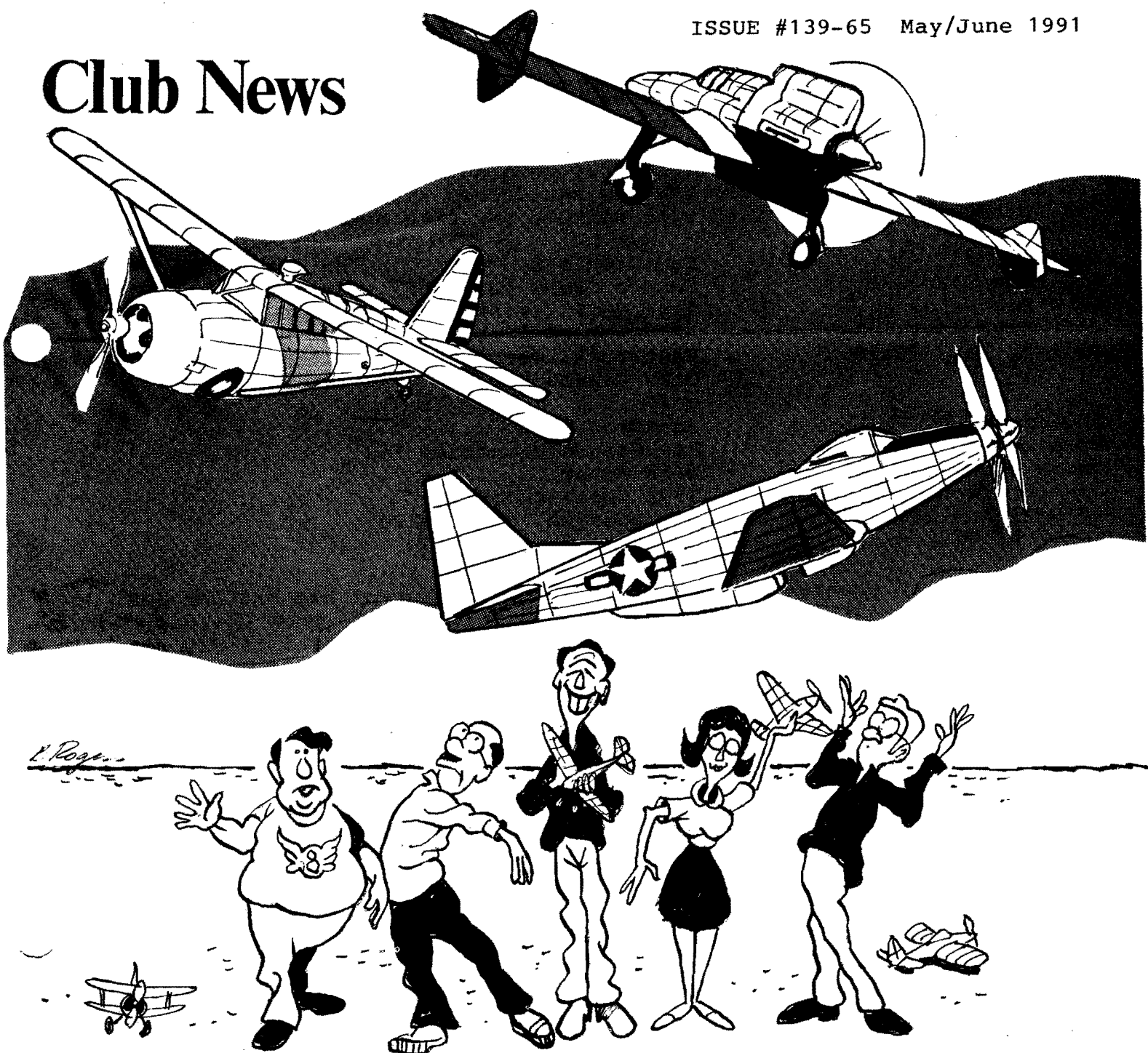


FLYING ACES

ISSUE #139-65 May/June 1991

Club News



BARNEY BAXTER OF THE AIR!

OK experts, what do these three models have in common? Any of you old enough to remember the delightful comic strip, "Barney Baxter" will recall the very elegant, fictitious designs featured therein. That imaginative cartoonist must have once worked for Curtiss--he had the verve and sense of the romantic common to the Curtiss think tank. This company produced many a model builder's delight. However, a great number of their designs though pretty, were duds. On the cover are three losers. The Owl and the Ass-ender you know immediately. But what is the Fischer P-75 doing in that gaggle?

Maybe it is the kiss of death--it was designed by Don Berlin, famous Curtiss designer. With 3,000 horses, contra-rotation and heavy armor, all it lacked was sweepback to be a vision of the future. But alas, the war ended and the jet took over.

Bob Rogers

NEWS ON THE WING!

Alright! Five more squadrons have joined the FAC Air Force. This brings our total strength up to 21 squadrons as of right now. You can still get your squadron listed with GHQ, no time limit. Start one in your area if there is none near you. Doesn't take much to do it. All you need is a few good modelers. If you have any questions drop us a note and we'll be glad to help you if we can. Now here are the new squadrons. If there is one in your area get in touch with them, they will welcome you with open arms.

Squadron #17
FAC Lone Star Sector
Ed & Don DeLoach
~~3428 Bryn Mawr~~
Dallas, Tex. 75225

Squadron #18
Canada Goose Squadron
Jack McGillivray
~~621 Cosburn Ave.~~
East York, Toronto
Ont. Canada M4C2V1

Squadron #19
Western Pa. Tailspin Sq
Jim Buxton
~~550 McMurray Rd.~~
Bethel Park, Pa. 15102

Squadron #20
Norwich FAC
Jerry Bockius
Mann Egerton
48 Division St.
Norwich, Ct. 06360

Squadron #21
Rio Grande Squadron, FAC
Nick Ropar
7708 Hermanson Place
Albuquerque, N.M. ?????

Jim Brichacek has just informed us of the passing of his brother Joe. Joe had been a modeler since the age of 8 which meant he had been building models for 64 years! He was a very accomplished builder as several of Joe's models are in the Smithsonian Museum. He was a staunch supporter of all aspects of our hobby but his first and greatest love was for the rubber powered variety, especially those with two wings. We're sure Joe will be looking down on us--if you Clubsters have a fly-a-way just look up and ask Joe which way it went. I'm sure he will help you.

He was very proud to be associated with such a fine group of gentlemen who shared in his favorite hobby. He considered it a privilege to belong to the "Flying Aces". Jim says that before Joe passed away he asked him to thank all of you for helping him recapture his youth. As Dennis Norman put it "Our loss is Heavens gain".

Are you going to attend either one or both of the FAC Contests that GHQ is putting on at Lawrenceville, Ill. or the one at Geneseo, NY? Time is flying by and the dates are coming upon us very fast. If you haven't already sent in your entry forms please do so as soon as you can to help us plan for them. Entries are coming in at a good pace which will assure us of a good turnout.

Entry forms are in this issue as well as a map of the College Campus so you will be able to find the dormitory where we will be staying while at Geneseo. Motels have been listed in past issues of the newsletter for both contests. Lots of room in the dorms at Geneseo as we have the whole dormitory this time. The food is very good there and it is a great deal. We hope to see many of you Tissue Trimmers there at both contests.

GHQ now has official FAC T-Shirts for sale. You may have your choice of a design with a Waco "D" on it or you may have the one with a Curtiss P-6E on it, or maybe one of each. They come in your choice of gray or yellow with black lettering. Sizes are, small, medium large, extra lge. and extra extra lge. Price is just \$10.00 each plus \$2.00 for postage. Proceeds from these t-shirts will go towards fending off the recent postal hike and will keep us from raising the FAC dues. Which by the way, hasn't increased since we started putting out this rag eleven years ago. Just send your order to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

BUILD....FLY WIN....EFF--AAA--CEEE!!!
Lt. Col. Lin Reichel, CinC-FAC

Postal Meet News

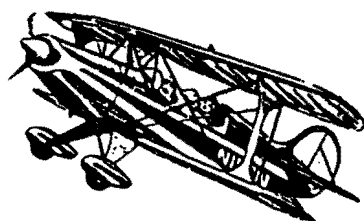
POSTAL RESULTS TO DATE

The postal contests for this summer will be the regular Comet kit/plan postal meet and the Pearl Harbor postal meet. The Pearl Harbor meet starts on May 1, 1991 and will end on Dec. 7, 1991. Models of aircraft that were on station on Dec. 7, 1941 from all Pacific countries are eligible. Responsibility of proof is with you!

The Comet event is for all models built from a Comet kit or Comet plan are eligible. This contest starts on May 1, 1991 and ends on Oct. 31, 1991.

Enter both contests as many times as you wish with as many models as you wish and every time you better your score with a particular model send it in to GHQ.

GO GET'EM, SKYSTERS!!! BUILD..FLY..WIN!!!
EFF--AAA--CEEE!!!!

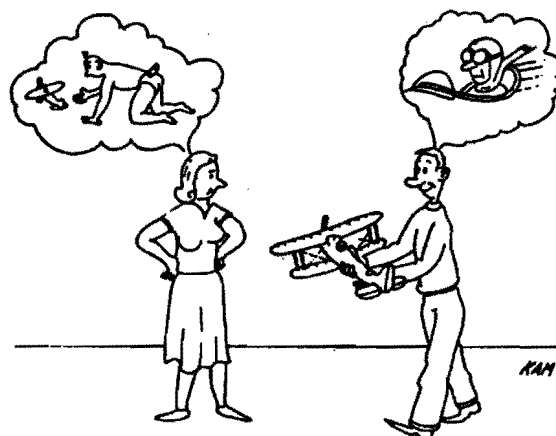


COMET ENTRIES;

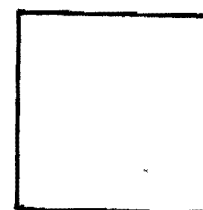
Padre Anderson, Fairchild 24, 267 seconds, Dave Stott, Fokker D-VII 58 seconds, Darold Wilken, Piper Cub, 55 sec., Paul Stott, Spartan Fighter, 48 sec., Dave Stott, Hawker Hurricane, 34 sec. and Paul Boyanowski, Spitfire, 30 seconds.

Pearl Harbor Entries;

Darold Wilken, Grumman Wildcat, 67 seconds.



