KAMIKAZE

ASAHI NO118

J-BAAI

MITSUBISHI NIPPON

三菱 朝日新聞社

"MITSUBISHI NIPPON", RIGHT SIDE

"Simplicate and build in lightness"
Kelly Johnson, Lockheed skunk works

"ASAHI NO 118", RIGHT SIDE

號八十百第日朝

NOSEBOMB
3" BALSA (6)

ANTENNA MAST TUBES, 48" SHT (2)

ANTENNA MAST CORE, 48" HWOOD (1)

1/8" HWOOD (1)

1/4" PLY (2)

DA 100
REMOVABLE FIREWALL, 3/8" PLY
GT-80
GT-80
DA 100

#8 X 1" F.H. WOOD SCREWS, TYP

TANK BOX SIDES, 1/8" PLY (2)
1/2" X 3/4" HWOOD FIREWALL SUPPORT
SCREW & GLUE TO INSIDE OF TANK BOX

TANK BOX TOP & BOTTOM, 1/8" PLY (2)

TANK BOX END, 1/8" PLY (1)

WINDSCREEN, 0.05 MM CLEAR PLASTIC

FOLD
FOLD
FOLD

BEVEL TO MATCH WINDSREEN SLOPE

WINDSREEN SUPPORT, 1/8" PLY

REMOVABLE FRICTION FIT ANTENNA MAST, DESIGNED TO BREAK AWAY AT BASE.

MOLDED WINDSCREEN AND OTHER PARTS ARE AVAILABLE FROM MICKO ACCESSORARIES AT WWW.MNBIGBIRDS.COM

F1 UPPER, 1/8" PLY

GT-80 ONLY

CLEVIS, EPOXY TO FIN

COVER W/ 1/16" SHT

COVER RUDDER W/ SIG KOVERALL CLOTH

3/16" X 1/8" HWOOD TRAILING EDGE

1/2" SQ

1/16" SHT RUDDER BASE

ROBART HINGE POINT (4)

1/8" DIA MUSIC WIRE

INCIDENT PORT

GOLDBERG SHORT CONTROL HORN

1" SHT, HOLLOW FOR LIGHTNESS

FIN FILET

1/8" SHT FIN PLATFORM

HARDWOOD BLOCKS

1/4" X 20 NYLON BOLTS (2)

1/4" SQ CRUTCH

COVER FUSELAGE W/ 3/32" SHT

SCALE PANEL LINES

1/2" HQ ALIGNMENT KEY BLOCKS ON LEADING EDGE OF STAB

RUDDER SERVO

ELEV SERVO IN STAB

DU-BRO 5/32" NOSE GEAR BLOCK & STEERING ARM

1-1/2" SOFT TAIL WHEEL

1/16" ALUMINUM

BEND

FIN FILET, 3/32" SHT (2)

TILT F17 FORWARD SLIGHTLY FOR GAPLESS FIT

RUDDER AND ELEVATOR SERVOS SHOULD PROVIDE AT LEAST 115 OZ-IN OF TORQUE AND BE METAL GEARED.

REMOVABLE STAB

KLETT OR DU-BRO HINGES

CLEAN & SCREW OUTER RINGS TO BOB BEFORE GLUEING

ROUTE RECESS & 1/32" FLAP CORE FOR HINGE BEFORE ADDING UPPER 1/64" PLY

PLACE FLAP HORN OVER HINGE

BEVEL 3/64" DISC TO FEATHER EDGE BEFORE ADDING UPPER 1/64" PLY

FLAP

SCALE SPINNER SHAPE

VORTEH OR TRUTURN 6" PARABOLIC SPINNER

SCALE PROP SIZE

SCALE CRANKCASE FAIRING

3/16" SQ HWOOD COWL STINGERS (16)

ATTACH FRONT HALF OF CRANKCASE CYLINDERS EXACT

TANK BOX, MOVE FWARD OR BACK FOR OTHER ENGINES

DU-BRO 32-OZ TANK HERE

CARVED BALSA FILET, F5-F7

1/16" SHT FILET, F7-F11

1/32" PLY WING SADDLE, F6 – F11

1/4" SHT SERVO MOUNT

3/4" SHT WING SADDLE SUPPORT

1/4 X 20 NYLON WING BOLTS

1/2" X 3/4" HW WING BOLT SUPPORT, F9-F11
GLUE TO WING SADDLE SUPPORT & SCREW TO F11

CAMERA SUPPORT, 4" X 3" X 3/4" BALSA

OBSERVER'S SEAT, 4" X 4" X 2" BALSA BOX

UPPER REAR FILET, 1/16" SHT, F11–F14

LOWER FILET, 3/32" SHT

CG = 5-1/2" AFT OF L.E. AT CENTER SECTION

OLEO TRAVEL PUSHES FAIRING 3/4" INTO WING

OLEO STRUT

1/4" X 2" SQ BASE

SET SCREWS, 2 SIDES

F2 UPPER, 1/8" LITE PLY

3/4" COMPRESSION SHOWN EXTENDED

11-5/16"

