MOONEY AIRCRAFT, INC.

Service Bulletin



NUMBER: M20-164

DATE: 9-18-67

(This Service Bulletin is FAA D.O. Authorization SW-1 Approved)

SUBJECT:

ALTIMETER INSPECTION

MODELS AFFECTED:

M20C, S/N 670001-670135

M20E, S/N 1177, 1199, 1217, 1268, 1273, 1277, 1281, 1283, 1286 thru 1288, 1290, 1292, 1293, 1295 thru 1308, 670001 thru 670062

M20F, S/N 660001 thru 660004, 670001 thru 670446

M22, S/N 670001 and 670002

This Bulletin will also apply to any other Mooney airplane for which a Weston-Garwin Model 22-374 altimeter was purchased between July 1, 1966 and August 2, 1967.

TIME OF COMPLIANCE:

Immediately, this Service Bulletin is mandatory.

INTRODUCTION:

Evidence has been found that an accumulation of tolerances in some Weston-Garwin Model 22-374 altimeters can cause a malfunction of the instrument. Since this condition is likely to exist in all airplanes which are equipped with Model 22-374 altimeters, this Service Bulletin is being issued to require testing of the altimeter and replacement, if necessary, on several models of Mooney airplanes.

INSTRUCTIONS:

To determine if the Weston-Garwin Model 22-374 altimeters are operating properly, accomplish the following:

- 1) Set barometric scale of altimeter to coincide with appropriate field pressure and check altimeter reading. It should agree with field elevation allowing for a tolerance of plus or minus 100 feet.
- 2) Set barometric scale of altimeter to 29.92 inches of hg (1013.3 millibars) and observe the altimeter reading.
- Turn the baro mechanism knob so as to move the scale to the low end stop. During this movement, exert slight pressure forward and aft alternately in order to see if it is possible to cause the internal mechanism to become disengaged. The disengagement will be obvious if the pointer hand fails to rotate as the knob is turned.
- 4) Turn the knob for baro scale so as to move the scale to the high end stop. During this motion, again exert pressure by alternately pushing and pulling slightly and watch for needle slippage.

INSTRUCTIONS:

Turn the barometric scale back to 29.92 inches of hg (1013.3 millibars) and compare this altimeter reading with the reading obtained in Step 2. The readings should be the same. If the pointers do not, at all times, move in direct relation with the baro scale, or if the reading of Step 2 does not agree with the final reading, or if the reading in Step 1 is not within tolerances, then the altimeter is not working properly, and it should be replaced or repaired at an approved facility. Aircraft with defective altimeters shall fly VFR only in visual contact with the ground until the altimeter is replaced or repaired.

The check required by this Service Bulletin may be performed by the pilot.