

AILERON AND SPOILER SYSTEM - DESCRIPTION AND OPERATION

1. General

- A. This section describes those systems and components used to control the ailerons. Included are control columns, ailerons, spoilers and aileron trim systems.

2. Description and Operation

- A. The aileron and spoiler system includes ailerons, right aileron servo operated trim tab, left aileron servo tab and left and right spoiler. A left and optional right control column contain a control wheel, control tube, bearings and a quadrant. An interconnect cable attaches left control wheel to right control wheel. the aileron control cable is divided into two loops. The low tension loop, located in the fuselage, is routed from left quadrant, under floorboards and up the left sidewall to a bellcrank in the cabin top. The loop runs from bellcrank across cabin top to right sidewall, down the sidewall, under floorboards and back to the left quadrant. The high tension loop is located in cabin top and left and right wings. It interconnects bellcrank in cabin top with left and right wing bellcranks. Aileron pushrods and spoiler pushrods connect wing bellcranks with ailerons and spoilers. The spoiler moves down three to four degrees during total aileron down travel. the spoiler moves up slightly during first five degrees of up aileron travel, then more proportionate during remainder of up aileron travel.