

# Civil Aviation Amendment Order (No. R12) 2004

I, WILLIAM BRUCE BYRON, Director of Aviation Safety, on behalf of CASA, issue the following Civil Aviation Order under subregulation 235 (7) of the *Civil Aviation Regulations 1988*.

**[Signed Bruce Byron]**

Bruce Byron  
Director of Aviation Safety and  
Chief Executive Officer

2 December 2004

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**1 Name of Order**

This Order is the Civil Aviation Amendment Order (No. R12) 2004.

**2 Commencement**

This Order commences on gazettal.

**3 Replacement of section 20.10.1 of the Civil Aviation Orders**

Section 20.10.1 of the Civil Aviation Orders is omitted and a new section substituted as set out in Schedule 1.

# Schedule 1      Substitution of section 20.10.1 of the Civil Aviation Orders

## SECTION 20.10.1

### HOT REFUELLING — TURBINE ENGINE AEROPLANE ENGAGED IN AERIAL WORK OR PRIVATE OPERATIONS

#### 1      INTERPRETATION

1.1      In this section:

*hot refuelling* means the refuelling of an aeroplane with its engine or engines running.

*equivalent data* means the information and instructions that would otherwise be contained in an aeroplane's flight manual but, in the absence of a flight manual, are instead displayed either wholly on a placard or partly on a placard and partly in another document.

1.2      Hot refuelling of an aeroplane may take place with its propeller or propellers rotating.

#### 2      APPLICATION

2.1      This section applies only to turbine engine aeroplanes engaged in aerial work or private operations.

2.2      The hot refuelling of aeroplanes at an aerodrome or a place used as an aerodrome must be carried out in accordance with:

- (a) the requirements set out in section 20.9 other than the requirements set out in paragraphs 4.1.1.1, 4.3.1, 4.3.8, 4.4.1, 4.5.1 and 5.1.4; and
- (b) this section.

Note: Operators and pilots should note that the provisions of paragraph 5.1 of section 20.2 of the Civil Aviation Orders relating to the inspections and tests for the presence of water in an aircraft's fuel system before the start of each day's flying are applicable to aeroplanes to which this section applies.

#### 3      OPERATOR'S OR OWNER'S RESPONSIBILITIES

3.1      Hot refuelling of an aeroplane must not be carried out unless authorised by:

- (a) if the operation is not a private operation — the operator of the aeroplane; or
- (b) in the case of a private operation — the owner of the aeroplane.

- 3.2 Hot refuelling may only be carried out:
- (a) at an aerodrome — with the consent of the aerodrome operator; or
  - (b) at a place used as an aerodrome — with the consent of the owner or occupier of the place.
- 3.3 Before authorising the hot refuelling of an aeroplane, the operator or owner must be satisfied that the refuelling can be carried out safely and, in particular, must have regard to:
- (a) the configuration of the aeroplane and its engine or engines; and
  - (b) the location of the components of the aeroplane's fuel system; and
  - (c) the refuelling system or systems to be used and its or their components; and
  - (d) the aeroplane's flight manual or equivalent data.
- 3.4 The operator or owner of an aeroplane who authorises hot refuelling of that aeroplane in accordance with paragraph 3.1 must include in the aeroplane's operations manual or, in the case of private operations, its flight manual or equivalent data:
- (a) the operational circumstances in which hot refuelling may take place; and
  - (b) the procedures to be followed during hot refuelling; and
  - (c) in the case of an operations manual — the requirements and instructions, if any, that relate to hot refuelling and are set out in the aeroplane's flight manual or equivalent data; and
  - (d) if applicable, the instructions to ensure fuel quality as required for the purposes of subparagraph 8.3 (b).
- 3.5 In an operations manual, the operator must set out the matters referred to in paragraph 3.4 separately in relation to each type of aeroplane to which the operations manual applies.

