

Operators Press For Relief From Oxygen Mask Rule

Oct 21, 2014 [Fred George](#) | *AWIN First*

NBAA, GAMA, Gulfstream Aerospace and business aircraft operators, among other interested parties, want a change in FAR 91.211, the rule that requires a single pilot of a pressurized aircraft to wear an oxygen mask above FL350 and one pilot in a two-crew cockpit to wear the mask above FL410.

Industry sources tell ShowNews that the rule is one of the most frequently violated sections of the federal aviation regulations. NBAA is convening a meeting of interested parties in S331B at the Convention Center on Thursday, October 23, at 10:30 a.m. to discuss the issue.

“The oxygen mask is an emergency piece of equipment that’s identified as the means of compliance for normal operations. The emergency oxygen mask hurts performance. There have been demonstrated negative safety impacts as a result of compliance with the rule,” says Douglas Carr, NBAA’s VP of safety, security, operations and regulation.

“FAA never has been good at change, but we have found some people at Flight Standards who are receptive to the idea. We need to provide a path forward. We’re looking for people willing to help as we develop some teams to address many elements of the issue, of what might become our recommendation to the agency.

“Let’s set expectations appropriately,” says Carr who favors a go-slow approach, who knows that a change in 91.211 is going to be a “multiyear process.” Initially, the focus will be on aircraft with a maximum certified altitude of FL510, as certification rules are much tougher for aircraft that fly above FL450. “We believe there has been substantial certification improvement without the benefit of a retroactive review of the operating rules.”

Science would seem to favor a change in rules, as there appears to be no history of a business jet suffering rapid decompression above FL410 in the last 40+ years. Historically, FAA’s aeromedical branch has objected to a change in the O2 mask rules because the time of useful consciousness (TUC) at high altitude is only a few seconds. The doctors, though, don’t talk with the aircraft certification officials at FAA, and they don’t review business aircraft safety statistics. So they don’t examine the probability of a rapid or explosive decompression event in business jets.

Robert Breiling, president of the Boca Raton aviation consulting firm bearing his name, says he know of no explosive or rapid decompression event in a business aircraft in more than four or five decades. The Payne Stewart accident of 1999, for instance, involved a pressurization failure at low altitude, not a loss of pressurization at altitude.

Gulfstream officials are especially interested in seeing a rule change that would benefit operators. "There are 2000+ large-cabin Gulfstream aircraft in service. While certification rules are much tougher, the aeromedical branch says that TUC hasn't changed. Everybody there is afraid that the pilots will pass out if a big hole blows open in the fuselage. That's about as likely as aboard the space shuttle. The medical profession is way behind. You're safe when you're operating at an acceptable level of risk," says John Salamankas, Gulfstream Aerospace's chief production test pilot. He wants FAA flight standards to undertake an objective analysis of hazard, severity, probability and exposure risks regarding pressurization loss, similar to the approach of flight test engineers.

"People at flight standards who make these rules don't know about certification. The safety record of aircraft constantly has been improving since the 1950s. Airplanes are better, safer, stronger than ever because of (certification) rules modifications. FAR 91.211 dates back to when people were flying Connies, Convairs, DC-6s and Stratoliners."

"We have to keep the ball rolling," says Salamankas. Interested NBAA members may want to attend Thursday's meeting along with Owens-Corning's Jacob Matthews, Merck's Rick Miller, Altria's Stephen Carbonneau, Dr. Quay Snyder, CEO of Aviation Medicine Advisory Service and MedImpact's Dave Ryan, among operators and stakeholders.