If the box on the right has the dreaded RED "X" in it, it is time to renew your membership which includes the newsletter. Cost is \$9.00 per year in the United States and Canada. Overseas cost is \$12.00. Six issues published every other month. This is your last issue under your old membership. Make checks payable to Flying Aces, send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506



1919-1939
AIR WARS
 THE AIRCRAFT
 MILITARY & CIVIL
 OF THE GOLDEN YEARS

Photos, articles, indepth tech info, plans and 3-views
 for Golden Age historians, modelers and replica
 builders. Military, Civil, Sport and Racers — It's all here!
 Quarterly 24.00 US. 30.00 Foreign (surface)
 8931 Kittyhawk Av., Los Angeles, CA 90045 USA

New!
AEROPLANS For the Creative Modeler
 JOURNAL 52 Pages of Plans and 3-4 views, Flying
 and static models of the propeller
 airplane 1909 to the present.

\$10 per issue plus \$1.50 postage. \$17 Foreign
 8931 Kittyhawk Av. Los Angeles, CA 90045 USA

It has been some time since we told you about the quarterly publication called "1919-1939 AIR-WARS". (see ad on the left). This has got to be one of the finest magazines of its kind. It's one of our favorites. Once it arrives we do not put it down until we have gone through it cover to cover.

Let's review the last three iss. Issue #23 Fall 1990, has an article on the Luscombe Phantom, the Stearman 4E, 7 pages of 3-views of the Consolidated NY-1, an article on a replica of the PZL-11. There is some model news by Lou Buffardi and a model plan of the Fokker C-14.

Issue #24 Winter 1990. This one contains an article on observation and attack aircraft of 1922-3 at McCook Field. Another

article covers the Poliparkov I-15 Russian biplane fighter, with 3-views, technical notes, photos, color schemes and a reduced size model plan by Dick Gates. There is also a full size model plan of the S.P.A.D. Bleriot 10 included.

Now on to issue #25 Spring 1991. This one has a story on the first flight over the Andes Mountains in a Curtiss Oriole. More on the PZL-11 replica aircraft, with some excellent 3-views of it. Six pages of 3-views of the Standard J-1. This issue includes a full size construction Plan of the Curtiss R military racer.

All issues contain photos, 3-views, and color schemes where possible for aircraft of the Golden Years. As well, they always cover something in the world of modeling. A GREAT magazine. Try it for a year and we'll bet you renew your subscription.

NEW PLAN BY AL LIDBERG

Al has done it again! A 40 inch wingspan model of the Turbo-Porter for rubber power. Should be a great flyer in the Jumbo Class. Straight forward instructions make it an easy model to build and it should be easy to trim out. Three color schemes are mentioned and it comes as a crisp Blackline plan for ease of building. Detailed building instructions are included as well. This one should create quite a stir out at the field.

Readers of the newsletter may get the plan plus text, B&W photo and 3-view, plus a copy of Al's catalog for \$7.00 (ask for the catalog)
 Send to A.A. Lidberg Plan Service, 614 E. Fordham, Tempe, Az. 85283.

Thanks to the following for their contribution to this issue. Bob Rogers, Dave Stott, Pres Bruning, Jerry Bockius, Bob Howard and Al Lawton.

TWO FROM THE BOOT.

by Mangia Cavallo.

O.K.mob,..er, gang, no,no,clubsters! Yeah, clubsters. Here we are presenting a duo of Il Duce's war birds, though one was a civilian pressed into service. As this is the prettiest let us view her first.

The Caproni Ca 164 was a civil training and touring plane that graced the sunny sky over Italy before things got nasty for the entire world. Built in small numbers it served to train only few pilots for the military, and was probably used as a squadron hack. one did see some duty as a short range recce and liason job in Croatia in 1942.

The Ca 164 depicted in our 3-view drawing was one captured by U.S. forces in Ciscily, given a USAAF serial number and paint job. This makes it O.D.on upper and side surfaces, gray beneath, yellow serial numerals. The spinner was silver. It had a wood prop.

The Ca 164 profile shows a survivor of the war in it's civil markings. It seems to have been all silver with the fin and rudder divided into green, white, and red sections. The lightening bolt stripe is as dark as the registration, so was probably black. The stabilizer and elevator could have been striped as was the vertical tail. This was a common practice in pre-war days and may well have been carried over to postwar days.

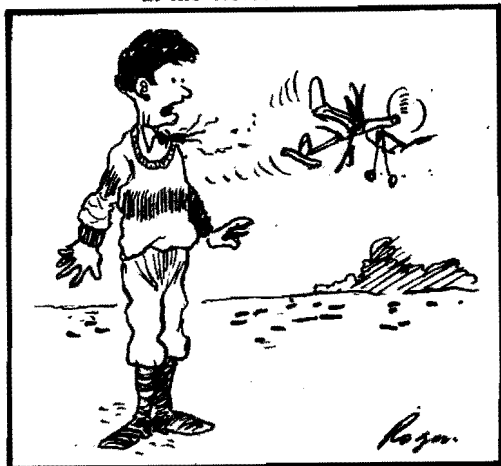
Ref; Letectiv & Kosmonautika No.11 and No.15, 1979. "Italian Civil and Military Aircraft", by Jonathan Thompson.

The twin engined ship depicted in our other 3-view is the Savoia Marchetti SM 86 dive bomber. It was a single place job. The glazing on the lower nose was for the lone pilot to line up on target. Only the prototype was built. It was painted in the usual italian camouflage of olive green dappling over a base of sand. the under surfaces were light grey, including the sides of the nacelle beneath the wing, but not the like area on the fuselage, for some reason. The fuselage band was white, as was the tail cross bearing the crest of the house of Savoy. The usual 4 position wing insignia was carried.

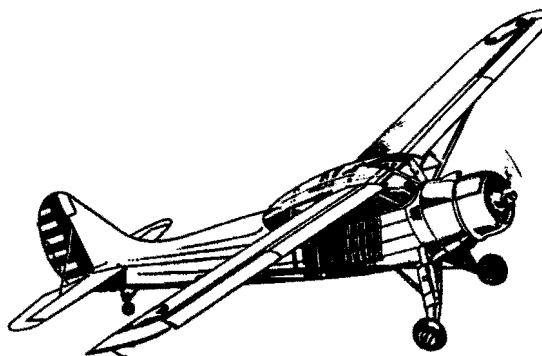
Ref; Letectiv & Kosmonautika No.14 and No.15, 1984. RAF Flying Review, Sept. 1962. "Italian Civil and Military Aircraft", by Jonathan Thompson.

FAC SOCIAL NOTES:

McPheat got his tie caught
in his Rotor-Plane.



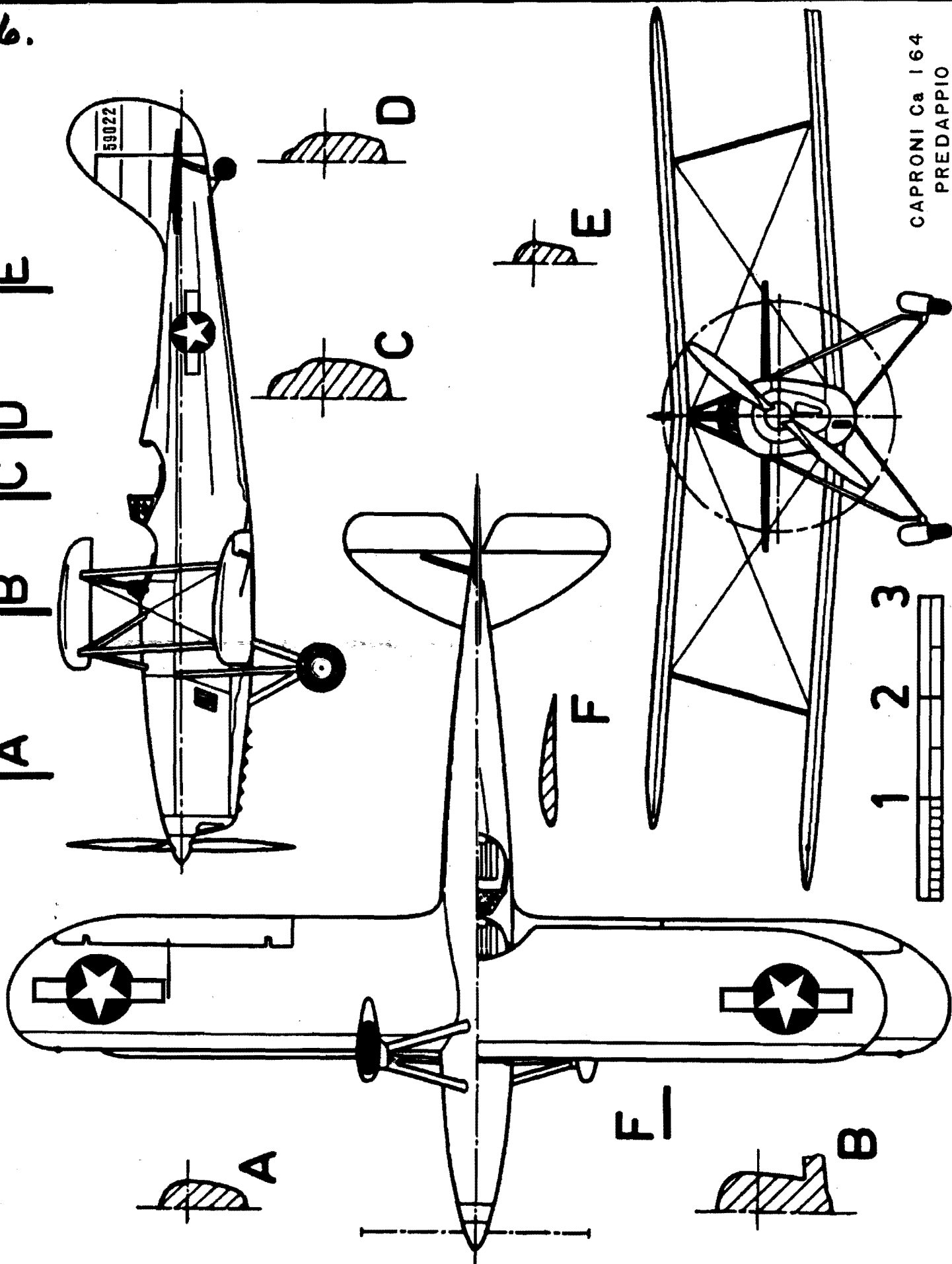
"With fresh rubber you just
hafta be careful."

**SPRING FLY-IN**

June 23...at Durham, Ct....FAC Scale, Jumbo Scale, WW II Combat, Races, Embryo, Peanut Scale, Catapult Jet, No-Cal, HLG, P-30, 10¢ Scale Model. CD, Ed Novak, 106 Cutlery Ave. So. Meriden, Ct. 06450 Flying site at Durham Fairgrounds, Durham, Ct. Rts. 68 & 17.