#### **4 RESPONSIBILITIES OF PILOT IN COMMAND**

- 4.1 Before allowing the hot refuelling of an aeroplane to commence, the pilot in command must ensure that the refuelling can be carried out safely in accordance with this section and the procedures included in the operations manual or the aeroplane's flight manual or equivalent data.
- 4.2 The pilot in command must ensure that passengers are not on board during hot refuelling, except in the case of a passenger who cannot, in the opinion of the pilot or on medical advice, be safely disembarked.
- 4.3 Unless subsection 7 of section 95.7 of the Civil Aviation Orders applies, a pilot with a licence that is valid for the aeroplane must, at all times, be at the controls of the aeroplane while refuelling is carried out.
- 4.4 While a pilot is at the controls of an aeroplane, communication between the pilot and the person on the ground in charge of the refuelling system

must be maintained by means of an electronic intercommunication system or by visual contact and an agreed system of signals.

- 4.5 While hot refuelling is taking place, the pilot in command must ensure that:
- (a) the door or doors on the refuelling side of the aircraft remain closed; and
  - (b) the door or doors on the non-refuelling side remain open; and
  - (c) a person nominated by the pilot in command is stationed at the open door or doors to assist with evacuation in the event of an emergency; and
  - (d) the area outside the aircraft that would be used in event of evacuation is kept clear of obstacles; and
  - (e) if the presence of fuel vapour is detected inside the aircraft, or any other hazard arises during refuelling, refuelling is stopped immediately.

## **5 PROCEDURES AND EQUIPMENT**

- 5.1 All persons engaged in hot refuelling must be trained in, and familiar with, the procedures to be followed during hot refuelling or any emergency that may occur in relation to the refuelling.
- 5.2 Suitable and properly maintained fire fighting equipment must be readily available for use if an emergency occurs during the refuelling.

## **6 FUEL LOADING**

- 6.1 The quantity of fuel to be loaded must be decided before hot refuelling is commenced.
- 6.2 A closed or open refuelling system may be used for hot refuelling.
- 6.3 If an open system of refuelling is used, there must be a means of quickly cutting off the fuel supply at the point of entry into the fuel tank of the aeroplane.
- 6.4 Before the aeroplane's fuel filler cap is removed, the refuelling equipment and the aeroplane must be earthed and connected so as to ensure they are of the same electrical potential.

## **7 RADIO TRANSMISSIONS**

- 7.1 While hot refuelling is taking place, radio transmissions from the aeroplane must be restricted to the greatest extent practicable.
- 7.2 While hot refuelling is taking place, an HF transmitter or radar equipment on the aeroplane must not be operated.

## **8 INSPECTION AND TESTING OF FUEL SYSTEM**

- 8.1 The operator of an aeroplane engaged in aerial work operations must ensure to the greatest extent practicable that, on completion of each hot refuelling of the aeroplane, the pilot in command inspects and tests the aeroplane's fuel system for the presence of water.
- 8.2 The pilot in command of an aeroplane, engaged in aerial work operations or private operations, that has been hot refuelled must, on completion of each hot refuelling of the aeroplane, inspect and test the aeroplane's fuel system for the presence of water.
- 8.3 Paragraphs 8.1 and 8.2 do not apply to an aeroplane engaged in aerial work operations:
- (a) if the aeroplane has, for a continuous period of not more than 5 hours time in service, been engaged in operations during which hot refuelling has taken place; and
  - (b) if:
    - (i) the fuel used by the aeroplane is supplied by a person:
      - (A) who has a fuel quality audit program; and
      - (B) whose regular audit reports are checked by the operator;or
    - (ii) in the case where the fuel used by the aeroplane is supplied by a person who does not have a fuel quality audit program — the operator has a system for monitoring the quality of the fuel used by the aeroplane.
- 8.4 Paragraph 8.2 does not apply to an aeroplane engaged in private operations if the requirements set out in subparagraphs 8.3 (a) and (b) are satisfied and approval in writing is given by CASA.