

presented a reasoned determination that the benefits justified the costs. It was not MITRE's task at the time of the study to address ADS-B.

Commenters responding to this rule have criticized us for not having enough accident data to justify the rule. In issuing this collision avoidance systems rule, we are being proactive about preventing accidents, rather than waiting for comprehensive mid-air collision data to give us overwhelming justification for this rule. Since the NPRM was published, a mid-air collision occurred in Germany on July 1, 2002, involving a DHL cargo Boeing B-757 and a passenger-carrying Tupelov Tu-154. Both aircraft were equipped with ACAS II (TCAS II version 7.0). German authorities also reported that data from the aircraft Cockpit Voice Recorders (CVR) and Flight Data Recorders (FDR) indicated that both ACAS II systems alerted the flight crews and displayed coordinated RAs. The B-757 descended in response to its RA, but the Tu-154 did not climb in response to its RA. Rather, it descended in response to air traffic control instructions. The accident is under investigation and the probable cause is unknown at this time.

Paperwork Reduction Act

Information collection requirements in the amendment to parts 121, 125, and 129 previously have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) and have been assigned OMB control Nos. 2120-0008 and 2120-0085. The potential paperwork burden is any recordkeeping required to maintain the list of those pilots who have completed training and are certified as to their proficiency on the collision avoidance system operation. These recordkeeping requirements already are covered under the Paperwork Reduction Reports entitled "Operating Requirements; Domestic, Flag, and Supplemental Operations" and "Certification and operations: Airplanes having a seating capacity of 20 or more passengers or a maximum payload capacity of 6,000 lbs. or more; and rules governing persons on board such aircraft."

An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number.

International Compatibility

International Standards and Recommended Practices (SARPs),

Annex 6 to the Convention on International Civil Aviation, Part I, seventh edition, July 1998 has the following four recommendations addressing collision avoidance systems:

6.18 Aeroplanes Required to be Equipped with an Airborne Collision Avoidance System (ACAS II).

6.18.1 From 1 January 2003, all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15,000 kg. or authorized to carry more than 30 passengers shall be equipped with an airborne collision avoidance system (ACAS II).

6.18.2 From 1 January 2005, all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5,700 kg. or authorized to carry more than 19 passengers shall be equipped with an airborne collision avoidance system (ACAS II).

6.18.3 Recommendation.-All aeroplanes should be equipped with an airborne collision avoidance system (ACAS II).

6.18.4 An airborne collision avoidance system shall operate in accordance with the relevant provisions of Annex 10, Volume IV.

FAA Discussion of ICAO SARPs

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with ICAO SARPs to the maximum extent practicable. The FAA has reviewed the corresponding ICAO Standards and Recommended Practices and has identified the following differences.

The FAA agrees that ICAO should actively encourage the use of ACAS II, which is equivalent to TCAS II version 7.0, and agrees in principle with the SARPs. However, the FAA is concerned that some aspects of the SARPs may be unrealistic. ACAS II is appropriate for large, transport category airliners, which have been successfully using TCAS II version 6.04A Enhanced in the United States for several years. However, some small airplanes lack the performance capability to respond to RAs provided by ACAS II (TCAS II version 7.0) and therefore would receive no benefit from the recommendation. The FAA believes that this rule provides a reasonable alternative for those airplanes for which ACAS II would be inappropriate. The FAA has considered the aerodynamic capability of certain airplanes and does not agree that ACAS II/TCAS II is the appropriate level for smaller airplanes. The FAA currently mandates TCAS I for airplanes with 10-30 passenger seats and has done so for more than a decade. Many of the 10-30 passenger-seat airplanes currently equipped with

TCAS I weigh less than 5,700 kg. (12,500 lbs.). The FAA also has considered the cost of installing equipment that cannot be fully utilized by certain airplane operators.

The FAA desires that all TCAS II/ACAS II users have the latest version (version 7.0) and the FAA believes that TCAS II version 7.0 has additional benefits. However, many airplanes currently required to have TCAS II have had version 6.04A Enhanced installed for several years. The purpose of this rule is to capture cargo airplanes for the first time, not to create retrofits for passenger airplanes. This rule allows airplanes that already are equipped with TCAS II version 6.04A Enhanced to continue using that version until those particular units can no longer be repaired to TSO C-119a standards. Air carriers that are installing TCAS II for the first time must equip their applicable airplanes with TCAS II version 7.0. Eventually, airplanes operating under parts 121, 125, and 129 that are required to have TCAS II would be required to be equipped with TCAS II version 7.0. This is because operators will need to replace version 6.04A Enhanced units when old units wear out, or they will choose to operate in RVSM airspace or in foreign countries that require version 7.0.

Economic Evaluation, Regulatory Flexibility Determination, Trade Impact Assessment, and Unfunded Mandates Assessment

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs each Federal agency proposing or adopting a regulation to first make a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreement Act prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this act requires agencies to consider international standards, and use them where appropriate as the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 requires agencies to prepare a written assessment of the costs and benefits and other effects of proposed and final rules. An assessment must be prepared only for rules that impose a Federal mandate on State, local or tribal governments, or on the private sector, likely to result in a total expenditure of \$100 million or