THE

SCATER

(10)

published by Southern California Aero Team January 1962

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TWO QUESTIONS....TWO ANSWERS

For some unaccountable reason a new wave of attention, here in the U.S., has focused on FAI modeling in general, and FAI-FF in particular. This growing "discovery" of an established and popular category in European modeling has prompted many "leaders" in the U.S. to ask two major questions:

1. Isn't it imperative that more modelers be "lured" into FAI-FF?
2. Aren't these FAI events too tough because they're designed for experts?...and, therefore, shouldn't they be simplified down to the level of all modelers?

Questions which dig this deeply into the basic motivations of the international classes should be answered. Here goes:

First, we fail to see any reasons which demand that more modelers have to enter into FAI. Some shout that it will die without huge transfusions of "new blood". Ha! We just wish these people had to open our mailbox for just one month; and take care of all the correspondence (from old and new FAIers) that results! Boy! If this sport is dying we'd sure hate to have to correspond with modelers from a "live" category!!!!

Sure we're scattered (plug intended) all over the world, and no single group of us has a huge membership...but we're a darn long way from running out of either people or interest! (Just look at the Finals entry. Team size has been steadily reduced down to the present 3 members; yet the total entry at FF Finals seems to keep climbing. Smaller teams, yet more entries, means just one thing...more and more countries sending teams. And we might just mention we've heard that some countries are finding this 3-day contest with 150 to 200 flyers just too much of a hosting job.) We ask you; is this the symptom of a "dying" sport???

So let's have no more of this wringing of hands about FAI's "fading" future...there are plenty of flyers, thank you.

Now, lest any non-FAIers think this attitude sounds snobbish, we hasten to add our "Welcome" to any newcomers...if this is the kind of modeling you like. And this leads to our reply to the second question:

No...the events aren't too tough. And No...they aren't designed for just "experts". (Whatever the heck they are!)

Sure, FAI is strict in rule and demanding in effort...but that's part of the fun! And as for those consistant FAI flyers you hear about, there's nothing mysterious about them. They have varying degrees of personal skill and capability; but they all have two things in common...practice and persistence! Yet, when their many hours of hard work (both mental and physical) pay

off in competition, the "Sunday sport flyer" is all too ready to throw up his hands and label these serious guys as "specialists", or worse yet, "experts". And faced with this formula, requiring more effort than he cares to exert, this "sportster" cries for easier rules. He wants to bring this fun down to his mediocre level. He doesn't see of course that without the toughness of rule and competition, the vital spark is gone...and with it the real essence of FAI flying.

So we're sorry but it's quite impossible to "make things easier" just to give FAI mass popular appeal. The sport certainly doesn't need it and if anyone tries to "water down" this basic FAI concept we serious FAIers around the world will just move on to another mountain..the highest and toughest we can find. Why?...Maybe that mountain man said it just right for us, too..."because it's there."

"DJANGO" by Birger Bulikin (Norwegian 1961 Power Team)

