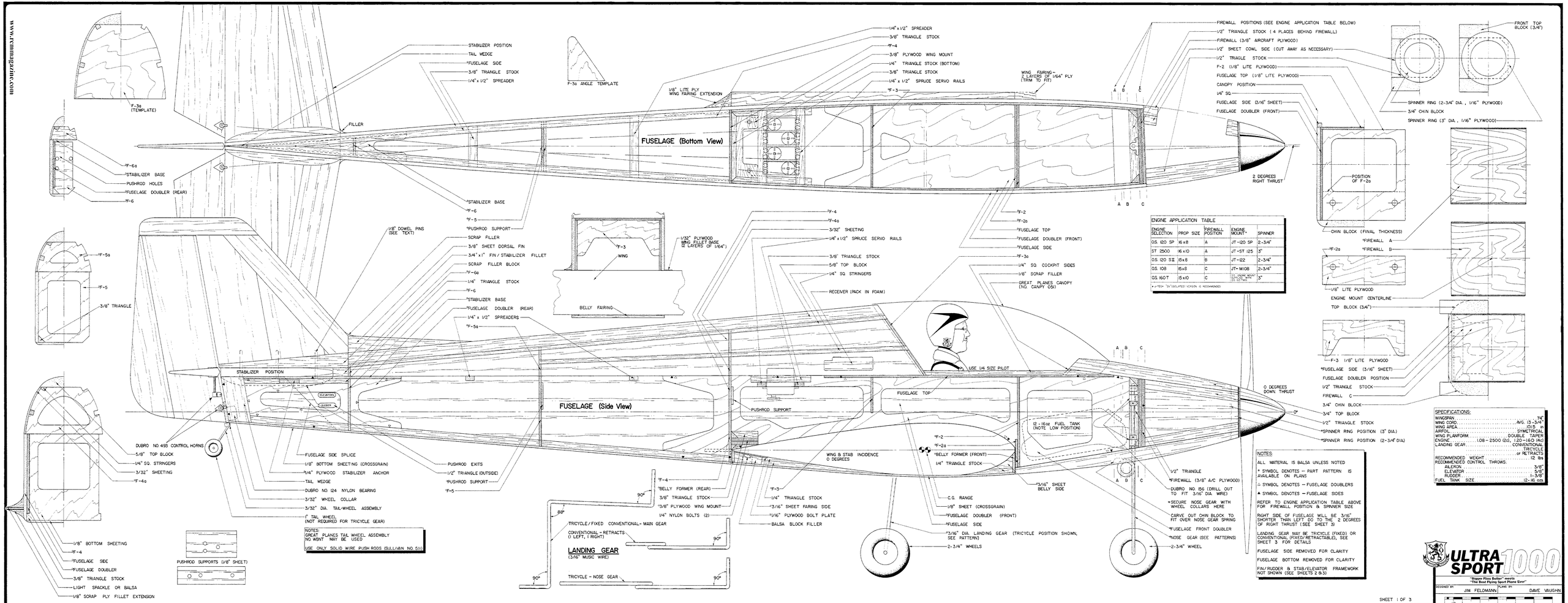
www.rcmagazine.com



NOTES:
GREAT PLANES TAIL WHEEL ASSEMBLY NO WSNT MAY BE USED

USE ONLY SOLID WIRE PUSH RODS (SULLIVAN NO.511)

ENGINE APPLICATION TABLE

ENGINE SELECTION	PROP SIZE	FIREWALL POSITION	ENGINE MOUNT*	SPINNER
O.S. 120 SP	16 x 8	A	JT-120 SP	2-3/4"
ST 2500	16 x 10	A	JT-ST 125	3"
O.S. 120 SII	15 x 8	B	JT-122	2-3/4"
O.S. 108	15 x 8	C	JT-M108	2-3/4"
O.S. 160 T	15 x 10	C	JT-ENGINE MOUNT FOR O.S. 160 T	3"

