THE

SCATER

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Fly Time Out West

The second "Yuma, Arizona FAI Challenge Meet" (Nordic and Wakefield) was held Jan. 14 and 15 in a three way challenge between Phoenix, San Diego Orbiteers, and SCAT. Yuma was chosen as the site because of its mid location for the three clubs. Dolby located a field, an unused Navy Auxiliary right off of Interstate 10 just outside town.

One round was flown Saturday afternoon but since the wind was a little fresh the remaining 4 rounds were flown the next day. Only one max was recorded in that first round (Nordic). Everyone retired to the motel except Pierre Brun and Andy Faykun. They jumped the border to Mexico to pick up some Kahlua. All gathered together later for dinner at a real winner of a restaurant picked by Dolby. After waiting several hours discovered that the Chef had quit and gone to Phoenix and the steaks were being cooked(?) by the bus-boy.

This was followed by a party back at the motel. Dick Gildersleeve entertained with an unbelievably complex epoxy repair job on his busted Wakefield prop. (he had stuck his hand through it) Soon it was morning and back to the field.

Fudo Takagi, looking for his Wakefield, by a fantastic bit of luck found his hand launched glider down wind. This glider had gone OOS at Fresno, about 400 miles Northwest of Yuma several weeks before. A really amazing feat and the conspirators are to be congratulated.

Federation Aeronautique Internationale

Even though Mr. Terriffic (your editor) managed to get high time, Scat support in depth did not materialize due to various epistomological phenomena. Gildersleeve made a beautiful test flight with his repaired Wake. Then on his first official the prop blew up. We calculated a peak RPM of 78,000 for the hub. In spite of this speed the ship failed to climb any more than 27 inches.

Woods, Fruciano and Roseberry of Phoenix won Nordic and F. Takagi, B. Donn and C. Mather of San Diego won Wakefield. Scat got beat.

The South West USA World Championships was held at Buckeye, Arizona on Feb. 18 and 19. We had a good turn out from Scat, and the rest of L.A. and San Diego was well represented. Weather was just about ideal and all had a good time. The Banquet Sat. night at the American Legion hall was very enjoyable. All you could eat for $1.50, Western style. Let's hope that Dolby, Roseberry, and all the Phoenix movers keep up the good work. Unfortunately I don't have a list of winners here in front of me so I can't be too informative. I do remember winning FAI power with 15:00. Ed Dolby took unlimited rubber (before 9:00AM) and Gildersleeve and Bogart lost their minds trying to beat him. Bogart also lost his fuselage compressive preload, in a rather difficult power-on maneuver that can best be described as a tangential arc, circularly compensated inverse climb-out.

Faykun flew his Coupe d Poupe in unlimited. What utter disdain for the competition! One flight thermalled all over the field for what seemed to be hours. One flight didn't.

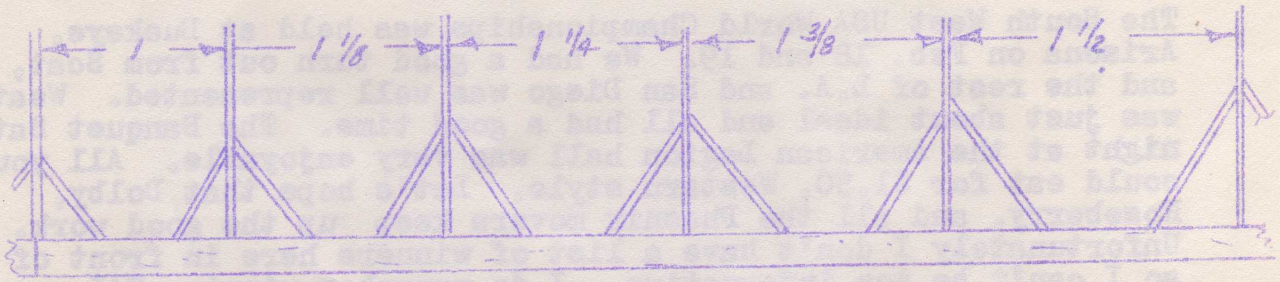
Bogart's Unlimited Rubber Wing Structural Design

For the open rubber event, a light airframe is most desirable, even to the point of sacrificing a little structural integrity. Thus it is common to see 300 sq. in. wings weighing less than one ounce. Now many people have their own ideas on wing structure and this discussion deals with my present idea.