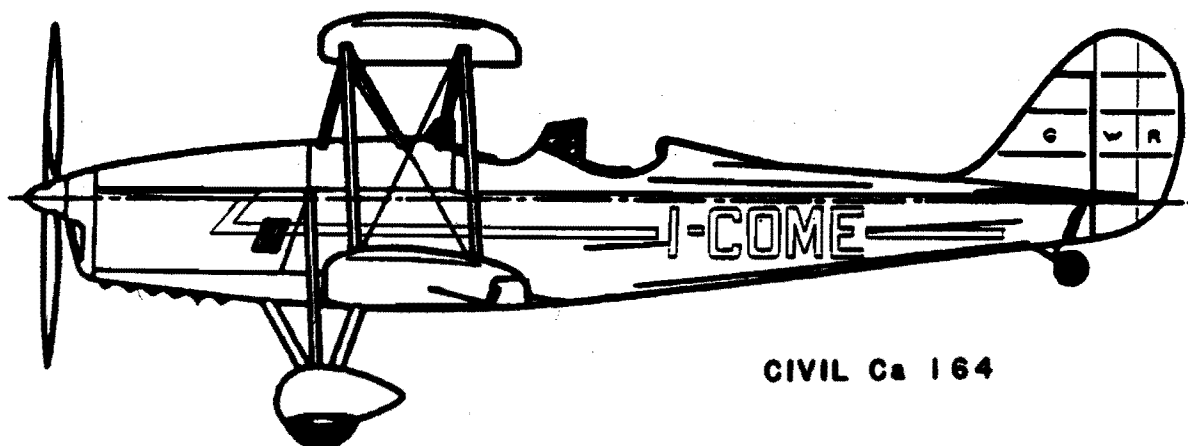
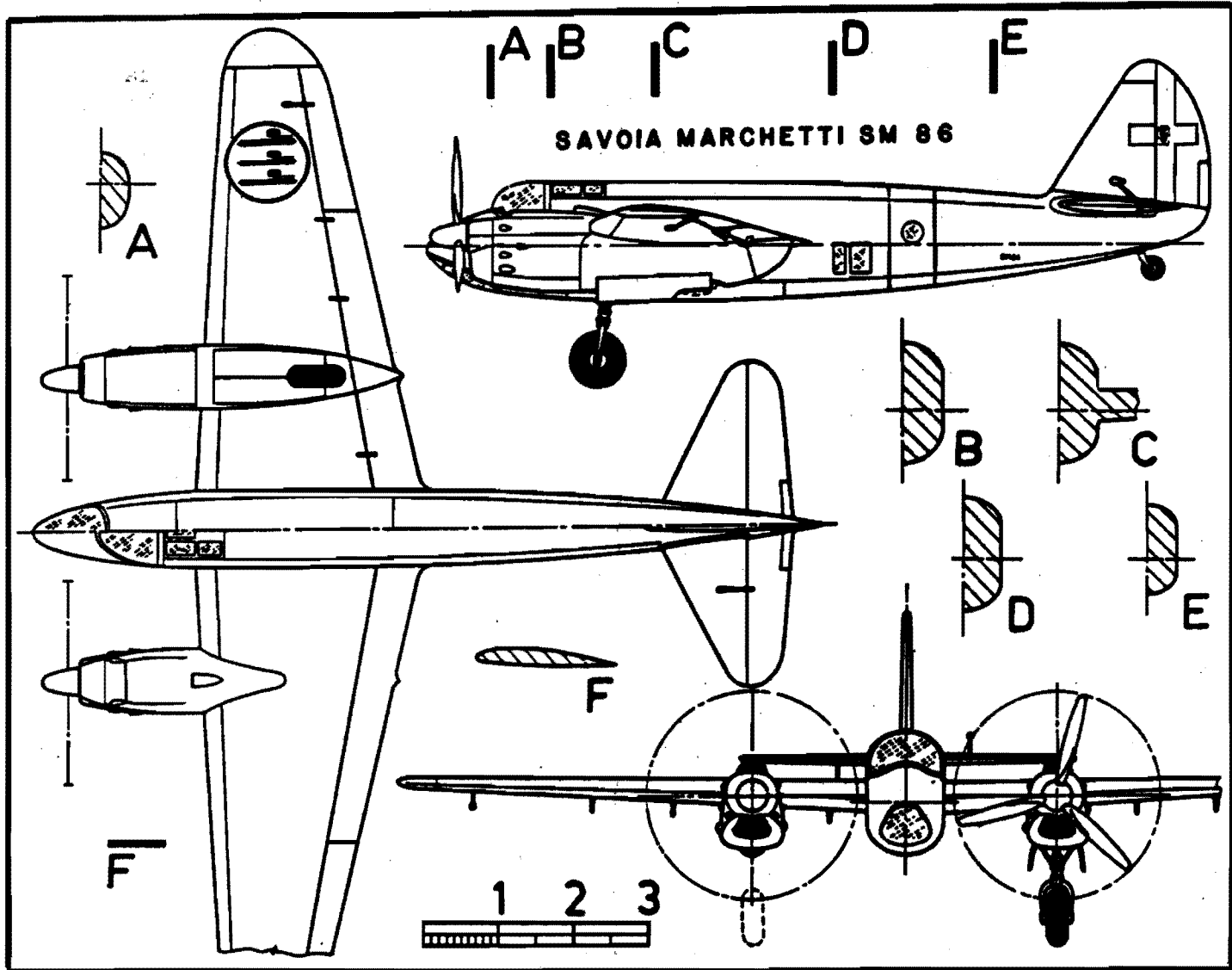
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A B C D E



CAPRONI Ca 164
PREDAPPIO





Peanut & No-Cal Scale Postal Meet

Another postal contest has ended and a very good entry list, too. The winners will get another notch on the "Kanone" list as well as a plan for their efforts. With the large return of entries they are not listed as to the order of finish. The winners are; Indoor Peanut, Chris Brownhill, Indoor NO-Cal, Jack McGillivray, Outdoor Peanut, Gene Smith, and Outdoor No-Cal, Claude Curry. The results for Outdoor Peanut and Outdoor No-Cal will be found on page 19. Thanks to all the Clubsters who entered. EFF--AAA-CEEE!!!!!!....

INDOOR PEANUT

<u>Pilot</u>	<u>Aircraft</u>	<u>Time</u>	<u>Pilot</u>	<u>Aircraft</u>	<u>Time</u>
Don DeLoach	Voisin Hydro	105 sec.	Jerry Bockius	Day. Wrt. RB-1	56 sec.
Walt Eggert	Gere Sport	66 "	Jim Buxton	Grumman Avenger	305 "
Gene Smith	Heinkel HE-100	65 "	Bob Betjemann	Beech Staggerwing	54 "
Randy Boston	Lacey M-10	61 "	Chuck Slusarczyk	Spitfire	463 "
Walt Eggert	Farman Sport	55 "	Gary Johnson	Curtiss XF13C-1	208 "
Bob Bender	S.D. 14bis	52 "	Walt Leonhardt	Cougar	50 "
Stan Fink	Euler D-2	45 "	Jack McGillivray	Cessna Cardinal	480 "
Ross Mayo	Bristol Scout D	32 "	Larry Loucka	Farman 400	439 "
Richard Fiore	Piper Vagabond	31 "	Don Slusarczyk	Spitfire	380 "
Walt Leonhardt	Cougar	27 "	Roy Bourke	Cessna 210	361 "
John Koptanak	SE-5	26 "	John Maret	Cessna Centurian	362 "
Stan Fink	Fokker D-8	23 "	Ken Wiberg	Helio-Courier	306 "
Stan Fink	Gee Bee Y	10 "	G. Gallo	Hawker Tempest	155 "
Jack McGillivray	Isaac's Fury	112 "	H.L. Jones	Piper J-3	126 "
Chris Brownhill	Lacey M-10	118 "	Jack Barker	Piper J-3	93 "
Don Slusarczyk	Waco PW-8	79 "	D. Roseberg	Piper J-3	88 "
Don Steeb	Wright Flyer	29 "	Lou Leifer	Cessna Centurian	288 "
G. Gallo	Cougar	62 "	Dave Niedzielski	Fike	183 "
Dave Livesay	P-51	52 "	Stu Weckerly	Curtiss SBC-3	140 "
Dave Livesay	Mr. Smoothie	55 "	Curt Haskell	Hawker Hurricane	76 "
Stu Weckerly	SE-5	44 "	Richard Miller	Vought F4U	144 "
Paul Boyanowski	Piper J-3	51 "	Roy Courtney	Mig-3	72 "
Vet Thomas	Wittman Tailwind	52 "	Chuck Slusarczyk	Lacey M-10	237 "
Jim Miller	Lacey M-10	82 "	Ken McConnell	Grumman Bearcat	47 "
Roy Courtney	Lacey M-10	48 "	Ken McConnell	Maule M-5	91 "
Jack McGillivray	Curtiss XF13C-1	59 "	Larry Loucka	Hosler Fury	243 "
Dave Livesay	Waterman Gosling	39 "			
Curt Haskell	Bucker Jungman	40 "			
Gary Johnson	Andreason	43 "			
Don Slusarczyk	Voisin Hydro	86 "			
Jim Miller	Voisin Hydro	68 "			
Don Slusarczyk	F.R.E.D.	66 "			
Chuck Slusarczyk	Luton Minor	70 "			
Gene Smith	Stinson 125	88 "			
Lloyd Rosevear	Peitenpol	19 "			
Padre Anderson	Weedhopper	59 "			
Tom Fennel	Stinson 125	25 "			
Dave Linstrum	Fike	68 "			

Steven Whitford will receive a "Kanone" and a plan prize for winning as a Junior in Indoor No-Cal. Steven is only 9 years old.

FAC OLDTIMER

If anyone is interested in flying Old-timer Rubber FAC style, please contact Paul Grabski, 5004 Saufley Field Rd. Pensacola, Fla. 32526 or phone him at (904) 456-9841. We better tell you where though! This will be at the Jim Kloth Memorial and Gathering of the Turkeys in Pensacola on October 12/13. You may be able to pick yourself up a "Kanone", too.

INDOOR NO-CAL

Don DeLoach	Brewster SB2A	235 sec.
Russ Whitford	Day. Wrt. RB-1	184 "
Dave Linstrum	Cassutt Racer	165 "
Gene Smith	Mig-3	146 "
Steven Whitford	Maule M-5	140 "
Tom Nallen, Jr.	Piper Skycycle	140 "
Walt Leonhardt	Piper J-3	39 "
Walt Leonhardt	Farman 190	37 "
Ed DeLoach	Junkers JU-160	118 "

LOW WINGERS AND THE DEADLY

RIGHT HAND TURN.

by Dave Stott.

