

# "EL TORBELLINO"

Volume II, No. 3

March, 1966

Editor: Russ Soley, 3621 Paducah Drive, San Diego, 92117

MEETING DATES

Sunday, April 3	North Clairmont Community Center	7:30 PM
Sunday, May 1	North Clairmont Community Center	7:30 PM

CONTEST SCHEDULE

Sunday, March 27 Pre-rodding starts at 7:00 AM	San Diego Orbiteers 2nd Annual All FAI, Nordic Team Challenge, & Melange Cup	Lake Elsinore $\frac{1}{2}$ hour rounds
Sunday, April 3	Max Men Monthly	Lake Elsinore
Sunday, April 17	Thunderbugs Old Timer	Sepulveda Basin
Sunday, April 24	San Valeers Monthly $\frac{1}{2}$ A, (AB) C, FAI Power	Lake Elsinore
Sat & Sunday April 30, May 1	SHOC ANNUAL (The 1st FEMASC Team Meet)	Taft
May 21 and 22	Cal Western AAA (Everything except Rocket)	Sepulveda Basin

Note: Check C.O.'s and at April meeting for date of the Orbiteers April contest.

MARCH 27 " ALL FAI DAY # LAKE ELSINORE

PRESIDENT'S CORNER

by Clarence Mather

Russ Seley suggested that one thing our club could do to publicize our fine hobby would be to put on indoor flying exhibitions to youth groups, Boy's Clubs, Scouts, and Recreation Centers could be included. There are many youngsters (and oldsters) who don't realize there are simple models that can turn in good flights. Hand launch gliders, FZB's and scale models are suitable for demonstration flights in small gyms and auditoriums.

From past experience, I know that such programs are "hits" with the kids. Much more so than static displays and/or talks. Often parents accompany the kids and all go home with a good impression of the hobby. Occasionally someone with enough gumption gets 'bitten by the bug' right then and we have gained a modeler! I plan to organize such demonstrations as soon as our immediate contests are completed.

Speaking of contests, our All-FAI Invitational is upon us, March 27, at Lake Elsinore. I hope that you all attend as either fliers, timers, or both! You are needed to make the contest a success, but I believe you'll have a good time in the process. Soooo, see you there!

JOIN THE NFFS

GARY & EDWARD

What's this big thing going on between Russ Merrill & Don Sican? Both claim the other is the world's easiest to time; or the fastest.

Recently, "Fudo" was testing his Wakefield, and having some power trouble. It swooped dangerously low, climbed, and then started to swoop again. Ed Simpson, Clarence Mather, Brian Donn and Fudo ran full tilt to try and catch it before it splattered balsa and tissue across the Massa. Ed, made a brilliant Willic-Mays-type of one-handed-grab about two feet off the ground, and received the cheers of one and all! Howard Harvey, watching all this from the shade of his Honda, yelled: "Hey, do that again Fudo, I like to see those guys run."

H-E-L-P! We urgently need Titto Paper to print this. Over the past year and a quarter, we have only had to buy two reams, thanks to Gene Bach, McDonald Aircraft and Fiberglas. We're out now and need HELP. For your information, we use about  $1\frac{1}{2}$  reams per issue. H-E-L-P!

While settin' and chompin' at the pizza house following the February meeting, we were all doing what comes naturally to free fighters: Maxing every flight and cussing C.D.'s. All this came to a screeching halt though when Bob Ferguson came up with this: "My Strato Streak is sooooo good, it's almost unfair to fly it in Old Timer events!" Perhaps it is - he hasn't done worse than first yet!

Tom Hutchinsen, do you still believe 'they never could fly and can't now'?

Publishing this thing every month (or thereabouts) is really tough sometimes. But when your ditto machine breaks down, is repaired, runs out of 'bug juice', breaks down again, and then you run out of paper, man then it really gets ruff. Your February issue still wouldn't be out if Gene Bach hadn't taken the last 5 pages to the McDonald Branch Office and cranked 'em out. Then he and Gene Larson assembled, folded, and stapled the works together. Thanks a lot. RS

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The National Free Flight Society, is all but a reality right now! In our opinion, this could be the greatest new development since the AMA itself. It will work within the framework of the AMA and even has John Worth as Senior Advisor.

