



## **ICAO Rescue Fire Fighting (RFF) Category Compliance at Airports**

Boeing has received a number of inquiries from operators concerning the January 2005 ICAO recommendation of full rescue fire fighting category compliance at airports where they operate.

Boeing does not recommend specific levels of aircraft rescue and firefighting (ARFF) for the operation of our aircraft. Boeing is cognizant of the benefits of airports having available appropriate levels of ARFF to respond to potential emergency situations experienced by aircraft operators.

The issue is ICAO's Annex 14 – Aerodromes / Volume 1 (4<sup>th</sup> Ed/Jul 2004), Para 9.2.4 recommendation that,

“From 1 January 2005, the level of protection provided at an aerodrome for rescue and fire fighting should be equal to the aerodrome category determined using the principles in 9.2.5 and 9.2.6.”

Amendment 10 to Annex 14 has rescinded the phase-out date, although this language remains in the current ICAO document. Please note that ICAO's Annex 14 sets standards for aerodrome operators, but it is not a standard to which airlines have to comply. ICAO's Annex 6 provides the standards and recommended practices (SARPs) for air carrier operations, however, this document currently does not have any reference to RFF requirements for other than ETOPS flights.

The ICAO Annex 14 – Aerodromes / Volume 1 standards and recommended practices (SARPS) are used for airport design and were not intended as airline operational criteria. However, it is acknowledge that some member states and their regulatory agencies have applied these design criteria as operational criteria. The RFF standard cited in ICAO Annex 14 - Aerodromes (4th Ed/July 2004) states,

"9.2.3 The level of protection provided at an aerodrome for rescue and fire fighting shall be appropriate to the aerodrome category determined using the principles in 9.2.5 and 9.2.6, except that, where the number of movements of the aeroplanes in the highest category normally using the aerodrome is less than 700 in the busiest consecutive three months, the level of protection provided shall be not less than one category below the determined category.

*Note — Either a take-off or a landing constitutes a movement."*

Thus, if a carrier is operating to an airport with a 737-700 that would typically call for an RFF category of 6, then RFF category 5 would meet the ICAO standard provided that the combined operations of the 737-700 size aircraft (assuming the 737-700 is the largest aircraft operating at the airport) does not exceed 700 operations within a three



month period. For operators that serve the charter market, this can be a challenge, as late in the season the 700 operations threshold may be crossed, prompting the need for the airport to meet RFF Cat 6. Please bear in mind, that the RFF standard may be enforced by either the carrier's regulatory agency or the regulatory agency holding jurisdiction over the airport, and sometimes both. Also note, ICAO SARPs are not consistently implemented throughout the world and there are some countries, such as New Zealand, that still allow for a reduction of the level of fire protection by two categories for airports with little scheduled traffic due to the cost of maintaining the higher level of compliance.

The following approach is how one carrier in Europe addresses the RFF category issue to support their 737-400/-800 flight operations:

“Our procedure at the moment is to ensure that the airport fire fighting category is at least equal to the aircraft fire fighting category. If it is not then we write a letter to the airport asking if it is possible that they can raise their fire fighting category for the time that we are operating to their aerodromes. Normally the answer is yes, however at some airports they are unable to.”

Many airports are currently capable of meeting a higher ARFF Category based on the total number and capabilities of their existing fire vehicles. However, they only publish the level of service based on existing traffic and are able to increase their RFF category at least for brief periods.

Additional questions regarding issues related to Aircraft Rescue and Fire Fighting (ARFF) and Boeing aircraft can be directed to either of the following:

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