DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 121

[Docket No. FAA-2002-14081, Notice No. 03-02]

RIN 2120-AH67

Transponder Continuous Operation

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM), withdrawal.

SUMMARY: The FAA is withdrawing the NPRM published on January 14, 2003, that proposed to require airplanes operated in domestic, flag, and supplemental operations to ensure immediate activation and continuous transmission of the designated hijack alert code to air traffic control (ATC) during a hijack situation. After September 11, 2001, the increased threat of hijacking and realization that a plane could be used as a weapon became the basis for the proposed rule. The intent was to provide the flight crew of commercial airplanes with the ability to initiate an immediate national security response in the event of a hijacking. The overwhelming majority of comments opposed the proposal for several reasons. Because of the reasons given, including completed security enhancements to strengthen flightdeck doors, we are withdrawing the proposal. Current regulations ensure an adequate level of aviation security.

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SUPPLEMENTARY INFORMATION

Background

On January, 14, 2003, the FAA published a Notice of Proposed Rulemaking (Notice No. 03-02, 68 FR 1942). The NPRM proposed to amend the instrument and equipment requirements in 14 CFR 121.345 for airplanes operated in domestic, flag, and supplemental operations. Under 121.345 currently, air carrier aircraft must be equipped with an air traffic control (ATC) transponder, which in normal operation provides radar beacon identity code and altitude for ATC use in controlling aircraft in en route and terminal areas of operation.

In response to the devastating events of September 11, 2001, the FAA initiated a complete review of aircraft and airport security procedures that produced several recommendations to improve security and safety during flight. The Secretary of Transportation established the Rapid Response Teams (Team) for Aircraft and Airport Security to identify weaknesses in the nation’s security and produce recommendations for improving aircraft and airport security. The Team consisted of individuals from the aviation industry, including airplane designers and manufacturers, airline operators, airline pilots, and flight attendants. On October 1, 2001, the Team submitted its report on aircraft security to the Secretary of Transportation. The report (available in Docket No. FAA-2002-14081) included 17 recommendations to help counter a situation in which an airplane might be hijacked and used as a weapon.

In response to recommendation No. 16 regarding transponders, the FAA established the FAA-Industry Transponder Task Force. The Task Force examined options for enabling flight crew to set and lock a designated hijack code during an emergency situation, and to secure the ATC transponder from being disabled by a hijacker.

Notice No. 03-02 was based, in part, on the efforts and recommendations of the Task Force. The proposed rule would have required all airplanes operated under part 121 to be
capable of immediately notifying ATC of a hijack situation. It would have required that the
ATC transponder continuously transmit the emergency code once activated, without the
possibility of interruption.

During normal operations a flight crew could manually dial in a new ATC
transponder beacon code in 5 to 10 seconds. The International Civil Aviation Organization
(ICAO) has designated a code for unlawful interference (“7500” or “hijack code”) to be used
during a hijacking. Under the stressful conditions of a hijacking and the presence of an
intruder on the flightdeck, activation of this “hijack code” would likely take longer than 10
seconds. The four planes that were hijacked on September 11, 2001, were unable to enter the
hijack code to alert ATC of the trouble and therefore delayed ATC awareness.

In addition, three of the four planes stopped responding to ATC interrogations
minutes after departing from their assigned routes. Under current requirements, the
airplane’s ATC transponder is not prevented from being switched to the “standby” position,
or having its circuit breaker “pulled,” disabling the transponder’s response to an ATC
secondary ground radar beacon interrogation.

For these reasons, we proposed that airplanes operating under part 121 must have the
capability to allow each flight crewmember to quickly activate the ATC transponder “hijack
code” through a single action that includes protection from inadvertent activation. Once
activated, the ATC transponder would have been able to:

- Continue to report the airplane’s altitude.
- Provide visual indication to the flight crew that the activation has occurred.
- Be protected from any person onboard the plane attempting to disable the
  transponder or change its code during the remainder of the flight.

This rule would have been incorporated into 14 CFR part 121 by creating § 121.346.
The comment period closed on April 18, 2003.
Discussion of Comments

The FAA received 146 comments on this NPRM. Comments were received from industry operators, air carriers, trade associations, pilots, and manufacturers. The overwhelming majority opposed the proposed rule. Most commenters felt that the continuous transponder rule was unnecessary because of the improved security measures implemented since the September 11, 2001, terrorist hijackings. We agree with these comments, and the FAA finalized the other security improvements since the NPRM was written. One hundred and twenty-six commenters opposed the proposed rule. Nine commenters expressed support for the rule. Ten commenters supported only part of the proposed rule or took a neutral position.

Opposition was almost universal from industry operators, air carriers, and trade associations. Nearly every commenter cited recently completed security improvements like strengthened flightdeck doors and more thorough screening of passengers and baggage as justification for their opposition. They believe that installing continuous ATC transponders would not increase safety or security, and that the cost of compliance would be harmful to the industry at this time. Commenters also believed the FAA underestimated the cost of compliance in the NPRM, stating that many planes would need rewiring or replacement of current ATC transponder equipment.