1/2" STEEL ROD

ROLL PIN

CUT FORK FROM 1" T6 ALUMINUM

1-1/2"

1/4" STEEL AXLE

AXLE SET SCREW

THIN ALUMINUM WHEEL COVER (4)

GLUE TO HUB W/ METHACRYLATE

WHEEL PANT CROSS SECTION

4-40 BOLT

SHINDN "BABS" STRUT

A & B

A, B & C

A,B,C & D

4-40 BOLTS & BLIND NUTS HOLD PANT HALVES TOGETHER

ROUND AFTER ASSEMBLY

ACCESS HOLE, INBOARD SIDE ONLY

0.016" X 1/2" WASHER (CUT FROM SIG ALUMINUM SHT)

1/4" STEEL AXLE

AERO-FLEX 8" X 1-1/4" WHEEL CHAIR WHEELS

NB: WHEEL PANTS HALVES ARE BOLTED TOGETHER W/ FOUR 1/4" x 4-40 SOC HD CAP SCREWS & BLIND NUTS IN LAYER C PLUS THE AXLE EXPOSED THRU LAYER E.

THE 4-40 BOLTS ARE RECESSED INTO THE PANT. THIS MAKES THE PANT REMOVABLE FOR REPAIR.

AXLE IS A 1/4" STEEL ROD INSIDE CONCENTRIC 6AS 5/16" & 9/32" ALUMINUM TUBING (11) (1 & 107).

FIBERGLASS PANTS AND OTHER PARTS ARE AVAILABLE FROM MICKO ACCESSORARIES AT WWW.MNBIGBIRDS.COM

COMPLETE STRUTS AVAILABLE FROM WWW.SHINDINMACHINE.COM

CRANKCASE FAIRING TRIMMED TO CLEAR ALL EXPOSED CYLINDERS

CRANKCASE FAIRING STRINGERS (12), 1/4" SQ

CF1 (2)

CF2 (4)

1/4" SHT

COVER W/ 3/32" SHT

FIBERGLASS COWL AND OTHER PARTS ARE AVAILABLE FROM MICKO ACCESSORARIES AT WWW.MNBIGBIRDS.COM

C1, 1/8" LITE PLY

NB: C1 SUPPORTS THE DUMMY RADIAL ENGINE. IT IS ALSO A COOLING BAFFLE – CUT TO FIT ENGINE OUTLINE.

SPLICE HERE IF NECESSARY

SATO 450

DA-100

GT 80

C2, 1/4" PLY

MAKE 4 COPIES OF ONE QUADRANT. ASSEMBLE OVER THIS PATTERN

MOUNT DUMMY EXHAUST HERE, RIGHT SIDE ONLY

DA-100 ENGINE SHOWN

F1 LOWER, 1/8" PLY

1" DIA EXHAUST

3/8" DIA

F2 LOWER, 1/8" LITE PLY

COWL STRINGER, 3/16" SQ BASSWOOD (16)

3-3/4"

A CD is available from Micko Aircraft and Accessories that contains a detailed construction article, 250+ color construction photos, full-size plans, parts list, paint masks, full-sized kanji graphics, scale documentation, alternate color schemes, cockpit drawing, in-flight photos & videos and flying report.
See http://www.mnbigbirds.com and click on Micko Aircraft and Accessories.
You may contact the designer at davidpanderson64@msn.com.

Addiction Designs

http://www.mnbigbirds.com

MITSUBISHI KI-15 "Babs"

DESIGNED AND DRAWN BY DAVID P ANDERSEN

SHEET 1 OF 5

RIBS A & B, 1/8" LITE PLY (4)

RIB C, 1/8" LITE PLY (2)

RIB D, 1/8" LITE PLY (2)

RIB E, 1/8" PLY (2)

1/2" SQ HWOOD LG BEARERS SCREW & GLUE TO RIB

RIB F, 1/8" PLY (2)

ADD 1/2" X 1-1/2" LE AFTER SHEETING BOTH SURFACES

1/2" SQ HW BEARERS

3/4" TRIANGULAR STOCK REINFORCEMENT, TYP

3/32" X 1/2" X 5" OVER TOP SPAR FROM F TO D

TOP VIEW OF LG MOUNT IS SHOWN HERE

3/32" X 1" X 5" OVER TOP SPAR FROM F TO D

1/4" SHT SERVO MOUNT

100 OZ-IN FLAP SERVO

3/32" X 1/4" X 5" OVER TOP SPAR FROM F TO D

FLAP

1/8" PLY LE

1/2" X 3/8" HW SPAR

1/4" X 1" HARDWOOD SPAR

1/8" SHEER WEB, VERTICAL GRAIN

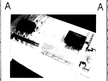
1/4" SQ SPAR

1/8" LITE PLY WING BOLT PLATE, UNDERSIDE OF UPPER SURFACE

3/8" WING DOWELS.

