Drawing list June 30, 2003

2nd edition 2st printing 06/03 Summary of revisions from 02/03 to 06/03

AIRFRAME

6-X-0 DRAWING LIST **June 30, 2003**

6-X-1 06/03 THREE VIEW

- 1) 2nd edition Second printing 06/03
- 2) Technical data: delete cabin width (06/03)
- 3) Measured performance, delete service ceiling, Changed "cruise (75% power)" to Max continuous speed 132 MPH (212 km/h), changed "Lycoming 0-235" to "Rotax 912S –100HP" (06/03)
- 4) Bottom right: added text "different engines will affect performance and specifications of the aircraft" (06/03)
- 5) Bottom right box, added text: visit web site for available options, added address. (06/03)

6-T-0 06/03 TAIL EXPLODED VIEW

- 1) L ANGLE, top right diagram: change 48" to 1219mm, added 6061-T6, R=1/8" delete 3mm (02/03)
- 2) L angle description: L inside a circle (06/03)

6-T-1 06/03 STABILIZER AIRFOIL

- 1) 6T1-4 change dl=114 to dl=112mm (02/03)
- 2) top right diagram: distance from CL to second rivet, change 80 to 64, first rivet is at 30mm from the rivet on the aircraft center line (02/03)
- 3) 6T1-4HD, 6T1-6HD, 6T1-7HD length, change 1220 to 1219mm (02/03)
- 4) 6T1-8 change quantity from 1L + 1R to 2 reg'd (06/03)

6-T-2 05/03 STABILIZER ATTACHMENTS

- 1) Added 2205 dimension between the Tip rib 6T1-8 (02/03)
- 2) A4 pitch 40 fiberglass tip to 6T1-8 and 6T2-4 (02/03)
- 3) Total 4 rivets in spar flange of each rib 6T1-2 (02/03)
- 4) Right middle diagram: replace the 75mm with 17mm to the center cutout in Rear Attachment 6T2-3, delete 178mm from right middle diagram (03/03)
- 5) middle diagram: add a note to file a radius along front edge of the Rear Attachment 6T2-3. Side view shown with the top of the Attachment 6T2-3 closer to the top to maximize on the overlap with the Doubler 6T2-3 (03/03)
- 6) 6T2-5 piano hinge, replace "Pin" under description with "Corrosion resistant Steel Pin" (05/03)
- 7) Bottom middle diagram: rivets in end rib 6T1-1, added: A4 pitch 35 (13 rivets A4), 3 rivets in the nose in front of the spar (05/03)

6-T-3 06/03 ELEVATOR

- 1) 6T3-5 Rev 1 Change location of hole from 95mm to 92, 22 to 24mm. Aft edge change 28 to 31 (02/03)
- 2) **6T3-6 Rev 1** Change length from 150 to 160mm (02/03)
- 3) Left middle diagram: delete 55 and 22 (location of 6T3-6) (02/03)
- 4) 6T2-7 change 50x70 to L=50, dl=70 (06/03)

6-T-4 06/04 VERTICAL TAIL RIBS

1) 6T5-4 change 5.5 deg open to 5.5 deg closed (06/03)

6-T-5 06/03 VERTICAL TAIL SKELETON

1) 6T5-5 Rev 2 change top flange from 30mm to 20mm, change 35x75 to L=35, dl=65 (06/03)

6-T-6 02/03 RECESSED ELEVATOR TRIM TAB

- 1) 6T6-6 Change 21 to 19, change R8 to R6, (02/03)
- 2) Top right diagram: Added A4 pitch 40 bottom flange of 6T6-3 (02/03)
- 3) Bottom right diagram: 74mm top and bottom, length of cutout, change 416 to 417mm (02/03)

6-W-0 12/02 EXPLODED VIEW

6-W-00 12/01 RIGHT WING ASSEMBLY

6-W-1 02/03 FLAPS

- 1) middle diagram: redrew Flap ribs with square corners at the front (02/03)
- 2) bottom middle diagram: rivets in front of flap ribs: first rivet 22mm from the top. (02/03)
- 3) 6W1-1 6L + 6R reg'd (02/03)
- 4) 6W1-2 added trailing edge radius = R1/8" (02/03)

6-W-2 06/03 AILERONS

- 1) Redrew aileron tip at 45 degrees (03/03)
- 2) 6W2-1 correction to 01/03, change hole diameter from 3/8" to 5/16" (06/03)
- 3) left middle diagram: Added distance from the top of the aileron to the 5/16" hole = 85mm (06/03)