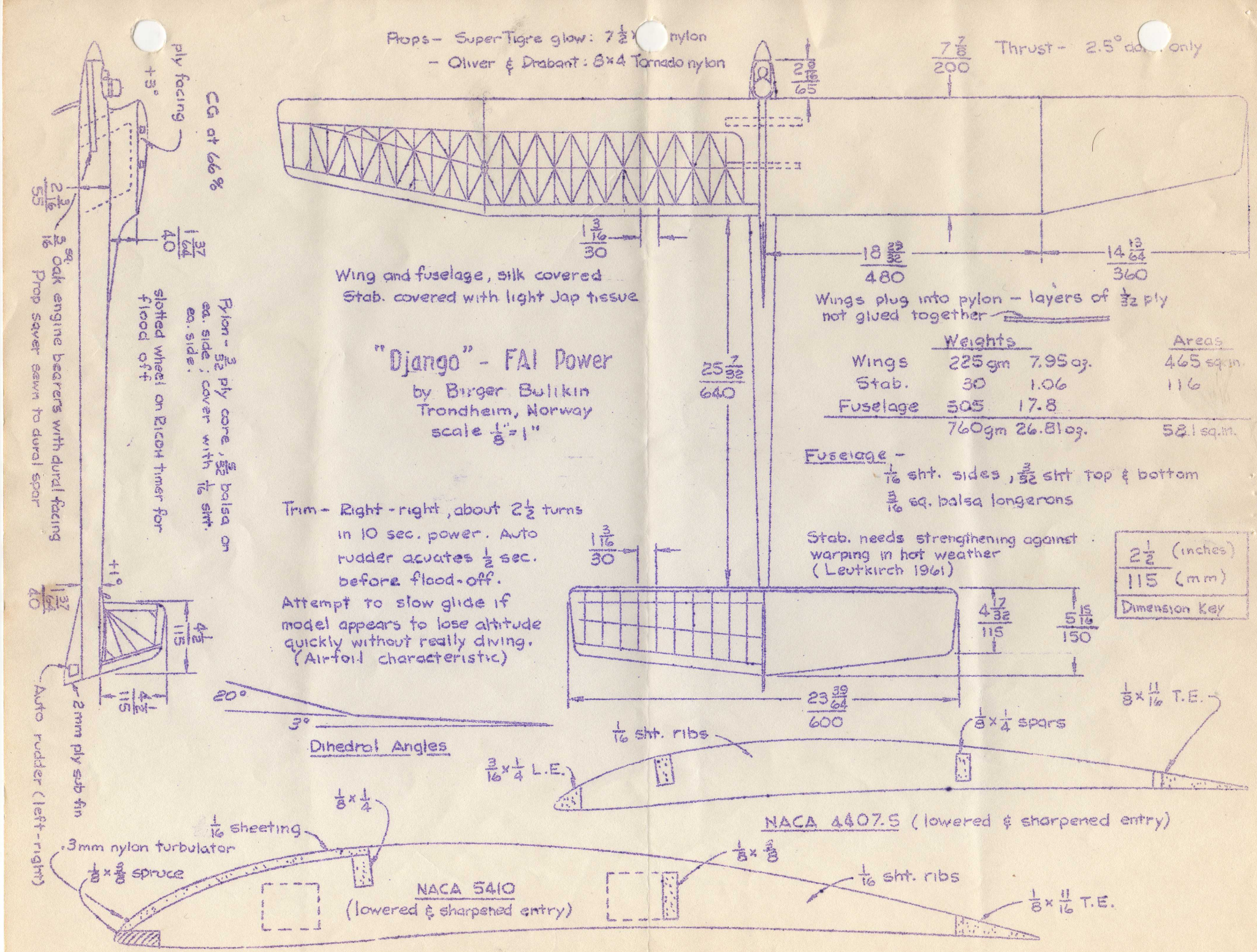
When sanding was finished the framework got two coats of rather thick dope to lock the fiber in the balsa. After light sanding it was covered with silk (stab with light jap tissue). Then two coats of thin clear dope was applied (three for the stab). The wing and fuselage got two layers of thick clear dope (the silk had no pinholes now), and the whole thing got a coat of plastic varnish (fuel proofer). At last an extra layer of plastic varnish was applied where fuel was expected to do the most harm.

On my two diesel models (Oliver Tiger and D-A Drabant) the prop is a Tornado nylon 8 X 4, on the Super Tigre glow the best results have been obtained with a 7-1/2 X 3-1/2 nylon. Originally it was an 8X4 Tornado, too.