INSTALL AFTER MATING WING TO FUSELAGE.

BUT BEFORE SHEETING THE BOTTOM OF THE WING.



1/8" SHEER WEB, VERTICAL GRAIN

3/32" X 1/2" X 5" OVER TOP SPAR FROM F TO D

BOTTOM VIEW OF LG MOUNT IS SHOWN HERE

ATTACH PLATE W/ WOOD SCREWS

3/8" PLY

SECURE TUBE W/ 8-32 X 1" BOLTS UNDER WING

3/32" X 1" X 5" OVER TOP SPAR FROM F TO D

1/4" SHT SERVO MOUNT

100 OZ-IN FLAP SERVO

3/32" X 1/4" X 5" OVER TOP SPAR FROM F TO D

PHENOLIC SOCKET

1-1/2" DIA ALUMINUM TUBE

TILT RIB 1 OUTBOARD AT USE THIS TEMPLATE

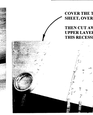
DU-BRO OR KLETT FLAP HINGE, TYP

F E D C B A A B C D E F

CONNECT FLAP SERVO WITH A REVERSING SERVO WIRE TO FLAP RECEIVER CHANNEL!

COVER THE TOP SURFACE WITH 1/32" SHEET, OVERLAPPING FROM D TO A.

THEN CUT AWAY THE INBOARD PORTION OF THE UPPER LAYER, USING THE FINGAUN'S FILET AS A GUIDE. THIS RECESSES THE WING FILET INTO THE WING.



3-5/8"

3/16" PLY (2)

2"

LG MOUNTING PLATE

TIP: ATTACH BEARERS TO MOUNTING PLATE BEFORE ATTACHING BEARERS TO RIBS F AND E.

LOWER WING FILET

LOWER WING FILET

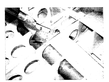
OBSERVER'S CAMERA WINDOW

RETRACTABLE STEP

LOWER SIGNAL LIGHT

1/8" PLY LEADING EDGE

COWL SKIN, 1/32" PLY SHOWN SLIGHTLY OVERSIZE TRIM AFTER ASSEMBLY



LOWER FILET, 3/32" SHT (2) INSTALL W/ WING IN PLACE

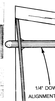
TAPER INSIDE EDGE BEFORE ASSEMBLY

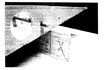
UPPER MIDDLE FILET, 1/16" SHT (2)

TAPER INSIDE EDGE BEFORE ASSEMBLY

TAPER INSIDE EDGE BEFORE ASSEMBLY

UPPER FILET, 1/16" SHT (2)





"WASHOUT STICKS"

5/16" RIB 14 HERE

3/8" RIB 1 HERE

UPPER ASSEMBLY JIG, 1/8" SHT

PLACE UNDER REAR SPAR DURING ASSEMBLY

LOWER ASSEMBLY JIG, 1/8" SHT

PLACE UNDER REAR SPAR DURING ASSEMBLY

1/4" DOWEL ALIGNMENT PIN

1/4" SQ

LANDING LIGHT, LEFT WING ONLY, BOTTOM VIEW SHOWN.

1/2" X 1-1/2" LE

1/8" SHEAR WEBS VERTICAL GRAIN

RIB 1 HERE

7-5/8"

RIB 14 HERE

5/8"

1" SHT TIP (2)

COVER WING W/ 3/32" SHT

1/4" X 3/4" SPARS

1/8" PLY SERVO MOUNT

ASSEMBLE RIGHT WING PANEL OVER THIS VIEW

1/4" X 1/8" SPARS

14A

PHENOLIC SOCKET 1-1/932" OD

EPOXY TUBE TO SOCKET AFTER ASSEMBLY

1/4" DOWEL ALIGNMENT PIN

2 PINS FOR SAFETY

3/32" SHEER WEB VERTICAL GRAIN

FILL SPACE BETWEEN SPARS WITH FOAM BEFORE SHEETING AILERON SKINS.

