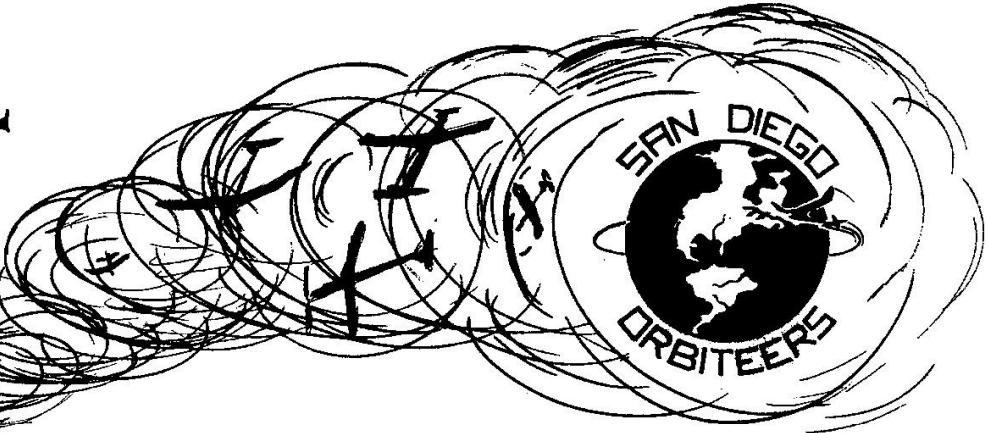


"EL TORBELLINO"



VOLUME II, NO. 2

February, 1966

Editor: Russ Soley, 3821 Paducah Drive, San Diego, 92117

MEETING DATES

- Friday, Feb. 11 - North Clairmont Community Center - 7:30 PM
Friday, Mar. 11 - North Clairmont Community Center - 7:30 PM

CONTEST SCHEDULE

- | | | |
|---------------------------|--|----------------|
| Sun. Feb. 13 | - San Valeers Monthly
M, A, (EC) (A3-A2) | - Taft |
| Sat & Sun Feb.
19 & 20 | - 16th Annual Southwestern
AAA, Saturday Night Dinner
@ Buckeye. | Buckeye, Ariz. |
| Sun. Feb. 27 | - Orbiters Monthly | Kearny Mesa |
| Sun. Mar. 6 | - SHOC Monthly | Lake Elsinore |
| Sun. Mar. 20 | - Thunder Bugs Monthly | Taft |
| Sun. Mar. 27 | - San Diego Orbiteers
2nd. Annual All FAI &
Team Challenge | Lake Elsinore |

PRESIDENT'S CORNER

By Clarence Mather

Thanks to Russ for creating this spot so that your president can get in a few licks. Even though 1966 is well underway, I took a backward glance at the Orbiteers 1965. What I saw looked mighty fine. There was a lot of building, flying, and contesting in about every phase of free flight. The club grew and maintained a healthy treasury. Every member played a part and each deserves credit. I would like to extend special thanks to Les Hill and Gene Larson, our outgoing president and treasurer, for jobs well done!

1966 has started with club members active as usual, so model-wise, things are going great. However, we have a knotty problem in deciding what course of action is best for the club regarding AMA chartering and liability protection. Preliminary checks with lawyers indicate that we should obtain a copy of the AMA policy and find out precisely what protection is offered. Since this is a serious matter and we don't yet have all the facts, I suggest we hold off trying to decide what is best for us. We are requesting a policy for study. It might be mentioned that many clubs, including all or most of the L. A. clubs, are becoming chartered.

As a final word, our treasury has been healthy. Let's keep it that way! Fudo will be glad to accept dues from 7:30 to 8:00 each meeting night.

RULES PROPOSAL FOR FREE FLIGHT GAS

By Ralph Prey

In the current AMA rules governing model activities, it is noted that certain events are permitted to have more than one model. Section 1.20 of these rules lists the exceptions where more than one model is permitted. These exceptions have become increasingly more significant to the free flight gas events. The free flight gas events permit only one model, but consider the following:

1. Free flight sites are becoming fewer and smaller. Housing developments are taking over many sites, causing the free flighter to travel greater distances in order to find a place to fly.
2. The latest rules change calling for progressive flyoffs results in more flights being required in each event, increasing the likelihood of lost models. Frequent flyoffs going to 5, 6, and 7 minutes flight are common; the Open Class $\frac{1}{2}$ A, B, and C records are over 50 minutes total, which required making at least a 9 min. max.
3. The free flighter is often plagued with poor weather, hostile terrain, unreliable timers and dethermalizers, leading to stolen, crashed or lost models.

