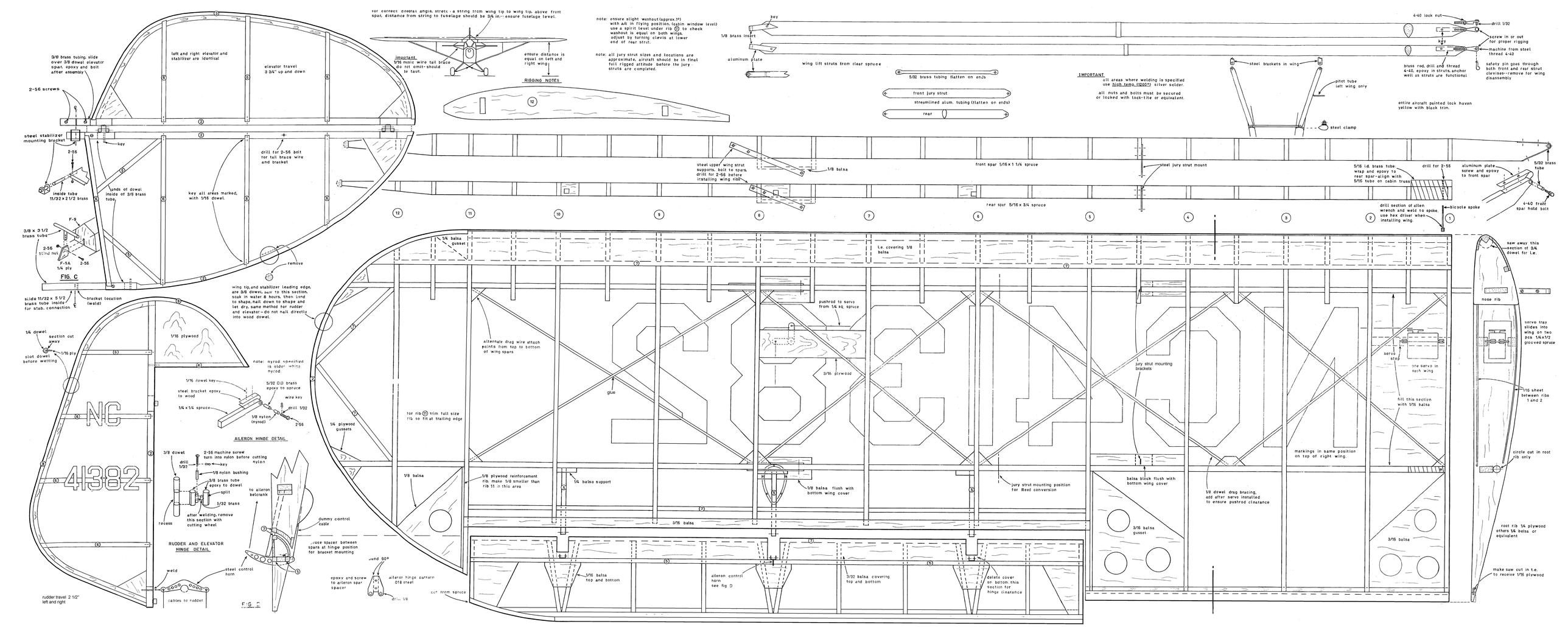
3/8 brass tubing, slide over 3/8 dowel elevator spar, epoxy and bolt after assembly
2-56 screws
left and right elevator and stabilizer are identical
elevator travel 3 3/4" up and down
steel stabilizer mounting bracket
key
2-56
inside tube 11/32 x 2 1/2 brass
ends of dowel inside of 3/8 brass tube
drill for 2-56 bolt for tail brace wire and bracket
key all areas marked, with 1/16 dowel.
3/8 x 3 1/2 brass tube
F-9
2-56 sliding nut
2-56
F-9A 1/4 ply
FIG. C
remove
slide 11/32 x 5 1/2 brass tube inside for stab. connection
bracket location (weld)
wing tip, and stabilizer leading edge, are 3/8 dowel, saw to this section, soak in water 8 hours, then bend to shape, nail down to shape and let dry, same method for rudder and elevator—do not nail directly into wood dowel.
