WHAM

NEWS, VIEWS, and REVIEWS

Official Publication of the
Wichita Historical Aircraft Modelers, SAM 56, and
the Kansas Sunflower Squadron, FAC Squadron #23

Sunflower Squadron
Wichita, KS

Issue JE2-25
July, 2025

Indoor Motor Adjusting

by Jack McGillivray From the Internet

The object is to utilize the maximum number of turns wound into the rubber motor during an efficient flight. It should land upon the floor, just as all the turns are used up. The following are the methods of achieving this:

Problem #1: Model runs out of turns above the floor (Overpowered)

Solutions:

A: Use another motor with a smaller cross-section, maintaining or increasing it's overall length.
B: Use another motor with the same cross-section, but with increased length.
C: Increase the propeller pitch, and/or prop diameter.
D: If the motor is new, the problem will diminish somewhat on the next flight.

Problem #2: The model lands upon the floor with unused turns left in the motor (Under powered)

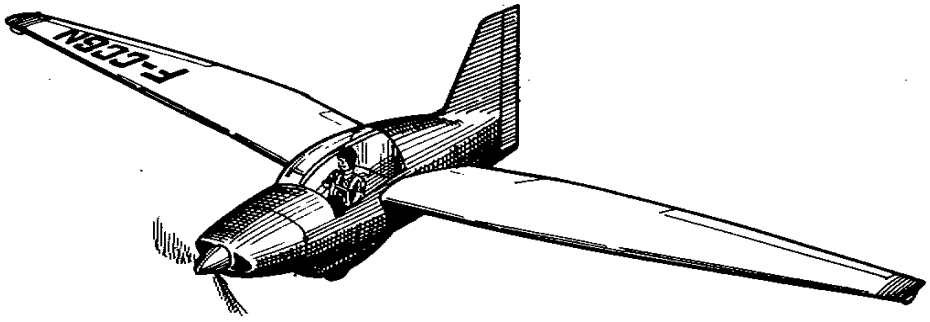
Solutions:

A: Shorten the existing motor.
B: Use another motor with a larger cross-section, maintaining or shortening it's overall length.
C: Decrease propeller pitch, and/or propeller diameter.

Other factors:

If possible, the motor should exceed the airframe weight, but should not exceed double the airframe weight. On many models, though, motors this heavy cannot be utilized because of the high wing loading. When the motor length exceeds the motorstick length by more than 2.5 times, vibration or rubber bunching can occur, spoiling the flight due to CG shift, and/or prop stoppage.

With each successive windup of the motor, power output will fall, particularly when maximum turns are applied, and insufficient rest periods are allowed between windings.



FAUVEL AV.221B French all-wood, side-by-side, two-seat flying wing sailplane powered by 50-h.p. Pygmee engine has 26:1 glide ratio at 53 m.p.h. with feathered propeller.

May 17, 2025 Meeting Minutes

ATTENDEES:
Jeff Englert, Linda & Chuck Powell, Marlene Hayes & Ed Salguero, Marilyn & Bill Schmidt, Dave Wiebe

President Powell called the meeting to order; Minutes were approved as delivered.

Treasurer's report reported a positive balance.

OLD BUSINESS:

Reviewed past items.

NEW BUSINESS:

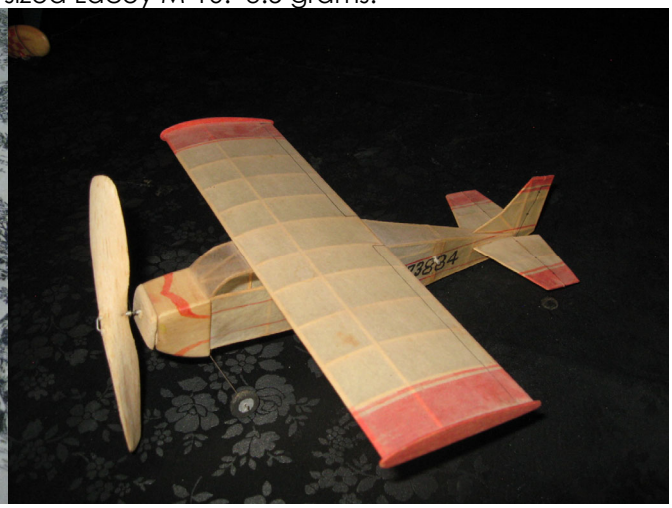
Discussed the upcoming Texas contests (subsequently cancelled)..