6-W-3 05/03 OUTBOARD WING SPAR ASSEMBLY

- 1) middle diagram and bottom left: added part numbers Rib Angles 6W3-9 and Hat Stiffeners 6W3-8 (03/03)
- 2) Change AN-470-AD-6-13 to AN-470-AD-6-14 place rivet head on the cap angle 6W3-6 and 6W3-7, change quantity from 150 to 142 (05/03)
- 3) Use AN-470-5-10 at the top and bottom of the Hat Stiffeners 6W3-8 and Rib Angle 6W3-9, 28 reg'd Change quantity of AD5-9 from 210 to 136 (05/03)
- 4) Change AN4 bolt to BOLT AN4-10A (left middle diagram) (05/03)

5) Middle of page, delete 40mm between rivet line of hat stiffeners, delete text in box above 6W3-4 "drill all rivets, angles and hats for A5 rivets" Changed description for 6W3-2 to "Front Upper Cap Doubler" 6W3-3 to "Front Lower Cap Doubler", 6W3-4 to Rear Upper Cap Doubler 6W3-5 to Rear Lower Cap Doubler (05/03)

6-W-4 05/03 CENTER WING SPAR

1) middle diagram: change AN-470-AD-5-13 to AN-470-AD-5-9 (place head on spar web qty=68) and AN470-AD-5-14 to AN-470-5-10 (qty=4 through 6W4-4) (05/03)

6-W-5 01/03 SPAR TIP / NOSE RIBS

6-W-6 06/03 REAR RIBS

- 1) RR1 change Bx=922.5 to Bx=922.6 (06/03)
- 2) RR2 change Ax=937.5 to 940.4, change Bx 915.2 to 918, change Xe=921.5 to 924.3 (06/03)
 - 3) RR3 change Bx=911.1 to 911.2 (06/03)
 - 4) RR8 change Bx=787.8 to 785.7 (06/03)
 - 5) RR9 change Bx=752-7 to 758.9, change Xe=759 to 758.9 (06/03)
- 6) Rear ribs 1 to 6 Rev 1, change the position of the second last lightening hole

from 475 to 500 (06/03)

6-W-7 10/02 REAR CHANNEL

6-W-8 06/03 WING SKINS

- 1) Bottom left diagram: support position of wing skeleton to install the rear top skin.
 - Main spar, change 75.5 deg to 81deg
 - Support blocks between workbench and channel.
 - Deleted blocks, the channel 6W7-1 is parallel to the workbench

Note: When the spar is at 9 deg the rear channel is level the top of the spar, Ref 6-W-6 top right diagram

6-W-9 03/03 TIEDOWN RING

1) 6W8-2 trimming the bottom rear skin: connect with straight line from 365 to 440 (delete 370, 380, 390, 400) (03/03)

6-W-10 12/02 AILERON CONTROLS

6-K-1 06/03 LEADING EDGE WING TANKS

- 1) 3/8"NPTX18, 1/8"NPTX27, Fuel line qty=10ft, 20 machine screws required for 6K1-2 (06/03)\
- 6-K-2 03/03 CENTER CONSOLE/ FUEL FLOW DIAGRAMS/ GASCOLATOR

6-B-0	10/02 FUSELAGE EXPLODED VIEW
6-B-1	06/03 FUSELAGE BOTTOM SKIN H.T. FRAMES
6-B-2	03/03 REAR BOTTOM LONGERONS 1) 6B2-8 & 6B2-9 delete OD notation in front of ¼" (03/03)
6-B-3	 06/03 REAR SIDE SKINS 1) top left diagram: aft end of Longeron 6B2-1 extends to aft edge of the fuselage side skin (06/03) 2) 6B3-2, OPTIONAL battery access panel (06/03)
6-B-4	12/02 REAR FUSELAGE RIVETING
6-B-5	 06/03 REAR FUSELAGE ASSEMBLY 1) Top left diagram: added top view of 6B5-4(03/03) 2) 6B5-1 Rev 0 (05/02) change angle of bottom flange from 61 to 57deg (06/03)
6-B-6	03/03 FIREWALL & STIFFENER 1) 6B6-4 Rev 2, Re-drew part, tack weld head top and bottom (03/03)
6-B-7	12/02 FIREWALL RIVETING
6-B-8	09/02 NOSE GEAR UPPER BEARING
6-B-9	12/02 RUDDER PEDALS
6-B-10	12/02 FRONT FLOOR SKIN
6-B-11	 06/03 UPPER FRONT LONGERONS 1) text bottom right of page: changed to "file 2mm off bottom to fit fuselage" 06/03 2) 6B11-1 added text behind L=2500 "length is oversize, trim aft end after overlap is drilled, see splice detail on 6-B-14) 06/03
6-B-12	12/02 FUSELAGE BULKHEADS
6-B-13	12/02 WING JIG
6-B-14	06/03 JOINING FUSELAGE ASSEMBLIED