Several truly dedicated free flight people have worked very long and hard for the past year getting the NFFS set up and rolling. They have written countless letters, worked many, many hours and spent several dollars of their own funds to help start something for all of us to enjoy.

As of now, memberships are being accepted as follows: Charter membership, \$5.00, Regular membership to AMA members, \$3.50 and Regular membership to non-AMA members, \$4.50. Send your money to: Hardy Brodersen, 4729 Walnut Lake Road, Birmingham, Michigan, 48101. Send the mailing tab from your latest Model Aviation as proof of AMA membership.

We know of at least 4 Orbiteers who are now charter members. This is a chance for you to get in on the "ground floor", too. Charter memberships will no longer be offered after June, 1966.

"Freecilight", the society's publication, is scheduled for it's first issue in July. Decals, membership cards, NFFS scroll, and many other things are also coming along.

#### LET'S ALL GET BEHIND THE NFFS

CUTLOOK, 1966 F.A.I. Free Flight Commentary.

Part II

THE NEW 40 GRAM WAKEFIELD RULE OR: UNNNGH, THAT BROKEN MOTOR SMARTS!

by Nat Antonioli

To continue our little treatise, we see the 20% reduction in power for the Wakefield Class will have it's telling effects, just as the power class.

The Motor: Observations of local Wakefield flyers has, more or less, confirmed our early thoughts on the changes in design and flying under the new rules. First of all, it seems best to retain the typical sixteen strand motor set-up. This means the motors will have to be shortened, usually around four inches, or so. The motor tube section can also be shortened by the same amount. Also ten grams taken from the motor can well be spent in beefing up the fuselage. (Overall flying weight of model does not change). Fuselages will have to be stronger, if the next logical step is taken. Yes, you guessed it! Pack in more turns on that motor! Naturally the sound of exploding motors (& tempers?) will fill the air, even more than ever!

Propeller: The next modification or refinement will no doubt be in the propeller. After all, the prop is the very heart of a rubber model. We look to see experiments in flaring and feathering type props, to gain that last ounce of thrust and maximum efficiency over the entire prop run.

This brings to mind the length of the motor run. The people using runs of 40 seconds or less, will probably be hurt less by the new rules. Those using runs of 50 seconds or more may be hurt badly. With a 40 gram motor, the model simply will not have enough 'punch' (we are reluctant to say 'penetration' for fear of being 'called' on it's correct definition by the 'experts') in the climb. This will be especially true in windy conditions. A model still has to gain maximum altitude when given limited power or engine/motor run.

Model Design: The next area of refinement under the new rules is parallel to F.A.I. power, that is; a "cleaner" model. Overall drag, both under power and glide should be reduced wherever possible. Most contemporary Wakefields are already quite clean. However, in the area of parasitic drag, there seems to be room for improvement, i.e. attention to better prop folding. Perhaps even going to "outrigger" folding props to keep away from the fuselage. Higher aspect rationwings and more investigation into high lift airfoil sections may be necessary, in the interest of overall improvement in performance. Talking about wakefield front ends will always bring up the "Exotic" ball bearing types. We honestly feel that the small increase (2-5%) in efficiency, under power, that these systems may give are cancelled out when overall reliability is concerned. Most of us fly in conditions ~~dirty, dirty, dirty, grit, etc.~~ ~~These are not reliable~~ were disheartening to a Wakefielder than having that small 2 to 5% advantage cancelled out by getting dirt, sand and grit into a beautiful ball bearing front end.

Auto devices: Obtaining optimum power and glide profiles thru the use of auto-rudder/stabilizer and possibly variable camber wings bear investigation, providing one is inclined towards gadgetry.

