



SERVICE INSTRUCTION

SI 06-01

ATA 2710

DATE: August 1, 2006

SUBJECT: **AD 79-22-04, Alternate Means of Compliance**

MODEL/SERIALS AFFECTED:	AA-5	All
	AA-5A	All
	AA-5B	All
	AG-5B	Not Affected

TIME OF COMPLIANCE: At the next scheduled 100 hour inspection per AD 79-22-04 or next annual inspection.

GENERAL:

It has been determined that the primary cause of occasional aileron oscillation on some AA-5 series aircraft is a deviation in the contour of the aileron skin across the aft 1/3 of the aileron chord. By verifying that correctly contoured ailerons are installed, the 100 hour inspections mandated by AD 79-22-04 may be eliminated.

INSPECTION:

A. Verify that Service Bulletin 163 and Service Kit 144 (Aileron Torque Tube Inspection and Modification) have been accomplished (if applicable).

B. Perform the following inspection:

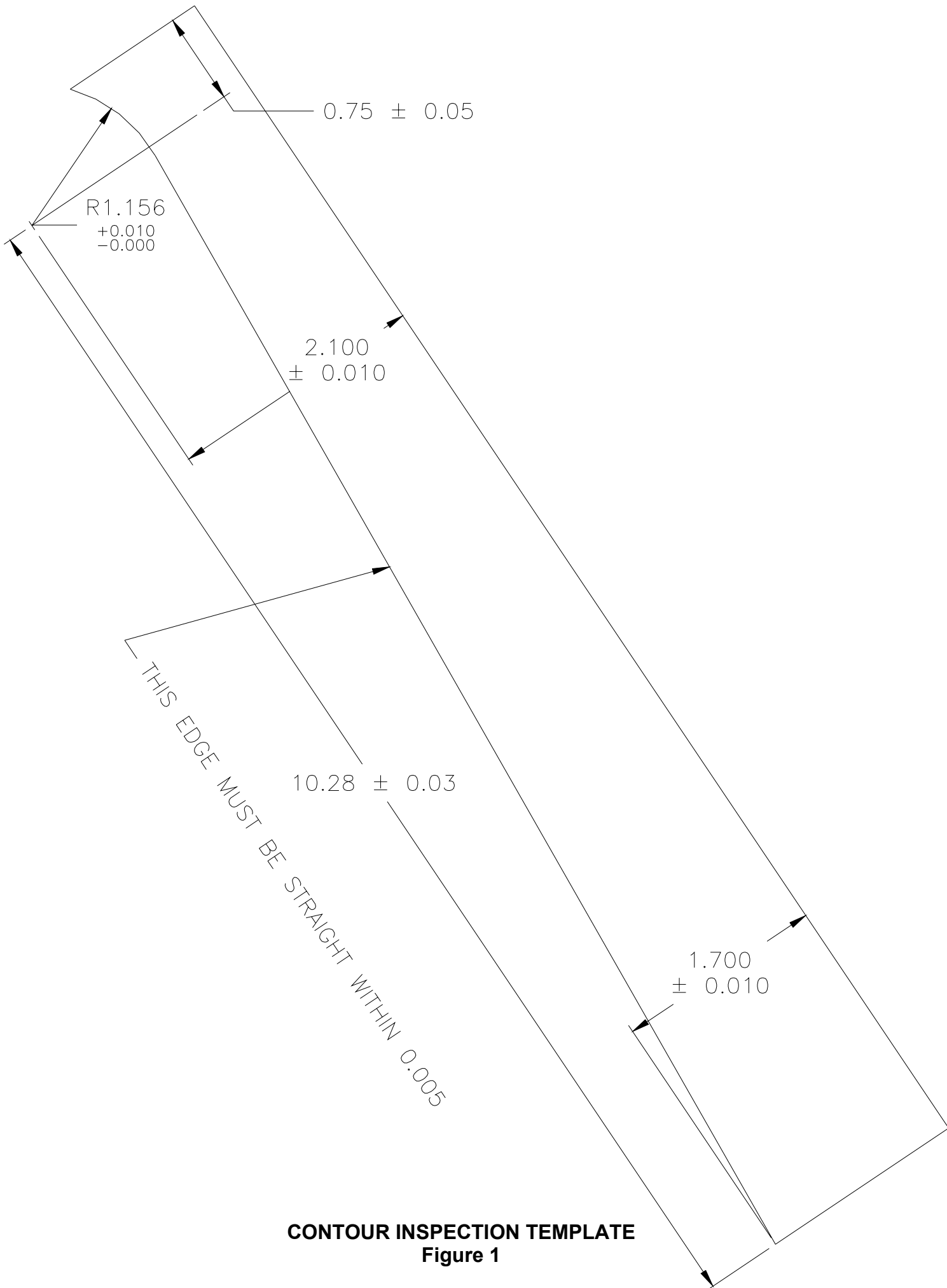
Reference Figures 1 through 4

1. Fabricate the inspection template in accordance with Figure 1. The template should be made from at least 0.032-thick aluminum.
2. Locate the aircraft in a well lighted area for adequate inspection.
3. Using a ruler and a removable marker, place a mark at each 1 inch of aileron span at the leading edge and trailing edge on both upper and lower surfaces of each aileron.
4. Place the template across the aileron, perpendicular to the trailing edge at the first 1 inch mark as shown in Figure 2. Visually inspect the aileron skin between the forward and rear spar of the aileron for contact with the template at any location other than at the forward and rear spar.

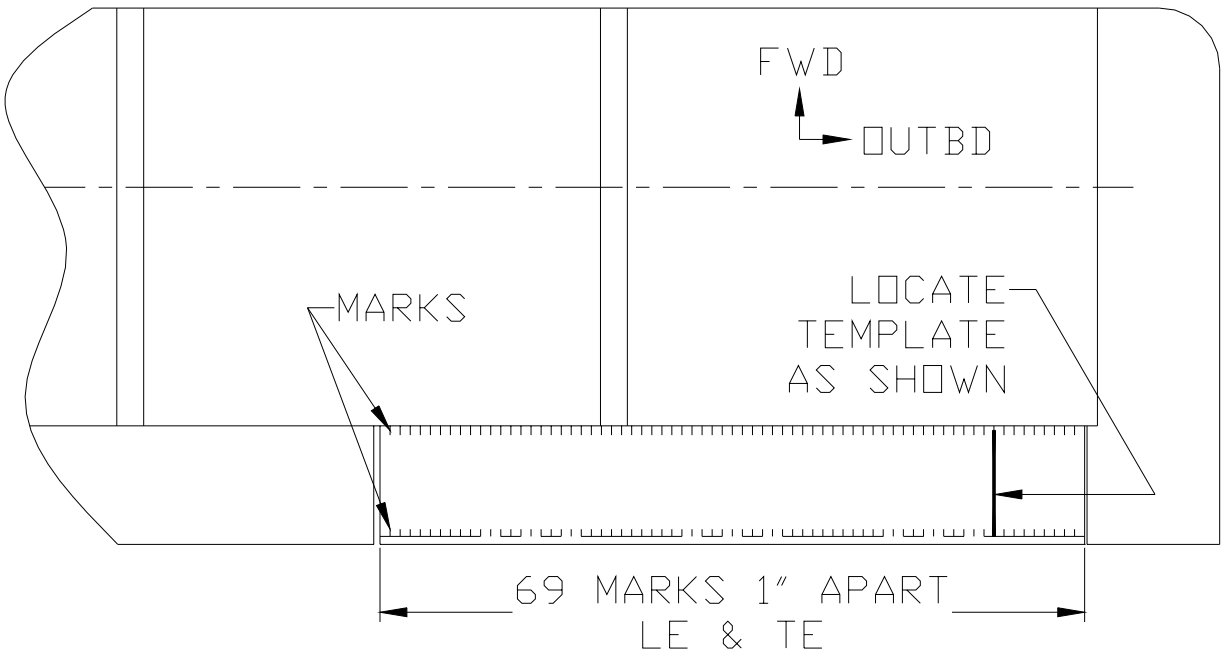
5. Repeat this inspection at each 1 inch interval on both the upper and lower surface of each aileron.