My wing chord is 6 inches with a 1/8 sq. trailing edge, two 1/8 x 1/4 spars set flat, opposing each other at about 30 percent chord and a leading edge carved from a 3/16 x 5/16 hard stick balsa. In order to keep the paper from pulling the T.E. up and causing unsightly wrinkles, I used 1/16 sq. sticks as gussets so placed that the space between the ribs was divided into thirds.

One last additional feature was the use of variable rib spacing between the root and the outboard dihedral break. This spacing varied linearly from one inch to two inches with each space increasing 1/8 inch.

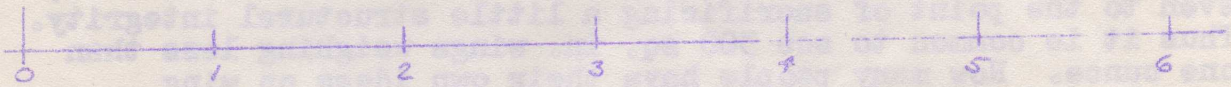
The trailing edge is drawn below to illustrate the foregoing.



The use of a rather blunt trailing edge was used so as to give more thickness at the T.E. to a rib section (my design) which is rather narrow in the rear. The section is really taken from a 6.4 inch length drawn below.



BOGART - UNLIM. RUBBER



I think the wing could be possibly lightened by using a 1/8 sq. L.E. set on edge with stick gussets as the T.E. and two 1/8 sq. spars in place of 1/8 x 1/4 spars. The wing as presently constructed survived a power-on crash (fuselage wipe-out) that caused paper rips in the outboard wing tip area.

F.A.I. Model Supply

Note: This is not an editorial but an advertisement bought and paid for by Ed Dolby. (two beers at Lake Elsinore)

FAI Model Supply
6521 N. 3rd Street
Phoenix, Arizona 85012

This is not the address of the long lost "Dirty Vulture Pirelli Mine" but the new diggings of the infamous "New England Wakefield Supply". The IRS, SEC and FBI are checking out how this switch transpired so before they catch up with these guys, send away for their free multi-page catalog and order book for all sorts of tittillating goodies and parts. Many are new items and their block buster is a new towline reel. It is made of a special FAI grade hardened nylon and has been designed and developed by Nordic flyers, for Nordic flyers. These boys are also looking for new items that they should handle. They are not afraid to handle what might seem like piddling trifles because they know that there is always somebody somewhere (like Moosejaw, Manitoba) that can't get a 3¢ dingus that would make him a World champion. Of course they might charge $30 for that 3¢ dingus but at least you could get it, and you wouldn't have to hog it out of a wildcat tusk.

Western Free Flight Association

Coordination of FAI Free Flight activity in the Western U.S.A. is progressing with the help of the WFFA and the organization now sports a quarterly publication,

"Western FAI News"
3818 El Ricon Way
Sacramento, California 95825

All interested clubs are invited to check with the WFFA on just what it is we are up to (example: Better FAI Teams, more FAI interest, help AMA understand FAI)

Unlimited Rubber Revival

Everybody (almost) in Scat has been bit by the Mulvihill bug and several new rubber ships are under construction. Bogart has an impressive looking ship mentioned here earlier and as soon

as its repaired we will report on it. Ray Behrens, Andy Zaykun, Dick Gildersleeve have older ships. Ken Sykora just completed a new one and brought it along to the last club meeting. It is a very neat layout, diamond fuselage (sheet) poly multi-spar wing about 250 sq. in. Prop is 22 d x 27 p, uses a "Montreal Stop". Overall construction is very well executed. It ought to be a threat and looks plenty strong too.

