THE SCATER

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LLARP...or, SNIFF, SNIFF: HOW'S YOUR SNIFFER???

Most FAI free flighters agree that striving for better designs is a wonderful way to wear out 4-H pencils. However, a more complex, and as yet, much less understood art has crept into our unending battle with the evasive "max." That is the fine and rare art of "thermal sniffing."

The techniques employed in this "sniffing" are many and varied. Ranging from the elementary tossing of turf into the wind, they continue to the more sly approach of watching opponent's airborne models and progress to the very personal ideas of wearing bikini shorts of getting fresh haircuts just before the contest. This last idea supposedly utilizes the tender fresh shorn skin as a "sampler" for thermal comings and goings. (Of course for the skin-beaned-bod, this idea is impractical.) And last but not least, there are those gallant few who favor the basest approach of all...before each launch they grip a rabbit's foot in each hand and with eyes shut tight drop to their knees and pray like hell.

Yet for a group who spends so much time at the designing board followed by yet more hours of trimming at the flying site, all these approaches seem rather crude and "out-of-phase" with the overall efforts for better equipment and techniques.

On the other side of the coin, Glenn Kinney's thermal article which appeared last month is a typical example of the smattering of the more technical investigations we do see occasionally. But such work though fine for as far as it goes, is still only a scratch...on what seems to be a very hard surface. What we would like to see is a real frontal attack at the heart of the problem. i.e. an intensive study of air conditions directly related to model flying. And since such a study should have a formal "scientific" name, we propose to call it LLARP (pronounced "llarp") for Low Level Air Research Project.

Now what areas of study do we define to make LLARP a useful tool for the modeler? Well, let's look:

Height: Here we should be practical. How about zero to 500 feet? Since we start at ground level (or 164 feet, for A/2's) and since a model flying at 500 feet is pretty sure in "3-minute land", this would seem a good study range.

Terrain: Here again let's be practical. Namely, where do we fly models? ...what types of terrain surround the site ?...and finally, how do these base factors effect the flight?

Weather: (i.e: temperature, winds, humidity, etc.) All these aspects of weather should be prime study areas for any research of the low level characteristics of air currents. Of course some modelers have already begun to probe this area. Serious designers have talked for some time now about "windy-weather" and "still-air" designs...but this is only the beginning. With more practical information on what actually is happening in that critical 0 to 500 foot "air zone" surely designs and trim and flying techniques can be further advanced to take even more advantage of the prevailing conditions at the flying site.

So there it is. The door is open to the scientific modelers with a meteorological bent. Perhaps there is already somewhere much useful data ready for the taking...or perhaps it will have to be all "dug" out. But however it's done, the "doers" will certainly be owed a vote of thanks from their fellow "searchers for-the-max"!

"SILKO" FAI Power Model by Ilmari Jokinen, Finland

(Ed. note: This is not a new model. It has been previously published in the Italian magazine, "Modellismo", and the Swedish magazine "Modell-flyg nytt". It took its present form in 1959 and the original design dates back as far as 1955...if our Italian translation can be trusted! However, it has been very successful for builder Jokinen, and is certainly in the current mode of modern FAI power design. Therefore, we decided to present it for the benefit of our many readers who do not have a chance to see the foreign model magazines. Of special interest, we think, is the overall concept of clean lines, neatly combined with a simple approach to every detail of construction. The final result is a good looking, yet completely "business-like", competition machine...a basic approach worthy of any serious designer's consideration.)

