Civil Aviation Amendment Order (No. R11) 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

1 Name of Order

This Order is the Civil Aviation Amendment Order (No. R11) 2004.

2 Commencement

This Order commences on gazettal.

3 Replacement of section 20.10 of the Civil Aviation Orders

Section 20.10 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 of the Civil Aviation Orders

SECTION 20.10

HOT REFUELLING — HELICOPTERS

1 MEANING OF HOT REFUELLING

- 1.1 In this section, *hot refuelling* means the refuelling of a helicopter with its engine or engines running.
- 1.2 Hot refuelling of a helicopter may take place with its rotor or rotors rotating.

1A APPLICATION

- 1A.1 The hot refuelling of helicopters 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 <u>before the start of each day's flying</u> are applicable to helicopters to which this section applies.

2 OPERATOR'S RESPONSIBILITIES

- 2.1 Hot refuelling of a helicopter must not be carried out unless authorised by its operator.
- 2.2 Before authorising the hot refuelling of a helicopter, the operator must be satisfied that the refuelling can be carried out safely and, in particular, must have regard to:
 - (a) the configuration of the helicopter and its engine or engines; and
 - (b) the location of the components of the helicopter's fuel system; and
 - (c) the refuelling system or systems to be used and its or their components; and
 - (d) the helicopter's flight manual.

- 2.3 The operator of a helicopter who authorises hot refuelling of that helicopter must include in the operations manual:
 - (a) the operational circumstances in which hot refuelling may take place; and
 - (b) the procedures to be followed during hot refuelling; and
 - (c) the requirements and instructions, if any, set out in the helicopter's flight manual that relate to hot refuelling; and
 - (d) if applicable, the instructions to ensure fuel quality as required for the purposes of subparagraph 7.2 (b).
- 2.4 The operator must set out the matters referred to in paragraph 2.3 separately in relation to each type of helicopter to which the operations manual applies.

3 RESPONSIBILITIES OF PILOT IN COMMAND

- 3.1 Before allowing the hot refuelling of a helicopter 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.
- 3.2 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.
- 3.3 Unless subsection 7 of Civil Aviation Order section 95.7 applies, a pilot with a licence that is valid for the helicopter must, at all times, be at the controls of the helicopter while refuelling is carried out.
- 3.4 While a pilot is at the controls of a helicopter, 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 PROCEDURES AND EQUIPMENT

- 4.1 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.
- 4.2 Suitable and properly maintained fire fighting equipment must be readily available for use if an emergency occurs during the refuelling.
- 4.3 Before carrying out hot refuelling on an off-shore oil rig, gas rig or platform, a drilling ship or any other vessel, the approval of the operator or master of that installation or vessel must be obtained.

5 FUEL LOADING

- 5.1 The quantity of fuel to be loaded must be decided before hot refuelling is commenced.
- 5.2 A closed or open refuelling system may be used for hot refuelling.
- 5.3 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 helicopter.
- 5.4 Before the helicopter's fuel filler cap is removed, the refuelling equipment and the helicopter must be earthed and connected so as to ensure they are of the same electrical potential.

6 RADIO TRANSMISSIONS

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

7 INSPECTION AND TESTING OF FUEL SYSTEM

- 7.1 The operator of a helicopter that has been hot refuelled must ensure that, on completion of each hot refuelling of the helicopter, the pilot in command inspects and tests the helicopter's fuel system for the presence of water.
- 7.2 Paragraph 7.1 does not apply:
 - (a) if the helicopter 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 helicopter 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 a case where the fuel used by the helicopter 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 helicopter.