SHOW AND TELL:

Dave Wiebe displayed clipped wing Taylorcraft. Built from the Bell kit of Duanne Cole's ship. Dave matched the covering to his real plane., which matches a chase plane from the 1939 National Air Races.

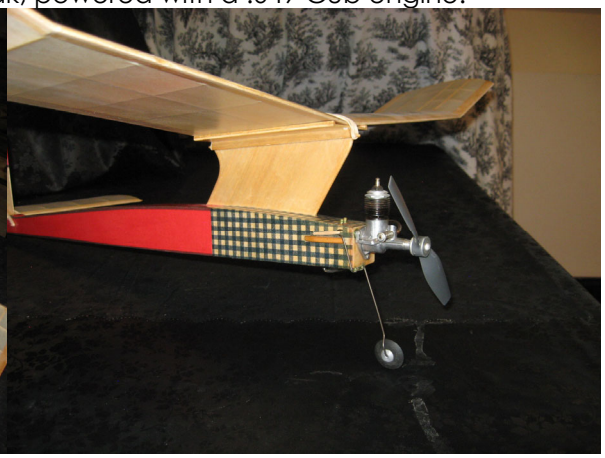



Chuck Powell showed his 35 year-old Pistachio sized Lacey M-10. 3.5 grams!

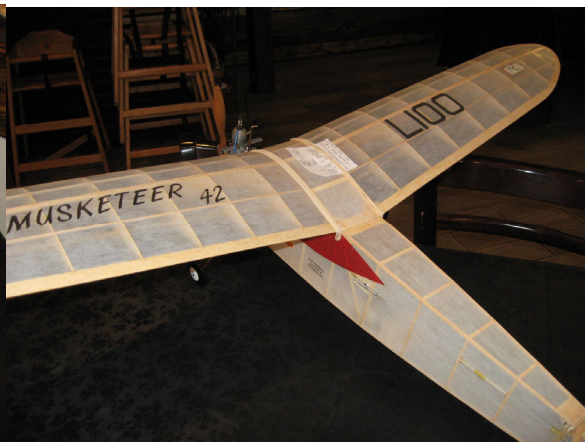
Ed Salguero displayed 45 year-old 1/2A Jasco Streak, powered with a .049 Cub engine.





Bill Schmidt presented a 1939 Berkley Musketeer. The 42 inch wingspan model is powered with a repro Syncro Bee engine, standard ignition set-up.





WICHITA HISTORICAL AIRCRAFT MODELERS
SAM 56

FLYING ACES
Sunflower Squadron
Wichita, KS

The next SAM 56 Dinner Meeting will be at:

Mediterranean Grill

335 S Towne East Mall Dr., Wichita, KS 67207
(316) 651-5599

Saturday, July 12, 2025

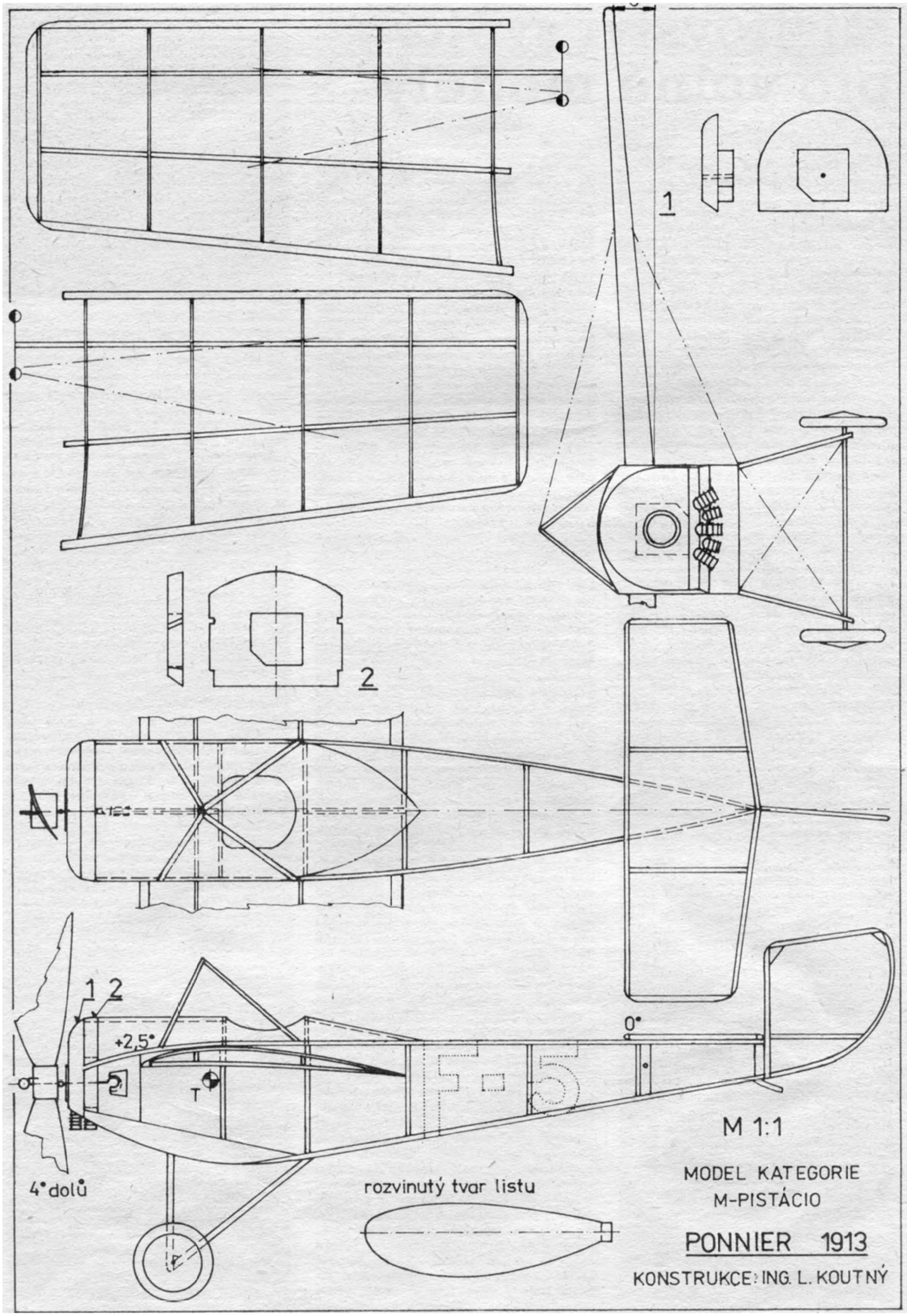
Social Hour @ 6:00 PM, Dinner @ 6:30 PM...

Upcoming events:

Membership Information:

Open to all interested AMA members, founded to encourage and promote model airplane building.

Member dues $20 annually, Subscription only; $12 annually, $18 foreign


1
2
+2,5°
0°
T
4° dolů
rozvinutý tvar listu
M 1:1
MODEL KATEGORIE
M-PISTÁCIO
PONNIER 1913
KONSTRUKCE: ING. L. KOUTNÝ

2·5 SHT. FACING RIB. SAND TO DIHED. & CURVE OF FUSELAGE

2·5x2·5 L.E

SPAR DOUBLERS

3x3 FULL DEPTH OF RIB.