ROBART HINGE, TYP (5 PER AILERON)

FYI: 1-1/2" WASHOUT FROM R1 TO R14 (MORE THAN SCALE FOR SAFETY)

CONVENTIONAL AILERON SERVO INSTALLATION

1/16" ALUMINUM HORN

AILERON SERVO, 100 OZ-IN MINIMUM

BALL LINK PUSPOO RECOMMENDED

WINGTIP CROSS-SECTION

TAPER SPARS TO BE FLUSH WITH R15

R14

R15

1" SHT TIP

ELEVATE 6-3/8" AT R14 WHEN JOINING PANELS

RIB 8

± 8"

SPANGENBERG AILERON CONTROL ROD 3/16" & 7/32" BRASS TUBING, BALL LINK, BOLT

RECOMMENDED CONTROL SURFACE MOVEMENTS

RUDDER: ± 2 INCHES. (MEASURED AT LOWER CORNER)

ELEVATOR: ± 1 1/8 INCHES (MEASURED AT TRAILING CORNER)
FLAP-ELEVATOR MIXING: ½ INCH DOWN-ELEVATOR AT FULL FLAP.

PARTIAL FLAP: 2 INCHES.
FULL FLAP: 5 INCHES.

ALERON SKINS, 1/16" SHT (4)

1/32" SHT

1/32" X 1/16" RIBS

1/32" X 1/16" TE

http://www.mrbigbirds.com

MITSUBISHI KI-15 "Babs"

DESIGNED AND DRAWN BY DAVID P ANDERSEN

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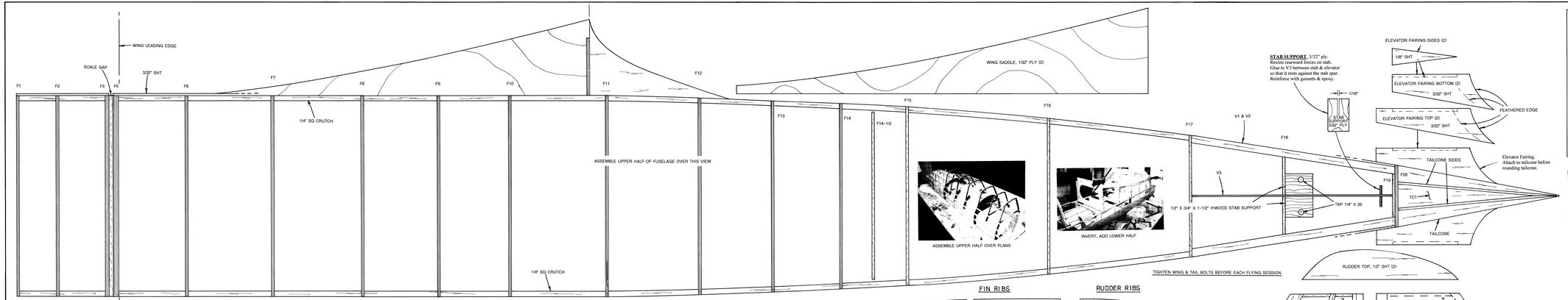
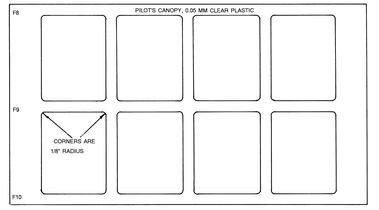


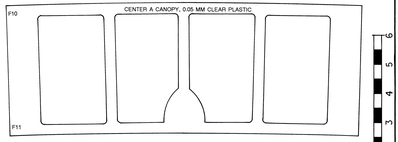
STAB SUPPORT, 3/32" ply. Resists rearward forces on stab. Glue to V3 between stab & elevator so that it rests against the stab spar. Reinforce with gussetts & epoxy.

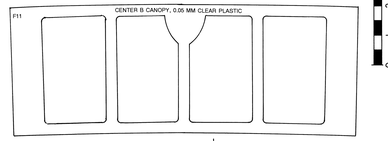
ASSEMBLE UPPER HALF OVER PLANS

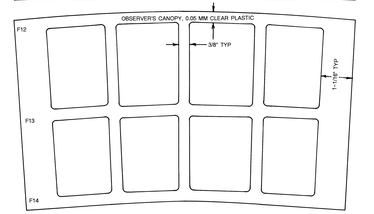
INVERT, ADD LOWER HALF

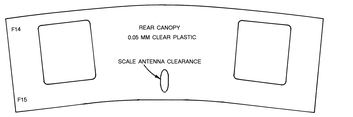
ELEVATOR FAIRING SIDES (2)
1/8" SHT
ELEVATOR FAIRING BOTTOM (2)
3/32" SHT
ELEVATOR FAIRING TOP (2)
3/32" SHT
FEATHERED EDGE