Conclusion: The 40 gram rule will see shorter motors, but retaining the same number of strands. Short motor runs probably will give the best power/climb profile. Much experimentation with prop design offers another solution to the reduced power. Refinement in model design, i.e. reduction of parasitic and profile drag, plus further investigation with airfoils, seem more than likely. Auto-devices may come more into play, as in F.A.I. power.

The serious modeler will overcome the new hurdle just as the power flyers will overcome theirs.

Next Month: The A/2 Glider picture, or: "Keep your model on the line as long as you can, but don't run out of sight!"

JOIN THE NFFS !

## AMA DOINGS

by Gene Bach &  
Gene Larson

This month we devote our column to a letter from John Worth, AMA Executive Secretary. There is nothing for us to add except a hearty 'Amen'!

### THE MEANING OF MEMBERSHIP

The value of AMA membership is what we make it. Unfortunately, some AMA members dilute the value of their own membership by making it easy for freeloaders. More frequently than you might think, Headquarters has to reject record applications or FAI team qualifications because the individuals are not AMA members! Too often it comes to our attention that someone paid for membership after qualifying, breaking a record, winning a trophy, etc.

Most frequently, however, the Contest Director's report (Form 10) comes to HQ without any AMA numbers being listed next to contestant's names. Random checks reveal that many entrants are not members. In fact, it's constantly noticed that, of groups of fliers known to be buddies, many are not members. At Headquarters it's no longer surprising to learn that some of our best known contest people - many of whom you would bet are current members - have not as yet paid their dues.

The time for checking AMA membership is before an entrant flies! It is important that an AMA sanctioned contest require AMA membership of all contestants. The reason is simple - it's your protection that all fliers are covered by insurance.

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Please note that all members at a contest have the right to expect that all other fliers are also members - and thus insured. Fliers from out of town benefit from your AMA sanction by knowing that the contest is supposed to be run by national standards; by knowing that, although fliers may have come from all directions, they all have the same basic knowledge of safety practices as provided by the AMA rule book.

Your sanction is valuable in that it provides protection from competing meets on the same date and in the same general area. It provides advertising by listing in the official contest calendar. It provides prestige and acceptance by all fliers.

Checking for and selling AMA memberships at a meet may seem like a chore, but it is the best way to build a better AMA, with more activity and more services. You have a dues investment in AMA which should not be compromised by having others get the same benefits from meet participation without having to pay their share. Why put in all the effort to run a meet and award prizes to someone who is content to let others pay his way?

Be wary of the flier who does not have his AMA license number on his model. At least, check to see that he is a current AMA member. If he is, insist that his number be displayed so that others may be comfortable in the knowledge of insurance protection that is provided. Put a number on the model is not enough - it may be last year's! The only way to be sure is to check the license. In every case, a current AMA license - either previously obtained or paid for at your meet, is your only guarantee of protection.

JOIN THE N.P.F.S.

IN & OUT

by Fud

FLASH!!! Results of Coupe d'hiver French International Meet at Chavenay, France, February 27, 1966:

1st - Enmann, West Germany  
2nd - John O'Donnell, Great Britain

Best US Entry - 8th - Frank Monts (Proxy O'D.)

Orbiteers placed 58th, 91st and ?. Complete results will be available when I get them from Dave Lindstrum. (Late news: MAKE THAT 59<sup>th</sup> - 52<sup>nd</sup> & ? !)

The Winter International Postal Meet run by the Orbiteers in January found us in second place in A/1 due to a last minute effort by Les Hill. Otherwise, we'd have been way down. With the help of Walt Mooney and his Foud FE2C, which met Coupe specifications, we managed to get into 4th place.

In H. L. Glider, Larry Simpson maxed out with his unlimited fourth flight over 5 minutes, easily gave us first place. Times put in by Clarence and Fudo was just icing on the cake. Apparently, this glider of Larry's is a good one because he has lost three to date all on maxes, of which two were at Phoenix (Buckeye). This gave him high time over all at the Meet. His club record time now stands at 10 Min., plus which makes him harder to catch. He has promised plans and information.

Eight teams entered mostly from England. However, we did have an entry from Czech in A/1.