* JETECH "DV" (ISOLATED) VERSION IS RECOMMENDED

NOTES

ALL MATERIAL IS BALSA UNLESS NOTED

* SYMBOL DENOTES - PART PATTERN IS AVAILABLE ON PLANS

△ SYMBOL DENOTES - FUSELAGE DOUBLERS

▲ SYMBOL DENOTES - FUSELAGE SIDES

REFER TO ENGINE APPLICATION TABLE ABOVE FOR FIREWALL POSITION & SPINNER SIZE

RIGHT SIDE OF FUSELAGE WILL BE 3/16" SHORTER THAN LEFT DO TO THE 2 DEGREES OF RIGHT THRUST (SEE SHEET 3)

LANDING GEAR MAY BE TRICYCLE (FIXED) OR CONVENTIONAL (FIXED/RETRACTABLE), SEE SHEET 3 FOR DETAILS

FUSELAGE SIDE REMOVED FOR CLARITY

FUSELAGE BOTTOM REMOVED FOR CLARITY

FIN/RUDDER & STAB/ELEVATOR FRAMEWORK NOT SHOWN (SEE SHEETS 2 & 3)

SPECIFICATIONS:

WINGSPAN	74"
WING CORD	AVG. 13-3/4"
WING AREA	1015 in
AIRFOIL	SYMETRICAL
WING PLANFORM	DOUBLE TAPER
ENGINE	.108 - 2500 (2c), .120 - 160 (4c)
LANDING GEAR	CONVENTIONAL, TRICYCLE, or RETRACTS
RECOMMENDED WEIGHT	12 lbs
RECOMMENDED CONTROL THROWS:	
AILERON	3/8"
ELEVATOR	5/8"
RUDDER	1-3/8"
FUEL TANK SIZE	12-16 ozs

ULTRA SPORT 1000

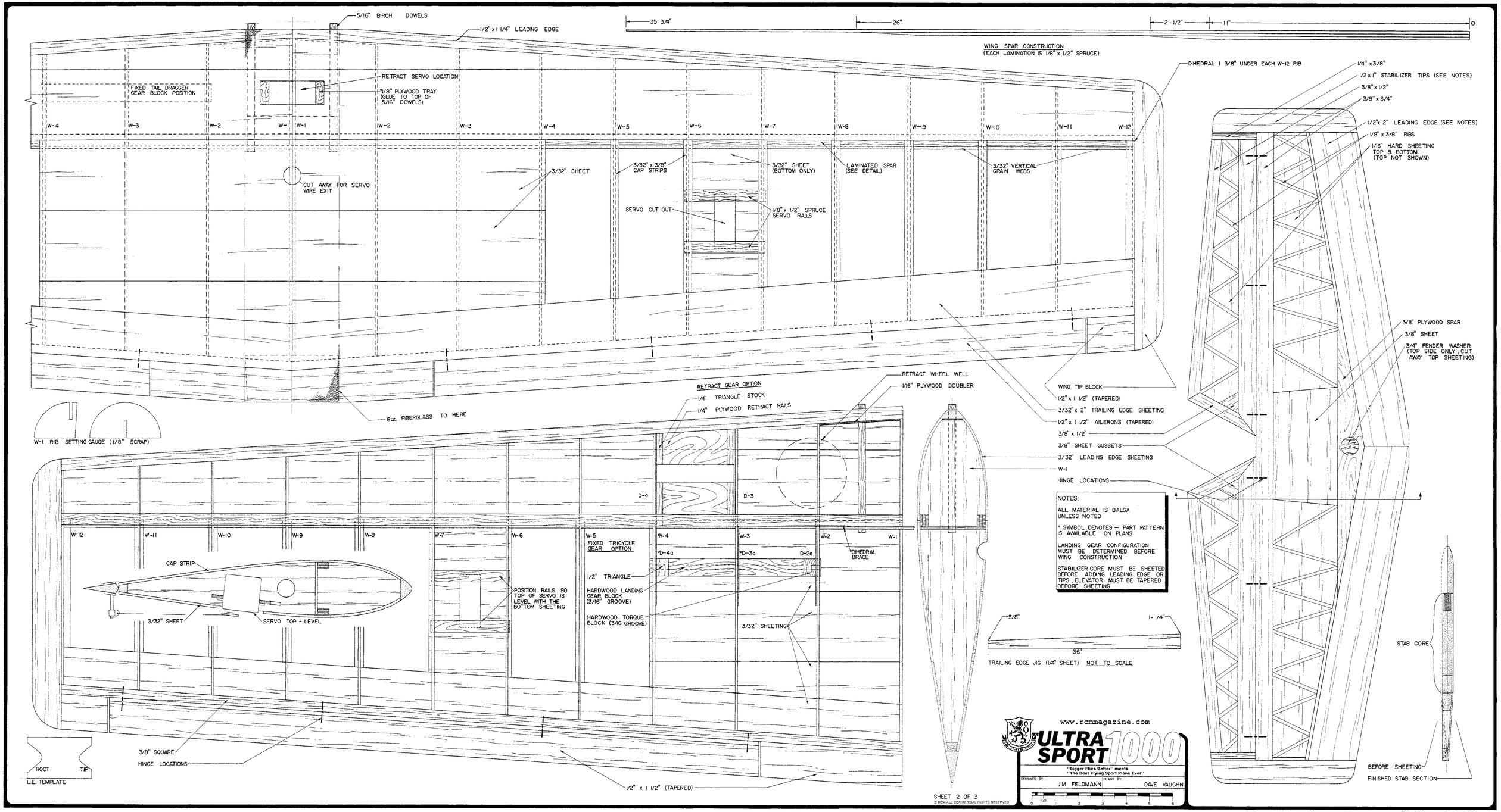
"Bigger Plus Better" meets "The Best Flying Sport Plane Ever"