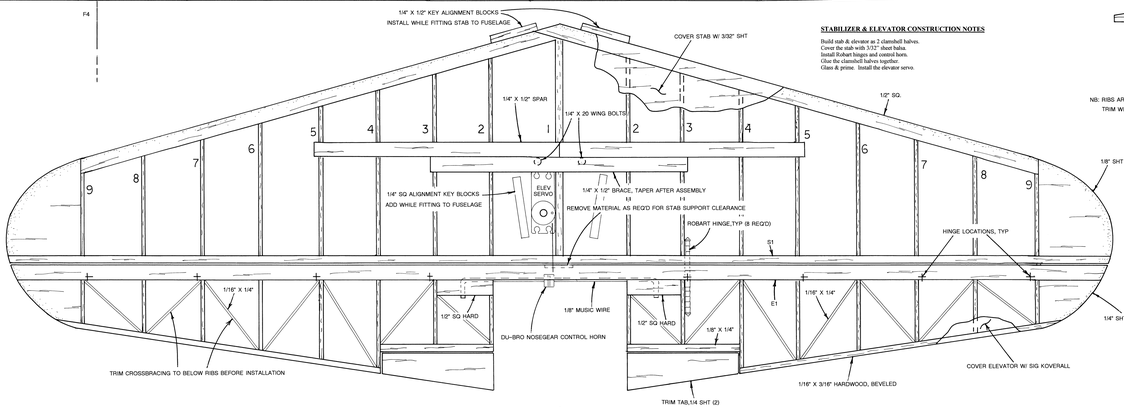








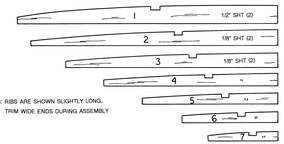
TIP: Cut canopies about 1/16" oversized. Trim to fit during assembly. Mask windows after installation.



STABILIZER & ELEVATOR CONSTRUCTION NOTES

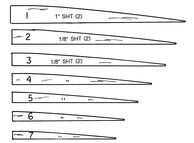
Build stab & elevator as 2 clamshell halves.
Cover the stab with 3/32" sheet balsa.
Install Robart hinges and control horn.
Glue the clamshell halves together.
Glass & prime. Install the elevator servo.

FIN RIBS

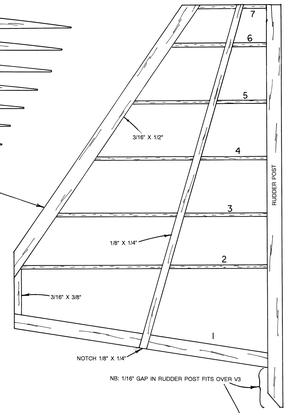


NB: RIBS ARE SHOWN SLIGHTLY LONG. TRIM WIDE ENDS DURING ASSEMBLY

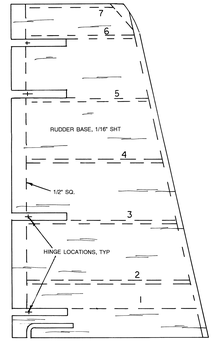
RUDDER RIBS

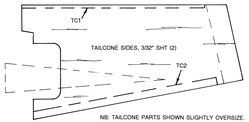


RUDDER TOP, 1/2" SHT (2)



NB: 1/16" GAP IN RUDDER POST FITS OVER V3

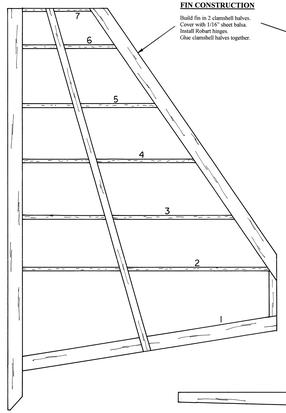


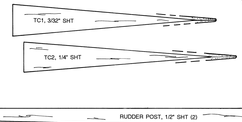


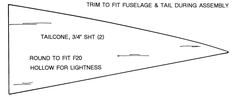
NB: TAILCONE PARTS SHOWN SLIGHTLY OVERSIZE. TRIM TO FIT FUSELAGE & TAIL DURING ASSEMBLY

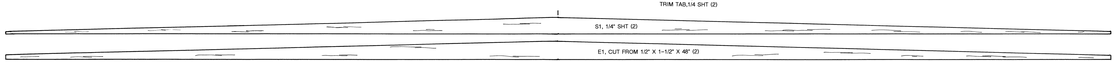
FIN CONSTRUCTION

Build fin in 2 clamshell halves.
Cover with 1/16" sheet balsa.
Install Robart hinges.
Glue clamshell halves together.

