

## **Coalition of Airline Pilots Associations**

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Docket Management System  
U.S. Department of Transportation  
Room Plaza 401  
400 Seventh Street SW  
Washington, DC 20590-0001

RE: Docket No. FAA-2002-12261

Dear Sir:

The Coalition of Airline Pilots Associations (CAPA) is grateful for the opportunity to have its views considered on important matters such as those contained in this notice of proposed rulemaking.

CAPA is a trade association representing the pilots of American Airlines, Airborne Express, AirTran, Southwest Airlines, and United Parcel Service. We have 22,000 members in all.

The Allied Pilots Association, the union representing the pilots of American Airlines, and one of our constituent members has filed its own comment on this proposal. CAPA adopts those comments as its own. We add our own comments on TCAS for emphasis as we believe this is the most critical aspect of this proposal.

We note that the FAA relies on the requirements contained in 14CFR part 91 Appendix G (as amended by this proposal) to set the requirements for installed equipment for those operating in RVSM airspace. The FAA states that Appendix G incorporates all ICAO requirements. Appendix G does not require those operating in RVSM airspace to have TCAS equipment, and nothing in the FAA NPRM would add a requirement for those operating in RVSM airspace to have this equipment.

This is our primary concern with this proposal: The FAA proposes to introduce RVSM operations in the airspace over the United States and does not intend to require TCAS equipment on participating aircraft.

The FAA may be entirely correct in asserting that it is fully compliant with ICAO standards in instituting RVSM without requiring TCAS installation, but it is also true that authorities controlling airspace where RVSM is currently in use (including the U.S. controlled portion of the North Atlantic) have taken the added precaution of requiring TCAS for participating aircraft.

The FAA proposes to use RVSM in the busiest airspace in the world without the added and prudent precaution of requiring TCAS. The high altitude airspace over the United States is not just busier, but it is far busier than any of the other areas where RVSM is currently in use.

The FAA states the percentages of aircraft currently equipped with TCAS in a way that seems to imply that if a substantial percentage of the aircraft operating in the RVSM area have TCAS, that's good enough. 67 Federal Register Vol. 91, 31924, last paragraph. We disagree. We strenuously urge the FAA to reconsider and require TCAS for all aircraft using RVSM in airspace under United States control.

A recent mid air in Europe and a hauntingly similar near miss in Japan illustrate our concerns. Both of these incidents occurred after the FAA released this RVSM proposal on May 10th. In both cases, both aircraft were equipped with TCAS, but in each case one of the pilots did not follow TCAS guidance. In the case of the mid air in Europe, one pilot followed ATC instruction rather than a TCAS resolution advisory while the other pilot did follow a resolution advisory and that caused a fatal crash. Authorities have determined that the TCAS was operating correctly on both aircraft and would have safely resolved the problem if followed by both pilots. In the case of the incident in Japan, the near miss was worsened by one pilot's failure to follow TCAS guidance. Both situations initially arose from problems or mistakes at ATC.

Here's the point: Not following TCAS guidance is exactly the same as not having it; the results in both of these cases are exactly what we can expect in some encounters in which only one aircraft has TCAS. One pilot responds to TCAS and the other continues to rely on a mistaken or misunderstood clearance. A controller may give a clearance to one aircraft that exacerbates the situation because he is not aware of the action taken by the other pilot in response to TCAS. These two incidents graphically illustrate the hazards of that dynamic.

A risk analysis that would show that such incidents are extremely unlikely would be extremely unpersuasive in light of these recent events. No doubt the FAA has already done some calculations along those lines.

Our conclusions from this are neither surprising nor extreme; we think they simply represent common sense:

1. All aircraft operating in dense traffic areas or RVSM airspace must have TCAS. Specifically, RVSM without TCAS is not appropriate in the high-density airspace over the United States.

2. TCAS resolution advisories must be followed in preference to ATC clearances

We very much agree that substantial economic benefit may be realized by the aviation business through the use of RVSM. Unfortunately, there will also be a cost in terms of better and more precise equipment. TCAS saves lives. Lives have been lost because TCAS was either not available or not followed. Let's not let that happen again.

Thank you for considering our views.

/s/ Michael P. Cronin  
Executive Director  
Coalition of Airline Pilots Associations