



# Ercoupe MEMORANDUM

**ERCOUPE  
SERVICE  
MEMORANDUM**

**No. 56**

**REVISION: A  
09/01/2008**

**SUBJECT: Control System Play—  
Checking of**

In the Ercoupe Service Manual, under 25 hour inspection, Item 14 calls for inspection of control surfaces for cracks and excessive play and checking controls for excessive movement. In order to more properly define the excessive movement, or play, in the controls, we wish to give the following method of checking them:

For the aileron system, the total play between one aileron and the other should not exceed  $7/16$  of an inch at the trailing edge. This can best be checked by neutralizing the controls and securing one aileron in line with the center section trailing edge and moving the other aileron to take up all play, checking the amount of movement of the trailing edge with respect to the center section trailing edge at this time. In checking motion, care should be taken not to exert sufficient force to deflect some of the members and thereby getting a false reading. The pressure of the little finger of one hand applied at the trailing edge of the aileron is sufficient to take up all of the slack. If the resulting motion is greater

than  $7/16$  of an inch, all the joints and bearings should be checked and those which are loose should be tightened or replaced.

Rudder looseness can be checked by applying a similar pressure to the trailing edge of the rudder just sufficient to take up the slack. Neither rudder should move with the controls neutral and with the nosewheel on the ground, more than  $1/4$  of an inch at the trailing edge.

The elevator motion can be checked by locking the control wheel in the rearmost position and raising the elevator to obtain the slack in it. The motion of the trailing edge of the elevator should not be greater than  $3/8$  of an inch. At the same time the elevator should be checked for uptravel to be sure that the correct uptravel is available.

The hinges of all the controls, those of the ailerons, in particular, should be carefully inspected for wear. They should be replaced if there is appreciable looseness in the hinges.