[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 91

[Docket No. FAA-2015-2147; Notice No. 15-05]

RIN 2120-AK51

Transponder Requirement for Gliders; Withdrawal

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Advance notice of proposed rulemaking (ANPRM); withdrawal.

SUMMARY: The FAA is withdrawing a previously published advance notice of proposed rulemaking that sought public comment from interested persons involving glider operations in the National Airspace System. The action responded to recommendations from members of Congress and the National Transportation Safety Board and was intended to gather information to determine whether the current glider exception from transponder equipage and use provides the appropriate level of safety in the National Airspace System. The FAA is withdrawing that action because the limited safety benefit gained does not justify the high cost of equipage.

DATES: This action becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: For technical questions concerning this action, contact Patrick J. Moorman, Airspace Regulations Team, AJV-113, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone (202) 267-8783; email: patrick.moorman@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

On August 28, 2006, a Hawker 800XP aircraft[1] and a Schleicher ASW27-18 glider were involved in a non-fatal midair collision near Reno, Nevada. The collision occurred in flight about 42 nautical miles (NM) south-southeast of the Reno-Tahoe International Airport (RNO), at an altitude of about 16,000 feet (ft.) above mean sea level (MSL), and in an area where gliders are excepted from the transponder equipment requirements in Title 14, section 91.215(b), of the Code of Federal Regulations (14 CFR).[2] The glider was equipped with a transponder, but the transponder was not turned on at the time of the accident.

On March 31, 2008, the National Transportation Safety Board (NTSB) provided safety recommendations to the FAA resulting from an investigation of the accident.[3] The findings of the accident investigation address the limitations of the see-and-avoid concept in preventing midair collisions and, more specifically, the benefits of using transponders in gliders for collision avoidance. The NTSB recommended that the FAA remove the glider exceptions pertaining to the transponder equipment and use requirements, finding that "transponders are critical to alerting pilots and controllers to the presence of nearby traffic so that collisions can be avoided."

[1] The Hawker 800XP aircraft was equipped with a Traffic Alert and Collision Avoidance System (TCAS). TCAS is a family of airborne devices that function independently of the ground-based air traffic control (ATC) system, and provide collision avoidance protection for a broad spectrum of aircraft types. All TCAS systems provide some degree of collision threat alerting, and a traffic display.

[2] The exceptions to the rule allow aircraft that were originally certificated without an engine-driven electrical system, such as balloons and gliders, to be operated in the following areas without a transponder: within a 30 nautical mile radius (NMR) of the 36 listed airports listed in Appendix D to part 91 (Mode C veil), provided aircraft remain outside the Class A, B, or C airspace and are below the ceiling of the airspace designated for the Class B or C airport, or 10,000 feet MSL, whichever is lower; above 10,000 feet MSL; and in the airspace from the surface to 10,000 feet MSL within a 10 NMR of any airport listed in appendix D, excluding the airspace below 1,200 feet outside of the lateral boundaries of the surface area of the airspace designated for that airport.

[3] A-08-10 through 13, Safety Recommendations. National Transportation Safety Board, Washington, DC 20594, March 31, 2008. A copy of this letter has been placed in the docket. www.regulations.gov docket FAA-2005-2147. Note: while NTSB used the term "exemption" the correct term as it relates to this airspace is "excepted."

On June 16, 2015, the FAA published an Advance Notice of Proposed Rulemaking (ANPRM) to respond to recommendations from two members of Congress[4] and the NTSB. 80 FR 34346. The ANPRM requested comments on a proposed rulemaking that would require gliders operating in the National Airspace System (NAS) to be equipped with transponders. The FAA did not propose specific regulatory changes but rather sought public comment on the use of transponders in gliders operating within the excepted areas of § 91.215. The ANPRM also sought input on more recent alternatives to glider equipage including the use of Traffic Awareness Beacon System (TABS)[5] and Automatic Dependent Surveillance Broadcast (ADS-B) Out equipment.[6] The FAA asked for comments from the public and industry to aid in the development of a proposed rule and the analysis of its economic impact.

