



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# SAFO

Safety Alert for Operators

SAFO 08016  
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Flight Standards Service  
Washington, DC

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*A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.*

**Subject:** Boeing 737 (B-737) Cabin Altitude Warning Horn Confusion

**Purpose:** To call attention to the possibility that a B-737 flightcrew might incorrectly interpret the cabin altitude warning horn as the takeoff configuration horn while in flight, and to emphasize the importance of donning oxygen masks immediately any time the intermittent warning horn sounds during flight.

**Background:** During a B-737 accident investigation it was discovered that the flightcrew misinterpreted the intermittent cabin altitude warning horn as a false takeoff warning horn. On the B-737 the same intermittent horn is used for both conditions. Subsequent data gathering revealed that this misinterpretation occurred in other instances involving both US and non-US operators. The FAA issued Airworthiness Directive (AD) 2006-13-13 making certain emergency procedures in the Airplane Flight Manual immediate action items (also known as recall or memory items). That AD may be downloaded at:

[http://www.airweb.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAD.nsf/0/817975EE9A57B8DC862571950054A6DA?OpenDocument&Highlight=2006-13-13](http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/0/817975EE9A57B8DC862571950054A6DA?OpenDocument&Highlight=2006-13-13)

**Discussion:** Since the publication of the AD there have been several more incidents in which B-737 flightcrews have failed to recognize and respond appropriately to a valid cabin altitude warning horn. In one case the crew reported they first believed it to be a cell phone. In all cases the crews were unaware of the meaning of the intermittent warning horn until looking at the cabin altimeter and rate of climb indicator on the overhead panel. There are further indications that some crews have delayed responding to the horn because of air/ground sensing system failures, or because of conditioning during training to react only to a rapid decompression, without considering the possibility of a slow loss of cabin pressure. In some cases, illumination of the EQUIP COOLING light has added further confusion, resulting in further delay in donning oxygen masks.

A crew's awareness of the possibility for confusion is essential to their quick response in donning an oxygen mask and avoiding hypoxia. It is also essential to establish communications between the flight deck and the cabin since people become at least partially hypoxic even at 10,000 feet cabin altitude.

**Recommended Action:** Directors of safety, directors of operations, trainers and check airmen for operators flying any B-737 model should immediately make known to their flightcrews and flight attendants the absolute necessity of donning an oxygen mask -- flightcrews as soon as an intermittent warning horn sounds during flight, flight attendants whenever the passenger oxygen masks deploy automatically. They should ensure that this message is included in manuals and in all phases of training and checking. Managers at Part 142 training centers conducting pilot training on the B-737 should ensure that their trainers clearly point out to pilots in training the necessity of donning their oxygen masks immediately whenever the intermittent horn sounds during flight.

**Questions Regarding the Content of this SAFO:** Questions should be directed to Mike Garrett, B-737 Flight Standardization Board Chairman, Seattle Aircraft Evaluation Group, 425-917-6621, [mike.garrett@faa.gov](mailto:mike.garrett@faa.gov).