WING CONSTRUCTION:
LP III MAY BE BUILT WITH OR WITHOUT DIHEDRAL. ZERO DIHEDRAL WILL MAKE LP III VERY SENSITIVE TO THERMALS, BUT IT WILL HAVE TO BE FLOWN ALL THE TIME. WITH DIHEDRAL, IT WILL BE SOMEWHAT STABLE IN TURNS AND NOT REQUIRE CONSTANT ATTENTION. DECIDE ON ELEVONS OR INDEPENDANT ELEVATOR AND AILERONS. PILOT'S CHOICE.

LEFT WING: REMOVE 1/16" FROM ONE EDGE OF 3/8" TRI. LEADING EDGE. TRUE ONE EDGE OF 1/16" X 4" BOTTOM SHEETING AND GLUE TO LE. PIN LOWER SHEET WITH LE TO BUILDING BOARD AND USE RIBS TO POSITION AND MARK LOCATION OF LOWER SPAR CAP. GLUE SPAR CAP TO LOWER SHEET. CONSTRUCT REMAINDER OF LOWER CENTER SECTION AND TE SKIN USING RIBS TO LOCATE POSITION OF REAR SPAR CAP AND TE. ADD CAP STRIPS. GLUE REAR SPAR CAP IN PLACE. GLUE RIBS AT LOWER SPAR CAP ONLY. ELEVATE LE AND TE WITH SHIMS OR LENGTHS OF TE STOCK. GLUE SHEETING, LE, REAR SPAR CAP, AND TE TO RIBS WITH CA.

ALL TOP SHEETING, SPARS AND STRIPS OMITTED FOR CLARITY OF WING CONSTRUCTION

1/4" X 1/8" SPRUCE SPAR CAPS.

3/8" X 1/8" FOR EXTREME WINCH LAUNCHING.

SHEAR WEB BETWEEN CAPS 3/32" BALSA. ALL BAYS EXCEPT WHERE NOTED.

INDICATES 1/16 SHEET TOP AND BOTTOM

NOTE: TWO BOLT WING ATTACHMENT IS ADVISED FOR WINCHI LAUNCHING. FOR HIGH START OR HAND LAUNCH, THE REAR BOLT AND LEADING EDGE DOWELS ARE ADEQUATE. THE LE DOWELS ARE NOT REQUIRED WHEN USING THE TWO BOLT SYSTEM.

FILLER BLOCK. EPOXY TO SPAR CAPS AND WEB.

BALSA OR PLY WEB

WORK CAREFULLY ENSURING GOOD CONTACT BETWEEN RIBS AND SHEETING.

ADD FRONT AND REAR SPAR WEBS. GLUE FRONT AND REAR UPPER SPAR CAPS IN PLACE. ADD DIHEDRAL BRACES AND INTERNAL SUPPORT BLOCKS DEPENDING ON WING ATTACH METHOD SELECTED. SAND UPPER TE CONTOUR. GLUE UPPER SKIN AND CAP STRIPS IN PLACE. ELEVATE TIP OF COMPLETED LEFT WING AND BUILD RIGHT WING.

INSERT ANTENNA TUBE BEFORE SHEETING TOP OF RIGHT WING! LEAVE ENOUGH ANTENNA TUBE AT TIP TO EXIT WING TIP BLOCK.

CONTROL SURFACES ARE HINGED AT TOP USING COVERING FILM OF CHOICE. APPLY HINGE STRIP TO TOP SURFACE AND INSIDE HINGE GAP TO PREVENT SEPARATION UNDER LOAD.

HS-81

1/4" X 1/16" CAP STRIPS.

HS-81

3/32" LITE PLY MOUNTING PLATE. BOTH SIDES.

1/8" PLY DIHEDRAL BRACE.

DIHEDRAL GUAGE

EPOXY FILLER BLOCK TO DIHEDRAL BRACE

1/8" SQ. SPAR CAPS.

3/32" REAR SPAR SHEAR WEB ALL BAYS.

1/8" PLY DIHEDRAL BRACE.

1/8" PLY DIHEDRAL BRACE.

3/32" DOUBLERS

BALSA BLOCK

RIBS AND RIB DOUBLERS ARE 3/32" SHEET EXCEPT WHERE NOTED.

ANTENNA TUBE

ALL WING SKIN 1/16" TOP AND BOTTOM

CARVE TIPS FROM SOFT BALSA BLOCKS.

HS-81

LE TEMPLATE

3/32" DOUBLERS

1/8" SQ. SPAR CAPS.

TRAILING EDGE 1/4" SQ.

3/32" SHEET 16 REQ.

