


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2008- 0197</b></p> <p><b>Date: 29 October 2008</b></p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p><b>Type Approval Holder's Name :</b></p> <p>McDonnell Douglas Corporation</p>	<p><b>Type/Model designation(s) :</b></p> <p>DC-9-10, -20, -30, -40, and -50 Series, DC-9-81/82/83/87, MD-88, MD-90, and 717 airplanes</p>
TCDS Number:	U.S.A No. A6WE
Foreign AD :	Not applicable
Supersedure :	None
<b>ATA 31</b>	<b>Central Aural Warning System – Airplane Flight Manual and Pre-Start Check of the Take-off Warning System – Introduction</b>
Manufacturer(s):	McDonnell Douglas Corporation (previously Douglas Aircraft Co.), The Boeing Company.
Applicability:	All McDonnell Douglas Model DC-9-10, DC-9-20, DC-9-30, DC-9-40, and DC-9-50 airplanes; Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) airplanes; Model MD-88 airplanes; Model MD-90-30 airplanes and Model 717-200 airplanes.
Reason:	<p>In August 2008, a McDonnell Douglas DC-9-82 (MD-82) airplane crashed while attempting to take off from runway 36L at Madrid's Barajas International Airport.</p> <p>Although the preliminary report issued by Spain's Comisión de Investigación de Accidentes e Incidentes de Aviación Civil (CIAIAC) did not identify the probable causes of the accident, it states that the data recordings suggest the flaps/slats were not set for takeoff and the Take-Off Warning (TOW) did not occur.</p> <p>After a similar accident in 1987 where it was concluded that the flaps/slats were not set for takeoff and the TOW did not occur, McDonnell Douglas recommended all MD-80 series operators conduct a check of the TOW system before engine start prior to every flight. It has been found that some operators' procedures no longer reflect the initial intent of the recommendation made by McDonnell Douglas as the check is performed less frequently.</p>

	<p>A defective TOW system could let an improper take-off configuration undetected to the flight crew and result in loss of control during the initial climb. As a consequence, to ensure that all operators of MD-80 series airplanes perform the TOW system check before every flight, this Airworthiness Directive requires an update of the Airplane Flight Manual (AFM) to make the frequency mandatory.</p> <p>The AD also extends to the DC-9 and 717-200 aircraft as the design of the TOW system is common to all three types.</p>
Effective Date:	12 November 2008
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Within 15 days after the effective date of this AD, Amend the PROCEDURES section of the applicable Airplane Flight Manual to incorporate the following check.</p> <p>This may be done by inserting a copy of this AD into the AFM after the TABLE OF CONTENTS pages of the PROCEDURES section.</p> <div style="border: 1px solid black; padding: 10px;"> <p>TAKEOFF WARNING SYSTEM</p> <p><i>Note: This check is mandatory and must be carried out before the first engine start before every flight.</i></p> <p>Before engine start, and with power on the aircraft:</p> <p>Takeoff Warning/Throttles.....CHECK/IDLE</p> <p>Move both throttles toward full forward position and observe takeoff warning sounds. Move throttles to idle and observe warning is silenced.</p> <p><i>NOTE: If takeoff warning does not sound, maintenance action is required prior to takeoff. Confirmation of takeoff warning system operation does <b>not</b> ensure that correct takeoff values for stabilizer trim, centre of gravity, or flap/slats position have been set.</i></p> </div>
Ref. Publications:	Not applicable
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.</li> <li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a></li> <li>4. For any questions concerning the technical content of the requirements in this AD, please contact: <p style="text-align: center;">Boeing Commercial Airplanes Attention: Data and Service Management, Dept. C1-L5A (D800-0024) Long Beach Division, 3855 Lakewood Boulevard Long Beach, California 90846, United States of America</p> </li> </ol>