The phenomenon we will consider in this article is familiar to many flyers of low wing rubber powered scale models. It manifests itself in that initial turn down-wind. Once a low winger successfully negotiates that turn the flyer rests easy, for if a low winger is in for trouble, it usually starts right there.

Let us review some typical flight patterns of low wing models by starting with a model that makes it's initial turn down-wind to the left. The model climbs out against the wind after launch. After gaining some altitude it begins to turn to the left. When about 100° into the turn the nose begins to drop. As the model turns further down-wind it picks up speed, zooming down a bit, then up, all the while turning left. And so it goes, into a repeat of the cycle that becomes a pattern of undulating circles usually gaining a few feet of altitude with each cycle.

How does the flyer feel about this type of flight? "Well, not bad for a low winger, but it took a long time to gain a little altitude. And those undulating circles don't strike me as being very scale-like. Maybe if I try a tad more of right thrust, or some right rudder to open the turn up," thinks he.

Our flyer makes his trim change and tries another flight. This time the model climbs straight out into the wind. The nose gets high, the model slowing down. The nose drops to the left and the ship roars back straight at the flyer! But look what is happening to the model as this occurs....the nose plug has pulled out of the zooming ship! How in Hung could that have happened? That plug had a 5/16 long shank that was keyed to a slot in the nose block! How could it have pulled straight out against the tension of an almost fully wound motor?! There are very powerful forces at work here, clubsters.

Let us say our flyer put in a very little bit more trim adjustment than in the previous paragraph. The model is launched and climbs straight into the wind. It begins a wide right turn still climbing nicely. It continues the wide right turn down-wind and still climbs. Crossing behind the flyer, it comes into the wind again gaining even more altitude, and so on for a beautiful high scale-like flight of good duration.

Our flyer is elated. "Boy, is this crate ready! I'll be promoted in no time with the batch of kanonen this bus will win for me! Why, here comes Capt. Downthrust driving onto the field. Wait 'til he sees this ship perform!"

"G'mornin' Cap'n, sir," pipes our happy hero, saluting smartly. He describes his previous flight to the officer as he winds for a demo. He launches as before, but lo.....the model flies as depicted in figure 1.

"Cripes, Cap'n, I didn't change a thing on it since the last flight. I gave it a few extra turns wuz all. Geez, it come whistlin' in like a bat outa hell!"

"UM," says the captain. "Ya oughta make some high wing crates. They never do any of that nasty stuff," says he as his Monocoupe screws up into the ozone like a home sick angel.

Now, the author knows that not all low wingers fly as described above. Some sit right up there turning either right or left. But we all must admit the band between being in trim, and out of trim is pretty narrow for the low wingers. You can never really count on them flying a groove the way a high winger does. Why is it so? Much has been written on dihedral and vertical fin sizing and their effect. In this study we will add another important consideration. Thrust.

Before going on we should look at the forces, and their location, that are acting on the models considered. Figure 1 illustrates both high wing and low wing configurations. The center of lift is determined by drawing a horizontal line from the mean chord on one half of the wing, to the like place on the other half. Where this line crosses the vertical center line is the center of lift.

The center of gravity is well known to all. Just remember that all three axis pass thru this point. Horizontal (roll), vertical (yaw), and lateral (pitch). Think of the CG as a ball joint around which the plane moves in any and all attitudes. Notice that the CG is below the center of lift on the high wing configuration, and below it on the low winger.

The thrust line position varies according to configuration. Figure 2 shows typical thrust line locations. The arrow passing thru the thrust line location shows typical offset to compensate for torque and drag differential. More down than right for a high wing, more right than down for a low wing. The high wing has more drag above the lateral axis, while the low wing has more drag below it....hence the difference. The side thrust does not cancel torque, it only compensates for it. Side thrust induces a yaw force around the vertical axis by thrusting the nose to the right. It is aided by the slipstream blowing along the right side of the fuselage and fin. All this to try to compensate for torque, which is a rotary force around a different axis....the horizontal axis.

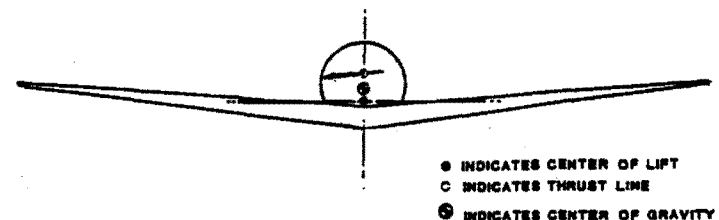
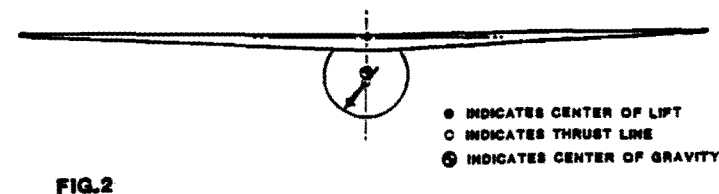
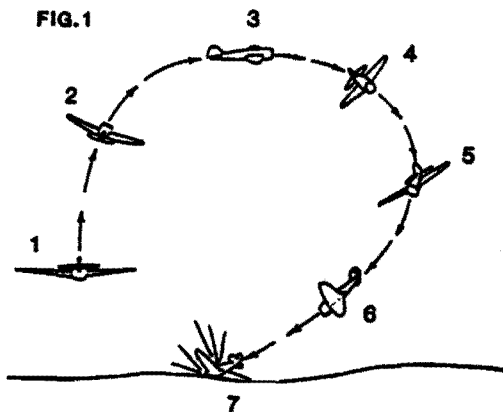
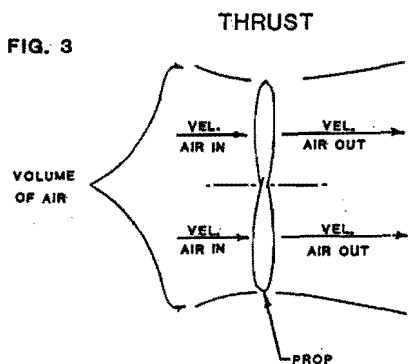


FIG. 3



THRUST = VELOCITY OF AIR OUT MINUS VELOCITY OF AIR IN
TIMES THE VOLUME OF AIR MOVED

Thrust is a force often misunderstood. It is easily confused with power available. Figure 3 is a simplified explanation of thrust. An airplane sitting on the ground with its brakes on and throttle wide open is developing maximum thrust. The same plane with throttle wide open and in level flight is developing little thrust. The reason is that in level flight there is but little difference between the velocity of the air coming into the prop, and the air going out behind it. When the reduced value of this figure is multiplied by the volume of air moved (which is about the same in both cases), you can see how thrust varies.

Now, where in the flight of a hand launched model does it develop the most thrust? It develops the most thrust in the second half of its initial turn down wind, about at position 4 in figure 1. This is

because the velocity of air entering the prop has been reduced by its turning away from the wind. It is developing more thrust to "catch up" to the speed the power available (which is still very high) can provide. Remember where the model was in its flight path when the nose plug unseated?

Now let's look at the forces, their magnitude and direction, as models go thru that crucial down-wind turn.

Figure 4 shows both a high wing and low wing model in a left turn with a 30° bank. The arrows emanating from their respective symbols represent the direction of the forces of lift, weight, and thrust. On the low winger it will be seen that the lift component is tending to roll the ship into a steeper bank. But thrust, which has a slightly longer moment arm, is exerting a corrective force and now points slightly upward, the vertical axis being no longer vertical. With the increase in thrust due to the turn down-wind, the magnitude of this new found up-thrust is even greater. Also, the increase of airflow along the right side of the fuselage and fin is producing the effect of "top rudder". These two forces bring the ship into a power stall. While it continues the left turn it may side slip toward the inside of the turn until it heads back into the wind where thrust is reduced and the bank less steep, the model recovering. The cycle is repeated, and the undulating circular flight path is established.

The high wing model in a left turn with a 30° degree bank suffers no upsetting forces, as can be seen in figure 4.

Figure 5 shows us that the high wing model in a 30° banking turn to the right suffers no upsetting forces either.

But Great Hung! Just look at the forces acting on the low wing model in figure 5! The lift component tends to increase the bank, and the side thrust is now directed downward a good deal due to the tilt of the vertical axis. The flow of air along the right side of the fin and fuselage, as well as the magnitude of the side thrust that is now directed downward will be even greater with the increase in thrust during the down-wind turn. Here then, are the powerfull forces at

work that we witnessed in the flight path shown in figure 1. which is actually a terminal velocity dive!

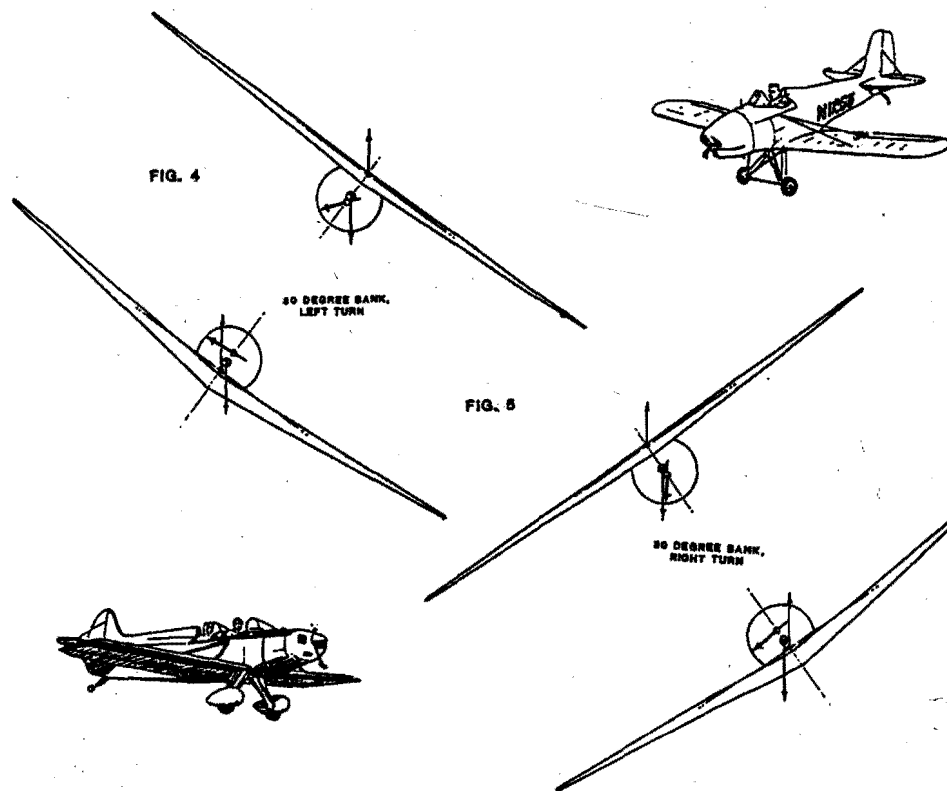
From all this we see that our torque compensator, side thrust, in concert with a high thrust magnitude during that initial down-wind turn is the cause of the phenomom suffered by many a low wing model.