DESIGNED BY: JIM FELDMANN | PLANS BY: DAVE VAUGHN

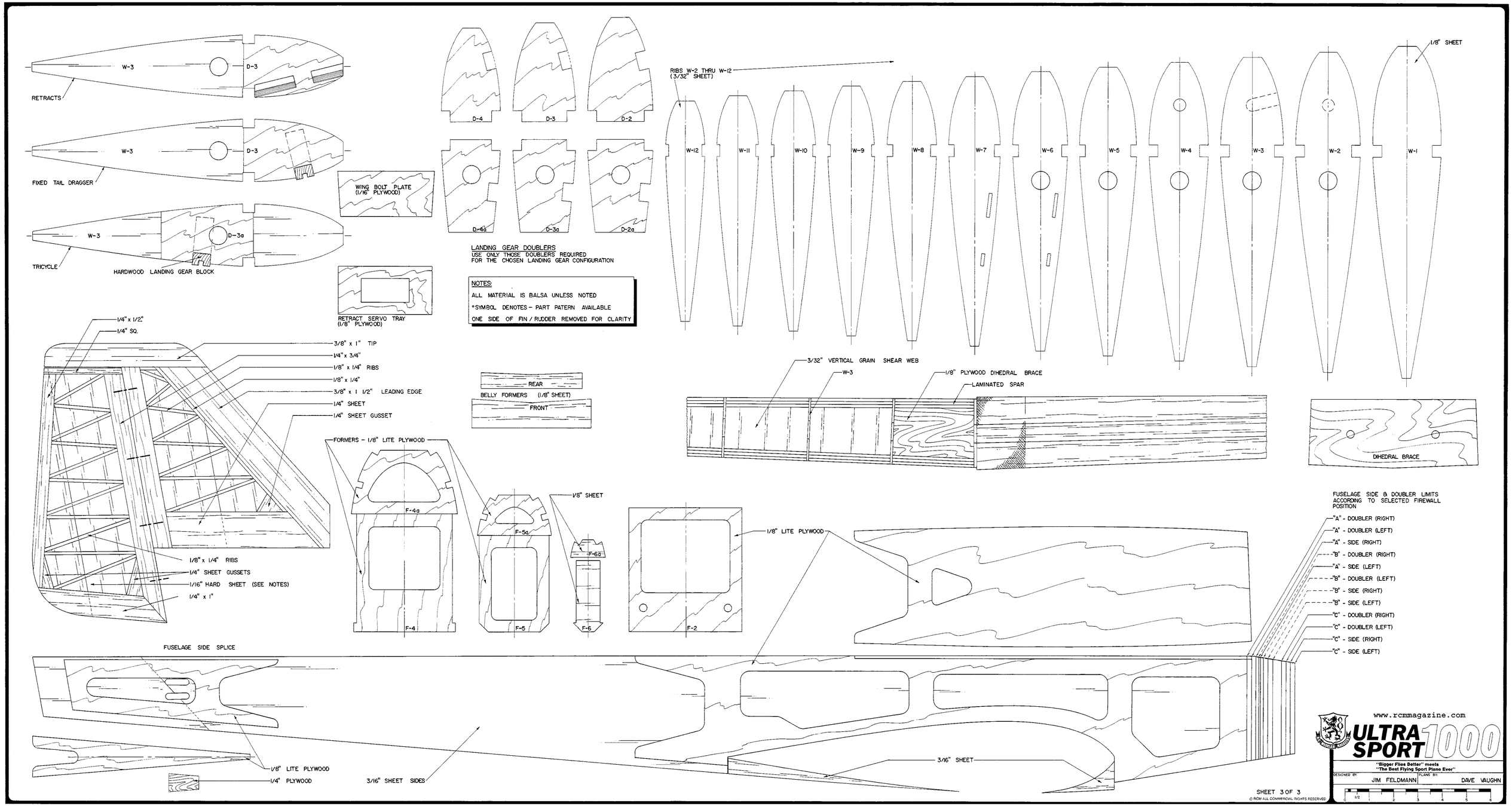
SHEET 1 OF 3

© ROYALL COMMERCIAL RIGHTS RESERVED

PLAN NO.1114


5/16" BIRCH DOWELS
1/2" x 1 1/4" LEADING EDGE
35 3/4"
26"
2 - 1/2"
11"
0
WING SPAR CONSTRUCTION
(EACH LAMINATION IS 1/8" x 1/2" SPRUCE)
DIHEDRAL: 1 3/8" UNDER EACH W-12 RIB
1/4" x 3/8"
1/2 x 1" STABILIZER TIPS (SEE NOTES)
3/8" x 1/2"
3/8" x 3/4"
1/2" x 2" LEADING EDGE (SEE NOTES)
1/8" x 3/8" RIBS
1/16" HARD SHEETING TOP & BOTTOM. (TOP NOT SHOWN)
RETRACT SERVO LOCATION
3/8" PLYWOOD TRAY (GLUE TO TOP OF 5/16" DOWELS)
FIXED TAIL DRAGGER GEAR BLOCK POSITION
W-4
W-3
W-2
W-1
W-1
W-2
W-3
W-4
W-5
W-6
W-7
W-8
W-9
W-10
W-11
W-12
CUT AWAY FOR SERVO WIRE EXIT
3/32" SHEET
3/32" x 3/8" CAP STRIPS
3/32" SHEET (BOTTOM ONLY)
LAMINATED SPAR (SEE DETAIL)
3/32" VERTICAL GRAIN WEBS
SERVO CUT OUT
1/8" x 1/2" SPRUCE SERVO RAILS
3/8" PLYWOOD SPAR
3/8" SHEET
3/4" FENDER WASHER (TOP SIDE ONLY, CUT AWAY TOP SHEETING)
6oz. FIBERGLASS TO HERE
W-1 RIB SETTING GAUGE (1/8" SCRAP)
RETRACT GEAR OPTION
1/4" TRIANGLE STOCK
1/4" PLYWOOD RETRACT RAILS
RETRACT WHEEL WELL
1/16" PLYWOOD DOUBLER
WING TIP BLOCK
1/2" x 1 1/2" (TAPERED)
