Caution: The prototype Ki 45 differed from production versions in many subtle ways – landing gear, armament, door shape, canopy shape, cowl, wing filet, etc..

This model represents the last of many production versions. Be careful when selecting documentation photos.

A complete construction article with scale documentation and parts list on DVD plus molded parts are available from Micko Aircraft. See www.mnbigbirds.com.

Ki 45 DRAGON SLAYER, "Nick"

Designed and drawn by David P. Andersen

June 2012 Sheet 1 of 7

WWW.MNBIGBIRDS.COM


CARB AIR INTAKE HOLE, DA 50 ONLY
THIS LITTLE HOLE SAVES 1 OZ OF TOTAL WEIGHT
N7, 1/4" PLY (2)
G45 ENGINE, MOVE FIREWALL BACK 5/16"
FOR OTHER ENGINES,
ADJUST THE LENGTH OF THE TANK BOX AS REQUIRED
FORWARD
TANK BOX TOP, 1/4" PLY (2)
LANDING GEAR BASE, 1/4" PLY (2)
BEVEL TO MATCH TANK BOX BOTTOM
SIERRA KI 45 RETRACTS
TANK BOX REAR, 1/8" LITE PLY (2)
REMOVE IF LARGER TANK IS REQUIRED
G45
N5, 1/4" PLY (2)
CARB AIR INTAKE, REAR INTAKE ONLY
ASSEMBLE TANK BOX W/ EPOXY & #4 X 3/4 F.H. WOOD SCREWS
3"
FIREWALL, 3/8" PLY (2)
TAP 10-24 FOR COWL BOLTS
10-32 BLIND NUTS
REAR CARB CLEARANCE
2 1/2"
ATTACH W/ 6 #6 X 3/4" WOOD SCREWS
FORWARD
G45
TANK BOX BOTTOM, 1/4" PLY (2)
TOP
FORWARD
USE THIS PATTERN MARK COWL FLAPS AND EXHAUST PORTS
CUTOUT FOR
2 EXHAUST PORTS
CUTOUT FOR
3 EXHAUST PORTS
FORWARD
BOTTOM
0 1 2 3 4 5 6 7 8 9 10 11 12
C1
C2
C1A
REMOVABLE 3/8" PLY FIREWALL
ATTACH W/ #6 WOOD SCREWS
C2 BOLTS TO FIREWALL
W/ 4 NYLON BOLTS
3 1/4"
IGNITION MODULE HERE
DU-BRO NO. 416
16 OZ TANK HERE
(SIDE CARB ENGINES)
OR TANK HERE
(REAR CARB ENGINES)
FPE 4.2 (40 CC)
W/ STOCK MUFFLER
THROTTLE SERVO HERE
FIBERGLASS COWL, NACELLE ETC -- SEE PARTS LIST
2°
SIERRA KI 45 RETRACTS
N1, STIFFNER
60°
ATTACH FAIRING TO FLAP.
IT ROTATES INTO THE
NACELLE AS THE FLAP IS
LOWERED.
N1 (2)
1/8" LITE PLY
DIAMETER SHOULD MATCH SPINNER
TRUTURN AEROTECH
4-INCH "FRANK" SPINNER
PIANO HINGE
ENLARGE OPENING AS REQUIRED
FOR WHEEL CLEARANCE
CARB INTAKE
DA 50 CARB
EXTENDS THRU FIREWALL
SIERRA 1 1/4" STAND OFFS
EARLY VERSIONS HAD DOORS THAT WRAPPED AROUND THE
CARB INTAKE. DOOR VERSION SHOWN HERE IS LATER & SIMPLER
DA 50 ENGINE
ALTERNATIVE
SLIMLINE
SL2123
MUFFLER
DU-BRO LITE OR EQUINOX 6" DIA WHEELS
2 1/2" DIA THIN ALUMINUM HUB COVER (4)
CARB INTAKE FRONT VIEW
MODS TO SIERRA ZIROLI P-38 RETRACTS:
--SHORTEN STRUTS BY 3/4"
--REPLACE UP-NIPPLE
W/ SHORTER NIPPLE TO CLEAR STRUT
C2 3/16" PLY (2)
BOLTS TO FIREWALL BEFORE GLUING TO COWL
FIREWALL
FPE 2.4
1/8" BEVEL
C1, 1/8" LITE PLY (2)
1/8" ALUMINUM TUBING, UNPAINTED
THIN ALUMINUM SHEET
BALL DRIVER ACCESS TO COWL BOLTS
C1A, 3/4" SHT (2)
0 1 2 3 4 5 6 7 8 9 10 11 12
Ki 45 DRAGON SLAYER, "Nick"
Designed and drawn by David P. Andersen
June 2012 Sheet 2 of 7
WWW.MNBIGBIRDS.COM

Ki 45 DRAGON SLAYER, "Nick"
Designed and drawn by David P. Andersen
June 2012 Sheet 3 of 7
WWW.MNBIGBIRDS.COM

RIGHT WING

(Bottom view shown)

Wing Assembly Sequence Overview

--Assemble a center section panel inverted over the plans, ribs elevated with the upper surface washout stick. Install flap and flap servo. Sheet the lower surface. Then remove the washout stick.
--Assemble an outer panel also inverted over the plans with upper washout stick while W11 and W10 are clamped together. Remove the clamp after the glue sets. Install the aileron servo and linkage.
--Glue the aluminum wing tube in the outer panel.
--Sheet the lower surface of the outer panel.
--Turn the outer panel over. Elevate with the lower washout stick. Sheet the upper surface of the outer panel.
--Use the outer panel to align and glue the socket in the center section.
--Sheet the upper surface of the inner section while resting on the lower washout stick
--Repeat the above for the other wing.
--Join the center sections elevated as shown on the plans. Install the dihedral braces.