1) top right box: Part number correction: Andair 3 way fuel selector, change FS 20x1H to FS20F3-F add 90 degree elbow P/N F139-4B qty=2 and Barb

coupler F125-4B qty=1 also added diagram of fuel valve (03/03)

- 1) Bottom left diagram: AN3-5A through uprights: bolts through 6B11-4, 6B11-2 & 6B11-3. Aft bottom bolts through bottom Longerons, AN3-5A through 6B11-4, 6B11-2 and 6B2-3. Front bottom bolts through Gusset AN3-5A through 6B11-4, 6B11-2 and 6B10-4 (06/03)
- 2) Text at bottom middle of page, change square to parallel "also keep the side of the template parallel to the aircraft center line". (06/03)
- 3) Table bottom right of page: 3 deg template to , change 50 to 0, 1019 to 954.1, 51 to 50. template 81 degrees: changed 203 to 203.2 template 77 degree: changed 244 to 243.8 template 77.5 deg changed 267 to 270, change 200 to 203.5 (06/03)

6-B-15 06/03 FORWARD FUSELAGE STIFFENERS

- 1) 6B14-4 Rev 1, change angle from 140 to 144 deg, delete 415, added dl=410 (06/03)
- 2) top right diagram: added text: web of 6B5-5 is Level (06/03)

6-B-16 06/03 SEAT BACK SUPPORT

- 1) bottom left diagram: change 2 rivets A4 to 4 rivets A4 (along front of 6B15-1: 2 rivets in 6B16-6 & 2 rivets into 6B16-3 (06/03)
- 2) 6B16-1 **Rev 1**, change 31 degrees to 35 degrees. (06/03)
- 3) Middle diagram: the web of 6B16-6 is not vertical, square to the baggage floor (06/03)

6-B-17 06/03 CONTROL STICK

- 1) 6B17-1 Rev 0 (05/02) change angle of top flange from 116 to 120deg, change height from 208 to 200 (06/03)
- 2) 6B17-4 Rev 2, change width from 32 to 37mm, change vertical height from 126 to 106, 100 to 80mm (06/03)
- 3) 6B17-6 change 33 to 32mm (06/03)

6-B-18 06/03 ARM REST / SEAT BELT

- 1) 6B18-1 Rev 1, change 227 to 225, 155 to 150, delete 60 degrees, delete text "in line with top of spar" (06/03)
- 2) 6B18-3 Rev 1, change 67 to 65, 26 to 38, 72 to 75, 24 to 25 delete 67 degrees (06/03)
- 3) bottom right diagram: L angle between 6B18-1 and 6B16-2, delete 123 degrees, add text "L angle, bent 30 degrees open" (06/03)

6-B-19 06/03 FLAP CONTROLS

1) Bottom middle diagram: added part number for steel shim: P/N 3088A-416 qty=2 (06/03)

6-B-20 06/03 FRESH AIR VENT / FLAP CIRCUIT

1) top right diagram: change 5A to 15A breaker (06/03)

6-B-21 01/03 FUSELAGE TOP SKIN

6-B-22 06/03 CABLE FAIRLEADS

1) Right middle diagram: horizontal distance between seat back and position of aileron cable: added text: Check, 120mm positions aileron cable to turnbuckle on torque tube 6b17-4 parallel to cross stiffener 6b1-7" (06/03)

6-B-23 09/02 CONTROL CABLE ENDS

- **6-C-1 01/03**CANOPY HINGE
- 6-C-2 01/03 CANOPY SIDES
- **6-C-3 01/03** CANOPY FRAME

6-C-4 06/03 CANOPY RELEASE

1) Bottom right diagram: Change the orientation of the bottom flange of 6C4-1 to correspond with the top right diagram 906/03)