Climb is about 70 degrees and gently to the right, about 2-1/2 turns in 10 seconds with auto-rudder about neutral. (Screw trim here is a necessity). The auto-rudder cocks to the right about 1/2 second before engine stops, depending on the speed of the model. Glide is slow and floating to the right. Caution must be taken not to trim it to glide too fast. Then it will lose a lot of altitude without really diving. It seems as if the l/d of the wing grows quite rapidly together with the speed. It should be quite a normal characteristic of the rather thick NACA 5410, shouldn't it? If a thick (o.7 mm) saw-tooth turbulator is used (not recommended) the model can be trimmed to fly below normal gliding speed without stalling. But it mushes down quite fast. I have found that a turbulator about 0.3 mm thick, either saw-tooth or nylon chord, gives just about the right amount of turbulance and at the same time makes the section flexible for easy trimming.

From 1958 (Cranfield) to the fall of 1960 I have been flying a model basically similar, but with a 5 cm shorter tail and a 8.5 dm^2 stab with a 9% section. A 14 year old club member, Gudbrand Dalsig, built it, too, and won the Nordic Countries Championship in 1959. (Luck and floating characteristic). This model has won for me the Norwegian champs in 1958 and 1960 and a 9th place in the world champs at Cranfield in '60.

I redesigned it to get the weight down (it was over area) simply by cutting 1 dm^2 off the stab and lengthening the fuselage; not having to move the c.g. forward. I tried three different tail sections before becoming satisfied. The rather thin one now in use gives a faster climb than one of 9% thickness being tried first. (The Finns told me about this thin stab business; it goes for Wakefield, too, they say.) After all this fiddling I believe "Django" has become my best model (but it was easier with 15 seconds).


Props – Super Tigre glow: 7½ x [illegible] nylon
– Oliver & Drabant: 8×4 Tornado nylon
7 7/8 / 200
Thrust – 2.5° dd[illegible] only
2 9/16 / 65
CG at 66%
ply facing
+3°
2 3/16 / 55
5/16 sq. oak engine bearers with dural facing
Prop saver sewn to dural spar
1 37/64 / 40
Pylon – 3/32 ply core, 5/32 balsa on ea. side; cover with 1/16 sht.
ea. side.
slotted wheel on Ricoh timer for flood off.
1 3/16 / 30
Wing and fuselage, silk covered
Stab. covered with light Jap tissue
18 23/32 / 480
14 13/64 / 360
Wings plug into pylon – layers of 1/32 ply not glued together
"Django" – FAI Power
by Birger Bulkin
Trondheim, Norway
scale 1/8" = 1"
25 7/32 / 640
Weights
Areas
Wings 225 gm 7.95 oz. 465 sq in
Stab. 30 1.06 116
Fuselage 505 17.8
760 gm 26.81 oz. 581 sq in.
Fuselage –
1/16 sht. sides, 3/32 sht top & bottom
3/16 sq. balsa longerons
Trim – Right – right, about 2½ turns in 10 sec. power. Auto rudder actuates ½ sec. before flood-off.
Attempt to slow glide if model appears to lose attitude quickly without really diving. (Airfoil characteristic)
1 3/16 / 30
Stab. needs strengthening against warping in hot weather (Leutkirch 1961)
4 17/32 / 115
5 15/16 / 150
2½ (inches)
115 (mm)
Dimension key
+1°
1 37/64 / 40
4 1/2 / 115
4 1/2 / 115
2 mm ply stb fin
Auto rudder (left-right)
20°
3°
Dihedral Angles
23 39/64 / 600
1/8 × 11/16 T.E.
1/8 × 1/4 spars
1/16 sht. ribs
3/16 × 1/4 L.E.
NACA 4407.5 (lowered & sharpened entry)
1/8 × 1/4
1/16 sheeting
3mm nylon turbulator
1/8 × 3/8 spruce
NACA 5410
(lowered & sharpened entry)
1/8 × 3/8
1/16 sht. ribs
1/8 × 11/16 T.E.

NEWS FROM THE READERS

Here's as far as we got with the "paid-up" list this month:

CHARLES BORNEMAN, Kokomo, Ind.

RON PETERKA, Los Angeles, Cal.
JESSE SHEPHERD, Ft. Worth, Tex.
JAMES SCARBOROUGH, Hawthorne, Cal.
LES WAGNER, Okla. City, Okla.
VICTOR BELLIS, Tenafly, N.J.
HOWARD TIMLIN, San Antonio, Tex.