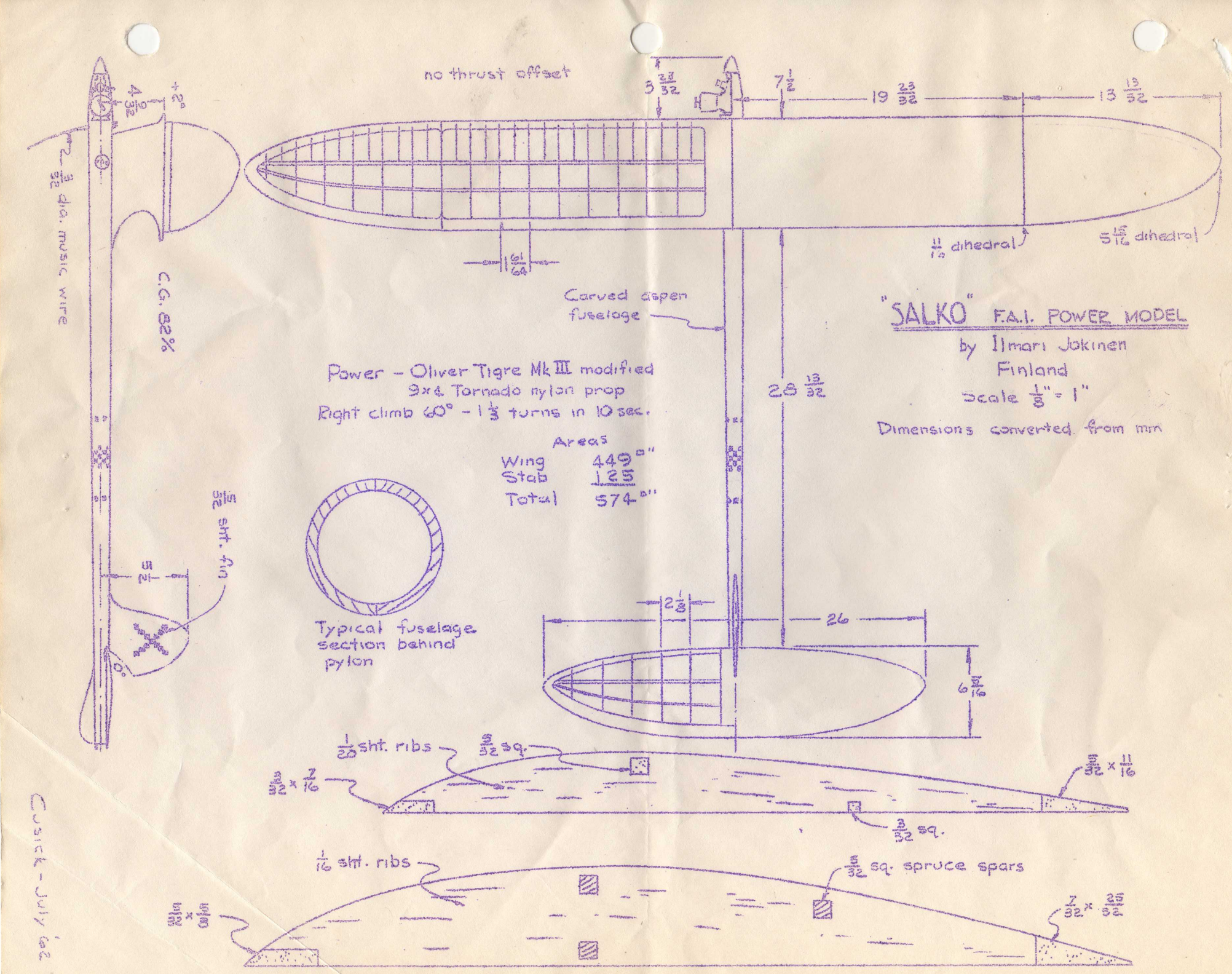
NEWS OF THE READERS

This month's paid list includes:

LOU YOUNG, La Habra, Calif.
C.I. BURGER, Amstelveen, Holland
GERHARD ROEMER, Socking/Starnberg, Germany
JOHN BONANG, JR., Inglewood, Calif.

AL VELA, one of the top local FAI power men, talked with us recently about our editorial on the need for better power prop design. He agreed on the need for better props to utilize the current higher turning engines: but also pointed out that a smooth power pattern with careful use of slightly lower rpm's can be a winning combination. Says he's heard that some of the top European power men, who are using "toothpick" seven inchers to produce 22,000 plus rpms, are finding this setup very tricky to handle...and a real mess, if anything goes wrong. Al, on the other hand, has had very good results with a Tornado 8 X 4 turning about 16,000. He swears by the auto-rudder system to insure a consistant "groovey" power pattern...his consistant high placing in the tough local and national competition would indicate he's got a point!

