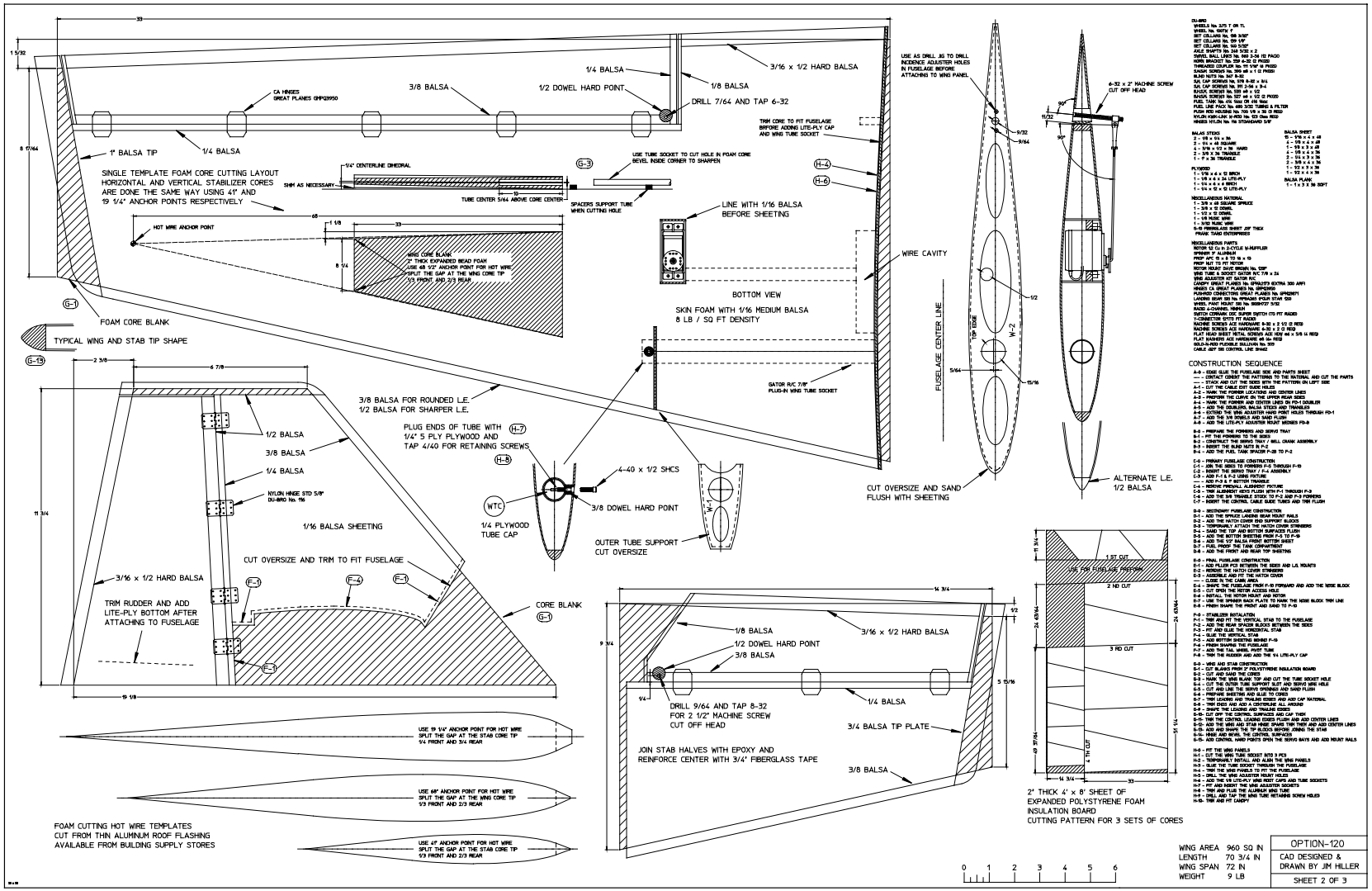

DU-BRO
WHEELS No. 375 7" DIA TL
WHEEL No. 59TH 7"
SET COLLARS No. 158 5/32"
SET COLLARS No. 159 1/4"
SET COLLARS No. 160 5/32"
AXLE SHAFTS No. 269 5/32 x 2
SWIVEL BALL LAND No. 860 2-56 TO PACO
HORN BRACKET No. 159 4-40 TO PACO
PUSH ROD HOUSING No. 709 5/8 x 30 TO PACO
THICK SCREWS No. 350 #8 x 1 1/2 PHSS
BLIND NUTS No. 367 8-32
SUL CAP SCREWS No. 978 8-32 x 3/4
SUL CAP SCREWS No. 971 2-56 x 3/4
BUSH. SCREWS No. 330 #8 x 1/2
RANCH. SCREWS No. 327 #8 x 1/2 (2 PKGS)
FUEL LINE No. 600 3/32 x 5/32
FUEL LINE PACK No. 600 3/32 x 5/32 x FILTER
PUSH ROD HOUSING No. 709 5/8 x 30 (3 REQ)
NYLON KWIK-LINK II #10-32 No. 123 Clevis REQ
HINGES NYLON No. 196 STD/MEDIUM 5/8"

