

CESSNA AGWAGON

By Gil Horstman

AN EASY-TO-BUILD, EASY-TO-FLY MODEL OF THE
POPULAR 1966 OR 1968 CESSNA AGRICULTURAL WORKHORSE

Picture this for a moment; you want to build a scale R/C model with a wing span of approximately 5' to 6'. You know that your favorite model has been built over and over, so many times it's almost assured that every scale contest will have at least one entered in competition. You want to be original, maybe different is a better word, so a trip to the local airport is in order. There are many good subjects, but the one that caught my eye was the Cessna Agwagon. Here is an airplane that certainly is **different**. I had not seen any of the Ag planes built as an R/C scale model, so the Agwagon was my choice.

Upon request, Cessna sent along three view drawings and color pictures of their 1966 Agwagon. I picked the 1½" to 1' scale so that I would end up with a 5' wingspan. I have mixed emotions about big airplanes, after working with Eddie Morgan and his 9-foot "Cubs" in years past, so that's why the 5-foot span.

After flying Formula I racing with some success using a Stafford "Midget Mustang," I used my superior aerodynamic engineering skills and deduced that my Cessna should fly as well as the Mustang because wing area, tail area, and power were identical. I went so far as to even use Jack's method of construction. By the way, this model is as close to true scale, dimension wise, as I could compute it, which goes to prove that scale tail will fly. (*What? . . . Ed.*)

If you don't already have a Stafford kit, you should rush out and buy one because Jack has the instructions for building my Cessna down pat. I guess after building at least one each of all of his kits, I have the system down pat myself.

The fuselage is very easy to build. It only has five formers and seven other pieces. The cowling was somewhat of a job for me. Living in the backwoods (*Las Vegas . . . backwoods? - Ed*) it is hard to get up to date on the fiberglass

techniques, etc., but with the help of one Kent, I have a nice fiberglass cowling.

The tail is simply cut out of ¼" sheet and sanded to shape. If you have ever built a Formula I racer, you know how to do this.

The wing on my plane is built up and sheeted with 3/32" contest balsa. It has to be built in three pieces or on a special jig set up for it. By using the root and tip ribs, a foam core could easily be cut, I'm sure.

The cabin was carved from a balsa block and hollowed. On the 1968 model Agwagon, Cessna has put windows all around the back for 360 degree visibility; so take your pick of 1966 or 1968 models. The windshield and side windows are installed exactly like it is on the Goldberg Skylane and it works out nicely.

That brings us to the finish. I'll tell you all I know about finishing models (?). Wow! In other words, use the finish of your choice.