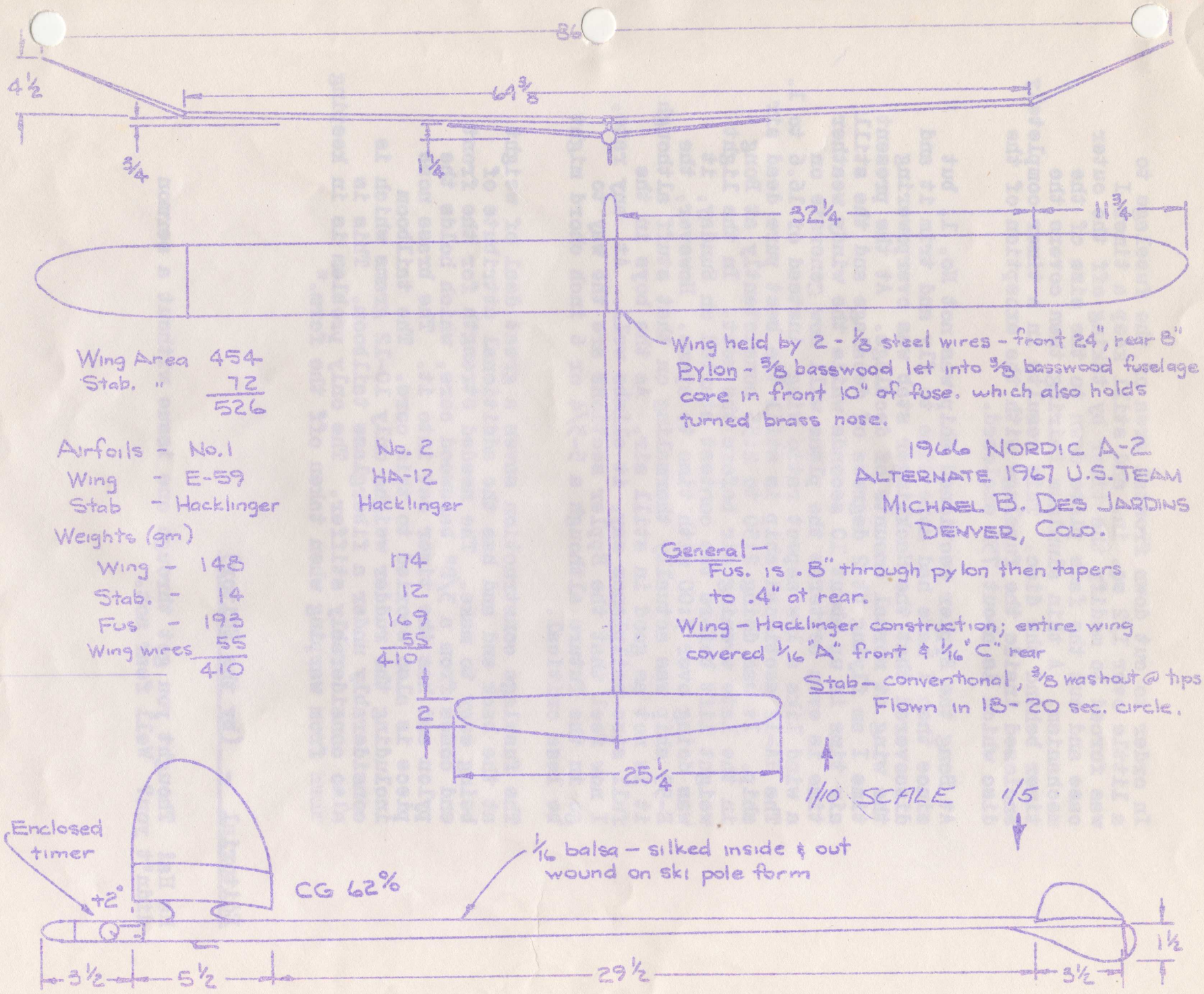
Your Editor is building an unlimited also. Square built up fuselage with 3/32 sq. longerons. Three panel wing about 260 sq. in. Concentrating on high power to weight ratio. Should have it done in a few weeks. Now if we can find some decent rubber!

Perhaps this year Scat will not let Joe, Manny, and John have it all their way!

Denver Nordic - Mike Des Jardins

Last week the Editor spent 3 days in Denver (on business) and had a great time free-loading and stealing the secrets of all those Rocky Mountain free flighters. More on this in the next issue, but for now let Mike tell about his Nordic experiences.