BALSA STOCK
2 - 1/8 x 6 x 36
2 - 1/4 x 48 SQUARE
4 - 3/8 x 1/2 x 36 HARD
2 - 3/8 x 36 TRIANGLE
1 - 1" x 36 TRIANGLE

PLYWOOD
1 - 1/16 x 4 x 12 BIRCH
1 - 1/8 x 4 x 24 LITE-PLY
1 - 1/4 x 6 x 6 BIRCH
1 - 1/4 x 12 x 12 LITE-PLY

BALSA SHEET
10 - 1/16 x 4 x 48
4 - 1/8 x 4 x 48
2 - 1/8 x 6 x 36
1 - 1/4 x 3 x 36
2 - 1/4 x 3 x 36
1 - 3/8 x 4 x 36
1 - 1/2 x 3 x 36
1 - 1/2 x 4 x 36

BALSA PLANK
1 - 1 x 3 x 36 SOFT

MISCELLANEOUS MATERIAL
1 - 3/8 x 48 SQUARE SPRUCE
1 - 3/4 x 12 DOWEL
1 - 1/2 x 12 DOWEL
1 - 1/8 MUSIC WIRE
1 - 3/32 MUSIC WIRE
1 - 8" PERMAKOTE SHEET .09" THICK
FRANK TIARD ENTERPRISES

MISCELLANEOUS PARTS
MOTOR 52 Cu in 2-CYCLE W-MUFFLER
SPINNER 3" ALUMINUM
PROP APC 15 x 8 TO 16 x 10
PROP NUT 10-32 ELECTRIC
VENTED FUEL TANK 32 OUNCE No. 1287
WING TUBE & SOCKET GATOR R/C 7/8 x 24
WING ADJUSTER KIT GATOR R/C
CANOPY GREAT PLANES No. GPMA1373 EXTRA 300 ARF!
WINDS CA GREAT PLANES No. GPMQ5900
PUSH-ROD CONNECTORS GREAT PLANES No. GPMQ4871
LANDING GEAR .520 No. HPMG2600 FOUR STAR 120
WHEEL PANT MOUNT SET No. GEBMP127 5/32
WHEEL PANTS GEBMP127
SWITCH CONSUMC DSC SUPER SWITCH 175 FIT RADIO
Y-CONNECTOR STITS FIT RADIO
MACHINE SCREWS ACE HARDWARE 8-32 x 2 1/2 (2 REQ)
MACHINE SCREWS ACE HARDWARE 4-40 x 2 (2 REQ)
FLAT HEAD SHEET METAL SCREWS ACE #2X #4 x 5/8 (4 REQ)
FLAT WASHERS ACE HARDWARE #8 (4 REQ)
SOLDA-PAD FLEXIBLE SOLDER No. 900
CABLE ASSY 150 CONTROL LINE SHAKE

CONSTRUCTION SEQUENCE

A-0 - EDGE GLUE THE FUSELAGE SIDE AND PARTS SHEET
— - CONTACT CEMENT THE PATTERNS TO THE MATERIAL AND CUT THE PARTS
— - ATTACH AND CUT THE SIDES WITH THE PATTERN ON LEFT SIDE
A-1 - CUT THE CABLE EXIT GUIDE HOLES
A-2 - MARK THE FORMER LOCATIONS AND CENTER LINES
A-3 - PREFORM THE CURVE IN THE UPPER REAR SIDES
A-4 - MARK THE FORMER AND CENTER LINES ON F5-1 DOUBLER
A-5 - GLUE THE F5-1 DOUBLER AND THE SIDE TRIANGLES
A-6 - SLIDE THE WING ADJUSTER TUBES AFT HOLES THROUGH F5-1
A-7 - ADD THE 3/8 DOWELS AND SAND FLUSH
A-8 - ADD THE LITE-PLY ADJUSTER MOUNT MEDINES F5-B

B-0 - PREPARE THE FORMERS AND SERVO TRAY
B-1 - GLUE THE FORMERS TO THE SIDES
B-2 - CONSTRUCT THE SERVO TRAY AS WELL DRAW ASSEMBLY
B-3 - INSERT THE BLIND NUTS IN F-2
B-4 - ADD THE FUEL TANK SPACER F-2B TO F-2

C-0 - PRIMARY FUSELAGE CONSTRUCTION
C-1 - JOIN THE SIDES TO FORMERS F-5 THROUGH F-9
C-2 - ADD THE TOP AND BOTTOM F-5 ASSEMBLY
C-3 - ADD F-1 F-4 LONG FUSELAGE
— - ADD F-3 & F BOTTOM TRIANGLE
C-4 - REMOVE FIREWALL ALIGNMENT FIXTURE
C-5 - TRIM ALIGNMENT KEYS FLUSH WITH F-1 THROUGH F-3
C-6 - ADD THE 3/8 TRIANGLE STOCK TO F-2 AND F-3 FORMERS
C-7 - INSERT THE CONTROL CABLE GUIDE TUBES AND TRIM FLUSH

