# PROCEDURE 6.140 Aileron Balance Procedures

In this procedure...

You will install the counterweight arm, balance the aileron, and complete the final installation of the aileron.

# **Supplied Material:**

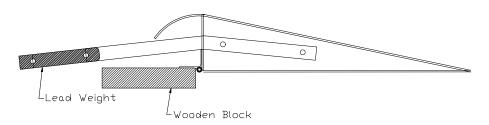
<u>Part No</u>	<u>Qty</u>	<b>Description</b>
111-24-006	2	Arm Aileron Counterweight
111-24-006-1	4	Counterweight
111-24-006-2	4	Rod Threaded
AN3-12A	4	Bolt
AN960-10	12	Washer
An365-1032	8	Nut

#### Step 1. Install Counterweight Arm

During the construction of the Aileron anchor nuts were install on the outboard rib for the attachment of the aileron counterweight arm. Use the two AN3-12A bolts and two washers and install the arm on to the aileron. Torque the bolts to 25 in/lb.

## Step 2. <u>Balance the Aileron.</u>

Once the aileron has been body worked and all painting has been completed the aileron must be balanced. Make two balance points by securing a 1.5 inch piece



of piano hinge to a piece of 1 x 4 board. Add weight to the arm to achieve a balanced control surface.

## Step 3. Install Aileron on Wing and Install Counterweight.

Install the aileron on the wing, cut a slot in the shear web to provide clearance for the counterweight arm. Bolt the aileron counterweight onto the arm using the threaded rod.



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