~~Our President turned the February meeting over to the Vice President, Jimmy~~  
~~and took off to the indoor record books and manager of some sort~~  
~~the nails in the roof to hang up his mike job. Not only that, he lost a lot~~  
~~of sleep.~~

Saturday evening of the same week-end, I talked him into going up that night to the Indoor Scale meet at the blimp hangers, held on Sunday February 13. This bit of strategy paid off because after an excellent breakfast at the Farters and a leisurely trip over to the hangers, his PT-19 took second and had high time of the day, with 2.18. In all, the Orbiteers did quite well with the Mooney's taking two thirds. Brian had fifth and Gene Wright took the best crack-up trophy.

March 4 was indoor time at Madison and another postal battle. We had a good turn out of flyers. Clarence just missed ten minutes with his Easy-B. Nat turned in a 29 in H. L. to lead the group. The way to get to fly at Madison is to have an Easy B or an indoor H. L. One has to compete, no speculators.

Hey, what happened to all of you Coupe builders on February 27 for the Aero modeler postal? Brian had 303 secs., Art Gunnert, 225 secs., then came tail-end Fud, with 132 Sec. All is not lost, 'cause we have an invite to participate in an April postal meet for A/1 and Coupe by the Croydon M.A.C.

Incidentally, Coupes is a bigger event than most people realize, judging by the more than 200 entries at the French International. Also, the Oakland Cloud Dusters are planning to have a Coupe event at Taft in a co-sponsored meet with an L. A. club. So lets get with it. The rules are simple and they are lots of fun. Join the Free Flight Society, I have applications.

THE OLD TIMERS

by Bill Thompson

True Southern California weather was the order of the day for the SCAMPS Old Timer Scale Contest. The date was February 27th, and the place was Mile Square. The rules were simple. The model had to be built from magazine or kit plans published prior to 1943. The plans could be enlarged or reduced, but you had to show your working drawings plus the original ones. The model had to R.O.G. There was no engine run limit. Any type of power could be used. A fellow could fly all day, but his one flight with the highest time was the one that counted. Three beautiful trophies were presented to the following:

1st Place	Johnny Johnson	Heath Parasol	9:23
2nd Place	Kit McNorgan	Corben Super Ace	7:12
3rd Place	Walt Ahlefeld	Aerocca K	7:05

Contest Notes: Young McNorgan's flight was made at 1 PM, so you can see what kind of a day it was. Although there were only 6 official entries, there were many more scale jobs being test flown all over the field. As usual, some folks were having engine trouble or scale crack-up trouble. Since 2nd and 3rd place trophies went to fellows who probably were not even born when glow plugs first came out, this would seem to be the type of contest where the youngster has a chance. Walt Mooney has known this for a long time. As evidence, look at some of the contests that Walt has advocated or promoted. There will be another contest of this type at Thermal, California, sometime in May. Johnny Johnson will be the sponsor.

The next Old Timer contest in the Los Angeles area will be held March 27th at Sepulveda Basin. The hosts will be the Southern California Ignition Flyers. The events will be ignition, glow and a precision event. Any nationally published or kitted gas model in which ignition data was shown on the plans and which conforms to the I2/100 cross section rule is eligible. For the ignition and glow events, engine runs will be 15 seconds with a three minute maximum flight time. For the unlimited engine run precision event (Attention Cavaliers, Buccaneers, etc.) the entrant will be trying for a three flight average of two minutes. Points will be deducted for a D-T flight. For the three events, there will be trophies to third and merchandise to fifth. An ignition engine will be given for high total time of the day. Re-entry will only be permitted in the precision event. Results next time!