The fact remains that flying is the most important commodity to the modeler. To keep the modeler flying is the lifeblood of the model aviation industry, and AMA. Therefore, any steps, large or small, that result in encouraging the modeler to fly are of prime concern to everyone.

In view of the above facts, the following change to Section 1.20 of the AMA rules is respectfully submitted:

"Add the free flight gas model categories (Classes $\frac{1}{2}A$, A, B, and C) to the exceptions that permit a contestant to enter more than one model."

Also add a new section to the rules in Section 5, Gas Models, Free Flight, to read:

5.17 Number of Models. Each contestant shall be allowed two models in each event. He may use any or all to complete his flights. The two models used may be of different design. (If an event is announced as a combined category with specific size classes, such as B and C combined, the two models may be of different size classes.) He may use parts of either model to complete the required number of flights.

The above is from the San Valiers, who have officially submitted the Proposal to District X officials for action.

SEEN & HEARD

A couple of weeks ago, Don Sloan watched as Art Gunnatt put up the first test flight of his new Coupe 'd Hiver. It was, to say the least, a perfect 'go' all the way - including a nice soft D.T. Don stood there shaking his head. "Poor guy," he said, "How's he ever going to learn to adjust."

You won't believe it, or at least you won't want to believe it, but John Tatone's newest product will be a controller for the slot car field! Next thing you know, Perilli will start producing "super balls."

AMA President Howard Johnson, is out of the hospital and doing just fine. Howard had a complete overhaul. Sure glad he's back in action.

Chuck Klevins, editor of the "T-Bugs News" had this nice note in the January issue: "The San Diego Orbiteers Club is really coming on strong. We attended their Annual last year and were quite impressed." Thank you, Chuck; now if you and the T-Bugs will just leave some of the trophies for the rest of us to take home - - - .

FLASH! Just heard from Tom Hutchinson, Editor of the Satellite, that the AMA has dropped "A Gas" from the '66 "Nate" at Chicago! The Navy requested a general cut back in the program due to man power shortages plaguing them because of Viet Nam. Reasoning was simply that this, the most popular event, would free-up the greatest number of timers and hurt the fewest number of flyers. This is probably true, since most just switch engines from " $\frac{1}{2}A$ " or from "B". Also dropped were Proto Speed and AMA team racing. All radio controlled events were cut back to a maximum of 5 flights. These cuts will mean the start of the event will be on Tuesday - cutting off all Monday activities.

OUTLOOK

1966 F.A.I. FREE FLIGHT COMMENTARY

By

Natko Antonioli.

Part One

Well, the new F.A.I. rules certainly have caused comment, elation, disgust, screams of joy, or screams of anguish! Usually the latter. One thing for sure, the challenge is greater than ever! F.A.I. power has probably caused the wildest opinions of all, as would be expected. But then, we're getting ahead of ourselves.

The following comment will be our own opinions on the coming F.A.I. design and flying season. Each event will be discussed individually, in a general and overall sense.

F.A.I. Power - (Screams of anguish!)

The power picture, at first glance, looks very grim, with the "straight fuel" rule, but it may not be so bad as it seems. True, we look to see the "super" engine as employed by the U/C Speed Buffs (Wisnewski's "Wart"). Naturally, there will be only a few modelers who can, or will, spend the kind of money necessary for several engines just to compete for one season. We estimate anywhere from fifty to seventy-five dollars each for these jewels! If this sounds wild to some, then consider the Ad in a recent model mag by a well-known engine manufacturer, for a new R/C engine costing seventy-five dollars! (Good Grief, Charlie Brown!)

As mentioned above, the picture looks fairly grim, but there just may be an out to all this nonsense, for those of us who don't have bottomless pocketbooks, or belong to the little "in-crowd". This comes in the form of a diesel, remember? Three modern day engines come to mind, the Super Tigre (sic), ETA and Oliver Tiger. These engines have done well in F.A.I. Class Team Racing, turning good speeds. Furthermore, these engines have several good points, which are listed below.

Diesel Features

1. No fuel restrictions.
2. Relatively high R.P.M. on 8-4 Prop. (Note Diesels will even turn a 9-4 prop well.)
3. Much better torque curve than glow engine.
4. Wider (though lower) peak power range.
5. "Happier" under load.
6. Longer life span than glow types.