DAVID BALES, Van Nuys, Cal.
DOUG WILSON, Hudson, Canada
HUGH LANGEUIN, Minneapolis, Minn.
N.P. INGERSOLL, Sunset, Utah

CLEVELAND SOCIETY OF MODEL AERO-NAUTICS, Cleveland, Ohio
PAT CLARKE, Wellington, New Zealand
H.E. BLUBAUGH, Aurora, Colo
JOE SLOVACEK, Pasadena, Tex.
HERBERT SHIELDS, Azusa, Cal.
FRANK LITTLETON, Hampton, Va.
AERO-CRAFTSMEN MODEL CLUB, Baltimore, Md.
WALT GHIO, Stockton, Cal.
CARL PERKINS, Mission, Kans.

LARRY CONOVER, of Cedar Rapids, Iowa, is an FAIer of extensive experience and a darn good competition record (at the moment we can think of his showing in the 3-way fly-off at the '56 Power Finals, and his 5-man "co-win" at the '60 Power Finals). For this reason, when Larry wrote us some opinions brought about by the October editorial, we thought they would make good "meat" for a guest editorial. Here's what Larry had to say:

"At this time I would like to comment on the present FAI rules.

The ten second motor run has placed Power on a handicap-level with Wakefield and Nordic. There are three basic requirements for world class competition. A high powered engine. An all weather model. An all weather modeler.

The time has arrived for the American FAI flyers to recognize that. Thermalsmanship is a science. That it must be studied and mastered if we are to compete favorably in international competitions.

There are many people with a limited knowledge of thermal flying. They have a wrong impression that luck is all important. Luck actually is a minor factor IF you have learned to read the weather. But even then, you have to be on your toes and you have to practice in the field under all conditions.

With the present state of the art there is no model in the world capable of making a max in a downdraft.

May I suggest that the art and science of thermal flying shares equal importance with the skills of designing and building. And that we maintain the rules accordingly.

I would like to see competition rules that required four flights in relatively dead air, and four flights in active conditions. This could be arranged by holding two rounds early in the morning, four rounds during the day, and two more rounds in the early evening. This program would test four important points. Quality and consistency of the model. Quality and consistency of the modeler. This would seem to be the true method of determining winners. I wonder what you and what your readers think?"

"BUCKEYE" A/2 by Andy Crisp (Abingdon, England)

(Ed. note: Since many of our readers have to do a lot of rough weather flying, we thought this "out-of-the-rut" approach might be interesting. The plan and notes came from Geoff Dallimer's excellent "News and Views" published by the Stevenage Model Flying Club.)

"Buckeye" was built early last year as an unashamedly 'rough weather' model. Getting high still-air time was not a consideration but emphasis was placed on strength and stability.

The large decalage and undercambered stab gives a very quick stall recovery when flown in a tight circle although the model flies quite slowly. The model tows straight without being exceptional on the line being rather touchy to rudder settings. However, I have found that low aspect ratio jobs have far inferior towline stability to those with a high A/R.

I have also found on this model that care must be taken to release it in the correct glide circle (right). If launched straight and with a slight stall there is a tendency to mush into wind sinking straight down and not turning. I intend to combat this by using tighter turn on the gliderand washing out the wing tips.