PAT CURTIS, Cape Province So. Africa, sends along a couple of kopecs and a welcome newsy letter. Has a new A/2 which just won the "Western Province" Cup in S.A.'s second higgest comp. We'll publish soon. Pat mentions that he's building Sotich's "Draftee Dip" Wake, from the Feb. SCATTER. Let us know how it goes, Pat.


no thrust offset
5 23/32
7 1/2
19 23/32
13 13/32
11/16 dihedral
5 15/16 dihedral
Carved aspen fuselage
"SALKO" F.A.I. POWER MODEL
by Ilmari Jokinen
Finland
Scale 1/8" = 1"
Dimensions converted from mm
Power - Oliver Tigre Mk III modified
9x6 Tornado nylon prop
Right climb 60° - 1 1/3 turns in 10 sec.
Areas
Wing 449 sq"
Stab 125
Total 574 sq"
28 13/32
2 1/8
26
6 3/16
C.G. 82%
4 5/16
2 1/2
2 5/32 dia. music wire
5/32 sht. ply
5/32
0°
Typical fuselage section behind pylon
1/20 sht. ribs
3/32 sq.
3/32 x 7/16
3/32 x 11/16
3/32 sq.
1/16 sht. ribs
5/32 sq. spruce spars
7/32 x 25/32
Cusick - July '62

DAVE GOODWIN, Yorkshire, England, says he's having trouble keeping the warps out of his power stabs...and it's very hard on the Cox 15 jobs! Is thinking of trying Soave's clever construction technique as a cure. If that doesn't do it, Dave, you just must be building on a bent bench! He also is fooling with an .049 VHTL test bed that will be developed into 15 size. This wee one has impressive climb, is easy to trim, and handles well in the wind. (Sounds like all you could ask for.) Dave would like to correspond with others interested in FAI power and Nordics. His address is: 12 Brooklands Crescent, Sheffield 10, Yorkshire, England.

C. I. BURGER, Amstelveen, Holland, is a Wakefielder with a problem. In addition to the generally bad weather; cold, rain, and wind; he has a hard time finding light balsa and can't get Jap tissue. And if this isn't enough modelers over there now find airdromes closed to them for model flying. If our geography memory is correct about the land of windmills, this pretty much rules out model flying unless your dad owns a tulip patch or you got a buddy on a canal barge. Yet in spite of these drawbacks Dutch modelers keep their interest at a high level, and produce top FAIers. (They were Team First in A/2 at the last Finals...remember?) So, O.K. now you gripers from Nu Yak City, so what's a little hundert mile jaunt to da "local" fly'in site, huh?