3/32" x 2" TRAILING EDGE SHEETING
1/2" x 1 1/2" AILERONS (TAPERED)
3/8" x 1/2"
3/8" SHEET GUSSETS
3/32" LEADING EDGE SHEETING
W-1
HINGE LOCATIONS
D-4
D-3
W-12
W-11
W-10
W-9
W-8
W-7
W-6
W-5
W-4
W-3
W-2
W-1
FIXED TRICYCLE GEAR OPTION
*D-4a
*D-3a
D-2a
*DIHEDRAL BRACE
CAP STRIP
1/2" TRIANGLE
HARDWOOD LANDING GEAR BLOCK (3/16" GROOVE)
HARDWOOD TORQUE BLOCK (3/16 GROOVE)
POSITION RAILS SO TOP OF SERVO IS LEVEL WITH THE BOTTOM SHEETING
3/32" SHEET
SERVO TOP - LEVEL
3/32" SHEETING
NOTES:
ALL MATERIAL IS BALSA UNLESS NOTED
* SYMBOL DENOTES — PART PATTERN IS AVAILABLE ON PLANS
LANDING GEAR CONFIGURATION MUST BE DETERMINED BEFORE WING CONSTRUCTION
STABILIZER CORE MUST BE SHEETED BEFORE ADDING LEADING EDGE OR TIPS, ELEVATOR MUST BE TAPERED BEFORE SHEETING
5/8"
1- 1/4"
36"
TRAILING EDGE JIG (1/4" SHEET) NOT TO SCALE
STAB CORE
BEFORE SHEETING
FINISHED STAB SECTION
ROOT
TIP
L.E. TEMPLATE
3/8" SQUARE
HINGE LOCATIONS
1/2" x 1 1/2" (TAPERED)
SHEET 2 OF 3
© RCM ALL COMMERCIAL RIGHTS RESERVED
www.rcmmagazine.com
ULTRA SPORT 1000
"Bigger Flies Better" meets "The Best Flying Sport Plane Ever"
DESIGNED BY JIM FELDMANN
PLANS BY DAVE VAUGHN
0 1/2 1 2 3 4 5 6