FROM THE NOTEPAD

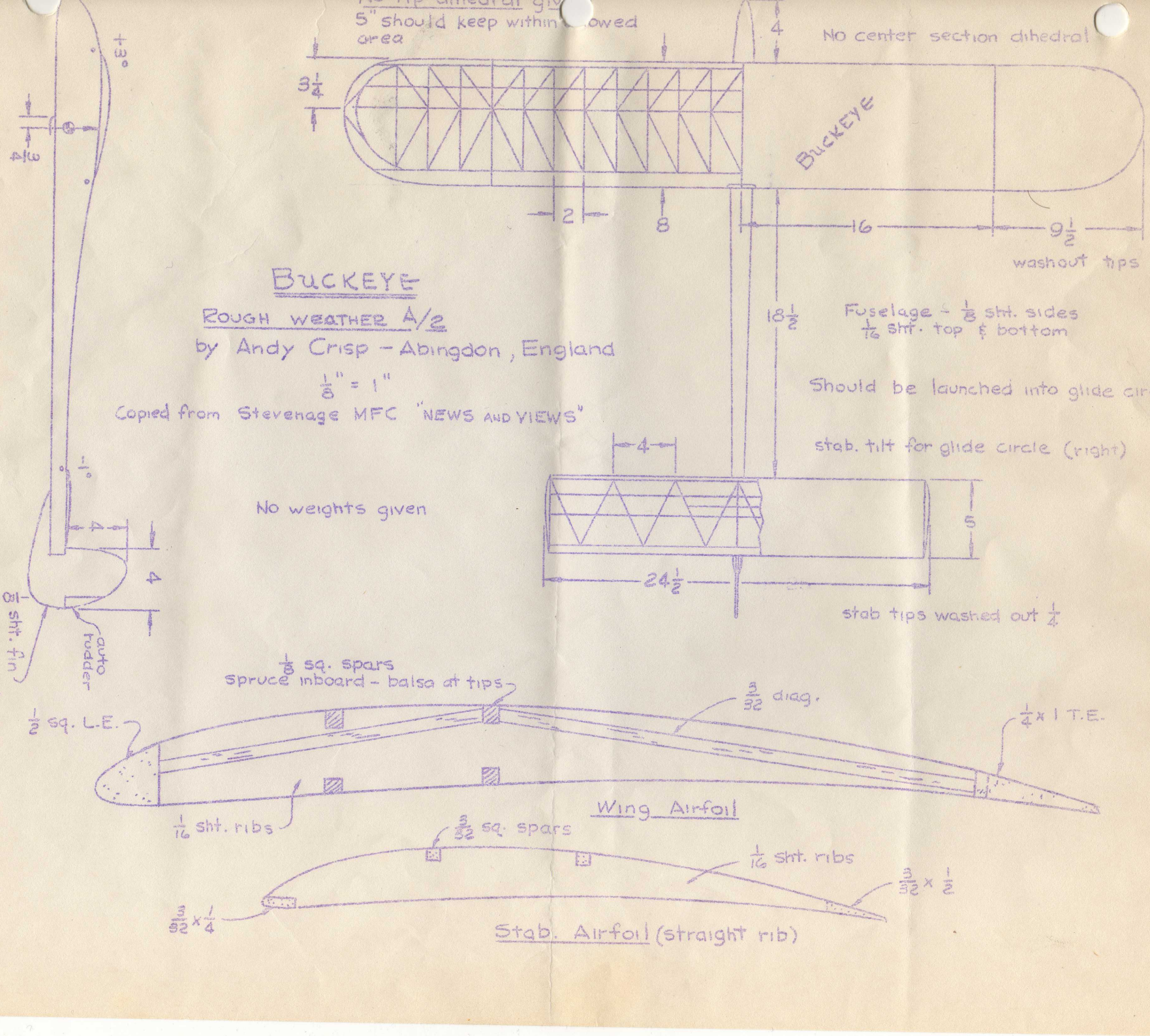
*****Received a very pleasant bundle in the mail recently. It was a stack of back issues of a very good technical model publication from Sweden; MODELLFLYGNYTT. Our translation power isn't good enough to bring you the articles, but there are many fine 3-views in every issue, and we'll be reproducing some of these from time to time.

*****If you'd like to be more scientific about your modeling but find the aero science books are unfortunately usually written in some strange language which appears to be a combination of South Slobovian and Complex Mathematics, here's good news. From the Illinois Model Aero Club newsletter we heard about "Shape and Flow", by Dr. Ascher H. Shapior. There is a paperback edition by Anchor Book, Doubleday & Co., (Science Study Series s21) which costs 95¢. It is good reading.