6x1·5 SPAR

3x1·5 SPAR

2·5x9 T.E

1·5 SHT. MED. TIP

3° DIHEDRAL UNDER EACH TIP

OPTIONAL ·8 SHT RIBS

CONDENSERS ~ MAKE UP FROM ·4 PLY & FIX TO FUSE. BETWEEN SPAR POSITIONS.

UNDERCARRIAGE PARTS X & Y 20S.W.G. PART Z 26 S.W.G.

SECTION A-A

SOFT 2·5 SHT. ROUND OFF

TAILPLANE ·8 SHT SOFT

1·5 x ·8 STRIPS TOP ONLY

NOTE GRAIN DIRECTION ON ELEVATORS

SCALE PROP

4 LAMS ·4 PLY + 2 DISCS OF ·8 PLY

THESE 3 BAYS LINED W/ ·8 SHT ~ GRAIN VERT.

·8 SHT DOUBLER

RT. THRUST AS REQ'D

DUMMY ENGINE FROM SOFT BALSA.

HEADER TANK SOFT BALSA W/PLY SUPPORTS.

14 S.W.G. ALI. TUBE SQUEEZED TO OVAL SECTION.

BLACK PLASTIC TUBE COCK ~ PIT LINING

GAS TANK SUPPORT ~ 3 CROSS LAMS. ·8 SHT.