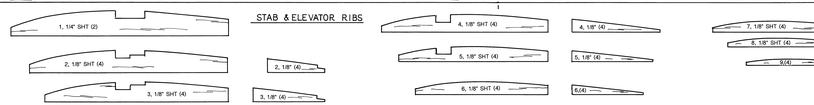








STAB & ELEVATOR RIBS



SHEET 3 OF 5

MITSUBISHI Ki-15 "*Babs*"

DESIGNED AND DRAWN BY DAVID P ANDERSEN

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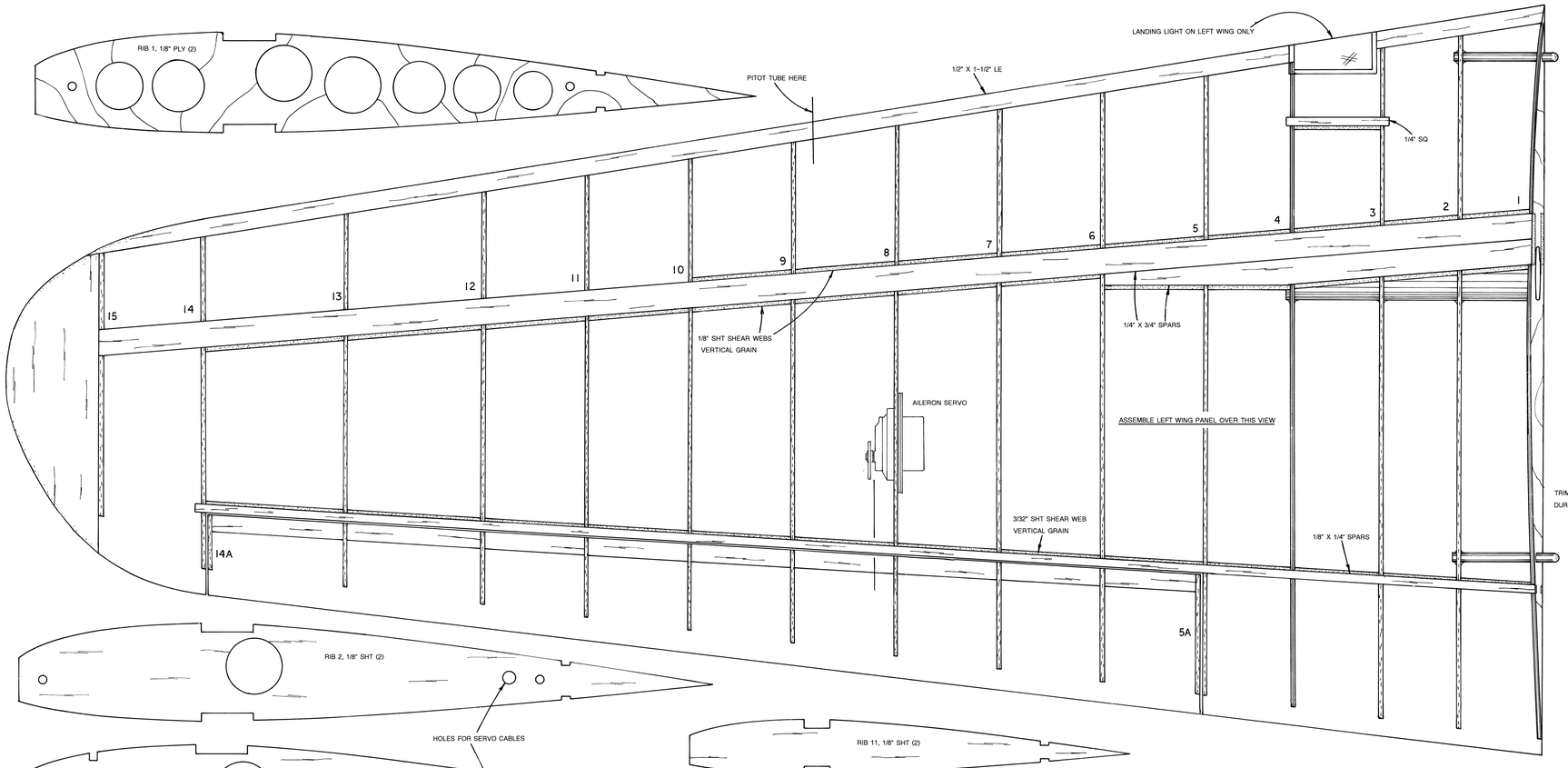
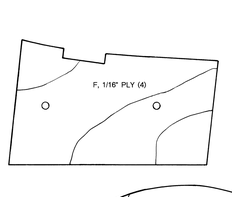
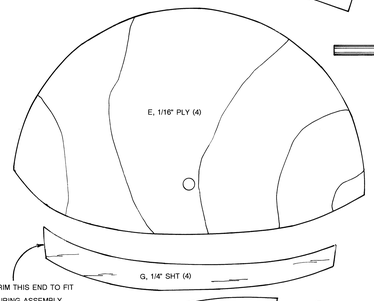
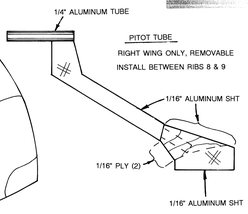
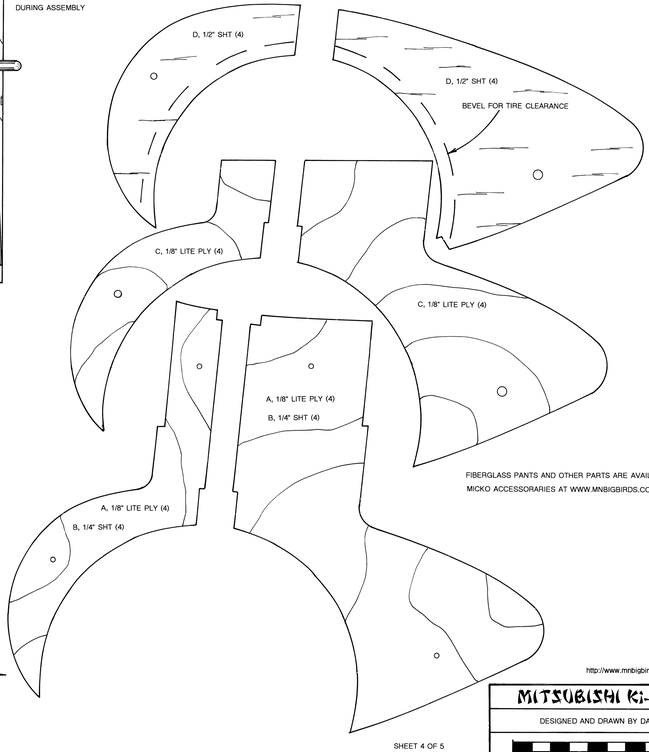