CAUTION: DO NOT ATTEMPT TO ALTER THE SKIN BY DEFORMATION. MINOR CONTOUR DEVIATIONS IN THIS AREA CAN CAUSE MAJOR HANDLING CHANGES.

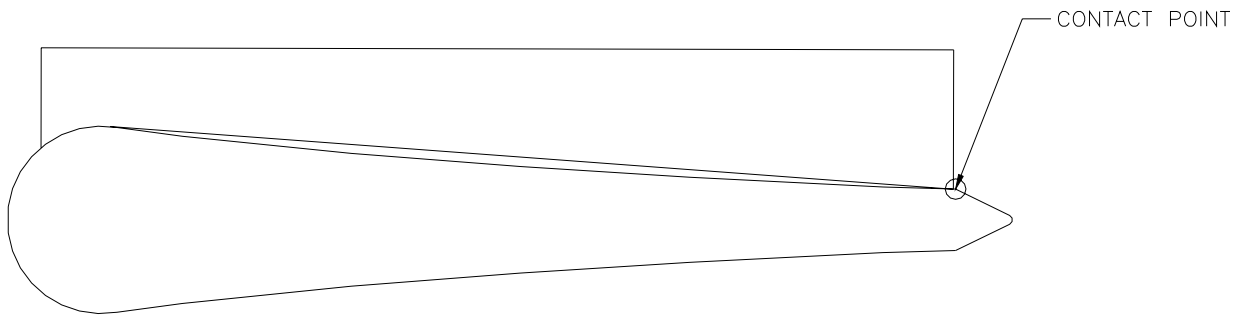
- C. If there is no skin contact with the template other than at the forward and rear aileron spar as shown in Figure 3, the aileron skin contour complies with the intended aileron design criteria. If both ailerons are found to be in contour and Service Bulletin 163 has been complied with, then the aircraft is acceptable and further repetitive inspections of the control system per Airworthiness Directive 79-22-04 are no longer required.
- D. If any aileron skin contacts the template at a point other than the forward and trailing edge spar as shown in Figure 4, the aileron is out of contour. Aircraft with an out of contour aileron must be inspected every 100 hours in service to the requirements described in AD 79-22-04 paragraph (b).
- E. Record compliance with this service instruction in the aircraft log book.



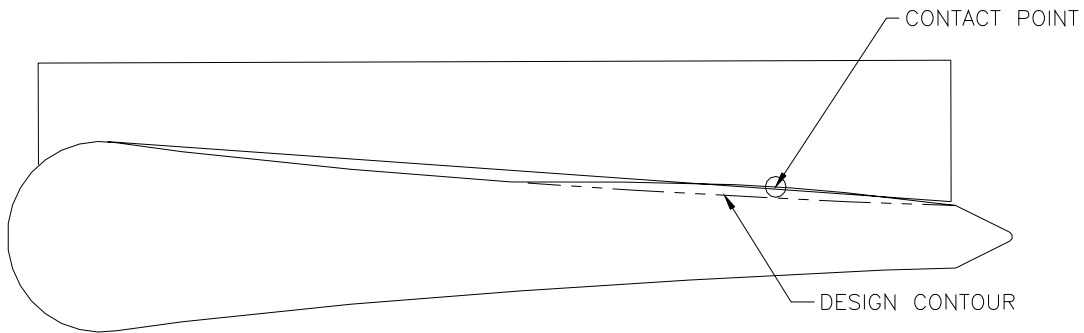
CONTOUR INSPECTION TEMPLATE
Figure 1



INSPECTION SETUP
Figure 2



CORRECT CONTOUR
Figure 3



INCORRECT CONTOUR
Figure 4