

# Continuing Airworthiness Notice – 14-002



## Robinson R22 Series Helicopters fitted with a Helipod Spray System

16 August 2017

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Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

**The contents of this notice are ADVISORY ONLY and are NOT MANDATORY.**

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

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### Applicability:

Operators of Robinson R22 series helicopters fitted with a Helipod NZ Limited spray system.

### Purpose:

This Continuing Airworthiness Notice (CAN) alerts operators that it is the responsibility of the pilot to ensure that a Robinson R22 series helicopter fitted with a Helipod NZ Limited spray system is operated within the weight and balance limitations specified in the R22 AFM, and the spray system AFM supplement. It is vital to carry out an accurate weight and balance calculation due to the small payload available for a R22 helicopter.

### Background:

This CAN is prompted by an accident with a R22 helicopter fitted with a Helipod III Spray System (Belly Pod), which occurred due to probable operation outside of the maximum aircraft weight and C of G envelope.

The investigation revealed the actual weight and moments of the spray system components installed on the helicopter were not determined prior to the accident flight, and the maximum helicopter weight exceeded the 1370lb maximum gross weight specified in the R22 AFM. This resulted in limited aircraft control.

### Recommendation:

To prevent operation outside of the maximum aircraft weight and C of G envelope, which can result in loss of aircraft control, accomplish the following before operation of a R22 helicopter fitted with a Helipod NZ Limited spray system:

- The pilot is responsible to determine the total weight of the actual spray system installed on the helicopter (the actual weight and moment of the spray system will vary depending on the system configuration. For example, the length of the spray boom extensions will influence the actual weight and moment of the spray system), and
- The pilot is responsible to perform a weight and balance calculation to establish that the helicopter C of G will remain within AFM limits for the duration of the flight, and
- The calculation uses the actual weights of the pilot, the fuel and the spray system on the helicopter.

### Note:

- An accurate weight and balance calculation will determine the actual available payload.
- The markings on the spray tank window are for general reference only and cannot be relied on to determine spray tank contents weight.

### Enquiries:

Enquiries with regard to the content of this Continued Airworthiness Notice should be sent to:

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