SKETCH PAGE GOODIES

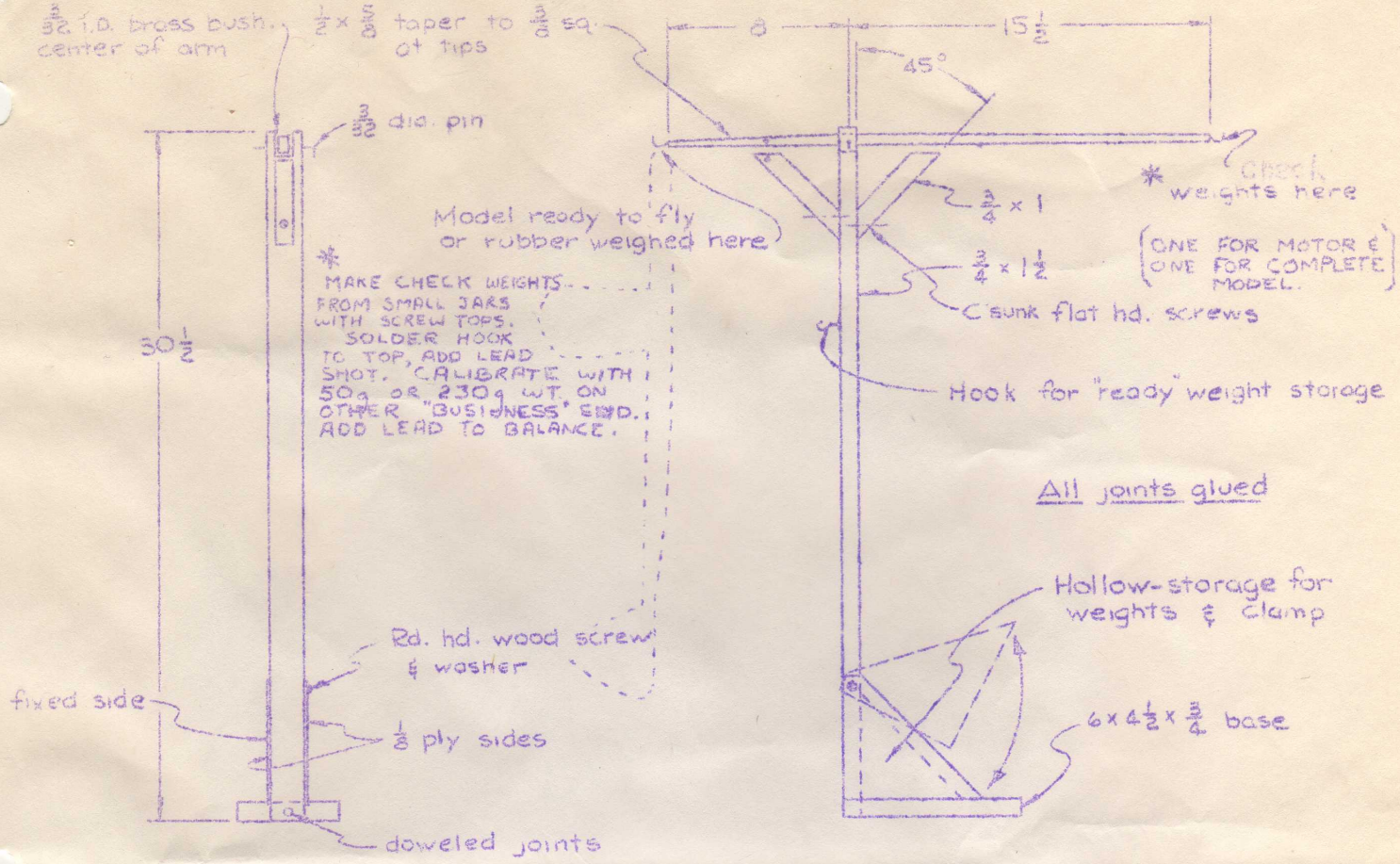
FAI GO-NO/GO WAKEFIELD SCALE

Fast accurate weighing of Wakefields and Wake motors used to be a pain in the bobbin (under windy field conditions) until we in the SCAT club started using the simple effective scale shown here. Bob Wiehle built it from a model provided by Andy Faykun of the local Thermal Thumbers club. The original design, Andy tells us, came from that top Wakefielder of this area, the late Lo Salisbury. The rig is easy to build, simple to use, and stands up well under a reasonable amount of the usual hamfisted handling at the flying site. Its simplicity lends well to fast processing at the contest: The flyer walks up with his "empty" ship in one hand and his gooey old motor in the other. He hangs the motor on the hook (with "rubber" weight at the other end of the beam) and if this doesn't bring the beam down with a crash (don't laugh...we've seen just that!) he's o.k. Then right on the spot, if he so chooses, he "strings" his motor in the ship, and pops the whole mess again on the beam (this time with the "model" weight on the other end.) If the beam does come down, this time, he's ready to fly.

Wiehle passes on this one warning to clubs who will use this scale... check those weights frequently. For some reason (maybe drying out of the wooden beam?) we have had to add a wee bit of lead several times to both our weights (checked against a chemist's beam gram scale). Also don't forget to acquire a large "c" clamp or some other method of securing this rig...to your table, fence post, comp director's nose...or whatever.

HOW TO TIE RUBBER (wet or dry) by Norma Hermes, Palto Alto, Calif.

ICC Western committeeman and internationally-known Wakefielder, Carl Hermes, can forget his snapped strands problem now that his charming wife, Norma, has come up with this dandy method of locking them back together. Since tieing a broken, lubed, strand during the winding sequence can be a real nerve wracker for the Wakefielder, this should be a real useful trick to aid the battle against "contest nerves". So while Grandma looks the other way quick dip into her knitting basket and pop a goodly supply of yarn into the old field kit!



HOW TO TIE RUBBER -

lubricated or dry

by Norma Hermes, Palo Alto, Calif.