Even with the features listed above, the diesel was not competitive, under the old rules in F.A.I. power, where the glow engine had a higher R.P.M. and Power output, due mainly to "Kickapoo Joy Juice" fuel mixtures and also a certain amount of engine rework.

However, under the new rules, the diesel may be more nearly competitive, even against the "super" engine. This statement can be completely true, if a more efficient model is utilized.

Model Design

It seems logical, with the statements above, that the model must be of the "cleanest" possible design. Reduced frontal area, thinner airfoil, higher aspect-ratio wings, longer tail moments, etc., we feel will be more important with the new scheme of things. In other words, more attention will have to be paid to the glide phase. With the old rules, models climbed so high, that it seemed they could fall out of the sky and still do three minutes! This may still be true, to an extent, with the small "in crowd" and their "super-wart" engines. The majority of us, however, will have to use a more scientific approach to overcome the F.A.I.'s latest perfidy.

Auto-Rudder & Stabilizers - or: Gadgets, gimmicks and things that go WHIRRER in the night.

With engine power down, a more efficient use of the available power will have to be made. This means low decalage for climb & relatively high decalage for optimum glide. Efficiency robbing engine downthrust cannot be tolerated under these conditions.

A fair percentage of modelers are already using auto-devices, of course. Reliability is still somewhat a problem with these gadgets, as we have witnessed on some occasions. Many a sure max has been nullified due to an auto rudder/stabilizer triggering too soon or too late. It seems more work is necessary in this area to refine out the "bugs".

Another alternative is to go to a high thrust line configuration. Our own experience, coupled with our observations of other modelers indicates this type of model can be trimmed for a maximum "vector type" climb and still obtain a good transition into glide without a stall and without having to resort to gadgetry. One can see that you're not going to have trouble with a gadget that isn't there!

Conclusion

The new F.A.I. power rules will see the "Super engine." Also, we might see the diesel "come-back" into the picture.

Much more attention will have to be paid to "clean" low frontal area model designs. Experiments in obtaining minimum sink in the glide, i.e. higher aspect ratio wings, etc., are inevitable.

The state-of-the-art in power flying, will have to come up to even greater heights, if we are to see three minute maxes again. Most serious flyers will clear this even higher hurdle the F.A.I. has raised.

Next Month

The new 40 Gram Wakefield rule, or. "Unugh, that broken motor smarts!"

IN, OUT, & ETC.

By Fud

The Editor being a generous buck passer, asked if I would head a column about the so-called orphan events as far as the Orbiteers are concerned like the following, Indoor, Scale, Coupe d' hiver, H. L. glider, and what have you.

So, iffen you want some event championed, here's the place to do it. Just make your wants known.

At the December 22 indoor flying session, NIMAS AWARD certificates were to be issued for the first time. However, no one broke or equalled the arbitrary times set up by Clarence and I. 25 Sec. for glider and 5 Min. for "Easy B". This was for the Community Center as there was no word on the Madison gym. Also, people who have made or busted said times are not eligible.

Tom Ottiwell, Clarence, and Russ Soley came close in glider with 23 Seconds. No one came close in "Easy B" but Clarence and he doesn't count. The turn-out was gratifying and the spectators were numerous.

Gained a couple of new members, Lou Vargo and Lou Jr. Lou was an old time Aeronut of the Chicago Variety with whom I was able to renew acquaintances. He made the comment that he didn't realize he had been away so long from indoors till he threw his glider and found he needed forty feet more of altitude to add to the existing 22. Weight is a problem?

The January 21 Indoor session found us waging a postal battle with the Kokomo Indiana group. Clarence pushed 7 Min. Fudo broke 6 Min. Tom Ottiwell did 23.8 Sec. We gained a new member, Jim Taft. Don Sloan showed up as we were being ushered out. (Because of a dance)

A trial indoor session was held at Madison, courtesy of Clarence and Harry's school model club, with invites to indoor type Orbiteers. Our new member, Jim Taft, did over 5 Min. in "Easy B" which makes him the first to win a NIMAS AWARD. Congrats, Jim! Clarence did 9 plus but he doesn't count except as a postal warrier against the Ann Arbor Airfoilers. The glider people, Nat, Tom, and Don did over 25 Sec. but in Madison, they will have to better 29 to get an award.

