

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
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(RAAC/7)**

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Agenda Item 2: AVSEC and future perspectives

U.S. ACTIONS TO ENHANCE FLIGHTDECK SECURITY

(Presented by the United States of America)

INFORMATION PAPER

SUMMARY

This paper summarizes the Federal Aviation Administration's (FAA) recent rulemaking to enhance cockpit security on part 129 airplanes. The requirements in the rule are the same security enhancements as those for U.S. air carriers. The new requirements are necessary to ensure that there is one level of flightdeck protection for transport category airplanes operating in U.S. airspace.

1.0 Introduction

1.1 The use of aircraft as a terrorist weapon has created new challenges for the global aviation community. Since an aircraft is the last point of defense in the aviation security system, the United States sees a continued threat throughout the world to the possibility of terrorist activity involving aircraft. For this reason, the United States believes that the global aviation community needs to act expeditiously to reduce the probability of intrusion into the flightdeck of an aircraft.

1.2 Following the tragic events of September 11, 2001, the U.S. government took immediate steps to address potential threats to the security of aircraft in the U.S. air transportation system. As part of these efforts, the Secretary of Transportation created a special Rapid Response Team (RRT) that was charged with investigating and evaluating potential measures to protect the cockpits of transport category airplanes against future terrorist actions. The team completed its work and made its recommendations to the Secretary on October 1, 2001. (The report of the team, whose work is relevant to this paper, can be found at www.dot.gov/affairs/aircraftsec.htm.)

1.3 While this work was going on, the U.S. Congress was completing action on the Aviation and Transportation Security Act (Public Law 107-71) that was signed into law on November 19, 2001 by President Bush. This new law establishes similar and additional security measures and a copy may be found at <http://tabula.ost.dot.gov/atsa/s1447.pdf>.

1.4 The purpose of this paper is to describe U.S. measures related to aircraft configuration and flight/cabin crew procedures. Other States can adopt these measures for aircraft on their own registries.

2.0 Discussion

2.1 The FAA has already taken action to protect the flightdecks of U.S.-registered transport category airplanes by requiring modifications intended to strengthen flightdeck doors and related locking devices.

FAA initially issued a series of special rules that permitted U.S. airlines to quickly, but temporarily, modify their airplanes without fully complying with certain airworthiness requirements and without prior approval by the FAA. The FAA believes that these simple modifications, such as the installation of a lock or bolt, are essential to the near-term security of aircraft. Such internal locking devices should be installed on any transport category airplane operating in U.S. airspace.

2.2 Subsequent to the issuance of these temporary special rules and as mandated by the Aviation and Transportation Security Act, the FAA issued a final rule in January 2002 that imposes a new more stringent, permanent standard in our regulations. (The FAA final rule amends 14 CFR Part 25, Airworthiness Standards: Transport Category Airplanes, and 14 CFR 121, Operating Requirements: Domestic, Flag, and Supplemental Operations.) This new standard, designed to protect the flightdeck from unauthorized intrusion and small arms fire and fragmentation devices, is harmonized with JAA and reflects ICAO Annex 8 provisions related to flightdeck doors. Operators of certain transport category airplanes registered in the United States must install reinforced doors that meet this standard by April 9, 2003.

2.3 When it issued the final rule establishing new flightdeck requirements, the FAA stated that it expected that other civil aviation authorities that oversee operators approved to operate to and from the United States would adopt similar standards for improved flightdeck security so that all aircraft operating in the United States will be protected. While the United States and many other aviation authorities have taken emergency measures to allow for temporary modifications to flightdeck doors, not all authorities have done so. Moreover, not all authorities have established permanent flightdeck door standards.

2.4 The FAA has discussed its intent to have consistent flightdeck door security requirements for part 121 and 129 operators in at least 14 different international meetings in Europe, Asia, Central and South America, and Canada.

2.5 In February 2002, as a result of a special Ministerial Conference on Aviation Security, ICAO adopted new requirements in Annex 6 that requires passenger-carrying airplanes of 60 passengers or greater, or 100,000 pounds or more, to be protected from intrusion and ballistic threats. ICAO's requirements are a Recommended Practice effective November 2002, but are not mandatory until November 2003.

2.6 Foreign-registered airplanes operating in U.S. airspace face the same security risks as U.S.-registered airplanes. If foreign-registered airplanes did not have the same flightdeck security enhancements, they would be more attractive targets for terrorists. Because the FAA finds it unacceptable to create two levels of flightdeck protection for the same operations to and from the United States, the FAA has issued a final rule that will impose the same requirements on part 129 airplanes as those issued on the U.S.-registered fleet operating under part 121.

2.7 By August 20, 2002, all passenger-carrying and cargo aircraft that have a flightdeck door separating the flightdeck from passengers, the flightdeck doors must have simple, temporary locking devices to restrict unwanted entry of persons into the cockpit (Phase I). In addition, part 129 operators must meet certain operational and procedural changes by that date to prevent unauthorized access to the flightdeck.