Overview of Withdrawal

Based on the information gathered from the ANPRM and a review of the current operating environment, the FAA finds that it does not have sufficient basis to move forward with rulemaking at this time. While the FAA has determined it is not warranted to move forward with a proposal to remove the glider exception in § 91.215, the FAA will continue to work with local glider communities to increase safety awareness. The FAA will also continue to consider surveillance system alternatives and to work with interested persons to mitigate the risk of

[4] The FAA received letters from Senator Harry Reid (D-NV) and Representative Mark E. Amodei (R-NV); Letters are posted to the docket at www.regulations.gov, docket no. FAA-2015-2147.

[5] TABS is a surveillance system derived from existing transponder and ADS-B requirements. It was developed to increase safety by providing a standard for a low cost surveillance solution for aircraft excepted from §§ 91.215 and 91.225. An aircraft equipped with TABS is visible to other aircraft equipped with collision avoidance systems such as Traffic Advisory System (TAS), Traffic Alert and Collision Avoidance System (TCAS) I, TCAS-II, and ADS-B In. However, a TABS-equipped aircraft is not displayed to controllers. The FAA published Technical Standard Order (TSO)-C199, the standard for TABS, on October 10, 2014.

[6] ADS-B is a satellite-based surveillance system that uses Global Positioning System (GPS) technology to determine an aircraft's location, airspeed, and other data, and broadcasts that information to a network of ground stations, which relays the data to air traffic control displays, and to nearby aircraft equipped to receive the data via ADS-B In.

aircraft collision with gliders. Further, the FAA recommends that all glider aircraft owners equip their gliders with a transponder meeting regulatory requirements, a rule-compliant ADS-B Out system, or a TABS device.

Comment Summary

The FAA received 231comments in response to its ANPRM. Of the 231 comments received, approximately 18 organizations and 213 individual or anonymous commenters responded. Approximately 161 comments were unfavorable (adverse), 52 comments were favorable, and 18 comments were neutral. Of the 18 organizations that commented, 14 responded unfavorably (adverse), 2 favorably, and 2 were neutral. Three comments received after the comment period closed were also considered.

The following organizations responded: Soaring Society of America (SSA), Aircraft Owners and Pilots Association (AOPA), Vintage Sailplane Association (VSA), Experimental Aircraft Association (EAA), Civil Air Patrol (CAP), National Transportation Safety Board (NTSB), American Association for Justice (AAJ), and approximately 11 local soaring clubs or groups. Individual and anonymous commenters were representative of all pilot types: glider, general aviation (GA), airline and military, many commenters holding multiple ratings, with glider and general aviation pilots representing the majority.

Individual and anonymous commenters in favor of removing the transponder exception were primarily concerned about safety, some relaying personal experiences not accompanied by supporting documentation, such as a near mid-air collision (NMAC) report.[7] Several commenters

[7] An NMAC is an incident associated with the operation of an aircraft in which a possibility of a collision occurs as a result of proximity of less than 500 feet to another aircraft, or a report is received from flightcrew members stating that a collision hazard existed between two or more aircraft. A report does not necessarily involve the violation of regulations or error by the air traffic control system, nor does it necessarily represent an unsafe condition. The fact

recommended the FAA consider alternatives to transponder equipage, including ADS-B, TABS, or FLARM.[8]

All comments are available for viewing in the rulemaking docket (FAA–2015–2147). To view comments, go to http://www.regulations.gov and insert the docket number.

Discussion of Comments

1. Safety Benefit of Transponders

Of the approximately 161 unfavorable (adverse) comments received, many addressed the high cost of transponder equipage and the limited safety benefit by requiring such equipage.

