

flanges of the main and auxiliary beams and to the trailing edge of the lower surface skin. Both upper and lower surface skins are beaded aft of the main beam.

2-88. NEGLIGIBLE DAMAGE. The same limits may be applied to the flap skin as to that on the wing. See Paragraph 2-7.

2-89. DAMAGE REPAIRABLE BY PATCHING. Damage to the flap skin panels which exceeds that specified as negligible should be repaired by patching. These patches need not be flush. Use Figures B-1 or B-3.

2-90. FLAP MAIN BEAM.

2-91. DESCRIPTION. The flap main beam is the forward portion of the bottom surface skin, bent up, flanged, beaded, and with lightening holes.

2-92. NEGLIGIBLE DAMAGE. See Paragraph 2-72.

2-93. DAMAGE REPAIRABLE BY PATCHING. Partial or complete damage to a cross section of the flap main beam is repairable by nesting a .032 24ST alclad channel within the beam channel. The channel should be the depth of the beam with 3/4 inch flanges top and bottom. Attach the repair channel flanges to the beam flanges with AN470AD3 rivet, five rivets each side of the damaged area thru each flange. Web rivet rows should be spaced 5/8 inch apart with five AN470-AD3 rivets per row on each side of damage. Rivet rows run spanwise, with a rivet spacing of approximately 5/8 inch.

2-94. FLAP AUXILIARY BEAM.

2-95. DESCRIPTION. The flap auxiliary beam is an

.020 24ST alclad channel with skin attachment flanges, riveted with AD3 modified brazier head rivets, to the upper and lower surface skin between beads. Both ends are flanged and riveted to the webs of the in-board and outboard ribs, at stations 0 and 106.442 respectively.

2-96. NEGLIGIBLE DAMAGE. See Paragraph 2-72.

2-97. DAMAGE REPAIRABLE BY PATCHING. See Paragraph 2-93.

2-98. FLAP RIBS.

2-99. DESCRIPTION. The flap ribs are formed of 24ST alclad sheet. All ribs are .020, .025 or .032 gage. They are all flanged horizontally for skin attachment and vertically to be riveted to the main beam web. The nose ribs are beaded and the lower flanges cut out for the stringer extending parallel and in front of the main beam. Flap support brackets perpendicular to the lower flap surface, just forward of the front beam, are riveted to the nose ribs at Stations 0 and 106.442 and to the skin with bracket supports inside the skin at Station 42.11.

2-100. NEGLIGIBLE DAMAGE. See Paragraph 2-48.

2-101. DAMAGE REPAIRABLE BY PATCHING. See Paragraph 2-77.

2-102. DAMAGE NECESSITATING REPLACEMENT. If any damage extends over half the length of the nose or trailing edge ribs, or if the damage occurs at the stringer cutout, the rib should be replaced. All damaged fittings or brackets should be replaced.

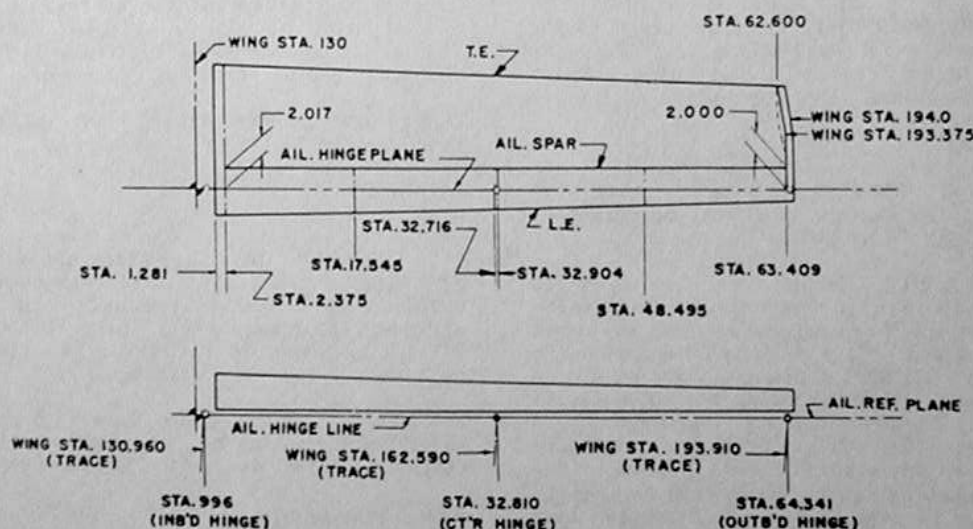


FIGURE 2-7. AILERON JIG DIMENSIONS