Ki 45 DRAGON SLAYER, "Nick"

Designed and drawn by David P. Andersen

June 2012 Sheet 4 of 7

WWW.MNBIGBIRDS.COM

LEFT WING
(Bottom view shown)
NACELLE BOX INSTALLATION
Assemble the nacelle box before assembling the wing.
Use the nacelle box to align ribs W5 and W7 but
remove the box before the glue sets.
After sheeting the top and bottom surfaces,
remove the sheeting between W5 and W7 in front
of the main spar so that the box fit can be seen.
Glue nacelle box in place after sheeting and glassing wing.
If the firewall needs to be moved rearwards to accommodate
other engines, shorten the length of N5 and N7 as needed,
omit the tank box rear wall, trim W6 for tank clearance,
and move the tank rearwards. Wrap in foam rubber.
N5
N7
16 OZ FUEL TANK HERE
3/8" DOWEL
1" X 2" LEADING EDGE
LANDING LIGHT, SOME A/C, LEFT WING ONLY
D1
D2
D3
1/2" X 1/4" H'DWOOD SPARS
REMOVE LOWER SHEETING, W5–W7, IN THIS AREA
1/4" DOWEL
Leave space for dihedral
braces when sheeting wing.
Install braces after joining
left & right wing panels.
1" X 1/2" BASSWOOD SPAR, LOWER SURFACE
1" X 1/2" BALSA SPAR, UPPER SURFACE
TILT W1 3°
USE THIS TEMPLATE
1/8" SHEAR WEB
1-3/8" O.D. PHENOLIC TUBE
W2
W3
W4
W5
W6
W7
W8
W9
W10
W1 BOTTOM VIEW SHOWN
3/32" SHEAR WEB
1/4" SQ SPARS
TRIM W6 AND SHEETING AS REQUIRED FOR WHEEL CLEARANCE
COVER WITH 1/8" SHEET
FLAP SERVO
1/4" DOWEL
3/32" SHEAR WEB
1/4" X 3/8" SPARS
PLACE WASHOUT STICK UNDER SPAR
CARBON FIBER REINFORCEMENT STRIP
1-1/4" O.D. ALUMINUM TUBE
EPOXY TO W11–W13
NOTE: INNER PANEL COVERED W' 1/8" SHT,
AND OUTER PANEL COVERED W' 3/32" SHT.
1/4" SHT SERVO MOUNT
FLAP SERVO DETAIL
Install before sheeting top surface.
Use ball link connectors.
60°
Where ancient craft no longer fly
Except in model form I
Paint a Wootton scene across the sky.
Balsa guns lay silent in wings whose only chore
Is the beauty of flight and nothing more.
Oh why must airplanes be built for war?
5/32" ALUMINUM TUBE
PITOT TUBE, LEFT WING ONLY
3/8" ALUMINUM TUBE
REMOVE FOR FLIGHT SAFETY
COVER WITH 3/32" SHT
1/2" X 1-1/2" LEADING EDGE
1/8" SHEAR WEB
WHITE
RED
WHITE
WHITE
W11
W12
W13
W14
W15
W16
W17
W18
W19
W20
AILERON SERVO
3/32" SHEAR WEB
1/4" SQ
Fill with ½" x 1" balsa
between aileron ribs
at aileron leading edge.
BALSA HINGE SUPPORT, TYP
1/8" X 1/4"
3/32" SHEAR WEB
WASHOUT STICK
ROBART HINGE POCKETS RECOMENDED (NOT SHOWN)
ROBART hinge points not shown in this view.
See other wing plan. Use 5 hinges per aileron,
every other rib bay.
AILERON SHOWN HERE BEFORE SHEETING
F6
F10
Center Section pattern, F6 – F10, 0.020" clear plastic or 1/64" ply.
Cut slightly oversize and trim to fit canopies during assembly.
Apply masking tape to windows before gluing in place.
0 1 2 3 4 5 6 7 8 9 10 11 12
Ki 45 DRAGON SLAYER, "Nick"
Designed and drawn by David P. Andersen
June 2012 Sheet 5 of 7
WWW.MNBIGBIRDS.COM

Before installing F1-F4, install F5a. With wing in place, drill 3/8" holes thru the wing L.E. using these holes as guides. Remove the wing and install the wing dowels in it.

Ki 45 DRAGON SLAYER, "Nick"

Designed and drawn by David P. Andersen

June 2012 Sheet 6 of 7

WWW.MNBIGBIRDS.COM

Ki 45 DRAGON SLAYER, "Nick"

Designed and drawn by David P. Andersen

June 2012 Sheet 7 of 7

WWW.MNBIGBIRDS.COM