Speaking of H. L. gliders, Larry Simpson has the club's outdoor record with 8 Min. Also, don't let his dad fly your gliders unless it has a Nat type DT with the fuse lit. Ed jeopardized my antique reputation by losing my brand new HL glider. Had lots of fun.

Hey, you Coupe builders, get them done as I have entry blanks for the Aero Modeler's Postal held in conjunction with the big Meet in France on February 27.

Hear that Mike's Hobby and Walt Mooney are cooking up an outdoor rubber scale event.

AMA DOINGS

By Gene Larson &
Gate Bach

Now that the new year of 1966 is well underway, it is evident that many changes are and will be made as the year wears on. The long rumored changes to F.A.I. has been finally confirmed. Whether they are good or not, only time will tell. For the most part, we're sure that the use of F.A.I. standard fuels will be in the best interest of the majority of modelers, but look for a big switch to diesel motors in the future.

As for the new 40 gram Wakefield motors, we personally can't comment at this time, primarily due to the fact that we aren't "Gum Band" flyers. "However - - !!!" Don't forget that as of January 1, 1966, all Wakefield records are up for grabs. Need we say more?

After reading the January issue of Model Aviation, we feel sure that the AMA Executive Council seems to have the right idea in mind with reference to Contest Directors, but feel that they mis-spelled the word "Quality". The word they meant was "Quantity" and would seem more appropriate. In essence, we agree that a C. D. should officiate in at least one contest per year, but of more importance in being able to retain this rating, he or she should be required to vote on each and every matter when asked to do so. This will enable the AMA to take a course of action which will benefit all of the members.

As prime example, was the recent voting by C. D.'s on the new By Laws for "OUR" organization. This showed the quality of the majority of present Leader Members by the extremely poor response. The next example was in the poor showing the L. M. gave in voting for new officers for "OUR" organization, the AMA.

To sum it up for you Leader Members, let's strive this year for "QUALITY" in our performance both in the field and administratively, because only with quality can come quantity which in the long run will let AMA grow into the kind of organization that we're sure all of us want.

Also new for 1966 is the big insurance bombshell that was dropped on the members. Locally, I'm sure that we in our fine club have many and widely varied viewpoints which everyone should so express, themselves. Whether you are for or against this insurance at least be courteous enough to listen to what the other guy is saying and "why" he feels as he does. Could be that YOU can learn something from his viewpoint.

Personally, we feel that the AMA charted club/insurance deal was extremely ill presented to the entire AMA membership and will be the big factor in determining which way they feel and act. To see if we were "way out", we did a little simple addition, using last years Model Aviation as a reference. Sanctions listed so far for the first six months of the year, 1966, total a measly nine (9), while in the first six months of 1965, a big fat total of 140 sanctioned contests! A breakdown of contests for 1965 goes like this: January 4, February 6, March 6, April 10, May 40, and June 74.

We realize that not all 1965 contests were listed which would swell the total even more. So our conclusion is that all of the clubs in the nation are engrossed with the matter of "Do we, or do we not want to become an AMA chartered club and if so, how will it affect our own club." Not having access to the master policy, how can one assess it's actual value? Certainly, we can't, can you???

For you professionals or competition type flyers, we call your attention to the proposed "Payload and Cargo Events" as outlined on pages 14 and 15 of the January issue of Model Aviation. Study them carefully, then send your comments to our area F.F. contest board director, so that he can have proper guidance in voting 'yea' or 'neu' on the important new proposal. In case you don't know to whom and where, here it is: Mr. J. Lenderman, 66½ Marshall Court, Santa Clara, California. Personally, we feel that this is a most challenging and rewarding event for the serious modeler.

One last item for you to mull over. Of approximately 75,000 to 100,000 R.C.'ers in this country, less than 10% are AMA members. But this 10% has the edge on the rest of the AMA membership only because they care enough to express their views and 'toot' their horn more. So, rather than knock the RC people, think of what and how you, as free flight modelers, could further your cause. Nuff said for now.

BONUS PLAN

E-Z-B TISSUE

By Clarence Mather

The March meeting will have as a special event, an "E-Z-B" Contest. Clarence produced the plan on Page 12.

In addition to this, we want to develop a whole covey of "B's" for the March long National "E-Z-B" Postal Contest being sponsored by the National Indoor Model Airplane Society. Clarence & "Fud" are willing to offer their help and advice and even provide rubber to all who ask.

Let's all take a shot at this. You get more flying time per hour of board time from a "B" than anything we know.

