# SUPPLEMENT TO THE APPROVED ROTORCRAFT FLIGHT MANUAL

### FOR

**ROBINSON R44 and R44 II** 

**INSTALLATION OF KAYAK RACK** 

**MODIFICATION RW08-08** (Rotor and Wing Maintenance Ltd)

Approved by: What Date of approval: 27/14/09

DO59596

## FLIGHT MANUAL SUPPLEMENT

## **ROBINSON R44 and R44 II**

# WITH **KAYAK RACK MODIFICATION RW08-08**

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#### 1.0 GENERAL

Rotor and Wing Ltd modification RW08-08 installs kayak racks onto the left and right hand skids of Robinson rotorcraft models R44 and R44 II.

The each kayak rack consists of a metal frame which act as cradles to support a kayak each and are mounted on either side of the cabin.

Information in this document supplements or supersedes information in the basic rotorcraft flight manual. For limitations, emergency procedures, normal procedures and performance information not contained in this supplement refer to the basic CAA approved flight manual.

#### 2.0 LIMITATIONS

### 2.1 Airspeed

V<sub>ne</sub> (never exceed speed) of 80 KIAS at sea level ISA with modification RW08-08 installed.

## 2.3 Weight

The maximum permissible weight per kayak per side is 70 lb.

## 2.4 Kinds of Operation Permitted

Rotorcraft fitted with modification RW08-08 are approved for Normal Operations.

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#### 2.5 Placards

The following placards must be placed as indicated when modification RW08-08 is installed:

a) Mounted in clear view of the pilot.

MODIFICATION RW08-08 - KAYAK RACK								
1	MAXIMUM PERMISSIBLE KAYAK WEIGHT 70lb							
2	MAXIMUM PERMISSIBLE KAYAK SIZE							
	Length 2.5m Width 0.70m Depth 0.45m							
3	1 or 2 kayaks may be carried							
4	Kayaks to be secured using only approved tie straps							
5	Minimum of 50mm clearance between CABIN DOORS and KAYAK							
6	Operation IAW flight manual supplement							
7	Pre-flight inspections IAW flight manual supplement							

b) Mounted on the kayak rack in clear view of maintenance personnel and pilot in charge. (Placard must be weather resistant and fitted to both sides of the cabin.)

MAXIMUM PERMISSIBLE KAYAK WEIGHT 70lb (31.7kg)

MAXIMUM PERMISSIBLE KAYAK LENGTH 2.5m

c) Mounted on the kayak rack in clear view of maintenance personnel and pilot in charge. Placard must be fitted on the step plate in clear view of passengers entering and exiting the cabin. (Placard must be weather and wear resistant. Placard must be fitted to both sides of the cabin.)



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### 3.0 EMERGENCY PROCEDURES

No Change

#### 4.0 NORMAL PROCEDURES

### 4.1 Use, Installation and Removal of Kayak Rack

It is the pilot's responsibility to ensure that the kayaks fitted are properly secured and that they do not exceed the weight or physical size limitations defined in section 4.2.

Kayaks must be secured with approved tie straps.

### 4.2 Approved Configurations

One or two kayaks may be carried.

The maximum permissible weight per kayak is 70lb.

The maximum physical dimensions of each kayak cannot exceed the following:

Length:

2.5 m

Width:

0.70 m

Depth:

0.45 m

### 4.3 Pre Flight Inspections

Add the following kayak rack checklist to each pre-flight inspections.

a) Kayak Frame. Inspect lugs for signs of distortion /yielding or

general signs of wear

Check security of fasteners and locking pins

b) Doors Ensure full unrestricted movement and clear

access.

c) Kayak Installation Ensure security and use of approved tie

straps.

Ensure no strap overhang.

### 5.0 PERFORMANCE

With modification RW08-08 fitted:

- The basic climb performance of the rotorcraft will be reduced when kayaks are fitted.
- When establishing hover ceiling altitude add 20lbs per kayak to the rotorcraft weight.

#### 6.0 WEIGHT AND BALANCE

The following weight and balance data applies to the installation of modification RW08-08 and unless the rotorcraft equipment list indicates that modification RW08-08 was installed at the last weighing this data must be taken into account when determining the weight and balance of the loaded rotorcraft.

Unit	Weight (lb)	Dist. Aft of Datum (in)	Longitudinal Moment (in.lb)	Lateral Arm (in)	Lateral Moment (lb-in)
Rack - Left Side	26.5	103.5	2,743	- 46.25	-1,225.6
Rack - Right Side	26.5	103.5	2,743	+ 46.25	+ 1,225.6
Kayak – Left Side		103.5		- 47.65	
Kayak – Right Side		103.5		+ 47.65	

Maximum kayak weight allowed 70lb (31.7kg).