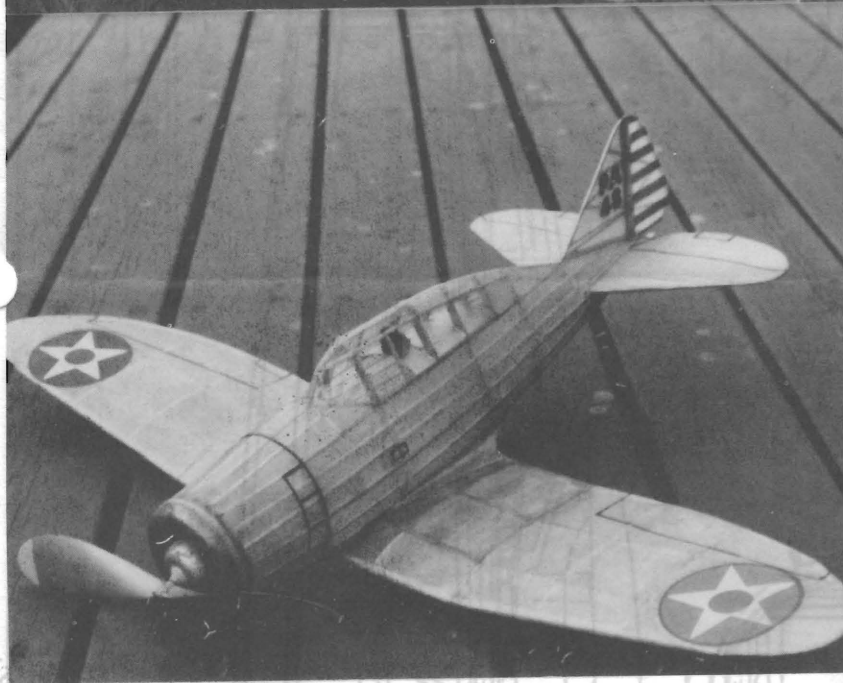
It seems little can be done to alleviate this condition, so we must try to work around it. The best approach seems to be to just let the ship turn to the left. It is safer that way. I have rarely seen any low wings spiral into the ground from a left turn. Ah, but that open right hand turn sure has a great rate of climb built into it! A shame to pass that up.

One thing you might notice is that those low wingers that do negotiate that deadly turn do so with a very flat turn. A slow flying speed (light wing loading) can help produce a shallow bank during the turn. Perhaps a washed in left wing tip for left turning models, and a washed out left tip for models who tend to turn right.

On a model with a large fin, perhaps a judicious reduction to a size less than scale will do the trick as long as it does not offend the eye. One trick tried at Pinkham Field was clear plastic spoilers on the fin to reduce its efficiency. They did reduce the model's sensitivity to trim changes, but in spite of being clear plastic, they were rather obvious. In truth I can find no wonder drug to cure this malady. I just keep giving it aspirins.

FIG. 4





Top Left;

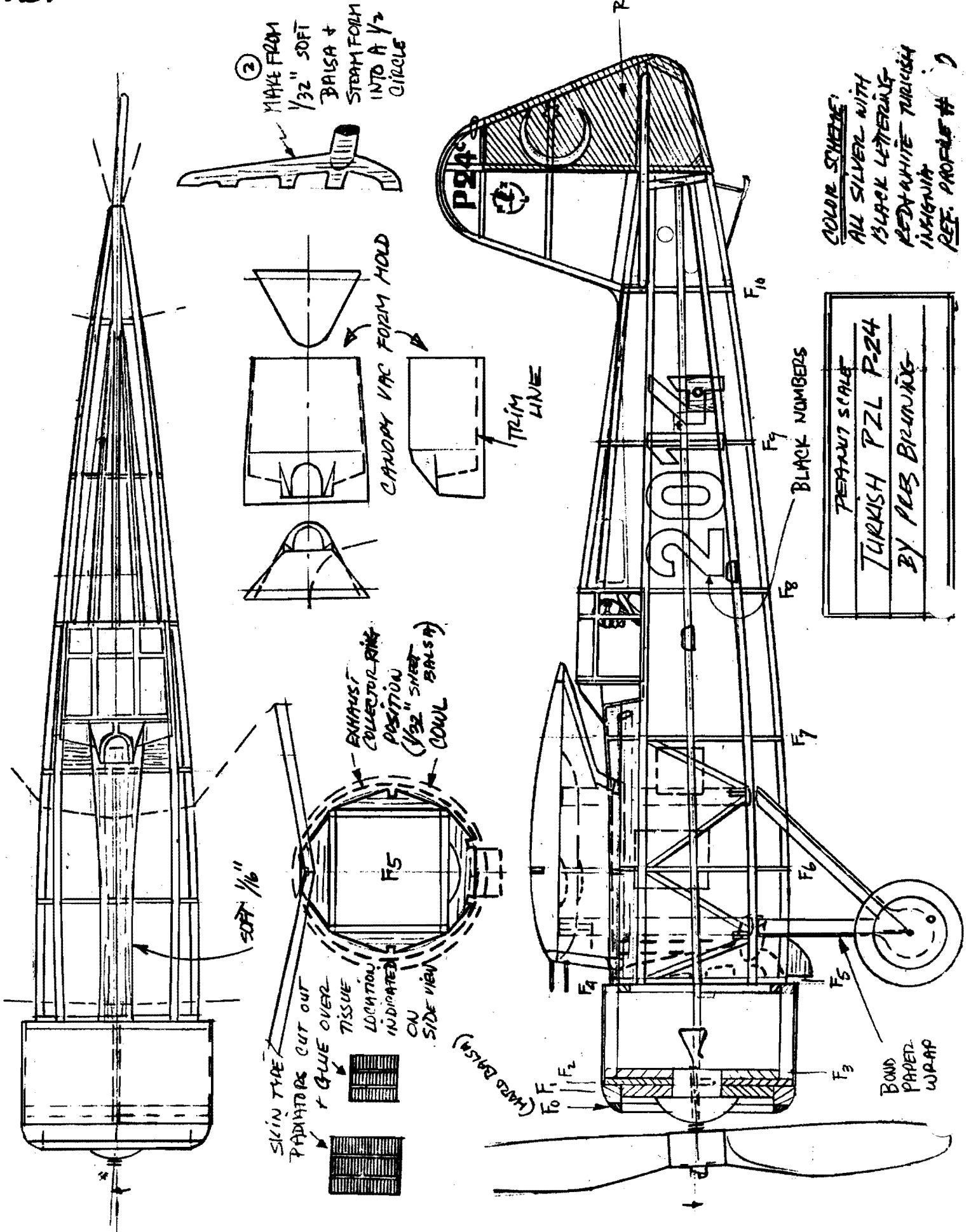
John Blair and two winners.....a Spitfire and a Spad. John Took both WW I and WW II at the same contest with these models.

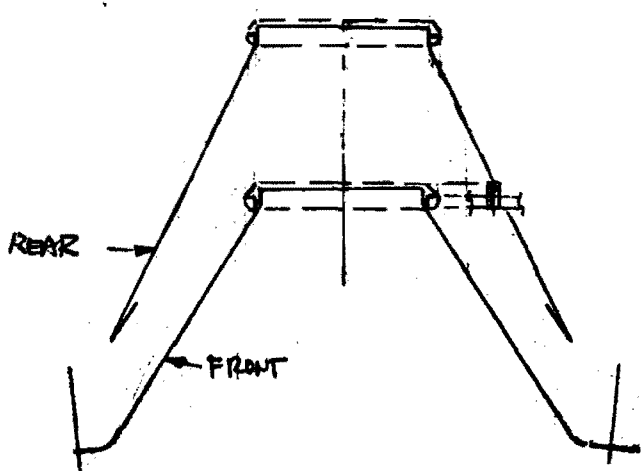
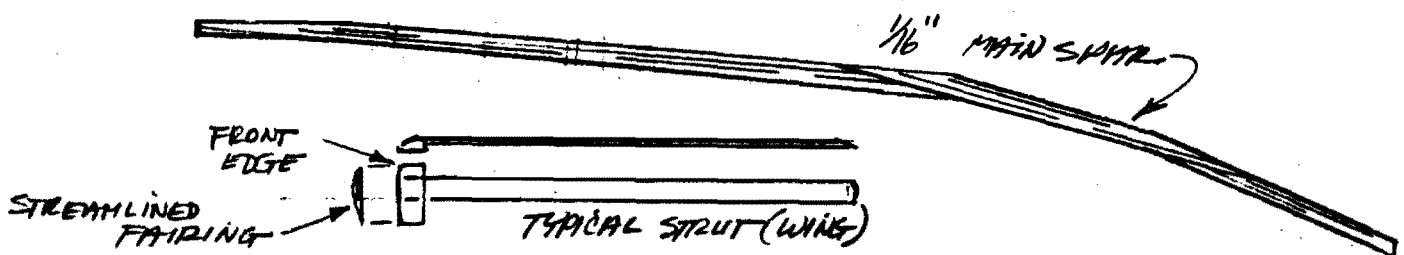
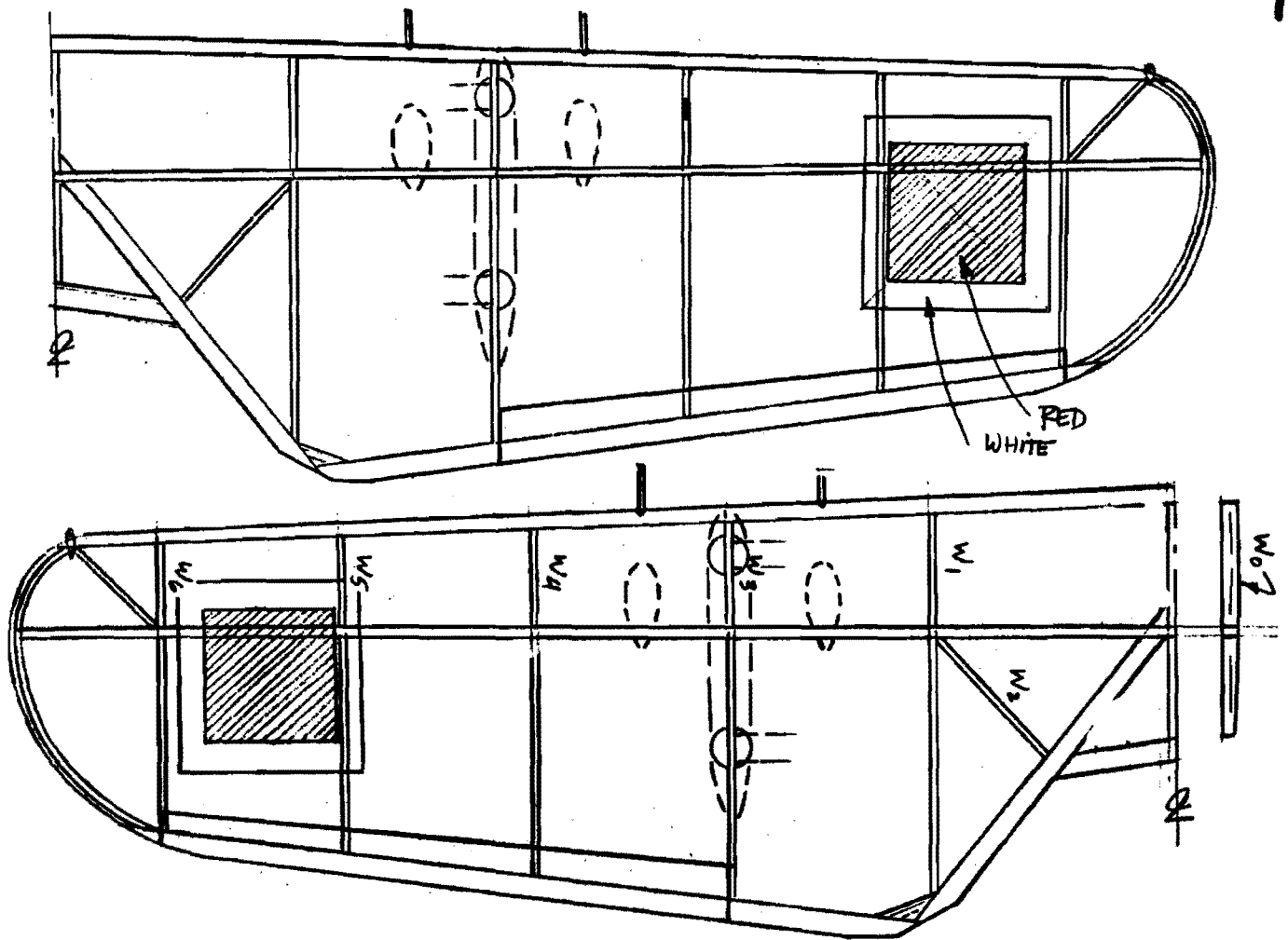
Top Right;