BUILD FAST /
FLY SLOW /
JOIN N.I.M.A.S. NEWS
VIEWS PUBLICATION: \$2⁰⁰/YEAR,
DUES \$1⁰⁰/YEAR ADDITIONAL.
SEND TO: BUD TENNY,
BOX 545
RICHARDSON, TEXAS

GOONEYBIRD A/2 NORDIC

By Russ Soley

While hundreds of people have been urging me to publish three views of the "Gooneybird", I have been extremely reluctant to do so, feeling that the model is "simply too good to give up to all and sundry." (Thank you, Mr. John O'Donnell). If Gene Bach can find a way to keep those MacDonald Aerocel bombs from running into each other, perhaps we'll have the plans of the "Twist" next month that originally were scheduled for the February issue.

"Gooney", is one of those highly sophisticated, scientific type designs, taking almost one full year from the original sketches to first flight tests. After all, it takes a long time to check every plan in the Zaic Yearbooks. And that "Circular Air Flow", WOW! The original drawings were then followed only as far as the wing & stab are the same. About the time these were completed, I began to notice how nice those low pylons looked - so, out went the simple straight-forward stick-of-a-fuselage previously planned.

Two further events gave "Gooney" its final configuration: Ted Orr was telling me about his many archery adventures over a "business lunch". Of course, to satisfy the government, business entertainment declaration practices, the discussions had to be put to practical application. Therefore, the Eason Arrow Boom! The final change came about when Hugh Langevin sent me a drawing of his famous "Osprey." The movable ballast system used on the "Osprey" was immediately usurped, and became the "Gooney Gravity Centering System". And so, another "original" design was ready for test flights.

I'll never forget the first day of test hops - it actually flew! Les Hill, of "Suskin" fame, assisted a little and really didn't laugh too much. Over coffee later, he told me that I should change the glide from left to right because he thought it would spin in some day if I didn't. Of course, I told him I wasn't going to do anything of the kind, because everyone knows, in North America, most thermals circle left; and most birds too; and so does the water in the "john".

After getting through one club contest, "Gooney" was ready to show the world at the Cal-Western. First flight, Sam Belcher timing, 180 seconds was a snap, 300 feet up when Sam said, "you got the first one in, son." Then it came to pass - Hill the prophet, son of Jerry Ritz, was right! Did you ever see a seven foot Nordic do the hundred yard dash faster than Jessy Owens? I did!

The pieces went back together in time for the summer qualifications - including a new rudder for right turn! The reason for the spin-in was because the left wing is set at $3\frac{1}{2}^{\circ}$ and the right wing at 4° - a design feature incorporated because of the poor union labor employed at the time.