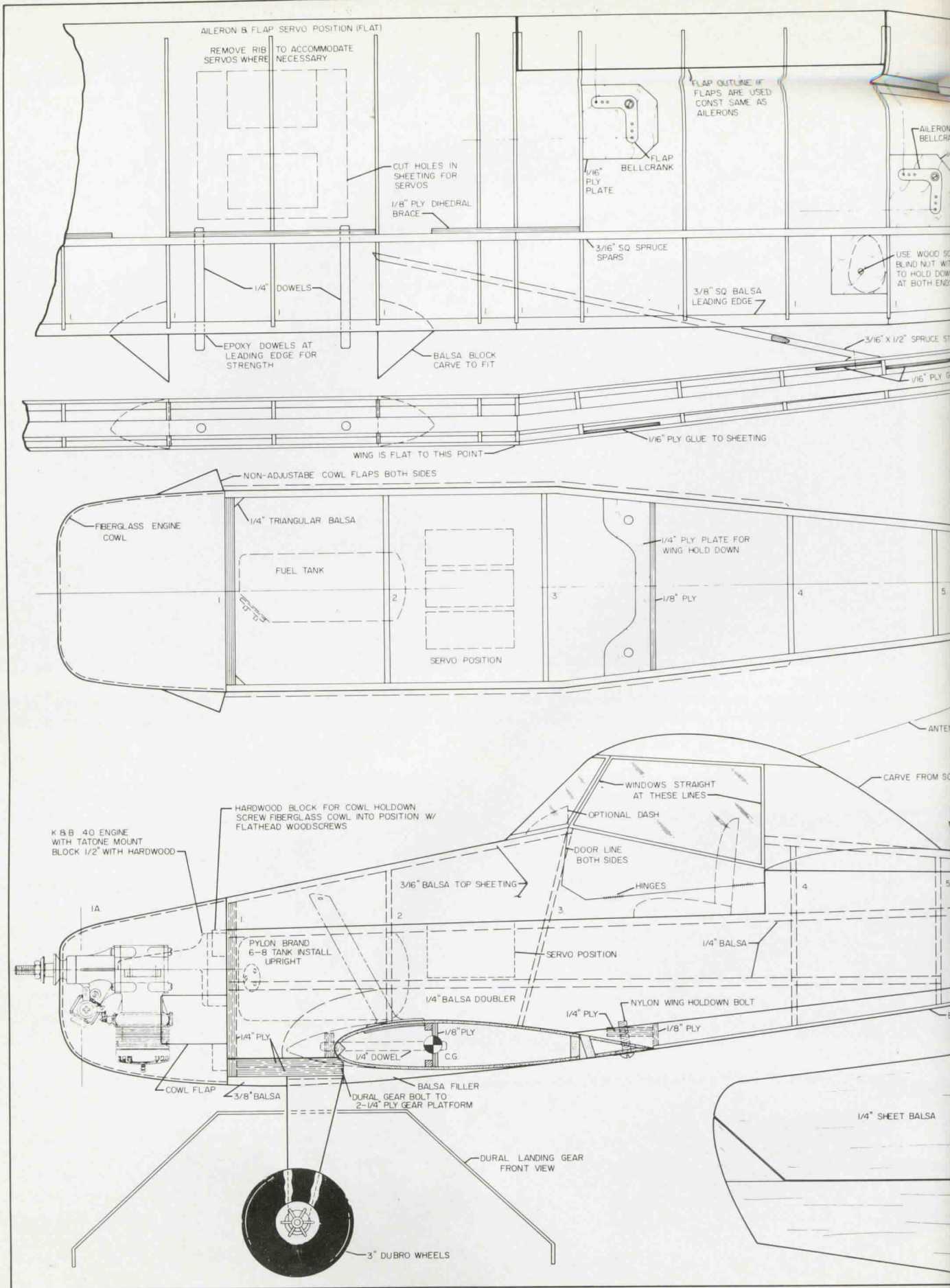
ABOVE: A beautiful photograph of Gil Horstman's 1966 Cessna Agwagon in front of the powerful, full-size 1968 version at a Las Vegas airport. Model is simple to construct and an ideal first scale project. **BELOW:** A close-up view of the construction prototype illustrating scale details.



After all of that work, you now have to fly it. This is my first effort at building a scale model from scratch (three views on up). After I got all finished, I threw the Agwagon into a rented trailer and headed for the Nats. I hope you don't test hop yours at the Nats! Maynard Hill and I finally agreed on something, and that is that scale planes should be flown before the actual Nats competition. My plane could have placed a lot higher in the competition if I had flown it beforehand.

My prototype weighs in at 6¼ pounds and handles like a dream in the air. I have made a couple of deadstick landings with about 30 degree flap, and the plane lands like a Taurus. The takeoffs require a little bit of rudder until the tail comes up, but what tail dragger doesn't? Just keep the CG around 25%.

Good luck and send me a picture of your model c/o R/C Modeler Magazine. □



AILERON & FLAP SERVO POSITION (FLAT)