> "I enjoyed your write-up of the Bong affair. You were also most charitable to my cause when you state that Hugh eased me out of 3rd place. In actuality he bludgeoned me out. If we would have had 3 days of Bong's standard windy weather I am afraid that Hugh would have beaten everybody by several minutes. Van Nest and Langenberg would have won anyhow probably as they were entirely too efficient about the whole process. As for my falling out of third place when all I had to average was 2½ minutes for the last 3 rounds, I have no excuse sir. The airplane wasn't at fault. I guess I just flat blew it. Panicked - took Gas, etc. Ah well competition like that sure does help you discover what makes the sport go round. Tremendous! The only way to select a team.
>
> I am enclosing a drawing of my latest A-2 design evolved from those I flew at Bong. The basic difference is the change from a Thomann style wing mount to a full low pylon, 2" more length from wing t.e. to stab l.e. and a slightly longer nose.



Wing held by 2 - ⅛ steel wires - front 24", rear 8"
Pylon - ⅜ basswood let into ⅜ basswood fuselage core in front 10" of fuse. which also holds turned brass nose.

1966 NORDIC A-2
ALTERNATE 1967 U.S. TEAM
MICHAEL B. DES JARDINS
DENVER, COLO.

Wing Area	454	
Stab. "	72	
	526	
Airfoils -	No. 1	No. 2
Wing -	E-59	HA-12
Stab -	Hacklinger	Hacklinger
Weights (gm)		
Wing -	148	174
Stab. -	14	12
Fus -	193	169
Wing wires	55	55
	410	410

General –
Fus. is .8" through pylon then tapers to .4" at rear.
Wing – Hacklinger construction; entire wing covered 1/16 "A" front & 1/16" C" rear
Stab – conventional, ⅜ washout @ tips.
Flown in 18-20 sec. circle.

1/10 SCALE 1/5

In order to cut down frontal area of the fuselage to a little over 1/2 sq. in. and still keep a timer I was forced to modify the timer by taking off the outer case and cut the face plate down to the size of the mechanism. A thin aluminum fairing then covers the timer behind the disc. This results in a timer completely enclosed inside the fuselage with the exception of the disc which is about 75% enclosed.

At Bong the Eppler sectioned ship was not No. 1, but since then I have had more time to fly and trim it and discovered that the Hacklinger stab was overpowering the wing at normal amounts of decalage. At the present time I am flying at 2 degrees of decalage and the still air time is up about 10 seconds while the windy weather time is even betteras the plane will now generate on a wind like a low aspect ratio wing instead of 16.6 to 1. The HA-12 sectioned ship is still the best pure dead air ship. It was doing 2:50 to 2:55 consistently at Bong in the late evening air before the meet. In the light weight lift before the contest started on Sunday, it was doing over 3:00 with time to spare. However, the E-59 ship was actually thermaling on that stuff although it is not as good in still air. As the boys in the full size sailplanes say, it climbs well. At any rate, I now feel that the Eppler sections are the way to go in the future although a 5-3/4 or 6 inch chord might be less critical.

The fuselage construction saves a great deal of weight at the back end and has the additional attribute of being easy to make. The needed strength for the front end comes from a 3/8" basswood core, which holds the pylon and has the timer set into it. The brass nose piece is also epoxied to this core. The tailboom including the rudder weighs only 10-12 grams which is considerably under a fiberglass tailboom. This is also considerably stiffer. The only problem is in keeping them from warping when taken off the form."

Editorial - (by the Editor)

Ha Ha! Thought you got through one issue without a sermon didn't you? Well fear not.

Question for this month, who is doing what to who in the AMA-FAI-FF Program? We find the situation impossible to report on intelligently and fear that:

a) Most readers would become bored.
b) We would all become bogged down in a hopeless bureaucratic tangle.

However great the fears, we must bravely struggle on to rescue the fair maiden FAI. (You knew we would) Back to the question. Who is selecting the current U.S.A. FAI FF team selection program?

There appears to be little knowledge among AMA members who fly FAI free flight, as to how decisions are being made. This would lead one to believe that these same AMA members are not being consulted.

We are treated to what appears to be constantly changing procedures, committee titles, timetables and so on. Why all the confusion? We would like to see our FAI organization within AMA, improved and made more responsive to the members. Whats wrong with that? Are we to be brushed aside as having a "self-interest" in this sport and therefore be disqualified from having a legitimate interest in its regulation?

Lots of questions, but where are the answers?

Next month we will attempt to provide some.