During the ANPRM process, the FAA also reviewed glider midair and NMAC reports at the local and national level. After further analysis of safety related statistics, the FAA found that nationally, from August 2005 through August 2015, the Aviation Safety Reporting System (ASRS) database reflects 1,841 reported NMAC for all airspace areas. Of these NMACs, 50 involve a glider and another aircraft type, or 2.72% of reported NMACs over a 10-year period for an average of 5NMACs per year. In 2008, the last year data was available for all aircraft categories, statistics show there were 236,519 active aircraft, including 1,914 gliders, or about 0.81% of the active fleet.

Nationally, the removal of the glider exception from § 91.215 would help to prevent those instances where a glider NMAC occurs with an aircraft equipped with a Traffic Alert and

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that flightcrew members initiate NMAC reports raises two important issues. First, to some degree the data likely will be subjective. This necessitates that considerable caution be exercised when evaluating individual NMAC reports. Second, it is most likely the number of NMAC reports filed will not represent the totality of such events.

[8] FLARM is an electronic system designed to alert pilots of potential collisions between aircraft. FLARM is approved by the European Aviation Safety Agency for fixed installation in certified aircraft. Aircraft equipped with FLARM (including a variant known as PowerFLARM that can receive transponder and ADS-B signals from other aircraft) are visible only to other FLARM-equipped aircraft. There is no FAA TSO for FLARM because FLARM uses proprietary technology rather than industry consensus standards.

Collision Avoidance System (TCAS).[9,10] However, instances where removal of the glider exception from § 91.215 help prevent a glider NMAC due to increased air traffic controller awareness are assumed negligible overall, because the operating areas for gliders are often in places with little or no radar coverage. Furthermore, because gliders can maneuver rapidly, glider flight paths are difficult for the Air Traffic Control (ATC) automation system to accurately project. Over the 10-year period reviewed, of the 50 reported NMACs involving a glider and another aircraft type, 7 involved a glider and part 121 or 135 air carriers required to have TCAS. Using this analysis, removal of the glider exception from § 91.215 has the potential to reduce the NMAC occurrences by about 0.70 occurrences per year, or about 2 NMACs every 3 years (0.38% of all reported NMACs per year over that period).

Assuming all of these NMACs would occur between gliders and air carrier aircraft,[11] this would represent an incremental NMAC hazard of approximately 3.8×10^{-8}/flight hour to the air carrier aircraft, based on air carrier flight hour data for years 2010-2014 published on the NTSB's web site. This rate of occurrence is within the acceptable hazard level guidelines for a Hazardous failure condition (not greater than the order of 1×10^{-7}/ flight hour) according to the FAA System Safety Handbook, Appendix B.[12]

[9] This assumes all gliders are equipped with a transponder.

[10] TCAS provides two types of advisories, a Traffic Advisory (TA) and a Resolution Advisory (RA). TCAS can provide both types of advisories using another aircraft's transponder signal. A TA provides an aural alert "TRAFFIC, TRAFFIC" to the flight crew and places the other aircraft on a cockpit display showing the other aircraft's position, altitude and movement relative to the TCAS-equipped aircraft. TCAS also computes the time to closest point of approach between the two aircraft. If this drops below a certain computed threshold, TCAS then provides a RA, which consists of aural commands and instrument cues to maneuver the aircraft vertically to avoid the threat.

[11] Air carrier aircraft are the fleet segment of greatest safety concern to the FAA for this contemplated rulemaking. These aircraft are required by regulation to be TCAS-equipped.

[12] Appendix B of the FAA System Safety Handbook defines a hazardous failure condition as one that reduces the capability of the system or the operator ability to cope with adverse conditions to the extent that there would be:

Therefore, based on the nationwide rate of occurrence, safety risk data does not support a rule requiring glider operators to install a transponder device at this time. Furthermore, the number of gliders voluntarily equipping with collision avoidance systems has increased steadily. Per the General Aviation and Part 135 Activity Surveys, the number of gliders equipped with a transponder device has gone from 14% in 2006, to 24.3% in 2014, the last year this data was available.[13]

Locally in the airspace surrounding Reno, Nevada, the NTSB noted four TCAS Resolution Advisory (RA) events in the 30 days prior to the accident, each between a glider and a TCAS-equipped transport category aircraft operated under 14 CFR part 121.[14] For these RAs to occur, the glider involved in each RA would have to be flying with an operable transponder (turned on).