From Bud McNorgan comes word of a new model magazine. The format will be similar to the old Flying Aces. The editor will be Larry Conover and the sponsor will be Sig. The name will be Sig Air-Modeler Magazine. It will be primarily for the sport flyer and beginner, but may include some Old Timer stuff. It will be a strictly "for fun" type magazine. Both F,F, and C/L will be covered but no contest ships will be allowed. Each issue will have a full size plan included. It will be a magazine for the majority of today's modelers, but club activity will be pushed. Payment for features or plans will be made in Sig Gift Certificates. These should be great since balsa is now worth it's weight in gold. McNorgan says, "It will be a refreshing change of pace to see a model magazine without slot cars, radio, jet propelled broomsticks and flying hatchets". Could the "flying hatchets" be Stardusters, this writer's favorite modern contest ship???? That's all we know about the new magazine at this time. See you next month!

JOIN THE O.T.N.F.F.S.

### MODEL OF THE MONTH

The "Grenade" Outdoor H. L.

by Larry Simpson

The "Grenade" is sort of a happy medium between the large hand launch and the smaller types. The first one was slightly larger than most with the main thought being to obtain a good glide and to aid unstable throwing arms. This was accomplished but launch altitude suffered somewhat. This led to the other extreme. A smaller glider was then built to increase the height, but the glide was not as good as the large one. This led to the size now presently flying. An average of the two, with a larger stab for more stability, more dihedral for a better roll-out and thermal stability. Thus far, both features have worked out very well.

The construction of the "Grenade" is standard as far as most hand launched gliders go, and the plans are self-explanatory. A few items to make a successful hand launch should be explained however.

1. The upsweep in the L. E. of the stab is to aid in keeping the glider at a constant angle in the climb and to make for a better rollout. The theory is, it gives a positive angle in the stab without the zero-ing in tendencies.
2. Although it is not necessary, a slight amount of positive incidence (+1°) in the wing seems to help the launch and roll out.

The finish in hand launch is usually what the individual prefers. My own process consists of five (5) basic steps after completion of rough sanding.

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- (1) Sand with 600 wet or dry until smooth. (Remove all roughness and burrs)
- (2) Sand the edges of main and aero surfaces with 50-50.
- (3) Sand again with 600 wet or dry.
- (4) Apply coat of clear 50-50 and sand lightly.
- (5) Apply coat of fuel proofer to seal finish. This also aids in visibility at great distances.

The basic adjustments are quite simple. The launch is to the right with a left glide. I like to use a slight amount of wash-in in the right, outboard panel and left tab for the glide. After the C. G. has been found, make all pitch adjustments with the stab. I have found by banking the model steeply to the right, I obtain the best roll-out and altitude on the launch. One thing to remember is that patience pays off in the final adjusting of the glider.

Although the "Grenade" is still young, it has done well in the two contests entered. An 11:30 was turned in for the postal meet and 10:09 for high time at Buckeye "66".

As a final note, a D.T. should be used to assure it's safe return. (I've lost three already.)

### JOIN THE N.P.F.S.

LET'S HAVE 100% TURNOUT FOR THE ALL FAI THIS SUNDAY—  
ALL 51 MEMBERS — EVEN IF YOU DON'T FLY, IT'S WORTH IT  
JUST TO WATCH, TIME, & ENJOY THE VERY BEST IN ACTION.  
WHEN TIMING, RECORD IN TOTAL SECONDS, INITIAL ALL FLIGHTS  
& ATTEMPTS, THEN RETURN CARD TO OFFICIAL RECORDER WITH-  
OUT DELAY. DORIS CRONKHITE & BARBARA SIMPSON  
ARE AGAIN GOING TO PUT IN A FULL DAY AT THE OFFICIAL  
TENT — WE MEN SHOULD ALL SHOW UP, AT LEAST.

Nineteen

Stab: 2x2 3/4 x 11/16

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All Wood Should  
be 6-8 lb. Stock

Finger Rest - Ether Side 1/8 Sht.

• O.G. 40-75% Fuses: 19x5/8x1/8 Spruce

Play for 35% H.P.

Wing - Chomsky

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Dihedral

60-3  
11-3

3-17-66 "GRENADE" DESIGN DRAW

SIMPSON, L. E. SCHEE, W. G. FU

3-17-66 "GRENADE" DESIGN & DRAFTED  
SAN DIEGO CONCRETE