the repairman is type-rated on the aircraft they are authorized to maintain.

When establishing the LSA repairman certificate with a maintenance rating the “FAA envisions that this new certificate would facilitate the maintenance of these aircraft by their owners and operators.” (67 FR 5393, February 5, 2002). The extensive expansion of size, speed, and complexity of LSA airplanes and the expanded flight training and aerial work operations of these aircraft as proposed were not considered when the LSA repairman was established in 2004.

The proposal was based on the three factors — (1) special light-sport aircraft would be very basic in design and construction; (2) these aircraft, and parts installed on them, would not be FAA approved; and (3) work could be performed on these aircraft under operating limitations that would contain provisions similar to part 43. (69 FR 44809, July 27, 2004)

The proposed expansion of authority of the LSA repairman is discriminatory and creates an uneven playing field for the aircraft maintenance service technicians.

If, the Agency has determined that the limited knowledge skills and abilities as demonstrated in draft AC No: 65-32B : Certification of Repairmen (light sport) is a safety limit considering the size, complexity, and operations of the new LSA aircraft, then the Agency must reconsider the knowledge standards for certification of mechanics (§ 65.75 Knowledge requirements.) and repairman (§ 65.101), as well as reconsider the experience requirements for the certification of mechanics (§ 65.77 Experience requirements) and repairman. (§ 65.101 (a) (5))

65.107 (d): The associations agree with this provision, but further recommend that the regulations be amended to require recordkeeping to show that the person is qualified on a specific task (i.e. a technician logbook). This is consistent with the regulations of 14 CFR 145.163 as well as international maintenance technician standards.

## **Part 91—General Operating Requirements and Flight Rules**

### **§ 91.409 Inspections**

The associations do not believe the FAA has gone far enough in this proposal.

The associations suggest that in addition to the criterion of (c)(1) that aircraft which meet the performance criteria of LSA should also be excepted from § 91.409 (a) (1) Inspections and that as with other recreational aircraft, standard airworthiness certificated aircraft which meet the performance requirements of LSA and primary category aircraft be allowed to receive an annual “condition” inspection rather than an annual inspection as is currently required. The purpose of the condition inspection as well as the annual inspection is to show the aircraft is safe for flight. This revision would align the criterion for the required yearly inspection regardless of the airworthiness certificate issued.

As proposed, this change would align the yearly inspection criterion for all aircraft below 2,700 pounds regardless of the type of airworthiness certificate held. This would allow a certificated mechanic without an Inspection Authorization the privilege of performing the yearly inspection.

Thank you for the opportunity to submit comments on this NPRM. Please contact us with any questions or if you require further clarification.

Sincerely,

Ric Peri  
Vice President,  
Government & Industry Affairs  
Aircraft Electronics Association  
601 Pennsylvania Ave, NW  
Suite 900, South Bldg  
Washington, DC 20004  
(202) 589-1144  
[ricp@aea.net](mailto:ricp@aea.net)

Sarah MacLeod  
Executive Director  
Aeronautical Repair Station Association  
121 North Henry Street  
Alexandria, VA 22314-2905  
703.739.9543 Ext. 114  
[sarah.macleod@arsa.org](mailto:sarah.macleod@arsa.org)