Nice looking Chambermaid by Oliver Benton. Don't Know how she did but it must have been alright. Chambermaids are naturals! Top pics by Oliver.

Bottom;

Two Models by Walt Leonhardt. A Seversky P-35 and a Stinson Reliant. The Stinson from a Megow plan and the P-35 from a Golden Age Reproductions kit. P-35 flew much better with stab published in the FAC newsletter. Photos by Walt.





CHECK MY STEALTH FIGHTER MODEL!

Contest Calendar

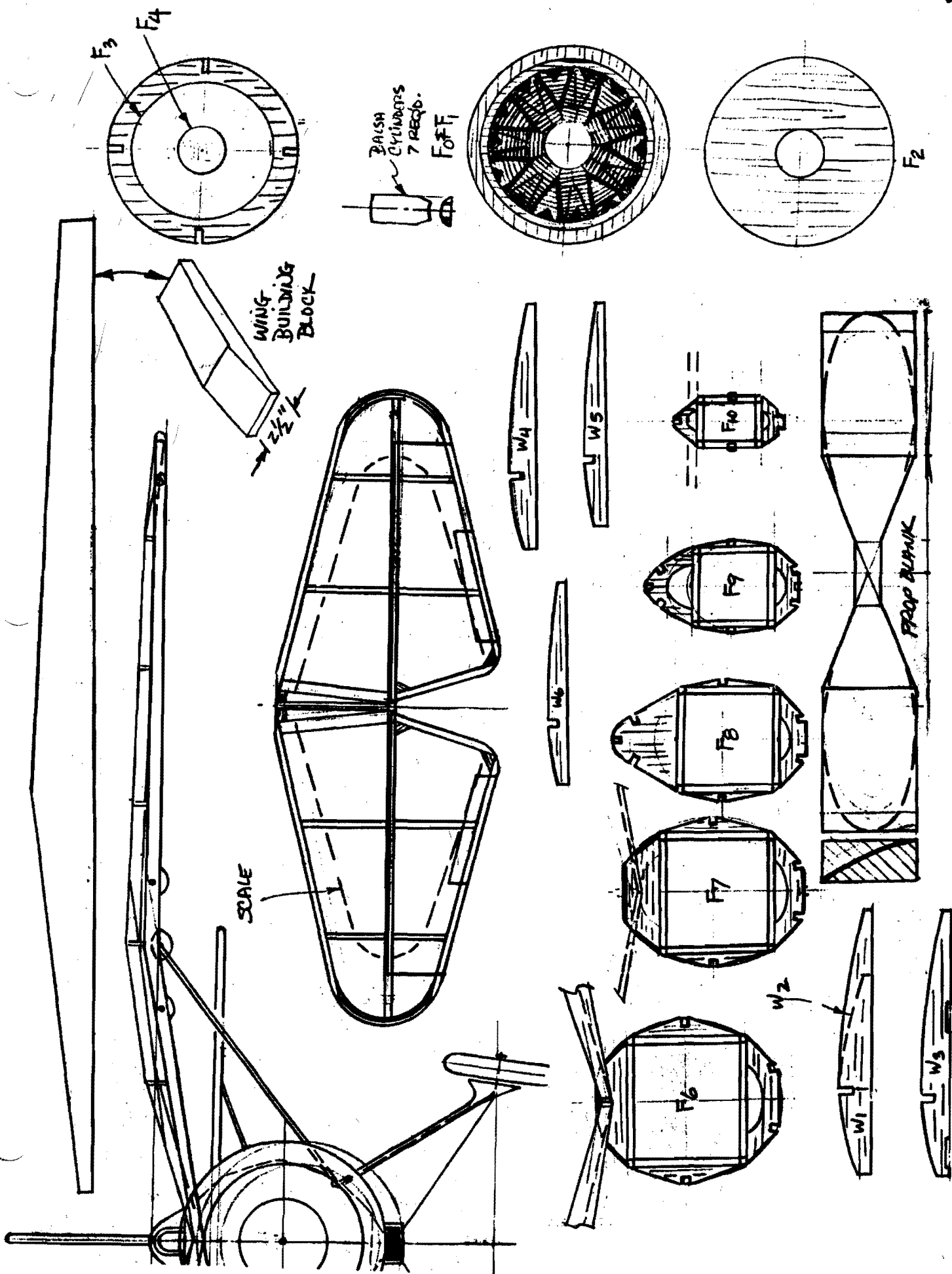
- June 6-7-8-9...The BIG Indoor Contest, Johnson City, Tn. AMA Indoor Nats plus FAC events, see last issue for FAC events.
- June 8.....20th Annual Great Lakes Contest at Prangmore Aerodrome, Erie, Pa. 10:00 am ti. 5:00 pm. FAC Scale, FAC Peanut, Hi-Wing Peanut, Embryo, Golden Age Scale, HLG Comet kit/plan Scale, FAC Oldtimer, WW II Combat, Races, Pioneer Scale. CD Joe Barna, 3517 Kristie Lane, Erie, Pa, 16506 Ph. (814) 833-4589
- June 16.....Cleveland Free Flight Society at Lorain County Community College. Contact Russ Brown, 4909 No. Sedgewick, Lyndhurst, Ohio 44124 Ph. (216) 382-4821 for events
- June 20-21....FAC Contest at the AMA Nats at Lawrenceville, Ill. See flyer in this issue.
- July 1--7.....Canadian Nats, at Huron Park, Ontario. All scale events to be flown by FAC rules. For more info, M.A.A.C., Box 9 344 Lakeshore Rd. E, Unit C, Oakville, Ont. L6J4Z5 Canada.
- July 13-14....National Warplane Museum FAC Contest at Geneseo, NY. See flyer in this issue.
- July 17-18-19.Great Grape Gathering at Gananoque Airport, Gananoque, Ont. Free Flight and R.C. Assist. For More info contact Don Reid, 7 Pinepoint Dr, Nepean, Ont. K2H-6B1 (613) 828-2467 or Noel Kirby, 5 Tiffany Cres., Kanata, Ont. K2K-1W1 (613) 592-5744
- Aug. 10.....E.M.A.A. Picnic Meet at Prangmore Aerodrome, Millfair Rd. Erie, Pa. FAC Scale, FAC Peanut, Hi-Wing Peanut, Embryo, Golden Age Scale, Comet kit/plan Scale, One Design--Flying Aces Moth, Pearl Harbor Mass Launch, Races, Jumbo Scale, No-Cal Scale, CD, Vic Didelot, 4410 Lorna Lane, Erie, Pa. 16506 (814) 838-326
- Aug. 24-25....FAC Mid-South Champs at Tullahoma, Tn. along with the Airfoilers FF Contest. WW I, WW II, Races, Jumbo Scale, Golden Age Scale, Embryo, FAC Old Time Rubber Contact Ollie Benton, 409 Brady Point Rd., Signal Mt., Tn. 37377 615-886-1293
- Sept 7.....D.C. Maxcutters Summer Fun Fly. Lots of FAC events, Contact Jerry Paisley, 20 Clearwater Ct., Damascus, Md. 20872 (301) 253-5295 for location.
- Sept. 7-8.....Peach State FF Scale Contest at Rome, Ga. Same schedule and CD as Aug. 24-25.
- Sept. 15.....22nd Annual Midwest Scale Contest at Prangmore Aerodrome, Erie, Pa. FAC Scale, FAC Peanut, Hi-Wing Peanut, Embryo, Golden Age Scale, Comet kit/plan Scale, FAC Oldtime Rubber, Post WW II Military, Races, No-Cal Scale, HLG. CD Ross Mayo, 6725 Alan Lane, Fairview, Pa. 16415 Ph. (814) 474-5229.
- Oct. 5.....E.M.A.A. Last Chance Contest at Prangmore Aerodrome Erie, Pa. FAC Scale, FAC Peanut, Hi-Wing peanut, Embryo, Golden Age Scale, Comet kit/plan Scale, FAC Oldtime Rubber, Pearl Harbor mass launch, Races, Jumbo Scale. CD Joe Barna, 3517 Kristie Lane, Erie, Pa. 16506 Ph. (814) 833-4589.