*****Have heard from John Pool of England and have received a copy of the very good Northern Area News which he edits. First issue we got had no less than four 3-views (FF) and lots of interesting reading. It's interesting to note that our friends over there have the same problems we face.. ..i.e. model politics rhubarb, competition flyer shunning by commercial mags., etc. Gee, it's sure nice to just sit back now and then and watch a good fight; without lacing on the old gloves ourselves.

*****Here's another tip for the "readers" among our readers: Gull Model Airplane Co., of Baltimore is currently offering back issues of Aero Modeller Annuals at $1.98 each. These go back to '48 and much of the material is dated; but there is also much useful stuff...especially for the less experienced FAIer.

*****Before any more readers panic, we'd like to announce that SCATTER is not going out of business...nor was your December issue late because you hadn't renewed your subscription (we'll tell you when!). The fact is the editor just didn't get the December issue out until quite late (in January!). And while on the subject, we'd like to say there may be some more late issues this spring...i.e., the editor will get some new ships built before


5" should keep within owed area
4
No center section dihedral
3¼
BUCKEYE
2
8
16
9½
washout tips
BUCKEYE
ROUGH WEATHER A/2
by Andy Crisp – Abingdon, England
⅛" = 1"
Copied from Stevenage MFC "NEWS AND VIEWS"
18½
Fuselage – ⅛ sht. sides
1/16 sht. top & bottom
Should be launched into glide circle
stab. tilt for glide circle (right)
4
No weights given
5
24½
stab tips washed out ¼
⅛ sq. spars
spruce inboard – balsa at tips
3/32 diag.
¼ x 1 T.E.
½ sq. L.E.
1/16 sht. ribs
Wing Airfoil
3/32 sq. spars
1/16 sht. ribs
3/32 x ½
3/32 x ¼
Stab. Airfoil (straight rib)

the Eliminations start! So if any future issue is late just bear with us... and remember we're not as lucky as most of you...we have to divide our time between razor blade and typewriter!

SCAT ANNUAL DINNER

The SCAT club annual dinner is our once-a-year bash which serves to install new officers, oust the old ones, and give the wives, girlfriends, etc, (etc.?) a night out on the town without the usual model talk. This year's dinner was a gib success, due in no small part to Don Hutchinson's excellent scouting which resulted in a very pleasant gathering place...the "Purple Foot Room" (a wine cellar, really) of Pucci's Restaurant in Encino. Jim Trego (who's in the business) bought some of his best Hi Fi equipment (among it a couple of 6 foot high speakers!) and an LP album called Themes of the Great Bands. All this added up to very fine eating, drinking, and dancing to Goodman, Shaw, the Dorseys', etc., etc. One of the highlights of this portion of the evening was Nora Van Nest and Bill Krecek doing a ten minute dance duet to a wild version of Benny Goodman's "Sing, Sing, Sing," ...even the onlookers were exhausted after that one!

Later, in the evening the party broke into groups and wandered out into the night. One group wound up at the "Gay Nineties" in Hollywood, where, so Dick Gildersleeve reports, Bill Hartill leaped on a table and a version of the "Twist" which can only be described as wantonly obscene. Jim Patterson was seen taking notes on a tablecloth during Bill's performance. (This information will be published in a later issue under the title "How To Tow Into A Thermal While Stamping Out a Small Fire").

Yet another group of overage delinquents found their way to "Cappy's" in Van Nuys. Here they viewed, and participated in, a most enjoyable floor show. Things were reasonably well in hand until Mary Wordin provided the entertainers with some cigarettes of dubious content...whereupon, shortly thereafter, the leader of the combo raced around the stage flapping his arms, the piano player fell off the stage and into the ringside tables and the girl vocalist (very snuggly gowned, wow!) ate coughdrops while leading the remainder of the band by placing them at her back and doing the Twist. We're happy to report that no club members were left on the scene by the time the more sedate customers had summoned the authorities.