PLAN NO. 1114


W-3
D-3
RETRACTS
W-3
D-3
FIXED TAIL DRAGGER
W-3
D-3a
TRICYCLE
HARDWOOD LANDING GEAR BLOCK
WING BOLT PLATE (1/16" PLYWOOD)
RETRACT SERVO TRAY (1/8" PLYWOOD)
D-4
D-3
D-2
D-4a
D-3a
D-2a
LANDING GEAR DOUBLERS
USE ONLY THOSE DOUBLERS REQUIRED FOR THE CHOSEN LANDING GEAR CONFIGURATION
NOTES:
ALL MATERIAL IS BALSA UNLESS NOTED
*SYMBOL DENOTES - PART PATERN AVAILABLE
ONE SIDE OF FIN / RUDDER REMOVED FOR CLARITY
RIBS W-2 THRU W-12 (3/32" SHEET)
1/8" SHEET
W-12
W-11
W-10
W-9
W-8
W-7
W-6
W-5
W-4
W-3
W-2
W-1
1/4" x 1/2"
1/4" SQ.
3/8" x 1" TIP
1/4" x 3/4"
1/8" x 1/4" RIBS
1/8" x 1/4"
3/8" x 1 1/2" LEADING EDGE
1/4" SHEET
1/4" SHEET GUSSET
1/8" x 1/4" RIBS
1/4" SHEET GUSSETS
1/16" HARD SHEET (SEE NOTES)
1/4" x 1"
REAR
BELLY FORMERS (1/8" SHEET)
FRONT
FORMERS - 1/8" LITE PLYWOOD
F-4a
F-4
F-5a
F-5
1/8" SHEET
F-6a
F-6
F-2
1/8" LITE PLYWOOD
3/32" VERTICAL GRAIN SHEAR WEB
W-3
1/8" PLYWOOD DIHEDRAL BRACE
LAMINATED SPAR
DIHEDRAL BRACE
FUSELAGE SIDE & DOUBLER LIMITS ACCORDING TO SELECTED FIREWALL POSITION
"A" - DOUBLER (RIGHT)
"A" - DOUBLER (LEFT)
"A" - SIDE (RIGHT)
"B" - DOUBLER (RIGHT)
"A" - SIDE (LEFT)
"B" - DOUBLER (LEFT)
"B" - SIDE (RIGHT)
"B" - SIDE (LEFT)
"C" - DOUBLER (RIGHT)
"C" - DOUBLER (LEFT)
"C" - SIDE (RIGHT)
"C" - SIDE (LEFT)
FUSELAGE SIDE SPLICE
1/8" LITE PLYWOOD
1/4" PLYWOOD
3/16" SHEET SIDES
3/16" SHEET
www.rcmmagazine.com
ULTRA SPORT 1000
"Bigger Flies Better" meets "The Best Flying Sport Plane Ever"
DESIGNED BY: JIM FELDMANN
PLANS BY: DAVE VAUGHN
0 1/2 1 2 3 4 5 6
SHEET 3 OF 3
© RCM ALL COMMERCIAL RIGHTS RESERVED