2.8 By April 9, 2003, these airplanes must have permanently modified doors that meet the performance standards set forth in 14 CFR 25.795 (Phase II). This is also the date by which U.S. operators must meet the same requirements. By synchronizing the compliance dates of the rules for part 121 and part 129 airplanes, one level of enhanced flightdeck protection is established.

2.9 The new final rule also establishes procedures to prevent access to the flightdeck by unauthorized persons. These procedures include providing flightdeck keys only to those persons with flightdeck duties, keeping the flightdeck closed and locked at all times when the aircraft is being operated, and limiting access to the flightdeck to crewmembers, CAA inspectors, or other persons authorized by the CAA of the operator's State of Registry.

2.10 Although the final rule was issued without prior notice and comment, the FAA solicits comments by August 20. In addition, the FAA will hold a public meeting during the comment period. The date of the public meeting will be published in the Federal Register.

2.11 The FAA is also working with the aviation industry to develop other modifications to enhance aircraft security, e.g., modifications to enhance transponders to ensure their continuous transmission in emergencies and installation and use of cameras and lighting outside the flight deck. These are being installed on a pilot program basis in the U.S., so that the FAA can consider the impacts of these new surveillance methods. In April, an industry task force reported on one of these methods, the use of video cameras and lighting outside the flightdeck door. That report is under review by the FAA.

2.12 With regard to flightdeck access issues, the recent final rule requires an operator to keep the flightdeck door closed and locked at all times when the aircraft is operated. Locking the flightdeck door can change the dynamic between an operator's flight crew and its cabin crew regarding limiting access to the flightdeck. The United States recognizes that this has been a matter of some international concern.

2.13 Most U.S. carriers, responding to specific suggestions identified by the Rapid Response Team, almost immediately took measures to change their operating procedures including the following:

- Prohibiting passengers from loitering at the forward lavatory and galley areas;
- Leaving curtains/dividers open between cabins to allow for unobstructed views;
- Strictly enforcing seatbelt signs;
- Reinforcing crew coordination to facilitate immediate reporting of suspicious activities to other crewmembers; and
- Positively identifying those entering the flightdeck, using peepholes, codewords, or other similar methods.

2.14 Industry associations have convened workgroups to further study these and other related measures to achieve effective and, where desirable, standardized approaches.

2.15 In its final rule, FAA also revoked a provision that formerly required that a key to access the flight deck "be available for each crewmember". Henceforth the cabin crew will not have such a key in their possession and consequently may only gain access to the flight deck with the knowledge and consent of the flight crew. Since the flight deck will no longer be routinely accessible to flight attendants, FAA is currently exploring methods by which cabin crews can notify flight crews of a suspected threat, "including providing for the installation of switches or other devices.... To discreetly notify the pilots in the case of a security breach occurring in the cabin."

2.16 FAA has also taken action in the area of flight and cabin crew training to develop new and revised procedures for crewmembers to react to potential threat conditions. As stipulated in the new law, FAA has developed and published detailed guidance for a scheduled passenger air carrier flight and cabin crew training program to prepare crew members for potential threat conditions. This guidance includes specific program elements, including:

- Crew communication and coordination;
- Appropriate self-defense responses;
- Use of any protective devices assigned to crew members whose use is authorized by the State of the Operators;
- Psychology of terrorists to enable crew members to cope with hijacker behavior and passenger responses; and
- Live situational training exercises regarding various threat conditions.

2.17 U.S airlines are now in the process of developing revisions to their training programs based on this guidance, programs that then must be approved by FAA and then provided to all their flight and cabin crews before a specified deadline of October 2002.

2.18 In the area of personnel licensing, the new law directs the new Transportation Security Administration (TSA) to consult with the Federal Aviation Administration (FAA) to study the feasibility of requiring “all pilot licenses to incorporate a photograph of the license holder and appropriate biometric imprints.” The FAA had already been collaborating with industry on a means to create digital signatures for airman certificates and has subsequently expanded the scope of this promising research to include photographs and biometric imprints of license holders.

3.0 Conclusion

3.1 As noted above, FAA and U.S. transport passenger airplane operators have already taken actions in the areas of aircraft configuration and flight/cabin crew procedures to protect flightdecks and passenger cabins and are currently exploring additional means to counter acts of unlawful interference.

3.2 Like other Contracting States, the U.S. has also participated in ICAO’s efforts to strengthen aviation security-related Standards and Recommended Practices in Annex 6 (Operation of Aircraft) and Annex 8 (Airworthiness of Aircraft). We applaud the recent Declaration of the ICAO Ministerial establishing new requirements for intrusion and ballistic penetration protection.

3.3 In light of the events of September 11 as well as incidents involving unruly passengers, the U.S. believes that it is essential that States take action to protect the flightdeck from forcible intrusion by persons. Given the urgency of the situation, the FAA has established new flightdeck door requirements for part 129 airplanes, so that airplanes operating in the United States, whether foreign or domestic, will have improved flightdeck doors by April 2003.