

FABRIC COVERING IS A CONVENTIONAL AIRCRAFT PROCESS, USING LIGHT, UNCERTIFIED CLOTH (POLYESTER). FABRIC PANELS ARE CUT TO SIZE, CEMENTED ONTO THE FRAME, THEN SHRUNK TO CONTOUR WITH A CLOTHES IRON. FABRIC IS SEALED BY BRUSHING ON A SEALANT/ADHESIVE (POLYBRUSH OR NITRATE & BUTYRATE DOPE). SURFACES EXPOSED TO SUNLIGHT ARE PROTECTED BY ADDITIONAL COATS OF DOPE MIXED WITH ALUMINUM PASTE (SILVERING). BRIGHT PAINT OR COLORED DOPE IS APPLIED OVER SILVERED SURFACES TO MAKE THE AIRCRAFT HIGHLY VISIBLE.

RIBS FOR THE TAIL SURFACES ARE A WET LAYUP OF FIBERGLASS CLOTH TAPE, GRAPHITE/EPOXY ROD, & EPOXY RESIN OVER STYROFOAM.

CONTROL LINES ARE DYNEEMA / VECTRAN BRAIDED LINE ROUTED VIA MARINE PULLEYS

WING LEADING EDGE SHELL IS MADE OF STYROFOAM BLOCKS CEMENTED BETWEEN THE RIBS, SHAVED DOWN TO MATCH RIB CONTOUR, THEN SEALED WITH EPOXY RESIN

RUDDER

ELEVATOR

HORIZONTAL STABILIZER

TAIL STRUT

VERTICAL STABILIZER

FORWARD SWEEP CABLES, UPPER & LOWER

4 POINT SEAT BELTS

CENTER LINE CONTROL STICK FOR ELEVATOR ONLY

PANEL FOR EXHAUST GAS TEMPERATURE GAGE, TACHOMETER, & IGNITION SWITCH

NOSE WHEEL/SKID FOR GROUND STOPS (NO WHEEL BRAKES)

RUDDER PEDALS FOR STEERING, NOAILERONS

HAND DEPLOYED EMERGENCY PARACHUTE, TOTAL RECOVERY SYSTEM (BRINGS DOWN PILOT & AIRPLANE TOGETHER), TAIL FIRST

WHEELS AT CENTER OF LIFT (LOADED AIRPLANE MUST BALANCE NOSE DOWN FROM LEVEL POSITION FOR SAFE STATIC MARGIN). PNEUMATIC TIRES ARE BMX BICYCLE TYPE

STEEL CABLE FIXED RIGGING

MAIN WING RIBS ARE SMALL ALUMINUM TUBES BENT TO SHAPE, SPANNING MAIN SPARS

NOTE: THERE IS NOTHING MECHANICAL IN THE WINGS, THEY ARE EMPTY SHELLS.

MAIN STRUCTURE IS MADE OF ALUMINUM TUBE FASTENED WITH NUTS & BOLTS (BLOOP IS FABRICATED WITH HAND TOOLS, USING NO SPECIALLY MACHINED OR WELDED PARTS). FIXED RIGGING IS BRAIDED STAINLESS STEEL CABLE WITH THIMBLES, TANGS, & NICOPRESS SLEEVES.

B4A2

AIRCRAFT  
OVERVIEW

BLOOP 4  
ULTRALIGHT  
AIRPLANE

M. SANDLIN  
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