Although this data supports the value of transponders in avoiding collisions, since the accident, the FAA and local glider community have also taken several measures to mitigate the risk of midair collisions within and around Reno, NV. First, advisory information on the heavy glider activity unique to the local area was published in official FAA flight information publications including the Chart Supplement, Special Notices, and Standard Terminal Arrival Routes (STARs) for Reno/Tahoe International Airport after the event. Second, on October 29, 2010, a Letter of Agreement (LOA) was signed between representatives for the local glider community and ATC facilities having control over the airspace. The LOA establishes an area

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Large reduction in safety margin or functional capability; Crew physical distress/excessive workload such that operators cannot be relied upon to perform required tasks accurately or completely; Serious or fatal injury to small number of occupants of aircraft (except operators); or Fatal injury to ground personnel and/or general public.

[13] Number of active gliders with transponders: 2014 GA Survey, Avionics Tables, Table AV.6. https://www.faa.gov/data_research/aviation_data_statistics/general_aviation/

[14] A-08-10 through 13, Safety Recommendations. National Transportation Safety Board, Washington, DC 20594, March 31, 2008. A copy of this letter is in the docket at www.regulations.gov, docket no. FAA-2015-2147.

and procedures for glider operations within positive controlled airspace in the Reno area. By establishing this area and these procedures, the LOA enhances airspace awareness and communication among the Oakland Air Route Traffic Control Center, Northern California Terminal Radar Approach Control, and the Pacific Soaring Council. Additionally, the LOA outlines entry and exit procedures into the operating areas and identifies pilot responsibilities to increase communication and situational awareness in the Reno area.[15]

Finally, the local glider community has undertaken a successful education campaign to prevent further accidents. According to the SSA, "Since the 2006 accident, the local glider community that flies near RNO has undertaken successfully to educate pilots on collision avoidance and to encourage the voluntary use of either FLARM or transponders. As a result of these voluntary efforts, the official ASRS database includes no new incidents with gliders not equipped with transponders in the RNO or MEV [Minden-Tahoe Airport] areas in [excepted] airspace since the release some 7 years ago of the NTSB report on the 2006 incident."[16]

The SSA, EAA, and several individual commenters opposing transponder equipage, noted that the glider involved in the 2006 Reno accident was equipped with a transponder, but at the time of the accident, the pilot operated the glider with the transponder turned off.[17] The FAA acknowledges that in the 2006 accident, if the glider transponder were turned on, the Hawker aircraft would have received TCAS advisories.

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[15] The LOA is posted in the docket at www.regulations.gov, docket no. FAA-2015-2147.

[16] SSA comment letter posted in the docket at www.regulations.gov, docket no. FAA-2015-2147.

[17] 14 CFR § 91.215(c) states: while in the airspace as specified in paragraph (b) of this section or in all controlled airspace, each person operating an aircraft equipped with an operable ATC transponder maintained in accordance with § 91.413 of this part shall operate the transponder, including Mode C equipment if installed, and shall reply on the appropriate code or as assigned by ATC. This collision occurred at approximately 16,000 feet MSL in Class E airspace (which extends upward from 14,500 feet MSL to flight level 180 throughout the National Airspace System).

2. Estimating Glider Transponder Cost from Removal of Glider Exception

Approximately 138 commenters discussed the cost of requiring gliders to equip with transponders.[18] Of those 138 commenters discussing cost, there were just 20 comments that could be characterized as in favor of requiring gliders to equip with transponders to some degree.

