Service Bulletin SB.JS-007

06 July 2012

TITLE

Rudder Pedals and Rudder Cable Inspection

APPLICABILITY

MODEL	SERIAL NUMBERS
JS1A	001 - 003, 005, 009
JS1B	004, 006 - 008, 010 - 037

REASON

During periodic maintenance inspections, certain aircraft displayed signs of rudder control cable wear near the rudder pedal S-tubes.

DESCRIPTION

Inspection of the rudder control cables for fraying in the cockpit area and the inspection of the rudder pedal position adjustment locking security. The relevant Flight Manual pages have been updated accordingly.

COMPLIANCE

MANDATORY

1. The pilot must perform an inspection on the rudder control cables before the first flight of the day.
2. The pilot must perform an inspection on the rudder pedal position adjustment lock before the first flight of the day.

INSTRUCTIONS

Inspection of rudder control cables:

1. The rudder control cables must be inspected by the pilot, as describe in Flight Manual 1A-5.04.10 Issue 3, pg. 4-8.
2. If any damage to either rudder cable is observed, the rudder cables must be replaced according to Technical Note TN.JS-009.

   Note: A rough or sticking feel when adjusting the rudder pedals might indicate fraying of the cable inside the rudder pedal S-tubes, or inadequate lubrication of the rudder pedal slider beam.

If the rudder cables are frayed (i.e. broken strands can be observed on the rudder control cable) the Technical Note TN.JS-009 must be implemented. Note that kinks could become a fraying zone after more flight hours.

Inspection of rudder pedal position adjustment lock:

1. The rudder pedal adjustment position locking must be inspected by the pilot, as described in the Flight Manual 1A-5.04.10 Issue 3, pg. 4-8, 4-12.

2. If the rudder pedals do not stay locked in all possible positions, the rudder pedal locking mechanism must be replaced according to Technical Note TN.JS-011.

   Note: The rudder pedal position adjustment lock must bottom fully in the locked position and should stay in lock under allowable loads applied by the pilot (100daN max).

NOTES

The attached pages of the Flight Manual Issue 3 (draft) are valid for the daily inspection until Issue 3 is approved by the SACAA.

Flight manual Issue 2 is available on www.jonkersailplanes.co.za under the owner/agent secure section.

4.3.1 Forward fuselage (1)

1. Check functionality of the nose release hook

4.3.2 Cockpit (2)

1. Ensure the canopy is clean
2. Check the canopy emergency release mechanism: pull back both red jettison latches slowly. Take care not the release the canopy completely without having assistance to prevent it from falling.
3. Check that main pins are secured properly
4. Check the proper connection of flaperon and airbrake system:
   - With control stick in neutral position and flap lever in position 3, the flaperon must be flush with the trailing edge at root rib,
   - Airbrakes must lock properly and open evenly.
5. Check the operation of the rudder pedals, and:
   - Move the rudder pedals fully forwards and backwards to check the rudder cables for signs of fraying, kinks and wear especially near the S-tube exits.
   - Perform a visual check on the rudder pedal retention nuts by checking if they are securely in place.
   - Ensure pedals lock positively in the desired setting under load.
6. Check that charged batteries are correctly installed and connected
7. Check that the oxygen bottle is properly secured
8. Check that the cockpit is clean and all foreign matter is removed
9. Check the condition and operation of safety belts, especially where they pass through the seat back

4.4 Pre-flight check

Daily Inspection	-	Performed
Control Systems	-	Functional check, positively connected, free movement and no play
Expendable Tail Tank (bottom)	-	Valve opening positively checked
Non-expendable Tail Tank (top)	-	Ensure empty or correctly loaded for CG range
Water Ballast System	-	Check operation and proper sealing of valves and vents unobstructed
Weight and Balance	-	Trim weight, water ballast (tail and wing tanks), minimum and maximum cockpit load within calculated limits
Total Energy Tube	-	Fitted and connection properly sealed, indication ok
Altimeter	-	Set correctly (QNH / QFE / QNE)
Radio	-	Set to airfield frequency, check operation
Other instrumentation	-	Checked, normally indicating zero
Backrest	-	Adjusted
Rudder pedals	-	Adjusted and locks positively in all settings.
Documentation	-	Complete and valid
Landing gear	-	Locked with no play