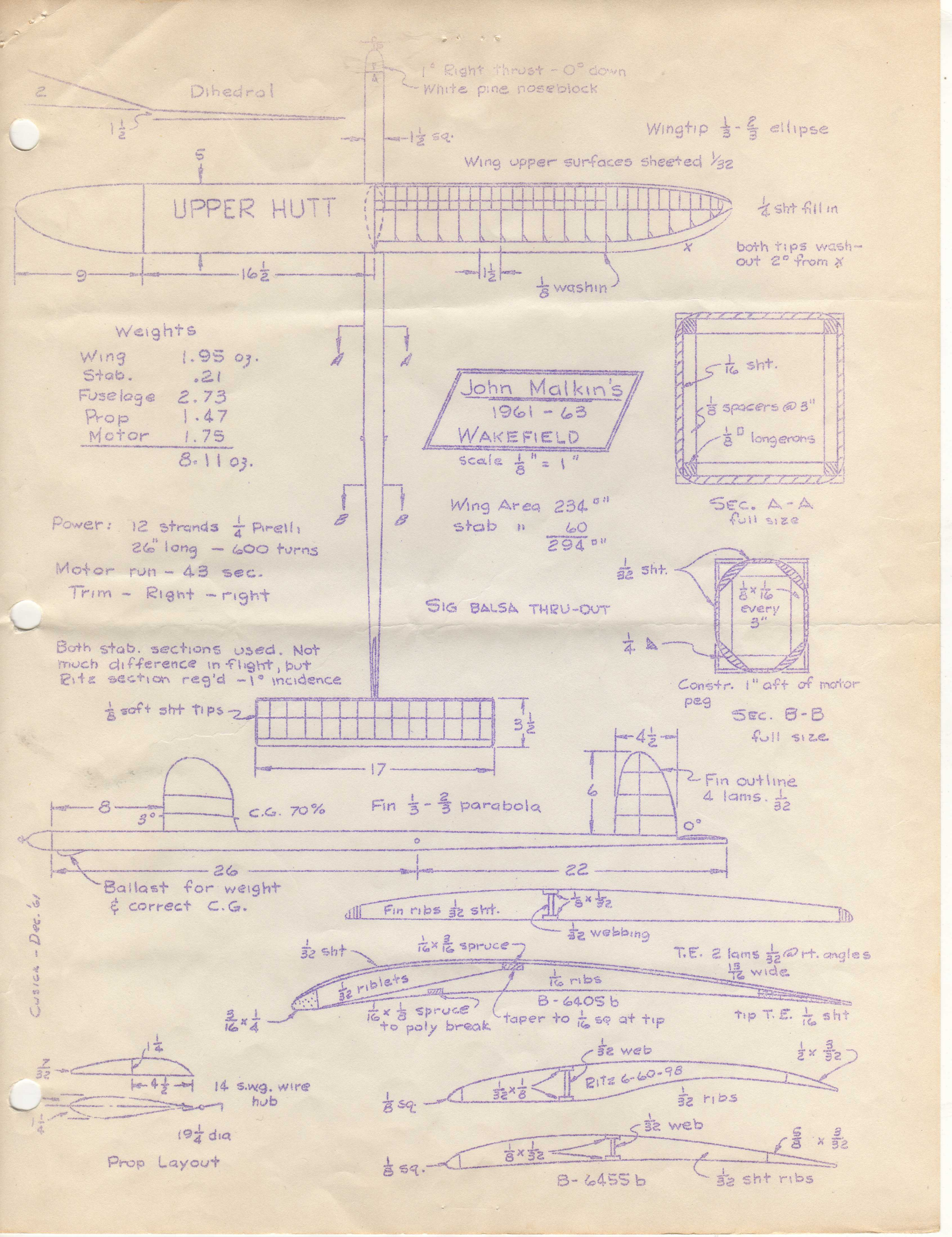
WAKEFIELD-61/63, by John Malkin (New Zealand Wakefield Team)

(Ed. note: This ship comes from our NZ friend, Bill Cook, and was originally published in his Upper Hutt News. Here's what Bill had to say about his team mate's model.)