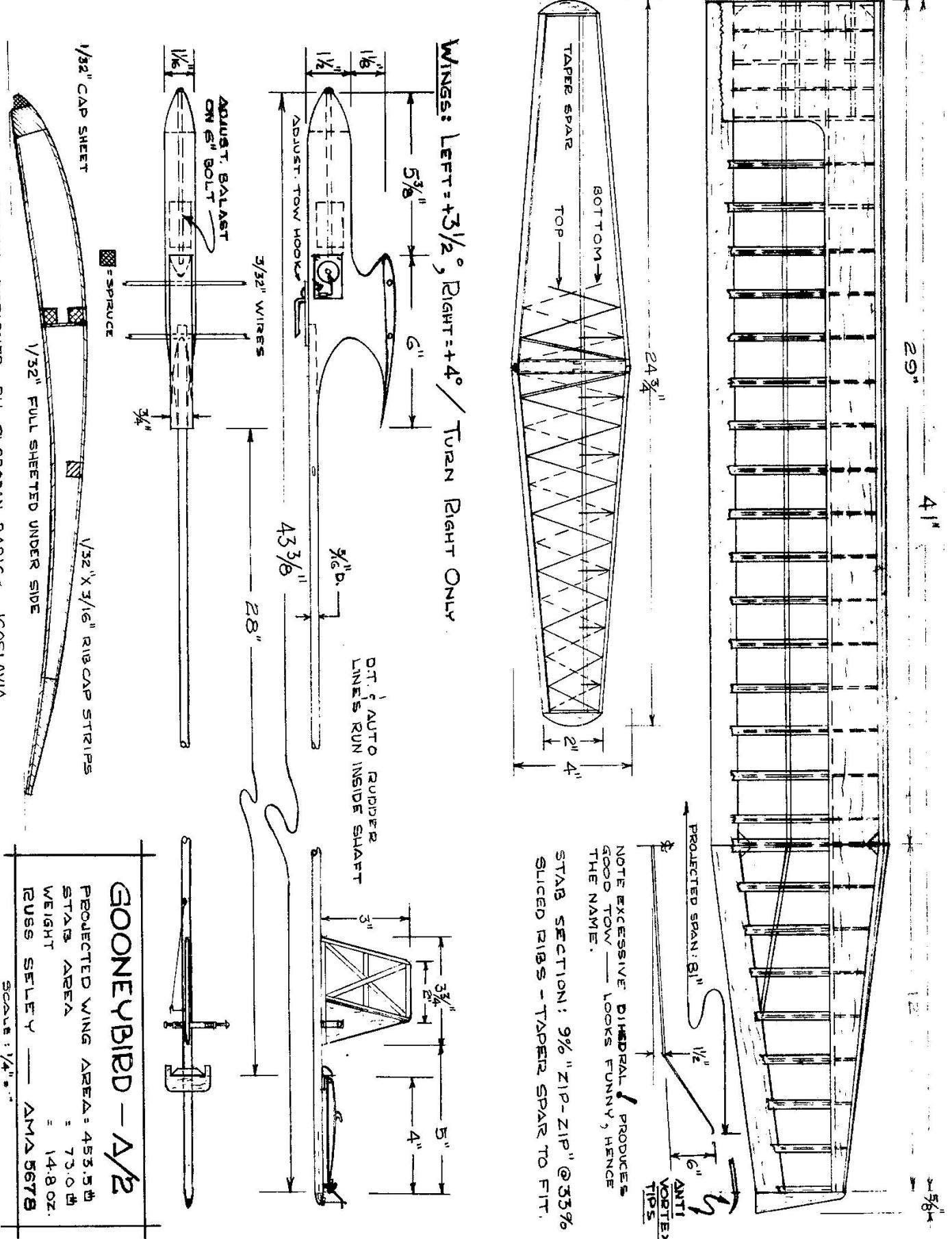
"Gooneybird" is only an attempt to build a Nordic of average moments, aspect ratio, and airfoils, to perform under all contest conditions. It is also built to take almost any blow without damage, but not to come in from 300 feet in 9 seconds flat! To this end, I can't say enough for the Eason

Target Arrow Shaft used for the Boom. It only weighs 6/10 of an ounce for it's 34" length, and has never suffered any damage.

The only design element that I really feel strongly about is the movable ballast. If you use one model to fly all conditions, this will really help you a lot. Hugh Langevin, can vary his C.G. from 45% to 100% - although he doesn't say he goes to such extremes in competition. As for the "Gooney", I only work between 50% and 65% - That's enough!