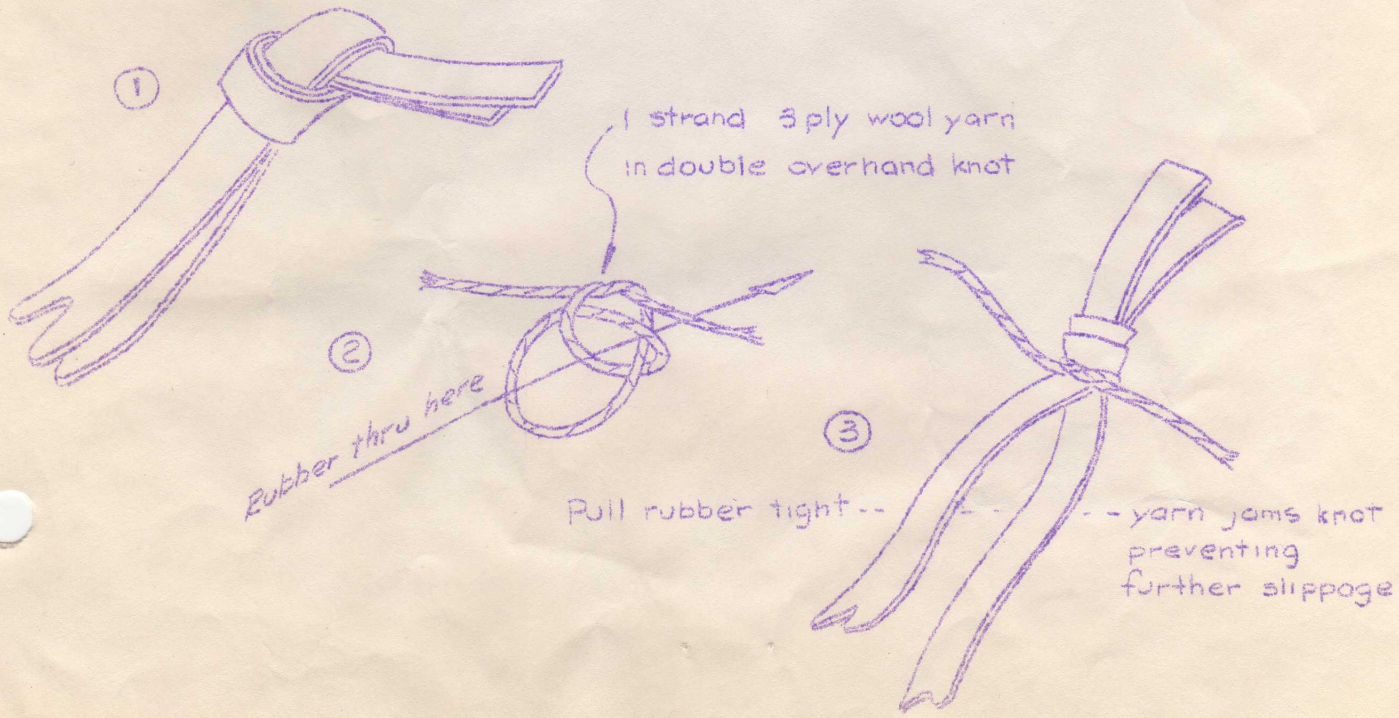
FAI GO - NO GO SCALE

FOR WAKEFIELDS & RUBBER

built by Bob Wiehle

design by Lo Salisbury

Andy Faykun & Thermal Thumbers



PLEASE ASK THE OFFICIALS

Recently we've received several letters (mostly from FAI-FF newcomers) requesting information of Qualifying Trials and other team selection matters. For the most part we have not been able to come up with answers to these letters; for three reasons: First, we have a continual log of back mail to answer, and as a result any replies coming from us would be too untimely to do the requestor any good. Second we don't pretend to answer for the appointed ICC officials on any matter pertaining to policy...and can only pass on to our readers in general that material which is given to us by these officials for publication. Third, we just don't know some of the answers! In years past the system has been rather ridgid and once established was carried out (as far as we knew) to the letter. This season, however, has (again as far as we know) been pretty much an "area local option" with each region doing pretty much as it pleased...making up rules as conditions, contestants, etc. permitted.

So in reply to all those who requested information we can only say we're sorry we didn't have the answers. In the future, however, we suggest you write your regional committeeman, the ICC chairman, or the AMA technical director for such information. Their addresses are available in the AMA publication, "Model Aviation".