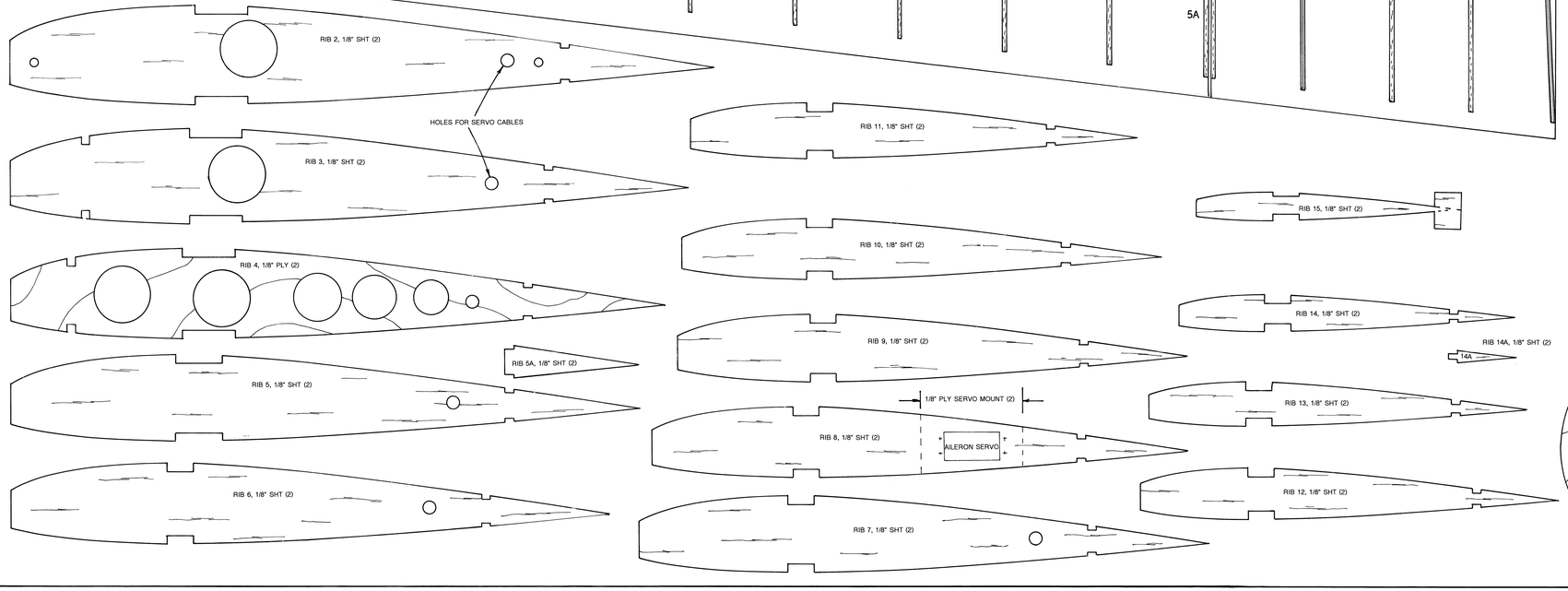


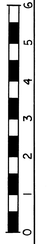






FIBERGLASS PANTS AND OTHER PARTS ARE AVAILABLE FROM MICKO ACCESSORARIES AT WWW.MNBIGBIRDS.COM





http://www.mnbigbirds.com

MITSUBISHI Ki-15 "*Babs*"

DESIGNED AND DRAWN BY DAVID P ANDERSEN

F7, 1/8" LITE PLY

F7, 1/8" LITE PLY

F6, 1/8" LITE PLY

F6, 1/8" LITE PLY

F5, 1/4" SHT
F4, 3/16" SHT
F3, 3/16" SHT

F5, 1/4" PLY | F4, 3/16" SHT | F3, 3/16" SHT

F5

F5

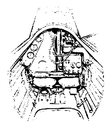
F3 & F4

3/8" DIA

F3 & F4 | F5

INSTRUMENT PANEL, ATTACH TO F8

CANOPY FRAME DOUBLER, F8 & F10
1/8" SHT, MAKE 4



REMOVE AFTER ASSEMBLY

F9

F9

MOUNT INSTRUMENT PANEL HERE ON F8

F8, F9, F10—1/8" LITE PLY

F8 ONLY

1/8" SHT FLOOR TO SUPPORT PILOT BUST, F9 – F10

F8, 1/8" LITE PLY

F11, 1/8" LITE PLY

F9, 1/8" LITE PLY

1/8" SHT (2)
F8

F11,
1/8" LITE PLY (2)

F9,
1/8" SHT (2)

WING SADDLE SUPPORT, 3/4" SHT (2)

WING SADDLE DOUBLER,
3/4" SHT (2)

F12 DOUBLER, 1/8" SHT (2)

12

F12, 1/8" LITE PLY

NB: CUT NOTCHES IN CANOPY FRAME DOUBLERS
AFTER GLUING TO CANOPY FRAME

1/8" X 1/4" HARDWOOD
CANOPY STRINGERS, TYP

F11, 1/8" LITE PLY

V1, 3/8" SHT (2)

BEVEL

V2, 3/32" SHT (2)

RUDDER SERVO
HERE

V3, 1/16" PLY (1)

REMOVE AFTER INSTALLATION
FOR ELEVATOR CLEARANCE

F14 1/2, 3/32" SHT

F14 DOUBLER, 1/8" SHT (2)

14

REMOVE AFTER ASSEMBLY

F14, 1/8" LITE PLY

REMOVE AFTER ASSEMBLY

F13

F13, 1/8" LITE PLY

F13, 1/8" SHT

FIN PLATFORM, 1/8" LITE PLY

F16, 1/8" SHT

F16, 1/8" SHT

1/8" FRONT SHEETING SUPPORT

15

3/32"

1/8" X 1/4" REAR SHEETING SUPPORT

FRONT SHEETING SUPPORT

F15, 1/8" SHT

F15, 1/8" SHT

CLEARANCE FOR RUDDER PUSHROD

F20, 1/8" PLY

REMOVE AFTER ASSEMBLY
FOR P/R CLEARANCE

F19, 1/8" SHT

F19, 1/8" SHT

F18, 1/8" SHT

REMOVE MATERIAL AFTER INSTALLATION
AS REQ'D FOR RUDDER PUSHROD CLEARANCE

F18, 1/8" SHT

F17A, 1/8" SHT

F17, 1/8" SHT

1/16"

RUDDER SERVO CABLE

F17, 1/8" SHT

0 1 2 3 4 5 6

MITSUBISHI Ki-15 "*Babs*"

DESIGNED AND DRAWN BY DAVID P ANDERSEN 2010

0 1 2 3 4 5 6