Three commenters stated that transponders were inexpensive, but as shown below these commenters underestimated the cost of glider transponders as "in the few hundred dollar range" or "less than $2000" and/or ignored the cost of installation or assumed installation was easy. They did not address the concern that about half the glider population does not have an electrical system, which significantly increases the cost of transponder installation. These commenters were contradicted by more than 30 commenters who provided specific cost estimates for glider transponders and installation costs. Another commenter, in favor of removing the glider exception because he believed that the safety benefits justified the costs, conceded that transponders "are indeed costly."

The FAA estimates the cost of requiring gliders to equip with transponders to be about $5,000 per glider and more than $7 million for the glider fleet. Owing to a lack of reliable data, the glider (and fleet) cost estimates do not take into account the possible significant cost of instrument panel modification. There may also be significant additional cost for older gliders that no longer have manufacturer support because they may require a FAA Form 337 (Major Repair and Alteration) approval if there is no prior approval (Supplemental Type Certificate (STC) or other previously approved installation).

[18] Most comments addressed the cost of transponder equipage. A few comments addressed the cost to install other equipment such as ADS-B, TABS, and FLARM. The FAA sought comment on these technologies in the ANPRM. These alternatives and others are discussed later in this notice.

The fleet estimate assumes that (1) all active glider operators will want to operate in the currently excepted airspace and (2) the 990 inactive gliders (total glider population of 2781 – 1791 active gliders) in the fleet will deregister upon rule implementation.[19] The $7 million fleet figure would be an underestimation to the extent these two assumptions are incorrect. Details of the estimates of cost per glider and glider fleet cost are shown in Table 1.

Table 1--Glider Transponder Unit Costs

ITEM	COST	SOURCES/NOTES
Transponder	$2,339	Cost based on the Trig TT21 as it appears to be the most popular glider transponder.
Cabling	$ 146	Aircraftspruce.com: Trig TT21 including custom harness--$2485.
Antenna	$ 169	Cumulus-Soaring.com: RAMI AV-74-1 Blade Style Transponder or DME Antenna: "… like the AV-74 - but with longer mounting studs - which is nice when trying to mount it through a glider fuselage."
Battery charger	$ 25	
Total Nonrecurring hardware	$2,679	
Installation	$1,300	Average of 32 ANPRM commenter estimates.
Total Nonrecurring Cost	**$3,979**	
Batteries (every 2.5 years)	$ 600	Battery choice based on comment by Philadelphia Glider Council: "... one [LiFePO4]18AH or two-three 9 Ahs generally sufficient for 10 hrs of operation." CumulusSoaring.com: Bioenno Power BLF-1209 LiFePo4 Battery 12V, 9AHr $100, charger $25. Or BLF-1220 20AHr $205, charger $30. Duration based on ANPRM comments.
Biannual inspection	$ 800	$200 per inspection. Based on ANPRM comments.
Total Recurring Costs	**$1,400**	

The nonrecurring and recurring unit costs required to estimate the cost of a rule change eliminating the glider transponder exception are shown in Table 1.

[19] Total number of gliders and number of active gliders: 2014 GA Survey, Table 2.1.

The FAA estimates the costs of such a rule change over a ten-year period for the existing U.S. glider fleet. This estimation is shown in Table 2.[20] The cost of a rule change for new production of existing glider models and new certifications is not estimated owing to a lack of the necessary forecasts.

Table 2—Ten-Year Cost of Removing Glider Transponder Exception

Year	Item Costs	Description	Non-Recurring Costs	PV Recurring Costs @7%[21]
0	$3,979	Hardware & Installation	$ 3,979	
1				
2	$ 200	Biannual Inspection		$ 175
2.5	$ 200	Battery Replacement		$ 169
3				
4	$ 200	Biannual Inspection		$ 153
5	$ 200	Battery Replacement		$ 143
6	$ 200	Biannual Inspection		$ 133
7				
7.5	$ 200	Battery Replacement		$ 120
8	$ 200	Biannual Inspection		$ 116
9				
10				
		Totals	$ 3,979	$ 1,009

[20] The estimation takes into account an additional nonrecurring cost not shown in Table 1 of $400 for gliders without an electrical system.