DIHEDRAL BRACES 3/32" PLY.

cut after assembly

cut after assembly

FUSELAGE ASSEMBLY:

GLUE TOW HOOK MOUNTING BLOCK IN AFT BOTTOM SHEET. GLUE BOTTOM TWO BOTTOM PIECES TOGETHER. GLUE SIDES TO BOTTOM BLOCKS. GLUE DOUBLERS TO SIDES. TRIM EDGE OF TRIANGLE STRIPS AND GLUE TO SIDES. GLUE SIDES TO BOTTOM. IT'S USEFULL TO CUT SOME FALSE FORMERS FROM SCRAP TO ENSURE THAT SIDES REMAIN PARALLEL. INSTALL FUSELAGE FORMERS. INSTALL PLY TOW HOOK MOUNTING PLATE.

CUT HATCH BLOCK TO SIDE PROFILE. DRILL HOLE FOR 1/8TH DOWEL USING HOLE IN FRONT FORMER AS GUIDE. GLUE DOWEL IN HATCH BLOCK.

CUT HATCH LOCATOR TO FIT BETWEEN FUSELAGE SIDES AND GLUE TO BOTTOM OF HATCH BLOCK. DO NOT GLUE TO FUSELAGE SIDES.

GLUE NOSE BLOCK IN PLACE AND FINISH SHAPING FUSELAGE AND HATCH.

GLASS FUSELAGE AND HATCH WITH 3/4 OZ. CLOTH IF DESIRED. PLACE CLOTH ON WOOD AND SQUEGEE LAMINATING EPOXY THROUGH CLOTH. WHEN SET APPLY SECOND COAT OF EPOXY. COVER NOSE AREA WITH SMALL OVERLAPING PIECES OF CLOTH. USE LEAST AMOUNT OF EPOXY THAT WILL WET CLOTH FOR A TOUGH LIGHT FINISH.

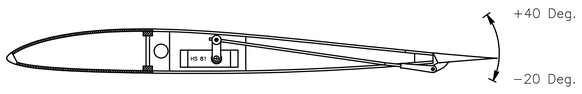
INSTALL HATCH BLOCK AND SCREW AFTER HATCH HAS BEEN SHAPED AND HOLLOWED.

FLIGHT EQUIPMENT:

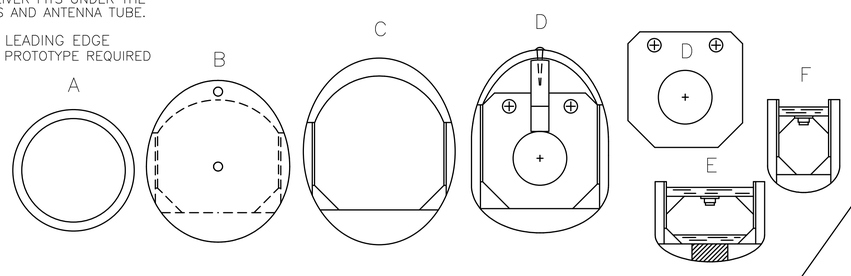
POWER: 150W – 200W MOTOR WITH 12" FOLDING PROP.

A 1500 MAH 3 CELL LI POLY BATTERY WITH 25 AMP. SPEED CONTROLLER AHEAD OF THE WING. THE RECEIVER FITS UNDER THE WING FOR EASY ACCESS TO THE SERVO LEADS AND ANTENNA TUBE.

START WITH THE C.G. 3" FROM THE WING LEADING EDGE AND TOWHOOK 2.6" FROM WING LE. THE PROTOTYPE REQUIRED NO LEAD IN THE NOSE TO BALANCE.



USE TITEBOND OR OTHER ALPHATIC RESIN GLUE EXCEPT WHERE NOTED.



WING BOLT AT SPAR SUGGESTED FOR EXTREME ZOOM LAUNCHES. LE DOWELS ARE ADEQUATE FOR MODERATE ZOOM.

8 – 32 STEEL WING BOLTS.

HATCH LOCATOR

Park 450

SKID, 4 LAM. 1/16 X 1/4 SPRUCE.

Park 450

SKID 1/8" PLY.

SIDE 1/8 SHEET

DOUBLER 1/32 PLY.

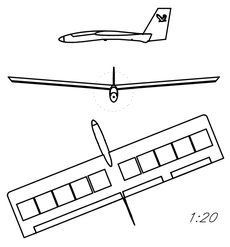
FWD. BOTTOM 1/2 SHEET

MID. BOTTOM 1/4 SHEET

AFT BOTTOM 1/4 SHEET

LITTLE PLANK III

SPAN	60"
CHORD	13.3"
LENGTH	23.6"
AREA	802 Sq. In.
ASPECT RATIO	4.5
AIRFOIL	EH 15090
WEIGHT RTF	32.5 Oz.
POWER	Park 400 Outrunner
PROPELLER	AeroNaut CAM 12 x 6.5
BATTERY	1500 mah Li Poly



DESIGN AND PLANS BY CHUCK CLEMANS

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Note: This is an experimental aircraft and the modeler assumes full responsibility for any model built using these plans.