REMOVE RIB SERVOS WHERE TO ACCOMMODATE NECESSARY

CUT HOLES IN SHEETING FOR SERVOS
1/8" PLY DIHEDRAL BRACE

FLAP BELLCRANK
1/16" PLY PLATE

FLAP OUTLINE IF FLAPS ARE USED MUST BE SAME AS AILERONS

1/4" DOWELS

3/16" SQ SPRUCE SPARS

3/8" SQ BALSAL LEADING EDGE

EPOXY DOWELS AT LEADING EDGE FOR STRENGTH

BALSAL BLOCK CARVE TO FIT

USE WOOD SCREW BLIND NUT WITH TO HOLD DOWN AT BOTH ENDS

3/16" X 1/2" SPRUCE ST

1/16" PLY G

WING IS FLAT TO THIS POINT

1/16" PLY GLUE TO SHEETING

NON-ADJUSTABLE COWL FLAPS BOTH SIDES

FIBERGLASS ENGINE COWL

1/4" TRIANGULAR BALSAL

FUEL TANK

1/4" PLY PLATE FOR WING HOLD DOWN

1/8" PLY

SERVO POSITION

K & B 40 ENGINE WITH TATONE MOUNT BLOCK 1/2" WITH HARDWOOD

HARDWOOD BLOCK FOR COWL HOLDDOWN SCREW FIBERGLASS COWL INTO POSITION W/ FLATHEAD WOODSCREWS

WINDOWS STRAIGHT AT THESE LINES

OPTIONAL DASH

DOOR LINE BOTH SIDES

HINGES

1A

PYLON BRAND 6-8 TANK INSTALL UPRIGHT

SERVO POSITION

1/4" BALSAL