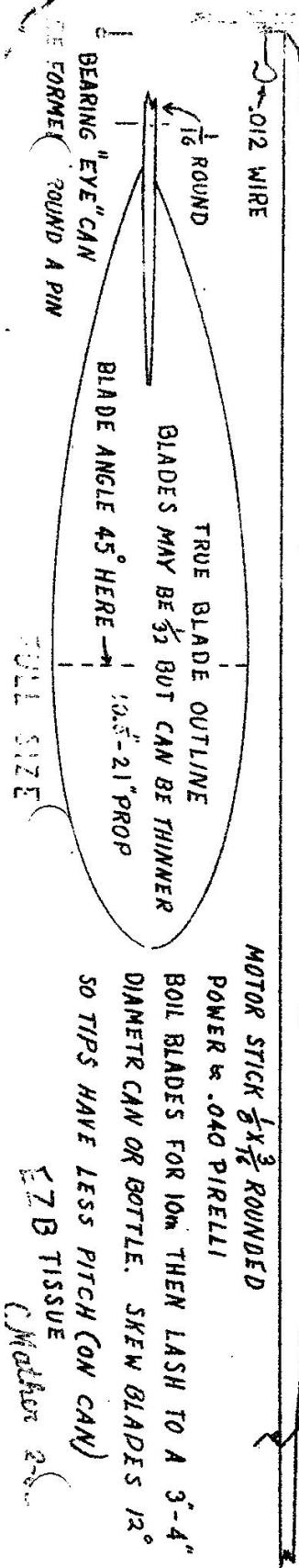
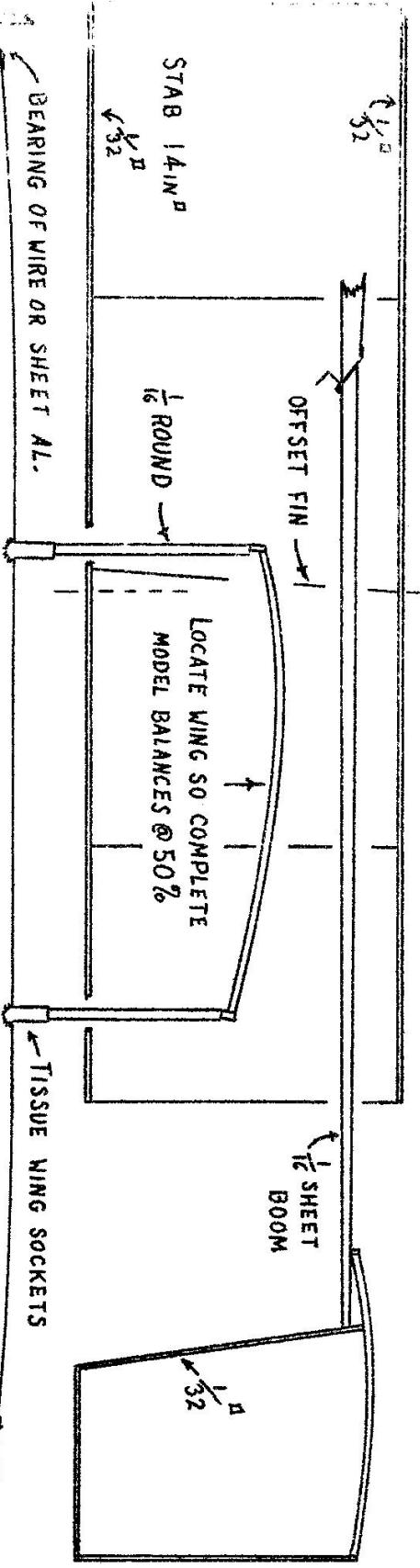
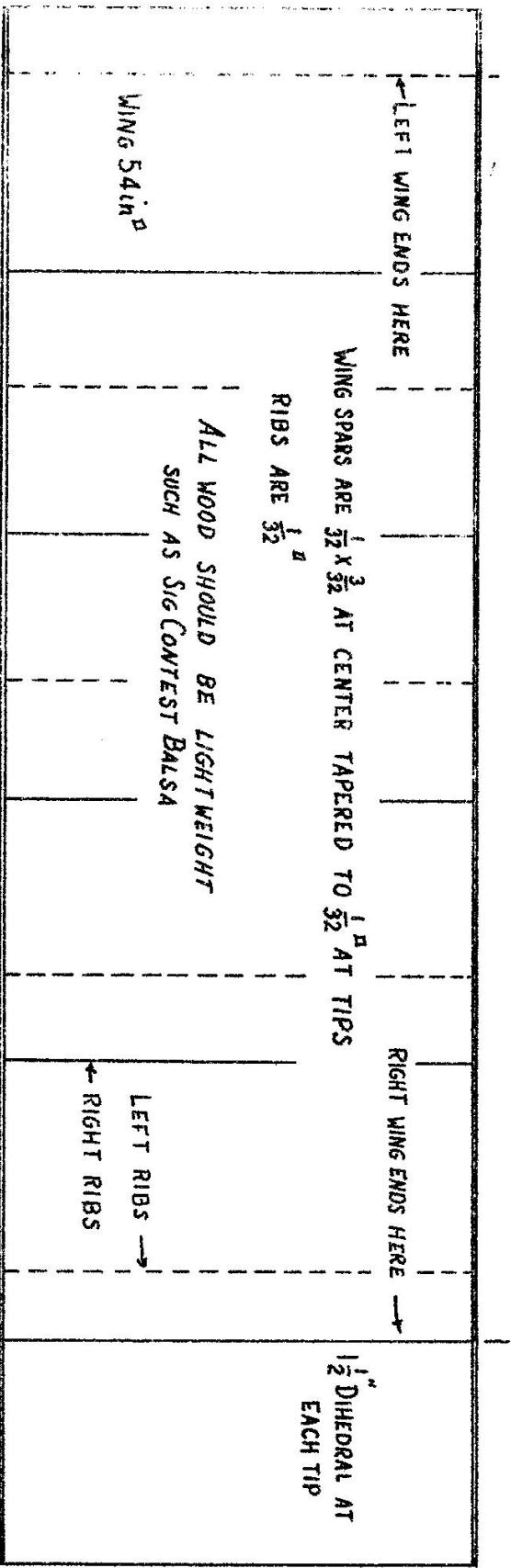
Up until the last Orbiteer monthly contest, it had a very good record, having never done worse than 12:h0. As for that January contest, all I can say is #%.! --- One secret I will not reveal is the tubulator design employed. To do this would require a complete dissertation on the techniques of wrinkle tissue covering practices and theory of optimum crack repair procedures.





