Pre-Paint>Fuselage>Interior>Fit aileron cable brackets

Objectives of this task:
In this task the aileron cable brackets will be positioned and mounted to the seat backs. Positioning of the aileron cable brackets is absolutely critical and great care must be taken in this task.

Materials required:
- Card # J5 ‘Aileron System’
- Epoxy Resin and Flock
- 73AS 6-6 rivets from box 3 of the hardware pack
- 220 x 270mm plywood or heavy cardboard for the alignment template

Position and fix the aileron cable brackets

completed aileron cable mounts as viewed from the rear facing forwards

Preparation
Start by making the positioning template from the drawing on the next page. Heavy cardboard is quite adequate for the template as long as care is taken to cut the lines and drill the holes accurately.

It will be necessary to redrill the top rivet holes in the aileron cable brackets – scribe a line parallel to the top of the bracket and in line with the centre of the existing hole.

Centre-punch and drill 2 new 3/16” holes as shown at right.

Make sure that you leave enough clearance around each hole for a 3/16” washer.

Clean around each hole and test a rivet in each hole – it should be a snug fit.
Aileron cable bracket positioning template
Align the template and mark the bracket positions

Temporarily attach the template to the control yoke with 2 bolts placed through the yoke and into the template as shown circled at the bottom of the photo at right.

Level the top of the template in line with the top of the seat backs.

Working with one bracket at a time, hold the bracket in place in the angled part of the template (circled at the top of the top photo) and carefully mark around the outside and bottom edges.

Remove the template.
Trim the seat backs for aileron cable clearance

It will be necessary to trim a section of the seat back out in order to provide clearance for the aileron cables – cut the hatched area shown in the left-hand photo below: cut just far enough to remove the curved lip from the side of the seat back, about 10mm.

A jigsaw is ideal for the task. Sand off any rough edges.

Drill the aileron cable bracket rivet holes

Working from the rear of the seats, hold each bracket against the seat back so that the outside and bottom of the bracket is in line with the marks on the front of the seat back – you will be able to see the marks through the seat back. Hold the bracket firmly and drill the bottom outside hole through the seat back.

Place a rivet from the front of the seat into the bracket to position it, check that the bracket is still lined up with the marks and drill the inside top hole.

Place another rivet into the inside top hole and drill the outside top hole.

Make sure that all the rivets fit snugly through the seat back and into each bracket, then remove all the rivets and clean all the holes carefully – there must be no burrs or rough edges remaining.
Attach the aileron cable brackets

Sand the back of each aileron cable bracket as well as the positions on the seat backs where they will be placed.

Clean all surfaces to be joined.

Prepare a small mix of resin and use a brush to undercoat the positions on the seat backs where the aileron cable brackets will be placed.

Working from the front of the seat, place all of the rivets through the holes in the seat backs.

Add flock to the resin and apply an even layer of flock approximately 2-3mm thick to the back of each aileron cable bracket.

Working on one bracket at a time, place the bracket onto the rivets, then fit a washer over the bottom rivet and hold it in place while using the rivet gun to secure the rivet. Repeat the process with the top outside and top inside rivets.

Using a little resin on a clean mixing stick, clean any squeezed-out flock from the brackets.

This completes the Pre-Paint > Fuselage > Interior > Fit aileron cable brackets task.