[21] A discount rate of 7 percent is recommended by Office of Management & Budget, Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs," October 29, 1992, p. 8.

Total number of active gliders	1791	Cost/Glider	Total Cost
Gliders with electrical systems[22]	699		
Gliders with transponders[23]	461		
Gliders without electrical systems	1092	$ 400	$ 436,800
Gliders without transponders	1330	$ 4,988	$6,633,798
Cost of rule removing glider exception			**$7,070,598**

Note: Due to rounding, details may not add up to totals or multiply to products.

Based on the risk reduction data discussed in the previous section and the estimated costs of equipage listed in this section, the FAA finds that the degree of risk reduction that could be expected by requiring transponder equipage for gliders does not justify the cost of requiring such equipage.

3. Alternatives to Transponders

Several commenters called for "low cost" and "affordable" transponders (such as a portable transponder) and ADS-B, TABS, or FLARM equipment. The NTSB noted the FAA published a final rule on May 28, 2010, that added requirements for ADS-B Out equipage that, if combined with transponder usage, would result in increased traffic awareness and collision avoidance. The NTSB also commented in response to this ANPRM that TABS may be an acceptable alternative as it is detectable by both TCAS and ADS-B-In equipped aircraft.

Since the 2006 accident, technologies have developed and alternatives are available that have the potential to mitigate risk, such as TABS, FLARM, ADS-B, local LOA with ATC facilities, and ongoing outreach and education. Of the technological solutions identified here, the ones that offer the best potential to avoid collision with TCAS-equipped aircraft (besides

[22] Number of active gliders with electrical systems gliders: 2014 GA Survey, Avionics Tables, Table AV.1. https://www.faa.gov/data_research/aviation_data_statistics/general_aviation/

[23] Number of active gliders with transponders: 2014 GA Survey, Avionics Tables, Table AV.6. https://www.faa.gov/data_research/aviation_data_statistics/general_aviation/

transponder equipage) are TABS or a rule-compliant ADS-B Out system, because those systems make the glider visible to TCAS-equipped aircraft, ATC or both.

The TABS standard provides for a reduction in the transmission rate and allows for a "non-aviation grade" GPS engine, in order to drive unit cost down while still maintaining an acceptable level of service to be considered a client in the NAS, where collision avoidance and ADS-B systems coexist. There are currently no TSO authorization holders for TABS equipment. However, we are aware that certain manufacturers currently have TABS systems in development.

Some commenters recommended that the FAA allow use of portable transponders, stating they were lower cost than fixed transponder installations and relatively affordable. While portable transponders may meet the TSO performance requirements, they are not approved for use unless they are actually installed in the aircraft. A key reason for this is placement of the transponder antenna in the aircraft. If the transponder antenna is not placed correctly, the aircraft may not be electronically detectable to other aircraft or ATC.

Other commenters recommended that the FAA encourage equipage of FLARM systems. In this regard, the FAA notes that a variant of FLARM, known as PowerFLARM, will make a transponder or ADS-B Out equipped aircraft detectable to the PowerFLARM-equipped aircraft (such as a glider). However, a glider that is equipped with any version of FLARM will not be electronically detectable to the other aircraft unless both aircraft are FLARM equipped. In view of these factors, the FAA concludes that FLARM systems may provide a safety benefit (particularly for avoidance of collisions between gliders, and for PowerFLARM equipped gliders, some benefit for avoidance of collisions with powered aircraft). However, the FAA does not view FLARM (including PowerFLARM) as the most effective system to support collision

avoidance with powered aircraft since a FLARM system may not make the glider detectable to the aircraft that must give way. Transponders, TABS, and ADS-B Out offer better protection against collisions with powered aircraft because those systems aid visual acquisition of the glider by the powered aircraft flightcrew, consistent with right of way rules.[24]

The FAA will continue to consider surveillance system alternatives for gliders for their feasibility and potential to improve safety.