AIRFOIL DESIGNED BY SLOBODAN BABIC, YUGOSLAVIA
WORLD CHAMPION - 1957 - CZECHOSLOVAKIA

SAN DIEGO ORBITER — FEB.'66



THE OLD TIMERS

By: Bill Thompson

After being cancelled twice by the weather, the Southern California Ignition Flyers have finally decided to drop their January Old Timer contest. However, this club has another meet scheduled for March 27, same time and same place. This writer and family had planned to attend their first meet which was to have been held on January 16th. We drove to Los Angeles on the morning of the 15th. The weather was beautiful and we stopped off at the Orange County Airport to see "Movieland of the Air". An added feature this year was the annual model industry trade show. After seeing many of the great airplanes of yesteryear, and also some of the greats in the modeling world, we drove over to "The Valley" late in the afternoon. While going out for supper, we remarked that it looked as though Sunday would be a perfect day for the contest. However, at about 8:30 PM, the wind started to blow like mad. Later, the lights went out while this writer was in the shower. On Sunday morning, the wind hadn't let up a bit. At the field, the Old Timers were hunched down in their jackets, cussing the weather. Thanks to Harry Lowe, most were later warmed up at his house to the tune of coffee and doughnuts.

Eventually, the contest was rescheduled for January 30. This writer decided to play it safe and drive up early on Sunday morning. We set the alarm clock and went to sleep to a weather report that might have allowed anything for the next day. However, during the night, when the torrential rains started, we just rolled over and shut off the alarm. Can't complain too much about the weather. Sixty degrees with wind or rain is a lot better than they have been having back east, where a lot of us came from. Remember flying in the snow? This writer does! It was so cold we had no trouble sticking out one frozen finger to flick the prop. However, my brother would keep his hand under his arm pit in order to have fingers flexible enough to adjust the needle valve. And all of this on ignition yet! Those were the good old days???

According to Bud McNorgan of the SCAMPS, there will be a minimum of 6 Old Timer contests in the Los Angeles area within the next six months. Also, there is a 2 day Old Timer wing - ding planned for Taft, California on July 9 & 10. It's going to be a big year, so get those Old Timers ready now!!

To help you fellows build an Old Timer, but who like prefabricated kits with all the goodies, a Buzzard Bombshell kit is now available. All you have to do is buy the kit, put it together, cover it, install engine (ignition or glow) and you're ready to fly. The price is \$15.95 and may be obtained from your hobby shop or:

Classic Model Aircraft
P. O. Box 267
Culver City, California, 90231

Ignition engines, such as the Super Cyclone or Anderson Spitfire, are still on the market. Either one would be a fine choice for this great old bird, if ignition flying is your cup of tea.

Before we sign off for this time, must list a few of the planes to be seen at "Movieland of the Air". A scale modeler would go nuts in this place.

1928 Boeing 100	1917 Curtiss Jenny
1928 Curtiss Gullhawk	1942 Curtiss P-40
1918 Dehavilland D H 4	1914 Fokker S-11
1928 Dehavilland Gypsy Moth	1918 Fokker D-7
1930 Dehavilland Tiger Moth	1931 Lockheed Orion
1936 Pitcairn Mailwing	1918 Pfalz D-12
1917 Sopwith Camel	1916 Spad

Along with the above are many other ships, replicas, models and engines. In all, 5 acres of aerial history.

MARCH 27, 1966
LET'S HAVE A 100%
TURNOUT FOR THE ALL F.A.I.
WE NEED HELP: FLYING, TIMING,
PROCESSING, SETTING-UP, TAKING-DOWN, AND
IN HAVING FUN. THIS IS A GREAT EVENT,
AND IT WILL BE BIGGER AND
BETTER THIS YEAR.
MAKE YOUR PLANS
NOW.