FAC AT JOHNSON CITY

These FAC events will be flown at the AMA Indoor Nats at Johnson City on June 8, judging will be on June 7 from 12:30 to 5:00 PM. Hi-Wing Peanut, Peanut Biplane, Peanut WW I Combat and Golden Age Scale 24" max span. Cost \$3.00 per event. CD Jim Miller, 827 Yorkhaven Rd. Cincinnati, Ohio 45240. Jim is looking for a couple of good men to help him. If you can do it he will greatly appreciate it.

S.O.S.--S.O.S.--S.O.S.

GHQ is needing the current address for Douglas Thomas. His last known place of residence was; 5988 Lake Lizzie Dr., St. Cloud, Fla. 32769. If anyone knows his whereabouts please let GHQ Know.



BILTMORE VEES
King of the Twin Pushers

Chapter Two.

Because Glendenning Lamanowitz, III, was engaged to Agatha Caidge-Leiner Stule, who was a cousin of Governor Byrd Caidge Stule, Glen and Scurvy were released from jail. With plausible explanations, charges were dropped. The world returned to normalcy, and preparations for the indoor demo were continued.

The use of the Calhoun City High School gym was obtained. Various model builders were invited (coerced) to fly models in the demo. The committee did most of this work, but Scurvy wrote the letters to distinguished invited guests in longhand for Biltmore to type. These letters were addressed to Governor Stule, Senator Claxton Horne, Ward Heeler, the Governor's aide, and so on. Biltmore objected.

"That's a lot of typin', and Ah just now most of 'em won't come anyway," Biltmore complained.

"Ah know most of 'em won't come," Scurvy replied, "but we gotta invite 'em anyway. Maybe they'll give us some good endorsements. We need some help."

"How is "Crazy" Hooligan *** gonna help us?" Biltmore asked.
"just because he's flown inverted under every bridge on Calhoun Creek ... "

"You just type," spat Scurvy, "An..."

"Why you even got one addressed to Rex Plains!" **** snapped Biltmore.
"Ah'll be up all night typin'."

"You type," snorted Scurvy, "an' leave the thinkin' to me."

*** Ronald "Crazy" Hooligan, the manager of Calhoun City Municipal Airport. He had flown Bristol Fighters in the Great War and had never quite recovered.

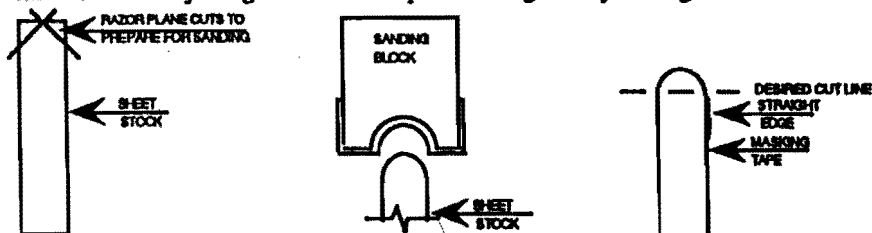
**** Captain Rex Plains, a test pilot of dubious repute, ran the local charter service and flying school. He had flown Spads in the Great War and continued to make power-on landings with frightening regularity.

continued in the next issue.....

ASK CAPTAIN CACTUS

Captain Cactus, I always have a hard time planing and sanding the leading edges on my model's wings. I always gouge the ribs, break glue joints and never get a smooth, round shape to it. What can you suggest to help me get my leading edges on the cutting edge?

Select a good straight-grained piece for your leading edge strips. Stand it up on edge and use a razor plane to preshape the edge of the sheet before you put that leading edge sanding block to work. When you've planed off the edges and roughed it to shape, put your sanding block to the edge and sand away. A few strokes and you're finished and ready to strip off the leading edge shape. Use a long straightedge and tape it to the sheet with a wide piece of masking tape. This straight edge will guide your cutting blade. I use a jig saw and find that it works just great and keeps the edge very straight.



FROM THE CACTUS SQUADRON NEWSLETTER

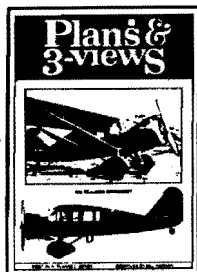
PAG SOCIAL NOTES:

Quality Control isn't what it used to be—
(in fact, it never was).



"ACE Mask Company? This is Kerry Keen.
I ordered a dozen crimson. You sent
MAUVE!"

MODEL AEROPLANE PUBLICATIONS & PLANS



NEW! PLANS & 3-VIEWS INTERNATIONAL!

Photos, 8 model plans and 11 3-views
Softbound, 8 1/2" x 11". \$11.95 postpaid

PEANUTS & PISTACHIOS, Volume 1, back
by popular request. Articles, photos
& 5 3-view drawings. \$8.95 postpaid

COMPLETE CATALOGUE: \$1

HANNAN'S RUNWAY where FUN takes off
BOX 210, MAGALIA, CA 95954, USA

A GREAT new publication from Hannan's Hanger is now available Skysters! You won't want to miss this one! It has construction plans for 8 models as well as 11 of those nice 3-views that Bill always seems to come up with. The price for this book is only \$11.95, A STEAL! Also back in print is Peanuts and Pistachios, Volume #1 at the good price of \$8.95. Prices for both of these publications include postage, a real good deal.

In case you missed the earlier volumes of Peanuts and Pistachios, volumes 3-4-5 are still available. Why don't you send Bill a buck for his catalog and see some of the other goodies he has available. Send your buck to; Hannan's Runway, Box 210, Magalia, Ca. 95954. We goofed at the top of this article with Hannan's Hanger! Thought we were reading his column in Model Builder Magazine.

Plan list number 4 is now available from Yesteryear Plan Service. 74 clean old time scale plans available all with patterns for formers and wing ribs. An S.A.S.E. will get you a copy of their list. Yesteryear Plan Service, 3517 Kristie Dr., Erie, Pa. 16506

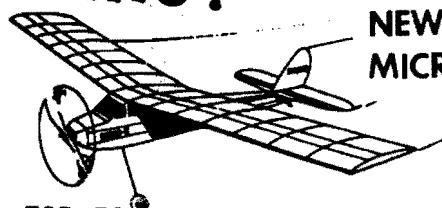
NEW KIT FROM DAVE DIELS

Dave has come out with a sixteen inch span Lacey M-10. This is an excellent kit for the beginner as well as the experts. For the beginner it features slab sided fuselage and the expert can build the conventional built-up fuselage. The kit comes with the usual Diels quality of materials such as very good balsa wood and the best tissue available. It even has the decals, this time you can put on the color trim in decals, GREAT!

There is also the usual 3-view of the model for scale documentation. The kit sells for only \$12.45 plus \$2.50 for shipping. Order yours from; Diels Engineering, Box 101, Woodville, Ohio 43469

When ordering anything from ads in the newsletter we would appreciate it if you mentioned that you saw it in the "FLYING ACES NEWSLETTER."

Micro Electric FLYING!



NEW FREE FLIGHT
MICRO-4 MOTOR

- FOR 50 TO 70 SQUARE INCH MODELS
- MANY 10¢ & 25¢ KIT DESIGNS SUITABLE
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motor, nicads, Props, switch,
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- FREE PLAN INCLUDED!

INTRO
PRICE

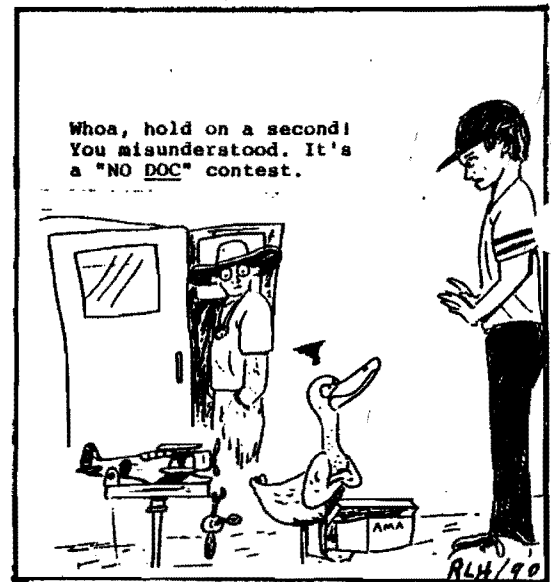
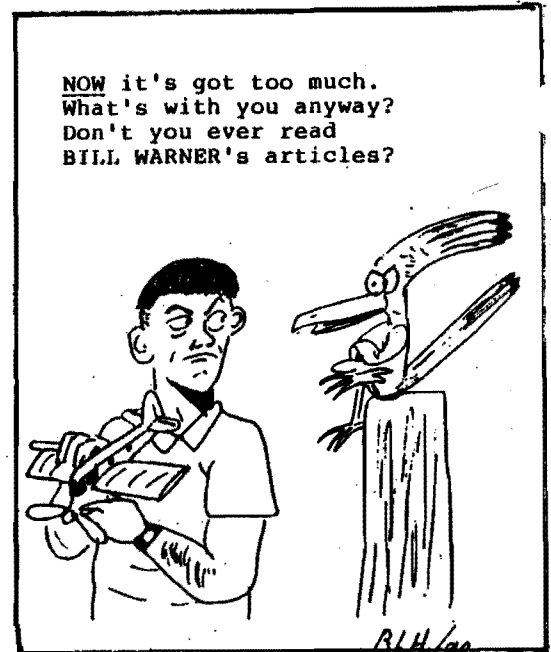
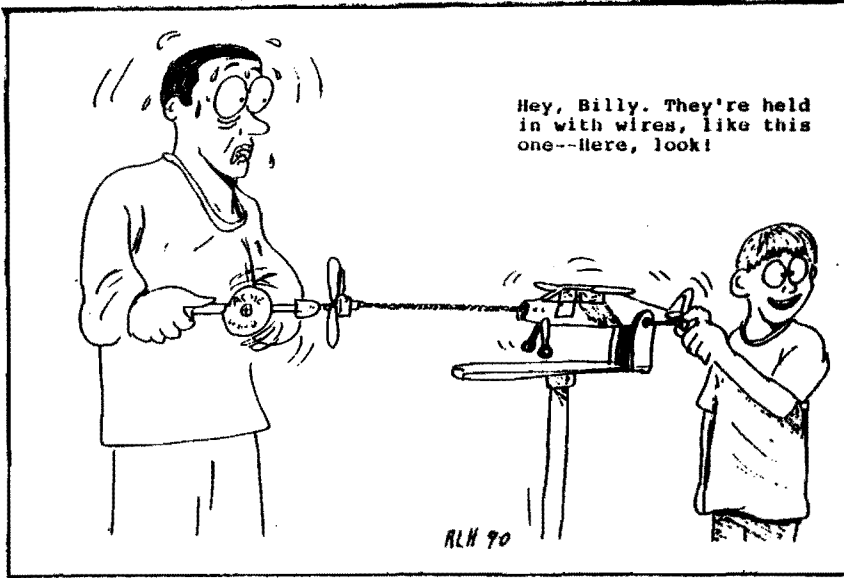
\$14.95 + \$2.00 Postage and Handling