The Air Transport Association (ATA) submitted a lengthy comment that recommended withdrawing the NPRM. ATA noted that Congress gave discretion for ATC transponder modifications and did not specifically mandate a change. Rather than implement this rule, ATA would prefer that the FAA focus on improving ATC equipment to monitor more types of air traffic. Like the majority of commenters, they felt that the flightdeck is now secure with new strengthened flightdeck doors. ATA also questioned the analysis of benefits in the proposal and claimed the NPRM did not satisfy the requirements of the
Administrative Procedures Act. They also question the “propriety of continuing unfunded mandates for aircraft modifications under the umbrella of national security.” Finally, ATA conducted a survey of its members (the majority of U.S. scheduled air carriers) to compare the cost estimates presented in the NPRM to show that the FAA underestimated the cost to the industry. Before issuing the NPRM, with the help and input from the industry, the FAA estimated the total 3-year cost at approximately $88.1 million in the NPRM. The ATA survey estimated it would cost $258.8 million to comply with the rule. The FAA concedes that the cost to comply may exceed our estimate in the NPRM but we cannot verify the accuracy or source for ATA’s numbers, even though a detailed summary of the survey was included in the comment.

Twenty international air carriers and associations from Europe, South America, Asia, and Canada submitted comments opposing the proposal. One common reason they expressed was that there was no such ICAO requirement for ATC transponders and that the lack of harmonization could have a “negative impact” on flight safety for international operators. The International Air Transport Association (IATA) and International Air Carriers Association (IACA) both stated this as one reason for their opposition.

IATA added concerns that unintentional hijack-code selection would certainly occur, and they are also concerned that many pilots said they would be reluctant to use the hijacking code if it resulted in a possible military response. IATA believes an unintentionally activated ATC transponder would put passengers at greater, rather than reduced, risk. The inability to turn the ATC transponder off would increase risk even more, they contend. IACA felt that no benefit would be gained by adding the continuous ATC transponder because of the reinforced flightdeck doors. These doors are meant to deny potential hijackers access to the flightdeck, thereby providing pilots enough time to initiate the hijacking code and communicate with ATC, they argued. British Airways, Austrian Airlines, Singapore
Airlines, Lufthansa, and Swiss International Air Lines echoed concerns about accidental ATC transponder activation and the belief that recent enhancements have secured the flightdeck.

The Aircraft Owners and Pilots Association (AOPA) and National Air Transportation Association (NATA) commented separately on the rule’s applicability to general aviation aircraft. Both groups summarized the comments of many of those in opposition by strongly opposing the application of this rule to general aviation operations. The FAA asked interested persons to comment on the applicability of this rule to aircraft operated under 14 CFR parts 91, 125, 129, and 135. AOPA noted that general aviation pilots personally know the passengers that are on board the aircraft, therefore eliminating the possibility of a passenger hijacking the plane. They also contend general aviation aircraft are primarily used for personal or business transportation and that these aircraft pose no greater threat than an average automobile. NATA cited “multiple discussions with security officials at all levels of government,” and based on these discussions they assert that there is no specific or credible terrorist threat related to these aircraft operations.” Many individual pilots and general aviation supporters believed that there was no record of a general aviation aircraft ever being hijacked. Three commenters suggested a continuous ATC transponder might be better suited for Ryder trucks or cars.

The Air Line Pilots Association (ALPA) submitted one of few comments in favor of the NPRM. ALPA agreed that the rule would ensure acceptable aviation security, but also wished to distinguish the difference between safety and security. ALPA cited strengthened flightdeck doors as a preventive safety measure, but they believe the ATC transponder modification should not be seen as a similar measure. They pointed out that modifying the flightdeck doors and other security changes are aimed at preventing a hijacking, while the ATC transponder modification would deter disaster should an aircraft become
commandeered. Because they believe this is a security issue and not a safety issue, ALPA felt that the government should fund the changes.

The FAA received 15 comments in favor of the proposed rule. The comments in favor of the proposal came from pilots and interested individuals for the most part. Seven commenters felt the proposed rule was appropriate and that it would provide additional needed security after September 11, 2001. Six commenters were opposed to the proposed rule if it were applied to general aviation aircraft but felt the application to commercial aircraft was “great” and “very positive.”

**Reason for Withdrawal**

We are withdrawing Notice No. 03-02 because the level of security provided by the proposed rulemaking has been accomplished by other completed rules, and because of reasons given in overwhelming opposition to the proposal. Several recently implemented security measures in response to the hijackings of September 11, 2001, such as strengthened flightdeck doors, make the modification of the ATC transponder equipment unnecessary. Due to the current security of the flightdeck against intrusion, measures to prevent the disabling of the ATC transponder are unnecessary. Likewise, current safety and security requirements allow pilots time to transmit the necessary hijack alert code and to communicate any danger to air traffic control.

The Transportation Security Administration (TSA) carefully evaluated the NPRM and considered changes that have already been made to the commercial aviation system. TSA does not see sufficient added security value to justify proceeding with this type of aircraft modification at this time. This position has been fully coordinated within TSA and the Department of Homeland Security.
Conclusion

Withdrawal of Notice No. 03-02 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 FAA has determined that this regulatory course of action is no longer necessary. Therefore, the FAA withdraws Notice No. 03-02, published at 68 FR 1982 on January 14, 2003.

Issued in Washington, D.C., on JUN 20 2007

John J. Hickey,
Director, Aircraft Certification Service