ROOT WING SECTION

TIP WING SECTION

WING RIBS 1·5 SHT SOFT

1·5 SHT MED

SLOT FOR TAILPLANE

4° DOWN-THRUST

WEDGE TO HOLD TANK IN POSITION

SILVER FINISH TO HERE

NATURAL PLY FINISH

SIDES & BOTTOM SHEETED W/ ·4 PLY

LONGERONS & SPACERS 2·5 x 2·5

CROSS BRACING ~ BLACK THREAD

CLING ~ FILM

26 S.W.G. SKID

FIN ·8 SHT SOFT. 1·5 x ·8 EACH SIDE

TEMPLATE FOR SETTING WING POS'N

ALL DIMENSIONS ARE IN MILLIMETERS

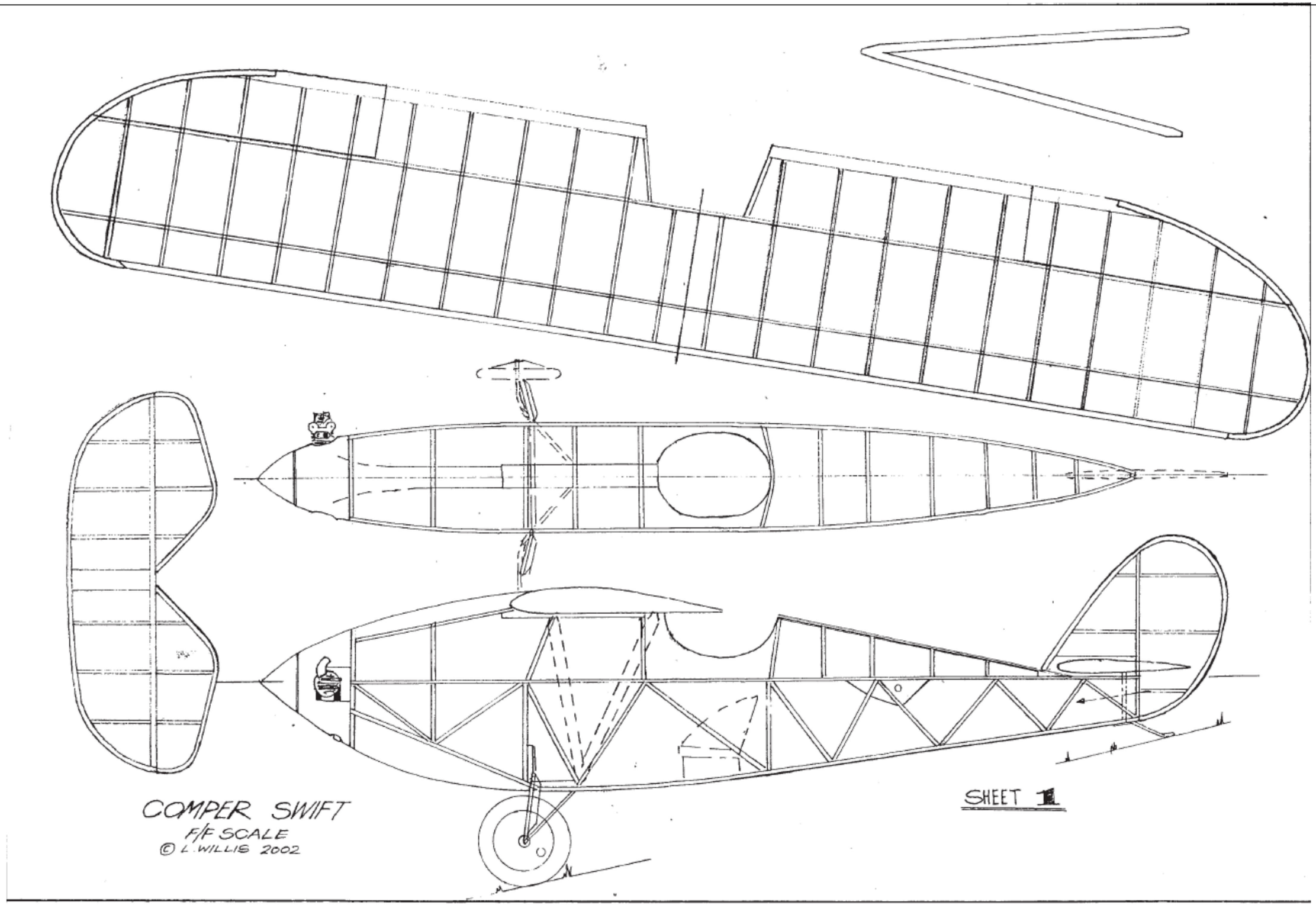
SKID ~ FOR DISPLAY ONLY 3 LAMS. ·8 x 5 PLY. CLIPS TO U/C LEGS, MAIN AXLE & TO HOLE IN FUSELAGE NOSE.

ϕ30 PLASTIC WHEELS

Aero Modeller ★ Centre Spread

Full Size Plans

by W.D. Binns



COMPER SWIFT

F/F SCALE

© L. WILLIS 2002

SHEET 1

C CUT 18 OF 1/32 BALSA

A CUT ONE 1/16, FOUR 1/32

B CUT TWO OF 1/32 BALSA

MANY PITTS SPECIALS SPORT BLACK OR BLUE "GULFHAWK" STRIPES AND ALTERNATE BANDS OF WHITE AND BASE COLOR ON THE TOP OF THE TOP WING AND TOP OF STABILIZER. IF YOU'RE UP TO THE CHALLENGE WHY NOT DOLL YOURS UP TOO ?

(WHITE)

(WHITE)

21/32 R.

D CUT TWO OF 1/16 & 14 OF 1/32 BALSA

1/4 BALSA 2 REQ'D.

ALL FLYING SURFACE OUTLINES ARE PREFABRICATED BY FORMING TWO WATER-SOAKED TITEBOND GLUED 1/16 X 1/32 BALSA STRIPS AROUND A WAXED CARDBOARD OR METAL FORM. THIS METHOD HELPS MAINTAIN A TRIM, LIGHTWEIGHT WARP-RESISTANT STRUCTURE THAT SIMULATES THE STEEL TUBE CONSTRUCTION OF THE FULL SCALE CRAFT.