1/4" BALSAL DOUBLER

NYLON WING HOLDOWN BOLT

COWL FLAP

3/8" BALSAL

1/4" DOWEL

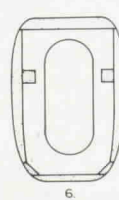
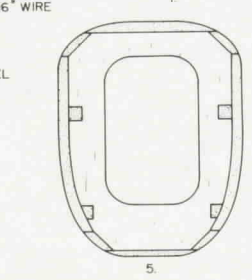
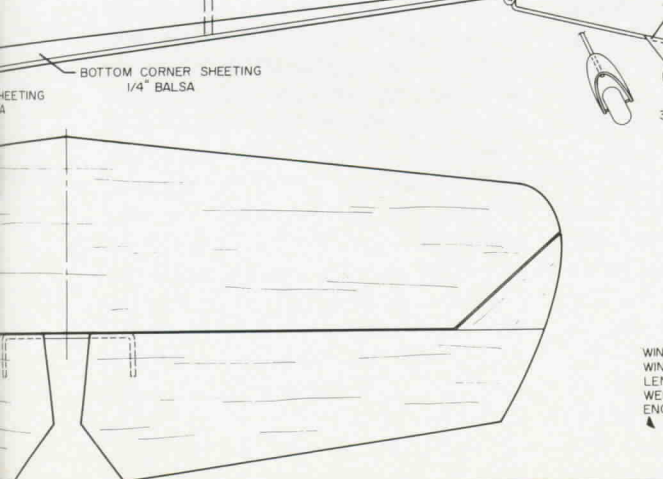
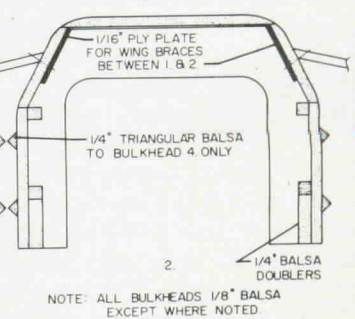
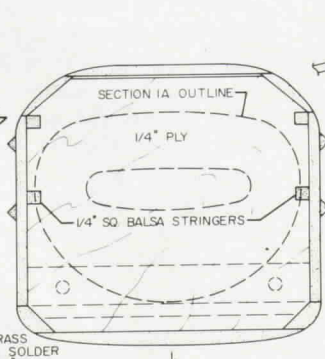
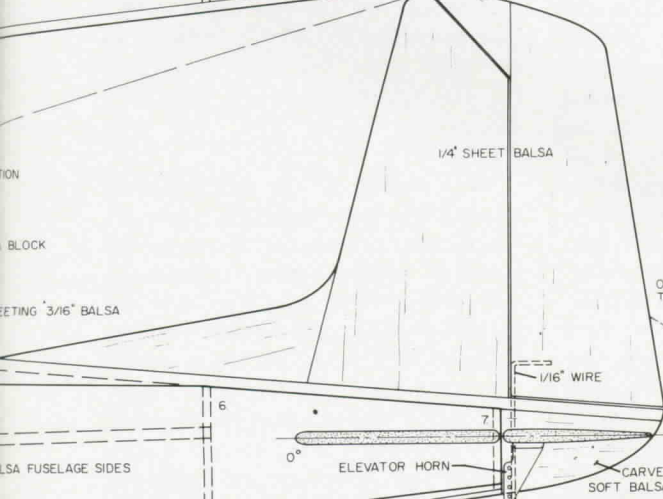
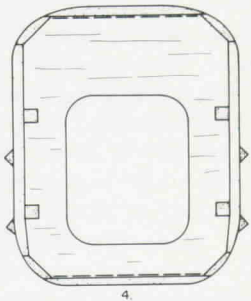
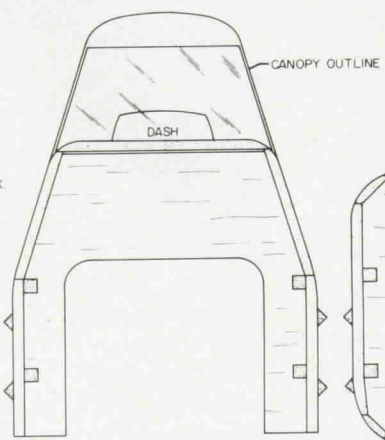
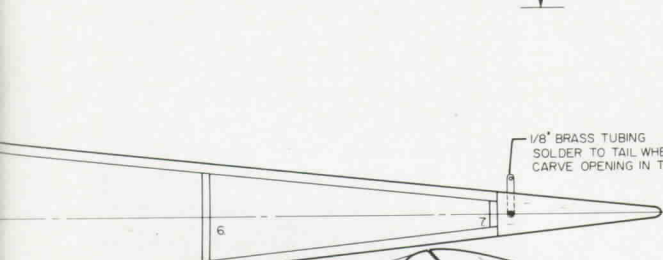
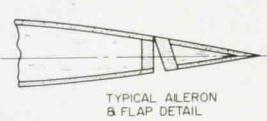
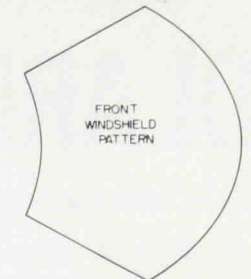
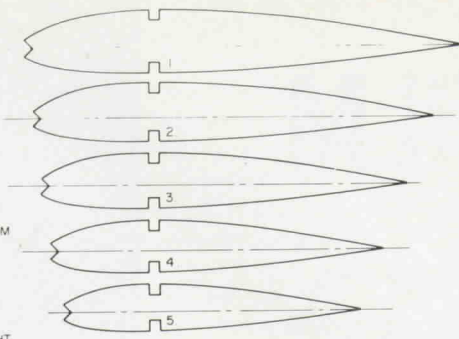
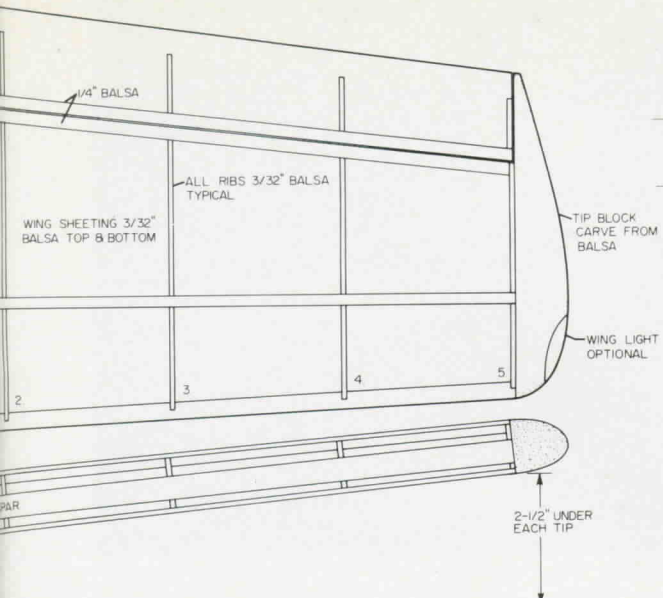
C.G.

BALSAL FILLER DURAL GEAR BOLT TO 2-1/4" PLY GEAR PLATFORM

DURAL LANDING GEAR FRONT VIEW

1/4" SHEET BALSAL

3" DUBRO WHEELS



WING SPAN 60-1/2"
 WING AREA 470 SQ IN
 LENGTH 37-3/4"
 WEIGHT 6-1/4 LBS
 ENGINE SIZE 40-45 CU IN



Cessna 'AGWAGON'

DESIGNED BY GIL HORSTMAN
 DRAWN BY JOE BRIDI
 INKED BY DICK KIDD
 RANDY KIDD

