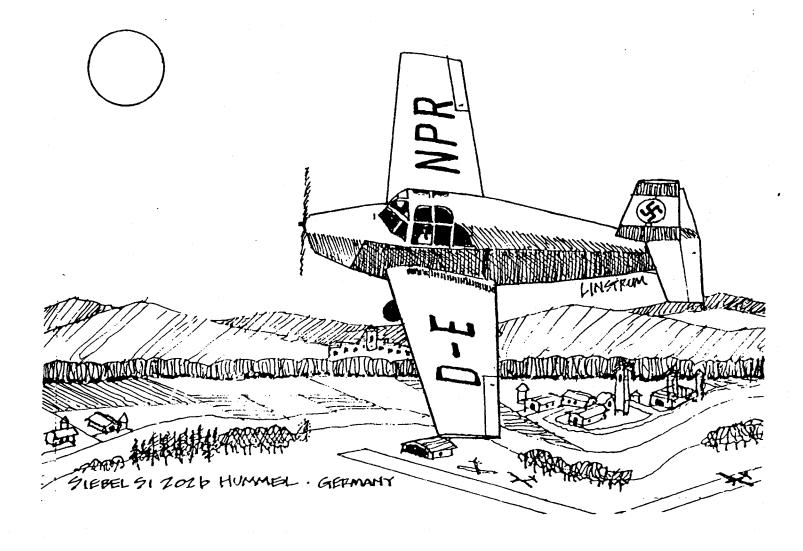
# FINAL S

ISSUE #205-131 MAY/JUNE 2002

Club News



The Siebel SI 202b Hummel was a pre-WW-II German 2 place trainer used to train Luftaffe pilots prior to the invasion of Poland.



Well, here we are again. Another fine cover by Dave "VTO" Linstrum, thanks Dave. And, thanks to all of the others who are part of this issue.

The plan sources are as follows; Megow's Lockheed "Winnie Mae, a dimer, from the Air-Flow newsletter, the Saab J-29B for the new Rapier event, from Australia, the Hansa-Brandenburg by Jim Van Nice, A P-51 Mustang from Florent Baecke, the Sopwith 1 ½ Strutter by Tom Nallen, Jr, and a Bostonian/Embryo, Tony Telford's Tail First. Thanks Skysters!

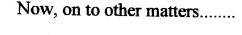
As of this writing we have 65 entries for the 13th Flying Aces Nats! Good numbers for this date. Are you tardy in sending in your entry? Please get them in as soon as you can. You may not realize the work that can be saved by sending your entry in early, believe me, it works!

We could still use prize donations, it can be anything of modeling interest, be it from manufacturers or individuals, we take em all! Event sponsors can still be utilized if anyone/manufacturers are still interested, but time is running out. If you are interested please contact FAC-GHQ as soon as possible. You may call collect; (814) 833-0314 if you wish.

There are still some small jobs that we can use some help with on the field during the contest. If you are interested in helping out please notify GHQ. We promise not to overwork you!

While at the FAC-Nats we will be staying at the Ontario Dormitory, This building is on the opposite end of the campus from where we have stayed the last couple of years. If you have been staying in the dorms regularly then you should know where Ontario is located. We stayed there about 3 or 4 years ago.

We have made a couple of changes in the events. We dropped the bi-planes only requirement for the Golden Age Military event. We also put the Powder Puff Derby back on the schedule for the Ladies to participate in. We always have an award or two left after this event. So this time we will order the awards after the event in order to save the expense.





### The FLYING ACES CLUB

is a society of unique individuals with a common interest that at times borders on a passion. It is our intent to preserve and promote the traditional building and flying of free flight stick and tissue model aircraft.

Although competitive at times, the sharing of innovations,

Assistance and comraderie is second nature to all who believe in the spirit of the FAC.