"This model is, in my opinion, the best around this area at the moment and it hasn't reached its final trimming stage yet. As can be seen on the drawing, two stab sections have been tried. So far comparisons have proved inconclusive, but the Ritz section needs about 1 degree more negative incidence in the stab."

OOPS! DEPT.

The editor wishes to apologize to all those to whom he owes letters. There has been an unusually large amount of correspondence during and since the recent holidays, and the stack is just currently ahead of us. We will however, answer all in time. Also, we announced last issue that two Swedish


1° Right thrust - 0° down
White pine noseblock
2
Dihedral
1½
1½ sq.
Wingtip ⅓ - ⅔ ellipse
Wing upper surfaces sheeted 1/32
5
UPPER HUTT
¼ sht fill in
both tips wash-out 2° from X
X
9
16½
1½
⅛ washin
Weights
Wing 1.95 oz.
Stab. .21
Fuselage 2.73
Prop 1.47
Motor 1.75
8.11 oz.
John Malkin's
1961 - 63
WAKEFIELD
scale ⅛" = 1"
A
A
B
B
Wing Area 234 sq in
stab " 60/294 sq in
1/16 sht.
⅛ spacers @ 3"
⅛ sq longerons
Sec. A-A
full size
Power: 12 strands ¼ Pirelli
26" long - 600 turns
Motor run - 43 sec.
Trim - Right - right
SIG BALSA THRU-OUT
1/32 sht.
⅛ x 1/16 every 3"
¼
Constr. 1" aft of motor peg
Sec. B-B
full size
Both stab. sections used. Not much difference in flight, but Rite section req'd -1° incidence
⅛ soft sht tips
3½
17
4½
Fin outline
4 lams. 1/32
6
8
3°
C.G. 70%
Fin ⅓ - ⅔ parabola
0°
26
22
Ballast for weight
℄ correct C.G.
Fin ribs 1/32 sht.
⅛ x 1/32
1/32 webbing
1/32 sht
1/16 x 2/16 spruce
T.E. 2 lams 1/32 @ rt. angles
13/16 wide
1/32 riblets
1/16 ribs
B-6405b
3/16 x ¼
1/16 x ⅛ spruce to poly break
taper to 1/16 sq at tip
tip T.E. 1/16 sht
1¼
3/32
4½
14 s.wg. wire hub
1¼
19¼ dia
Prop Layout
1/32 web
½ x 3/32
⅛ sq
1/32 x ⅛
Rite 6-60-98
1/32 ribs
1/32 web
⅛ sq
⅛ x 1/32
⅝ x 3/32
B-6455b
1/32 sht ribs
Cusick - Dec. '61

models would be in this issue...however they didn't make it...but will be in the February issue. (So stop chewing on your towlines, you glider fans, and bear with us.)

DATE FLASH!!! NEW ICC-FF COMMITTEEMEN APPOINTED

Just as we were going to press this month we received word that a new chairman and two new members have been appointed to the U.S. ICC-FF Committee. The committee now consists of:

Chairman
Gerald Ritz
9124 Parkside Drive
Des Plaines, Illinois

Eastern Region	Central Region	Western Region
John E. Patton	Sid Jepson	Carl Hermes
Route 5	4046 Amick Ave.	155 Green Meadow Way
Frederick, Maryland	Des Moines, Iowa	Palo Alto, California

This announcement of course means that the Eliminations Systems announcement (for picking the '63 teams) which we sent to U.S. readers recently is no longer valid. Please disregard it...Ritz has written us that he will provide a new Elimin. Procedure as soon as it is official; and we will publish it as soon as it comes through.

COMING NEXT MONTH

Two winners from the '61 Swedish Nationals...a very neat Wake. prop boss...a timer gimick...news from everywhere. ...and stuff....