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Comments for docket number FAA-2001-11032 - 14

DEPT. OF TRANSPORTATION
DOCKETS

02 FEB 21 PM 4:10

Concerns about the industry approach to secure cockpit doors.

#1. Are suppliers and airlines really stepping up to the full challenge of securing the cockpits of commercial aircraft?

The fact that new designs to protect against air rage were in work has unfortunately had the effect, in my opinion, of decreasing the level of security ultimately provided by cockpit door upgrades. In order to save time and money on redesign, door manufacturers and airlines have played down the security requirements and lobbied for the continued acceptance of design practices that, at times, will leave the cockpit door open to hijackers.

Of particular concern is the practice of allowing the cockpit door to open during a rapid cabin depressurization. While this would be of little concern in guarding against air rage, it could be a serious problem in dealing with terrorists. What do you suppose terrorists will begin to think about when they learn that the new security doors on some aircraft models open in the event of rapid aircraft decompression? It is irrelevant whether attempts would be successful or not, the mere fact that the doors open is an invitation for terrorists to attempt to rapidly depressurize an aircraft and exposes the flying public to needless danger.

The key to truly securing the flight deck of airliners is to make the prospect of getting to the controls so daunting that terrorists will decide to expend their efforts elsewhere. I do not believe that a door that opens in a rapid decompression rises to that level. Decompression venting is not simple, any barrier that remains in place in the doorway of an aircraft during decompression will subtract from the vent area allowed for air passage. This will cause an increase in the pressure difference across the bulkhead. In some cases it will require either additional venting paths to be found or beefing up of the bulkheads. These measures have been ruled out on some models (at least 767, 777 and perhaps some Airbus) as being too costly and inconvenient. I would ask how much more costly and inconvenient is it to dig dead bodies out of the rubble of skyscrapers?

I have continually asked; Is there a fundamental difference between an air rage incident and what we saw on Sept. 11th.? My answer is a resounding YES. I would further ask; Do the requirements that protect pilots from a drunken rampage also protect them from a terrorist plot? Is handling a burst of anger, panic or a drug induced frenzy equivalent to handling an attack by teams of people who have spent years studying the weaknesses of the air transport system and whom are willing to die for their cause? I believe it is not.

#2. Will the FAA certify designs that do not fully protect the flying public and Americans on the ground?

Taken at face value, the new rules are encouraging. The amendments to parts 25 and 121 are consistent with the level of security implied and required in the Aviation and Transportation Security Act enacted Nov. 19, 2001. The new regulations require the cockpit door to "*remain closed and locked at all times that the aircraft is being operated.*" (revised 121.587).

There is actually nothing wrong with the new regulations as written. It is how they will be applied by the FAA in certifying new designs that is the problem. While there is no specific exception provided for the practice of allowing the cockpit door to open under decompression, it is generally perceived in the industry that this practice will be approved for certification in new "secure" doors.

The requirement to keep the door closed and locked is a part 121 operations requirement, levied as a responsibility on the pilot in command. It would be his duty to see that the door is returned to its closed and locked position following a rapid depressurization. (The FAA is not even requiring that doors be capable of being relocked after a depressurization.) This would be a particularly busy time for both pilots. Flight attendants would not necessarily be available to help. They might be busy attending passengers, they

might not be equipped with a mobile oxygen supply or might possibly be injured or even lost overboard. The cockpit would in fact be particularly vulnerable after a rapid depressurization. A scenario for this is easily imagined.

Questions for FAA: Secure Cockpit Doors

CFR Parts 25 and 121

"On November 19, 2001, Congress enacted Public Law 107-71, the Aviation and Transportation Security Act (the Act). Section 104 (a) of the Act, Improved Flight Deck Integrity Measures, states:

(a) IN GENERAL.-As soon as possible after the date of enactment of this Act, the Administrator of the Federal Aviation Administration shall-

(1) Issue an order (without regard to the provisions of chapter 5 of title 5, United States Code)-

...

*(C) Requiring that such flightdeck doors **remain locked while any such aircraft is in flight** except when necessary to permit access and egress by authorized persons; and ..."*

Changes to FAA regulation part 121.587 extend compliance with 104(a)(1)(C) of the new law to all phases of aircraft operations stating "... shall ensure that the door separating the flightcrew compartment from the passenger compartment **is closed and locked at all times when the aircraft is being operated.**"

Q1. Could a door that opens (becomes unlocked) in the event of an aircraft decompression be found to violate Section 104(a)(1)(C) of the Aviation and Transportation Security Act and be found non compliant with the revised 121.587?

Pressurized Compartment Loads / Rapid Decompression:

Q2. Some reinforced cockpit doors, provided or proposed, open aft in the event of a rapid passenger cabin decompression. Given that this design feature might be learned by a terrorist group, is there concern at the FAA that terrorists will attempt to decompress an aircraft so equipped in order to gain access to the cockpit and control of the aircraft? Is there no credible scenario for such an attempt?

Intrusion Resistance

Q3. Prior to September 11 the FAA and ATA were working with several aircraft manufacture / modification companies on doors designed to prevent unauthorized entry into the flight deck during "air rage" incidents. The ATA advisory circulars on intrusion and ballistic penetration now adopted by the FAA have changed little since September 11. Is a terrorist assault on the cockpit considered no greater threat by the FAA than an act of air rage? If not, what additional requirements are likely to be imposed?

General

Q4. Given the destructive potential of a commercial transport demonstrated on September 11, has the FAA received any input or directives from other Federal Agencies, such as the Department of Defense, the National Security Council or the new office of Homeland Security, that would influence cockpit security requirements? If so, are any additional performance requirements foreseen by the FAA that are likely to exceed those for intrusion and ballistic penetration in the published Advisory Circulars?

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