1/4 dowel
section cut away
1/16 ply
slot dowel before wetting
1/16 plywood
note: nyrod specified is older white nyrod.
1/16 dowel key
steel bracket epoxy to wood
5/32 O.D. brass epoxy to spruce
wire key
1/4 x 1/4 spruce
drill 1/32
1/8 nylon (nyrod)
2-56
AILERON HINGE DETAIL
NC
41382
3/8 dowel
2-56 machine screw turn into nylon before cutting nylon
drill 1/32
key
1/8 nylon bushing
3/8 brass tube epoxy to dowel
split
5/32 brass
recess
after welding, remove this section with cutting wheel
to aileron bellcrank
RUDDER AND ELEVATOR HINGE DETAIL
dummy control cable
weld
steel control horn
cables to rudder
rudder travel 2 1/2" left and right
FIG. D
epoxy and screw to aileron spar spacer
bend 90°
aileron hinge pattern .018 steel
drill 1/8
cut from spruce
for correct dihedral angle, stretch a string from wing tip to wing tip, above front spar, distance from string to fuselage should be 3/4 in.—ensure fuselage level.
important
1/16 music wire tail brace do not omit—should be taut.
ensure distance is equal on left and right wing
RIGGING NOTES
note: ensure slight washout (approx. 1°) with a/c in flying position, (again window level) use a spirit level under rib 12 to check washout is equal on both wings, adjust by turning clevis at lower end of rear strut.
note: all jury strut sizes and locations are approximate, aircraft should be in final full rigged attitude before the jury struts are completed.
key
1/8 brass insert
aluminum plate
wing lift struts from clear spruce
5/32 brass tubing flatten on ends
front jury strut
streamlined alum. tubing (flatten on ends)
rear
IMPORTANT
all areas where welding is specified use high temp (1200°F) silver solder.
all nuts and bolts must be secured or locked with lock-tite or equivalent.
steel brackets in wing
pitot tube left wing only
steel clamp
4-40 lock nut
drill 1/32
screw in or out for proper rigging
key
machine from steel thread 4-40
brass rod, drill and thread 4-40, epoxy in struts, anchor well as struts are functional
safety pin goes through both front and rear strut clevises—remove for wing disassembly
entire aircraft painted lock haven yellow with black trim.
steel upper wing strut supports, bolt to spars, drill for 2-56 before installing wing ribs
1/8 balsa
front spar 5/16 x 1 1/4 spruce
steel jury strut mount
5/16 i.d. brass tube wrap and epoxy to rear spar—align with 5/16 tube on cabin truss
drill for 2-56
aluminum plate screw and epoxy to front spar
5/32 brass tube
4-40 front spar hold bolt
rear spar 5/16 x 3/4 spruce
drill section of allen wrench and weld to spoke, use hex driver when installing wing.
bicycle spoke
1/4 balsa gusset
l.e. covering 1/8 balsa
pushrod to servo from 1/4 sq. spruce
alternate drag wire attach points from top to bottom of wing spars
3/16 plywood
glue
for rib 11 trim full size rib to fit at trailing edge
1/4 plywood gussets
1/8 balsa
1/8 plywood reinforcement rib make 1/8 smaller than rib 11 in this area
1/4 balsa support
1/8 balsa flush with bottom wing cover
jury strut mounting position for Reed conversion
3/16 balsa
1/16 balsa top and bottom
aileron control horn see fig D
3/32 balsa covering top and bottom
delete cover on bottom this section for hinge clearance
jury strut mounting brackets
balsa block flush with bottom wing cover
1/8 dowel drag bracing, add after servo installed to ensure pushrod clearance
3/16 balsa gusset
3/16 balsa
servo stop
one servo in each wing
fill this section with 1/16 balsa
markings in same position on top of right wing.
nose rib
saw away this section of 3/4 dowel for l.e.
servo tray slides into wing on two pcs. 1/4 x 1/2 grooved spruce
1/16 sheet between ribs 1 and 2
circle cut in root rib only
root rib 1/4 plywood others 1/4 balsa or equivalent
make saw cut in t.e. to receive 1/16 plywood