3/32 BALSA 4 REQ'D.

USE TECHNICAL PEN OR 1/64 STRIPING TAPE TO DEFINE CONTROL SURFACES

1/16 X 1/32 BALSA

MOTOR HOOK LOCATION

1/16 SQ. BALSA

1/16 SHEET BALSA

(WHITE)

(WHITE)

THIS MODEL IS BASED UPON A DRAWING OF THE PITTS SPECIAL BY BJORN KARLSTROM, AVAILABLE FROM W.C. HANNAN, GRAPHICS. SINCE THE PITTS SPECIAL IS A "HOME-BUILT" AIRCRAFT CONSIDERABLE VARIETIES ABOUND SUCH AS WITH CESSNA LANDING GEARS, BUBBLE CANOPY AND AILERONS ON ALL WING PANELS. CHECK THE PAGES OF "SPORT AVIATION" (JOURNAL OF THE E.A.A.) OR OTHER POPULAR AVIATION MAGAZINES FOR DETAILS WHICH CAN BE APPLIED TO THIS MODEL WITHOUT DETRACTING FROM ITS SCALE AUTHENTICITY.

Peanut Pitts

FOR REAL NUTS!

A FLYING SCALE REPLICA OF THE PITTS SPECIAL 3/4 inch=one foot

drawn March, 1971, for
W. C. Hannan, Graphics, Escondido, California 92025
by nutty David W. Jones, Cave Creek, Arizona 85331

1-2

ALL WING RIBS 1/32 BALSA EXCEPT CENTER TOP AND ROOT LOWER WING RIBS WHICH ARE 1/16 BALSA

DOUBLE COVER WING LEADING EDGE, TOP AND BOTTOM, BACK TO HERE TO SIMULATE PLYWOOD CAPPED LEADING EDGE ON FULL SCALE CRAFT

1/16 SQUARE IS ATTACH POINT FOR INTERPLANE STRUT

A

31/32 R.

PAPER FILLETS FOR LOWER WING — 2 OF EACH REQ'D.

TOP SURFACE

BOTTOM SURFACE

D

INTERPLANE STRUT MOUNTS TO THIS RIB — TOP WING HAS NO DIHEDRAL SO STRUT IN POSITION DETERMINES DIHEDRAL OF LOWER WING PANELS

A

1-1/16 R.

NOTE HOW LAMINATIONS ARE SHAPED TO FORM WHEEL PANTS

LANDING GEAR STRUT 1/16 BALSA — 2 REQ'D. NOTE NOTCHES FOR RIGGING "WIRES"

DIAGONAL STRUT

REAR STRUT

ALL WIRE PARTS .025 MUSIC WIRE

2a 1/16 BALSA

2b

2b

3a 1/32 BALSA

1/16 BALSA

2c

THIS STRUT TOUCHES BUT IS NOT ATTACHED TO 2c TO ALLOW LANDING GEAR SPRING ACTION

CAREFULLY BEND COMBINATION FRONT STRUT AND LANDING GEAR WIRE TO THIS SHAPE AND GLUE TO 2a SEE SIDE VIEW.

LEADING EDGE OF FIN

6b 1/32 BALSA

1a 1/16 BALSA

STIFFEN EDGE OF PILOT PIN HOLE WITH EPOXY FILM

PROPELLER BLADES (2) OF .008 CELLULOID. USE BLACK PAINT TO REPRESENT SCALE SIZE PROPELLER.

USE THREAD OR FINE WIRE FOR WING RIGGING WIRES. NOTE THAT THEY ARE IN PAIRS SPACED 3/32. 1/32 SQUARE BALSA RIGGING BRACE CUT 1-1/4 LONG IS GLUED BETWEEN THE WIRE PAIRS WHERE THEY CROSS AND IS ALIGNED PARALLEL TO FUSELAGE CENTERLINE.