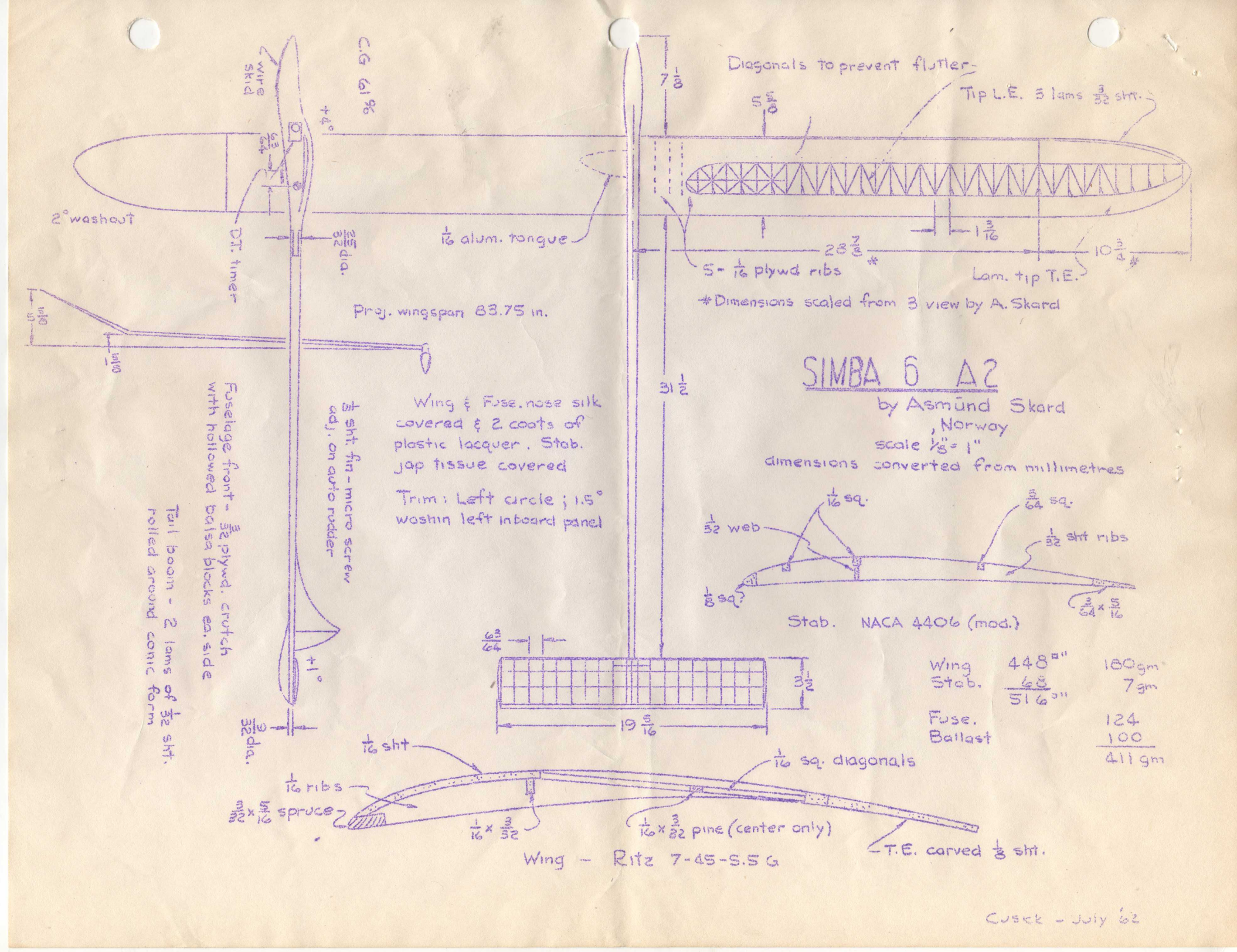
FROM THE NOTEPAD

*****We've noted with interest the appearance in the U.S. of at least three Nordic A/2 glider kits from other countries. Two,"Skymaster" and "Stratos" come from Sweden and the third "Ko-III" reaches us from Switzerland. All three are examples of much "pre-cutting" work, having ribs, ply nose pieces, rudders, etc. already cut to shape. Also all three would seem to be pretty much in the "current school" of A/2 design. All this is refreshing in light of the possibilities such box-models open up for the youngster who is interested in starting Nordic work, but is a little dismayed at trying his "first" hand at some of the more intricate, high a/r, super thin sectioned models presented in some of the foreign mag plans. With the good foundation of kits on this design level, the A/2 beginner can quickly acquire the "feel" for construction techniques and component weights and proportions. At the same time, with some special care in construction and flight trimming, such machines should enable him to become quickly competitive at local contests... thus building still stronger his interests in the finer points of FAIing.