4. Other Comments

Several commenters were in favor of removing the current glider exception for certain high-density airspace areas. One commenter, otherwise strongly in favor of removing the glider exception, suggested an exception for gliders involved in training below 5,000 feet above ground level (AGL). The FAA has determined not to propose any changes to the rules for specific airspace areas because the accident and incident history cited in the NTSB recommendation has occurred predominantly around one specific airspace area, Reno, NV. The FAA has determined that the post accident mitigations for the Reno area discussed previously in this notice mitigate the risk for that specific airspace.

Another commenter stated, "the FAA should make clear that installing a transponder, encoder, antenna, an extra battery or batteries and possible solar panels are all considered 'minor modifications' which can be signed off by the installing technician based on his judgment." This commenter and several others, in opposition of the removal of the glider exception, also called for exceptions for older gliders. The FAA finds that rulemaking is not necessary at this time for

[24] Section 91.113(d)(2) states that "A glider has the right of way over powered parachute, weight-shift-aircraft, airplane, or rotorcraft."

any gliders, but points to current guidance available to assist in installation and approval of transponder systems in gliders and sailplanes for operators wishing to voluntarily equip.[25]

The AAJ listed glider color, construction materials, and slender profiles as contributing factors to lack of pilot visibility or radar detection and further identified Instrument Flight Rule congested areas as concerns of undeniable risk, especially the parameters of Class B airspace. These sentiments were largely shared amongst both adverse and favorable commenters, offering similar solutions or variations thereof. The FAA has discussed its determination regarding specific airspace areas above. With regard to the other comments identified here, the FAA's decision in this notice includes consideration of those comments.

Reason for Withdrawal

After consideration of all comments received, the FAA is withdrawing Notice No. 15-05. The FAA finds that the high cost of transponder equipage and the limited safety benefit that is likely to result from requiring such equipage do not support rulemaking at this time. Additionally, as discussed above, the FAA has determined that a proposal to require gliders to equip with "low-cost" alternatives to transponders is not supportable at this time.

NTSB safety recommendations, resulting from the 2006 midair collision with a glider, indicated that although the glider was equipped with a transponder, the transponder was turned off. After further analysis of safety-related statistics over a 10-year period (August 2005-August 2015) the ASRS database reflects 1841 reported NMAC for all airspace areas. The FAA found data that indicates that removal of the glider exception from § 91.215 would have the potential to

[25] Information for Operators (InFO) 09009, Installation and Approval of Transponder Systems in Gliders/Sailplanes, dated June 10, 2009.

reduce the NMAC occurrences by about 0.70 occurrences per year, or about 2 NMACs every 3 years (0.38% of all reported NMACs per year over that period).

Conclusion

When further testing, research, and conclusive data is available that reflect alternative mitigations, a broader, more harmonized proposal may better serve the public interest. Withdrawal of Notice No. 15-05 does not preclude the FAA from issuing another notice on the subject matter in the future or committing the agency to any future course of action. The agency will make any necessary changes to the regulations through a notice of proposed rulemaking (NPRM) with the opportunity for public comment.

Although the FAA has determined that a regulatory course of action is not warranted at this time, the FAA will continue to work with local glider communities, encourage the voluntary equipage of transponders in gliders and encourage the use of TABS. The FAA continues to recommend that all glider aircraft owners equip their gliders with a transponder meeting the requirements of § 91.215(a), a rule-compliant ADS-B Out system, or a TABS device. In consideration of the above factors, the FAA withdraws Notice No. 15-05, published in 80 FR 34346, on June 16, 2015.

Issued under authority provided by 49 U.S.C. 106(f), 44701(a), and 40103 in Washington, DC, on . December 16, 2016

Gary A. Norek
Deputy Director, Airspace Services
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