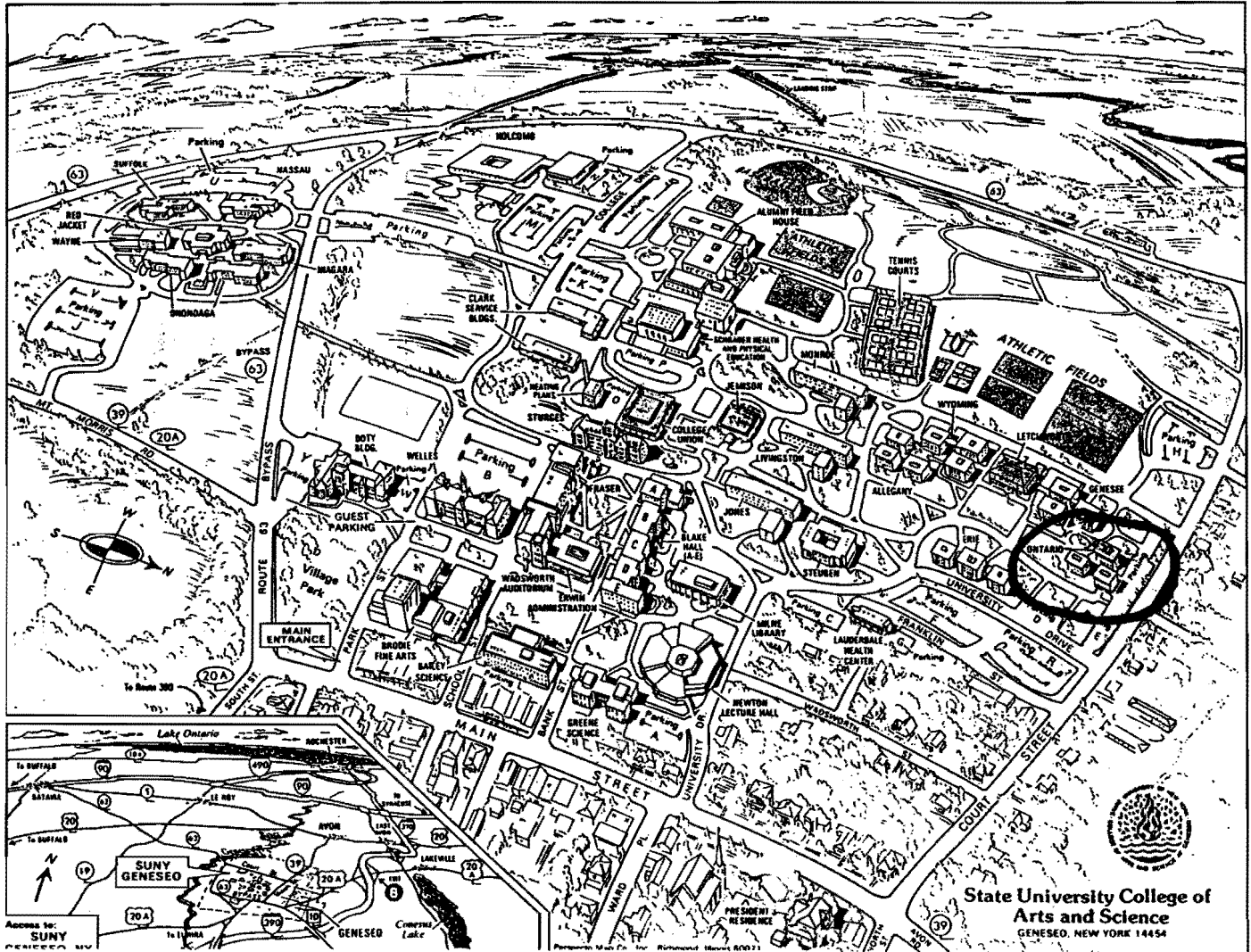
Send \$1.00
for complete
Catalog

Micro Ltd.

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BETHESDA, MD 20827

Cartoons by BOB HOWARD





For the Geneseo Contest in July we will be staying in the Ontario Dormitory (circled) and the scale judging will also be done there on Friday July 12 starting at 1:00 pm. If you are not staying in the dorms then you should bring your models there before 9:00 pm.

OUTDOOR NO-CAL

<u>Pilot</u>	<u>Aircraft</u>	<u>Time</u>
1. Claude Curry	Fike	229 sec.
2. Jim Buxton	Bell P-63	194 "
3. John Stott	Floyd Bean	191 "
4. Paul Clark	Bell P-63	160 "
5. Mark Fineman	Republic XP69	158 "
6. Gene Smith	Bearcat	112 "
7. Dave Linstrum	Day. Wrt. RB1	108 "
8. Bob Thompson	Goodyear F2G	104 "
9. Dave Stott	Gwinn Aircar	81 "
10. Dave Stott	Nieuport Del.	59 "
11. Walt Leonhardt	Cougar	46 "
12. Walt Leonhardt	Piper J-3	43 "
13. Walt Leonhardt	Farman 190	37 "
14. Walt Leonhardt	Farman Strat.	36 "
15. Walt Leonhardt	Corben S.A.	36 "
16. Geo. Bredehoft	P-38	30 "



OUTDOOR PEANUT

<u>Pilot</u>	<u>Aircraft</u>	<u>Time</u>
1. Gene Smith	Stinson 125	119 sec.
2. Carl Loehle	DH-6	117 "
3. Dave Stott	Fairchild 24	94 "
4. Padre Anderson	Weedhopper	85 "
5. Gene Smith	HE-100	72 "
6. Dave Stott	C.R. Courier	57 "
7. Darold Wilken	IS-4	46 "
8. Paul Herbst	Miles M-18	44 "
9. Darold Wilken	Caudron C-460	28 "
10. Geo. Bredehoft	Bell P-39	25 "

NFFS UNITED STATES OUTDOOR CHAMPS
FLYING ACES OUTDOOR CHAMPS

20.

June 20-21, 1991

Time 8:30 am til 4:00 pm. Mid-American Air Center Lawrenceville, Illinois

REGISTRATION FORM

Please print

Name _____ AMA No. _____
Street _____ Jr/Sr _____ Open _____
City _____ State _____ Zip _____

Entry fee \$15.00 until June 1, 1991.

After June 1, 1991 the entry fee will be \$20.00.

Mail FAC entry fee directly to Lin Reichel, 3301 Cindy Lane, Erie, Penna., 16506

Awards through third place, more places if advance entries warrent.

All Contestants must be members of the AMA or CAAM.

Schedule

Thursday June 20

FAC Scale
Hi-Wing Peanut Scale
World War One Dogfight
Thompson/Greve Race (combined)
Pioneer Scale (before 1914)
Embryo Endurance
FAC Old Time Rubber

Friday June 21

FAC Peanut Scale
Jumbo Scale
World War Two Combat
Military Bipes mass launch
Golden Age Scale
FAC Old Time Rubber

All Pioneer Scale models will be flown in the Pioneer event only regardless of size

FAC Old Time Rubber will have two official flights each day and the three best official flights of the four will be used as your total score. Flyoff to break ties.

BELL MODEL AIRCRAFT CO.

AERO-DYNAMIC - 



CATALOG \$1.50

SCALE MODEL AIRCRAFT PLANS and KITS
650 PINE CREST DRIVE, LARGO, FL 34640, USA 813-584-4003

S.O.S.--S.O.S.--S.O.S.

Jim Kutkuhn, RR5, Box 430, Augusta, Ks. 67010 is looking for info and detailed 3-views for the Fairchild 22 and for the XB47-D (turbo-prop configuration)

Dave Linstrum, 4057 San Luis Dr., Sarasota, Fla. 34235 needs a 3-view and other scale data for the Beardmore "Wee Bee" I

Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506 is looking for info and a 3-view for the Fokker YO-27.

NATIONAL WARPLANE MUSEUM FLYING ACES CONTEST

21.

July 13-14, 1991

Time 8:30 am til 5:00 pm. National Warplane Museum Field Geneseo, NY

REGISTRATION FORM

Please print

Name _____ AMA No. _____
 Street _____ Jr/Sr _____ Open _____
 City _____ State _____ Zip _____

Entry fee \$15.00 until June 30, 1991.

After June 30, 1991 the entry fee will be \$20.00.

Mail entry fee to Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

Awards through third place, more places if advance entries warrant.

All contestants must be members of the AMA or CAAM.

<u>Schedule</u>	<u>Saturday July 13</u>	<u>Sunday July 14</u>
	FAC Scale	FAC Peanut Scale
	Hi-Wing Peanut Scale	Jumbo Scale
	World War One Dogfight	World War Two Combat
	Thompson/Greve Race (combined)	Military Bipes Mass Launch
	Pioneer Scale (before 1914)	Golden Age Scale
	Embryo Endurance	FAC Old Time Rubber
	FAC Old Time Rubber	Multi-engine (mass Launch)

All Pioneer Scale models will be flown in the Pioneer event only regardless of size.

FAC Old Time Rubber will have two official flights each day and the three best official flights of the day will be used as your total score. Flyoff to break ties.

Notice that we have added a multi-engine event to the Sunday schedule. This will be a mass launch event.

We will be staying in the Ontario Dormitory for this contest and the scale judging will be done in the Ontario lounge area on Friday from 1:00 pm until! If you are not staying in the dorms, then you will be required to take your models to the dorms to be judged. Anyone not arriving until Saturday can have their models judged on the field.

Looking forward to seeing you all there for another GREAT TIME!

I wish to make the following advanced reservations for the above contest.

_____ entry fees at \$15.00 each.....\$ _____
 _____ Reservations for double occupancy with meals..... \$ _____
 (\$115.00 per person) Total enclosed \$ _____

Please note we will be unable to refund cancellations received after June 30, 1991. If you plan to share a room with someone, please indicate their name so we can direct the University to set up the proper room arrangements. _____

Your meals at the University will include dinner on Friday July 12, breakfast and dinner on Saturday July 13, breakfast and dinner on July 14 and breakfast on July 15.