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114TH CONGRESS
1ST SESSION

H. R. 772

To direct the Administrator of the Federal Aviation Administration to issue regulations to improve flight recorder and aircraft crash location requirements on certain commercial passenger aircraft in accordance with new International Civil Aviation Organization flight recorder standards.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 5, 2015

Mr. DUNCAN of Tennessee (for himself and Mr. PRICE of North Carolina) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

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A BILL

To direct the Administrator of the Federal Aviation Administration to issue regulations to improve flight recorder and aircraft crash location requirements on certain commercial passenger aircraft in accordance with new International Civil Aviation Organization flight recorder standards.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Safe Aviation and Flight Enhancement Act of 2015''.

SEC. 2. FINDINGS.

Congress finds the following:

(1) In 2012 the International Civil Aviation Organization (referred to in this Act as ''ICAO'') adopted a standard requiring all new aircraft with a maximum certificated take-off mass over 15,000 kilograms for which a type certificate is issued on or after 1 January, 2016, and which are required to be equipped with both a digital flight recorder (referred to in this Act as ''FDR''), and a cockpit voice recorder (referred to in this Act as ''CVR''), to be equipped with 2 combination FDR/CVR recorder systems.

(2) It is in the public's best interest that the second combination FDR/CVR system installed under the new ICAO standard uses a deployable combination FDR/CVR/Emergency Locator Transmitter (referred to in this Act as ''ELT'') system to: maximize survivability; prevent the need for underwater recovery of both black boxes in water incidents; improve timely location of the aircraft, accident site and survivors; and to ensure rapid recovery of the FDR/CVR data for timely safety and security analysis in all crash scenarios.

(3) Deployable recorder systems combine an FDR, a CVR, and ELT into one crash hardened,

survivable ''black box'', which releases from the aircraft upon crash impact with land, water, and in the event of in-air explosion, enabling it to avoid the crash impact site and float indefinitely on water to avoid time-consuming and costly underwater search efforts.

(4) Deployable FDR/CVR/ELT black boxes send a distress alert tracking signal to the free, global constellation of Search and Rescue (SAR) satellite transponders known as COSPAS–SARSAT; providing the position of the aircraft at point of impact, aircraft tail number, country of origin, and location of the deployable FDR/CVR/ELT black box for quick recovery and analysis.

(5) Recent commercial aviation accidents exemplify a growing trend in difficult and costly underwater aircraft CVR/FDR location and recovery efforts:

(A) March 8, 2014, Malaysia Airlines Flight 370, disappeared with 239 passengers and crew. International search and recovery efforts for the aircraft and black boxes are ongoing involving 29 nations and hundreds of millions of dollars in resources, estimated to result

in the most expensive search and recovery mission in aviation history.

(B) June 1, 2009, Air France Flight 447, crashed into the Atlantic Ocean with 216 passengers and 12 crew members. Despite locating aircraft wreckage within 5 days, it still took nearly two years and an estimated cost of over $160,000,000 to recover the FDR and CVR from the bottom of the Atlantic Ocean at a depth of 12,000 feet.

(C) June 30, 2009, Yemenia Airlines IY626, crashed off of the coast of Comoros, with 152 passengers and aircrew. The sole survivor, a 12-year-old girl, was found clinging to wreckage after floating in the ocean for thirteen hours. Her accounts estimated 30 to 40 passengers survived the crash but succumbed to hypothermia due to the delay in locating the downed aircraft. The FDR and CVR were not recovered until nearly two months later, at a depth of 3,900 feet.

(D) January 1, 2007, Adam Air Flight 574, carrying 102 passengers and aircrew crashed off the coast of Indonesia. The FDR and CVR were located nearly one month later,

but could not be recovered until seven months later on due to the difficulty of the underwater environment. The FDR and CVR were found at a depth of 6,600 feet and 4,600 feet apart.

(6) Countries with extensive search and rescue capabilities, such as Australia, Brazil, Canada, Denmark, Japan, Norway, United Kingdom, and the United States, have equipped military platforms, including commercial equivalent aircraft with automatic deployable black box technology.

(7) Following the crash of Air France Flight 447, the French Bureau d'Enquêtes et d'Analyses (BEA) led the International Flight Data Recovery Working Group, consisting of over 100 safety experts, that scored deployable FDR/CVR/ELT systems the highest among all evaluated technologies to improve aircraft and black box localization and recovery.

(8) There are no recurring service/data fees associated with the use of deployable FDR/CVR/ELT systems. The COSPAS–SARSAT satellites, network and supporting infrastructure that receives the alert signal from the deployable FDR/CVR/ELT with the aircraft crash location and black box location is a

free, global safety service managed by governments around the world.

(9) In accordance with Public Law 110–53, (Implementing Recommendations of the 9/11 Commission Act of 2007), the Transportation Security Administration conducted a pilot program that successfully tested in concept, the ability of automatic deployable recorder systems to improve rapid access to flight data following commercial aviation crashes, while also providing localization of downed aircraft and potential survivors.

SEC. 3. REGULATIONS REQUIRING DEPLOYABLE RECORDERS AND OTHER PURPOSES.

(a) REGULATIONS.—Not later than 1 year after the date of enactment of this Act, the Administrator of the Federal Aviation Administration shall issue regulations that require all commercial passenger aircraft defined under this Act be equipped with a deployable recorder system as the second combination FDR/CVR recorder system installed under International Civil Aviation Organization Annex 6, Part I, Amendment 35—6.3.4.5.2 Combination Recorders.

(b) SCHEDULE FOR COMPLIANCE.—The regulations under subsection (a) shall require the installation of the automatic deployable recorder system required under this

section on commercial aircraft that are ordered by an air carrier on or after January 1, 2017.

(c) DEFINITIONS.—In this Act, the following definitions apply:

(1) COMMERCIAL AIRCRAFT.—The term ''commercial passenger aircraft'' means a jet aircraft with a maximum certificated take-off mass over 15,000 kilograms, and which are required to be equipped with 2 combination FDR/CVR recorder systems in accordance with ICAO Annex 6, Part I, Amendment 6.3.4.5.2.

(2) DEPLOYABLE RECORDER SYSTEM.—The term ''deployable recorder system'' means a flight data recorder, cockpit voice recorder, and emergency locator transmitter housed in one crash protected, floatable unit that meets the performance specifications for a Deployable Recorder system under United States Federal Aviation Administration Technical Standard Order 123c (CVR), Technical Standard Order 124c (FDR), and Minimum Operational Performance Specifications for Deployable Recorders under EUROCAE ED–112A and all subsequent updates to such requirements.

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