6-G-1 11/02 NOSE GEAR STRUT ASSEMBLY

6-G-2 03/03 NOSE GEAR BEARING

1) bottom middle diagram: part number correction: change AN380-3-3 to AN380-2-2 (cotter pin) (03/03)

6-G-3 10/02 MAIN SPRING GEAR

6-S-2 06/03 INSTRUMENT PANEL LAYOUT

- 1) Fuse for landing light, change 30A to 15A, fuse for taxi light, change 30A to 15A (06/03)
- 2) Add text: "Rotax 912, Sample instrument panel layout & electrical system schematic. Ref actual engine & instrument installations instructions & documents" (06/03)
- 6-S-3 12/02 WING ATTACHMENT, FLAP TEMPLATE
- **6-S-4 08/02** INSTALLATION OF STABILZER
- **6-S-5 12/02** RUDDER ATTACHMENT

POWERPLANT

6-E-3 06/03 ENGINE MOUNT ROTAX 912S

- 1) 6E3-2, added 193mm from the front engine mount holes to the prop flange (02/03)
- 2) E2-1X, replace 175 (underneath part) with 181 measured on the top side of the part (02/03)

- 3) Part number corrections: middle diagram: change 6-RE-1-3 to E2-1X (two places) 06/03)
- 4) 6E3-2 REV 1, top diagram: change 205 to 210, bottom diagram change 285 to 291 (length of tube not measured along aircraft center line move dimension to top diagram), Gussets 4130N t=.050", tray 4130N t=.125", top right bolt, AN3-5A show to outside hole instead of inside hole (06/03)
- 5) E1-1X change 20 to 25, change 37 to 32 (06/03)
- 6) E2-1X add text, the 105mm dimension is oversize, cut and radius ends after holes are drilled Material description: BAR 1-1/2"x3/8"x3/8" (06/03)
- 7) Bottom right diagram; change AN6-17 to AN6-20 (06/03)

6-E-5 06/03 DUAL THROTTLE

- 1) 6E5-5 throttle bearing, hole diameter change 19/64 to 3/8", location of hole 16mm back from firewall, 12mm up from bottom edge. Top front edge, change shape from an arc to a straight line. (06/03)
- 2) 6E5-4 welded assembly, 5/16" solid rod (06/03)
- 3) 6E5-6 change bolt from AN3-16A to AN3-15A (06/03)
- 4) 6E5-7 changed 38 to 37, 3/8" hole is 15mm from the aft edge. (06/03)
- 5) 6E5-8, attached with 5 RIVETS A5, 6B5-3 attached with 4 RIVETS A5 (06/03)
- 6-E-6 12/02 OIL TANK BRACKETS
- **6-JE-1 03/03** JABIRU 3300 ENGINE MOUNT
 - 1) 6JE1-1 **Rev 1**, Moved apex of bottom tubes to be centered on the aircraft center line instead of on the engine center line. 210mm from apex to bottom attachment holes (side view), change 50 to 45, change 60 to 110 (03/03)
- 6-CE-1 12/02 CONTINENTAL 0-200 STRAIGHT ENGINE MOUNT
- **6-YE-1 12/02** LYCOMING 0-235 CONICAL ENGINE MOUNT
- 6-YE-2 12/02 LYCOMING 0-235 DYNAFOCAL ENGINE MOUNT

OPTIONS

6-ATO-1 06/02 XL AILERON TRIM TAB OPTION

6-LLO-1 12/02 LANDING / TAXI LIGHT OPTION

6-NSO-1 06/02 NAV/STROBE LIGHT OPTION

6-WFO-1 10/02 WHEEL FAIRING OPTION

6-WLO-1 06/03 WING LOCKER OPTION

- 1) Top left diagram: Added Dzus fastener, studs AJ5-30, springs S4A-225 qty = 12 (4 across the aft edge, one in the middle along the sides) 05/03
- 2) 6-WLO-1-1 Rev 1 change 480 to 500mm 06/03

6-WKO-1 04/03 AUXILIARY FUEL TANKS OPTION

1) location of ¾" tube through tank, I/B 125mm above outlet, O/B 25mm from bottom (see 6-K-1 tanks end for horizontal distance) 04/03

CONFIGURATION OPTIONS

6W2-PH 06/03 PIANO HINGED AILERONS

1) New drawings (02/03)

** end **