
AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/DO 228/10 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Dornier 228 Series Aeroplanes

AD/DO 228/10
Amdt 1

Fuselage Frame 19

6/2009

Applicability: Model 228-100, -101, -200, -201, -202, and -212 aircraft, all serial numbers.

- Requirement:
1. For aircraft with serial numbers 7011 through 7168, and 8012 through 8245, except serial numbers 8107 and 8169;

- **which have** accumulated 120 'short-field' landings or more on Short Take-Off and Landing (STOL) airfields at the effective date of this Directive, over the last 1,200 landings accomplished before the effective date of this Directive:
 - a. Inspect for cracks in the lower centre section of fuselage frame 19 in accordance with Structural Significant Item (SSI) Task No. 53.37 of the Structure Inspection Programme of the Dornier 228 Time Limits/Maintenance Checks Manual.
 - b. If no cracking is detected, before the accumulation of 800 landings after the effective date of this Directive, install the reinforcements and butt straps on fuselage frame 19 in accordance with the Accomplishment Instructions of RUAG Aerospace Services GmbH Service Bulletin No. SB-228-273 original issue, or later EASA approved revision.
 - c. If cracking is detected, repair in accordance with an EASA-approved repair solution.
 2. For aircraft with serial numbers 7011 through 7168, and 8012 through 8245, except serial numbers 8107 and 8169;

- **which have not** accumulated 120 'short-field' landings or more on Short Take-Off and Landing (STOL) airfields at the effective date of this Directive, over the last 1,200 landings accomplished before the effective date of this Directive:
 - a. Accomplish SSI Task No. 53.37 within the compliance schedule as defined in the Structure Inspection Programme of the Dornier 228 Time Limits/Maintenance Checks Manual.
 - b. If any damage is detected, repair in accordance with an EASA-approved repair solution.

Dornier 228 Series Aeroplanes

AD/DO 228/10 Amdt 1 (continued)

3. After accomplishment of applicable Requirement 1 necessary actions or Requirement 2 necessary actions, repeat thereafter SSI Task No. 53.37.
4. For all remaining aircraft, accomplish SSI Task No. 53.37 within the compliance schedule as defined in the Structure Inspection Programme of the Dornier 228 Time Limits/Maintenance Checks Manual.

Note 1: For the purpose of this Directive, a Short Take-Off is made when the aircraft clears a 50 ft (15 m) obstacle within 1,500 ft (450 m) of commencing take-off, and a Short Landing is made when the aircraft stops within 1,500 ft (450 m) after passing over a 50 ft (15 m) obstacle.

Note 2: EASA AD 2009-0085 refers.

- Compliance:
- 1.a. Within 800 landings after the effective date of this Directive.
 - 1.b. As specified in Requirement 1.b.
 - 1.c. Before further flight.
 - 2.a. As specified in Requirement 2.a.
 - 2.b. Before further flight.
 3. At intervals not to exceed 2,400 landings or 72 months, whichever occurs first.
 4. As specified in Requirement 4 for the initial inspection time. Repeat thereafter at intervals not to exceed 2,400 landings or 72 months, whichever occurs first.

This Amendment becomes effective on 4 June 2009.

- Background:
- During a maintenance inspection, cracks were detected on the centre section of fuselage frame 19. Fuselage frame 19 supports the rear side of the main landing gear. The investigation on the cause of the cracking is still in progress. Such cracking, unless detected and corrected, could result in failure of frame 19, and subsequent collapse of a main landing gear. The requirements of this Directive are considered to be an interim action.

Dornier 228 Series Aeroplanes

AD/DO 228/10 Amdt 1 (continued)

Amendment 1 is issued in response to a new EASA AD, which requires installation of reinforcements and butt straps on frame 19 at the lower part of the fuselage for aircraft used in operations where this frame may be subject to high stress, and recurring inspections of that frame for all aircraft.



David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009