*****From the rumor mill we hear that Carl Goldberg may produce a .15 size kit of his 1/2A Viking. If this happens it should also provide a good stepping-stone for the FAI Power tryo. And if history does repeat itself this might prove something of a real "discovery" by beginners of FAI power. Most of us can remember the real impact the "Goldberg school" of Clipper, Mercury, Zipper, and Sailplane had on competition power modeling in the thirties and forties. It might be real fun to see what effect this maestro's hand will have on our kids!

SIMBA 6, 1961 Norwegian Team A/2 by Asmund Skard

(Ed. note: This model placed 18th in the '61 Finals with a score of [illegible]6). Wimba 6 was designed with the mide-European weather in mind; the weather I thought we would get at Leutkrich (and which we did). This would be hot air with plenty of thermals and not too much wind. (A type of weather we don't have too much of in Norway!)


SIMBA 6 A2
by Asmund Skard
, Norway
scale 1/8" = 1"
dimensions converted from millimetres
Diagonals to prevent flutter
Tip L.E. 3 lams 3/32 sht.
Lam. tip T.E.
5 - 1/16 plywd ribs
1/16 alum. tongue
2° washout
C.G. 61%
+4°
+1°
Proj. wingspan 83.75 in.
Wing & Fuse. nose silk covered & 2 coats of plastic lacquer. Stab. jap tissue covered
Trim: Left circle; 1.5° washin left inboard panel
Fuselage front - 1/32 plywd. crutch with hollowed balsa blocks ea. side
Tail boom - 2 lams of 3/32 sht. rolled around conic form
1/32 sht. fin - micro screw adj. on auto rudder
1/16 sq.
1/32 web
3/64 sq.
1/32 sht ribs
1/8 sq.
3/64 x 5/16
Stab. NACA 4406 (mod.)
1/16 sht
1/16 ribs
3/32 x 5/16 spruce
1/16 x 3/32
1/16 x 3/32 pine (center only)
1/16 sq. diagonals
T.E. carved 1/8 sht.
Wing - Ritz 7-45-S.5 G
Wing 448 sq in 180 gm
Stab. 68/516 sq in 7 gm
Fuse. 124
Ballast 100
411 gm
Cusick - July '62

Construction is quite traditional, with the exception (?) of the tail boom. The boom is made of 2 sheets of 0.8mm balsa, soaked in hot water, then sandwiched together with a cold-water type glue in between, and rolled on conic former (waxed) using 1/4" Wake rubber to keep the balsa in form. I start the rolling and rubber winding at one end, and roll, wind, and bend the lamination into form along the former. When the balsa has dried for 11-15 hours, I take off the rubber strip, cut through the overlap and remove the excess balsa. Then the joint is glued, and the rubber strip put on again. After another 10-15 hours, I take off the strip and push the former out of the boom. When the boom is completely dry I sand and dope it inside. Weight of the finished boom with rudder, fin, etc., is 10 to 20 grams, depending on the balsa used. This boom does not flex more than any other type of boom.

Originally the model had the Ritz "Continental" stab airfoil, but as the model was almost impossible to fly in the wind, a new stab was built with the airfoil shown, and the windy weather characteristic was really improved.

The only fault the model has now is constructionally, the wings flutter tremendously at high speeds. (I think that is one of the reasons why the Ritz stab with his "diving" trim didn't work; when the model gained speed the wings fluttered!) To prevent this I have put in the diagonals as shown. Another way to prevent flutter is to cover with paper, or light Jap tissue, on the silk (or, with paper overside, silk underside).

With ths trim shown on the plan the model follows me like a nice dog on the line, is thermal sensitive, and stays nice in the thermals.

The model has only been entered in two competitions. The World Champs '61, where it placed 18th (151, 180, 180, 105, 150) and the Nordic Countries Champs, 1962 where it placed 4th.

COMING NEXT MONTH

For the July issue we've come up with a real "full house" for you readers! There'll be a new Power ship from England; John Wordin's brand new high aspect ratio A/2; and last but not least...Andy Paykun's U.S. Record holding Wakefield.