D-0 - SECONDARY FUSELAGE CONSTRUCTION
D-1 - ADD THE SPRUCE LANDING GEAR MOUNT RAILS
D-2 - ADD THE HATCH COVER END SUPPORT BLOCKS
D-3 - TEMPORARILY ATTACH THE HATCH COVER STRINGERS
D-4 - SAND THE TOP AND BOTTOM SURFACES FLUSH
D-5 - ADD THE BOTTOM SHEETING FROM F-5 TO F-9
D-6 - ADD THE 1/2" BALSA FRONT BOTTOM SHEET
D-7 - FUEL PROOF THE TANK COMPARTMENT
D-8 - ADD THE FRONT AND REAR TOP SHEETING

E-0 - FINAL FUSELAGE CONSTRUCTION
E-1 - ADD FILLER PCS BETWEEN THE SIDES AND LG MOUNTS
E-2 - REMOVE THE HATCH COVER STRINGERS
E-3 - SHAPE AND FIT THE HATCH COVER
— - ASSEMBLE ALL OF THE HATCH COVER
E-4 - SHAPE THE FUSELAGE FROM F-9 FORWARD AND ADD THE NOSE BLOCK
E-5 - CUT OPEN THE MOTOR ACCESS HOLE
E-6 - INSTALL THE MOTOR MOUNT AND MOTOR
E-7 - USE THE SPINNER BACK PLATE TO MARK THE NOSE BLOCK TRIM LINE
E-8 - FINISH SHAPE THE FRONT AND SAND TO F-10

F-0 - STABILIZER INSTALLATION
F-1 - TRIM AND FIT THE VERTICAL STAB TO THE FUSELAGE
F-2 - ADD THE REAR SPACER BLOCKS BETWEEN THE SIDES
F-3 - FIT AND GLUE THE HORIZONTAL STAB
F-4 - GLUE THE VERTICAL STAB
F-5 - ADD BOTTOM SHEETING INBOARD F-9
F-6 - FINISH SHAPING THE FUSELAGE
F-7 - ADD THE TAIL WHEEL PIVOT TUBE
F-8 - TRIM FIN RUDDER AND ADD THE 1/4 LITE-PLY CAP

G-0 - WING AND STAB CONSTRUCTION
G-1 - CUT BLANKS FROM 2" POLYSTYRENE INSULATION BOARD
G-2 - CUT AND SAND THE CORES
G-3 - GLUE THE CORES TOGETHER AND CUT THE TUBE SOCKET HOLE
G-4 - CUT THE OUTER TUBE SUPPORT SLOT AND SERVO WIRE HOLE
G-5 - CUT AND LINE THE SERVO OPENINGS AND SAND FLUSH
G-6 - PREPARE SHEETING AND GLUE TO CORES
G-7 - TRIM LEADING AND TRAILING EDGES AND ADD CAP MATERIAL
G-8 - TRIM ENDS AND ADD A CENTERLINE ALL AROUND
G-9 - SHAPE THE LEADING AND TRAILING EDGES
G-10 - CUT OFF THE TOOLING BLOCKS AND CAP TRIM
G-11 - SAND THE CONTROL SURFACES SMOOTH AND ADD CENTER LINES
G-12 - ADD THE WING AND STAB KNIFE SHAPE TRIM TABS AND ADD CENTER LINES
G-13 - ADD AND SHAPE THE TIP BLOCKS BEFORE JOINING THE STAB
G-14 - HINGE AND BEVEL THE CONTROL SURFACES
G-15 - ADD CONTROL HORN POINTS OPEN THE SERVO BAYS AND ADD MOUNT RAILS

H-0 - FIT THE WING PANELS
H-1 - CUT THE WING TUBE SOCKET SLOTS 3 PCS
H-2 - TEMPORARILY ASSEMBLE AND ALIGN THE WING PANELS
H-3 - GLUE THE TUBE SOCKETS INTO THE FUSELAGE
H-4 - TRIM THE WING PANELS TO FIT THE FUSELAGE
H-5 - DRILL THE WING ADJUSTER MOUNT HOLES
H-6 - ADD THE 1/8 LITE-PLY WING ROOT CAPS AND TUBE SOCKETS
H-7 - FIT AND INSERT THE WING ADJUSTER SOCKETS
H-8 - TRIM AND PLUG THE ALUMINUM WING TUBE
H-9 - DRILL AND TAP THE WING TUBE RETAINER SCREW HOLES
H-10- TRIM AND FIT CANOPY

WING AREA	960 SQ IN
LENGTH	70 3/4 IN
WING SPAN	72 IN
WEIGHT	9 LB

OPTION-120
CAD DESIGNED &
DRAWN BY JIM HILLER
SHEET 2 OF 3