3b 1/32 BALSA COCKPIT "DECK" PAINT DULL BLACK

4a 1/32 BALSA

INTERPLANE STRUT 1/16 BALSA — SAND TO STREAMLINED SECTION — NOTE NOTCHES FOR RIGGING "WIRES" 2 STRUTS REQ'D.

5a 1/32 BALSA

6a 1/32 BALSA

EPOXY WIRE STRUTS TO TOP WING

SAND 3/8 BALSA NOSE BLOCK TO BLEND WITH STIFF PAPER COWL

1a TOP LONGERON EXTENDS 1/16 INTO BULKHEAD 1a

2a

1b

FUSELAGE COVERED WITH STIFF PAPER ON TOP BACK TO 6a, ON THE SIDES BACK TO 3a AND THE BOTTOM BACK TO 2a. COVER ENTIRE FUSELAGE WITH COLORED JAP TISSUE. HINT: ATTACH STIFF PAPER WITH RUBBER CEMENT TO AVOID DISTORTIONS DUE TO SHRINKING GLUE.

THIN CELLULOID WINDSCREEN

TRIM EDGES WITH TISSUE

1b 1/16 BALSA 2 REQ'D.

INSTALL FAVORITE PILOT

3b

4a

5a

NOTE THAT VERTICAL TAIL IS REMOVABLE AS A UNIT FOR ACCESS TO REAR MOTOR HOOK. TWO PILOT PINS HOLD IT IN PLACE. LOWER PIN IS PART OF TAIL WHEEL WIRE FORM.

HOLE

1/16 X 1/32 BALSA

6a

6b

.025 WIRE PILOT PIN AND REAR MOTOR HOOK

1/16 SQUARE BALSA

1/8 ALUMINUM TUBE EXHAUST STACKS

RIGGING BRACE

1/16 X 1/32 BALSA FRAME VERTICAL

ALL STRINGERS (6) 1/16 X 1/32 BALSA

1/16 X 1/32 BALSA FRAME VERTICALS

TWIST FOR HELICAL PITCH AND CAMBER

3/4 INCH DIAMETER PEANUT-SIZE SMOOTH CONTOUR WHEELS AVAILABLE FROM W. C. HANNAN, GRAPHICS — FIRST CLASS

2c

3a

FOR BEST STABILITY MODEL MUST BALANCE ON OR IN FRONT OF LOWER WING LEADING EDGE

LOWER WING TRAILING EDGE LOCATION

SPINNER IS CUT DOWN BALSA MODEL ROCKET NOSE CONE. 1/16 ALUMINUM TUBE IS EPOXIED THROUGH CENTER. CUT SPIRAL FREE WHEELING CAM AT TIP OF SPINNER. SLOT SPINNER AT 45 DEGREES TO RECEIVE CELLULOID PROPELLER BLADES. THRUST PLUG IS 13/32 LENGTH OF 1/4 DIAMETER HARDWOOD DOWEL WITH 1/32 HOLE THROUGH CENTER TO FIT .025 MUSIC WIRE PROP SHAFT

SIDE FRAMES CONSTRUCTED OF 1/16 SQUARE BALSA EXCEPT FOR THE THREE VERTICALS INDICATED WHICH ARE 1/16 X 1/32 BALSA. PART 1b IS BUILT INTO THE SIDE FRAMES.

MAJOR DEVIATION FROM SCALE IS USE OF FLAT BOTTOMED WING AIRFOIL. TAIL AND STABILIZER SIZE, LANDING GEAR LENGTH, DIHEDRAL AND RIB SPACING ARE PROPERLY REPRESENTED.

BEND TAIL WHEEL (SKID) WIRE FORM ACCURATELY, GLUE IN PLACE AND FABRICATE WHEEL, FORK, SPRING AND FAIRING OF SCRAP BALSA, PAPER AND GLUE. PAINT NEATLY.