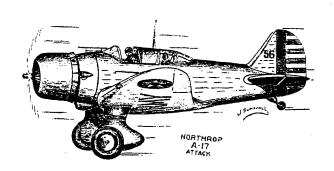
Let's talk about the Dime Scale event for a line or two. Some of you insist that vacuum formed parts should be allowed. Never! Under this regime. I think that some of you may be unaware of why the Dime Scale event was created in the first place. It was created just as an event that we could build models the same way that they were built back in the 30' and 40's, that is all, period! When it comes to canopies, you make them just like they were made back then. Many of the plans show you just how to do this with patterns and all. One Clubster went so far as to say, "if he couldn't vacuum form a canopy he would plunge mold it!". As far as we are concerned, vacuum forming and plunge molding are one and the same! Who really cares if your model's canopy doesn't really look scale on a Dimer. They didn't look too good on your model back then either!

Just in, more on the Nats. If you are staying at the Days Inn in Geneseo while at the nats, ask for the discount offered to us when you check in. Also, The Stealth Squadron of the FAC has offered an award to the highest placing high-wing cabin model in the Flying Aces Scale event. The model must be without any bonus points. (Example; a Cub with floats will not be eligible). The award will be a perpetual award and it is a litho plate of a J-2 Taylor Cub donated by Jim Fiorello. We will also award plaques to the top five finishers in this event within an event. The perpetual award will be know as "THE ANGUS MACSHADEFREUDER HI-WING WEENY AWARD".

Will the Clubster who just sent us two books titled "The First Air War" and "The Guide To Electric Powered Flight please let us know who you are. The package arrived in bad condition and your name and address were obliterated. The contents are OK though. I assume they were meant to be prizes at the Nats and we would like to thank you.

BUILD--FLY--WIN......EFF--AAA--CEEE!!!

Col. Lin Reichel, CinC--FAC



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

Wanted; Jimmie Allen plans for the BA Parasol, Bluebird Racer and the Thunderbolt. Elvin Buchele, 5758 Woodrow Dr. Sylvania, Ohio 43560

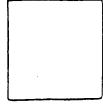
Fred Le'Mon, 112-30 Northern Blvd. Apt. 3H, Corona, N.Y. 11368 needs info on Lemburger as seen in the last issue and Gray Ghost pusher racer.

#### FLYING ACES PLAN PACK #1

- 1. Golden Eagle by Dave Stott 26" span
- 2. Westland Dreadnaught by D. Stott 23"
- 3. Fokker F-XX by D. Stott 28"
- 4. PZL P-23A by Pres Bruning 18"
- 5. Bristol 138A by P. Bruning 18"
- 6. Tractable Trainer Embryo by D. Stott 24"
- 7. Luscombe Phantom No-Cal by T. Nallen, Jr.
- 8. Piper J-3 by Chet Bukowski 13"
- 9. Blackburn Sidecar by Frank Scott 13"
- 10. Caudron C.620 by P. Bruning 13"

Plan pack #1 is \$10.00 each postpaid. Send your order to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

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 \$15.00 per year in the United States. Cost in Canada is \$20.00 per year. Overseas the cost is \$25.00 per year. All in U.S. dollars. Six issues per year, published approximitly every other month. Please make checks payable to; "Flying Aces". Send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



#### FLYING ACES CLUB HALL OF FAME

Listed below are this year's nominees for the Flying Aces Club "Hall of Fame" and their qualifications. Remember, to be eligible for the FAC "Hall" a nominee must have contributed far and above the norm as far as promoting and working for the good of the organization. We have listed the four nominees that did not acquire enough votes for induction in the last selection. Those four will be listed first followed by this year's nominees.

The top six vote-getters will be inducted in the Hall of Fame at the FAC-Nats in July. This is the highest honor we can bestow on these dedicated members. So please vote for your top six candidates as soon as possible. Send your votes to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

Here, listed in alphabetical order are this year's nominees.

- 1. Ollie Benton; Ollie was the first to organize Flying Aces contests around the Chattanooga, Tn. Area. His contests have now become known as the Mid-South F.A. Champs. Through Ollie's efforts this contest has become one of the premier contests each year. Also, his recruiting efforts has shown a large increase in new members to the Flying Aces Club.
- 2. Hurst Bowers; Hurst has long been an advocate of the FAC. He also has been a model designer with many of his plans being published that have that FAC "flavor". Most of his designs in recent years lean toward the electric scale category. Hurst is also one of the leaders of the D.C. Maxecuters, one of our largest squadrons.
- 3. Mike Midkiff; Designer, builder, competitor! That's Mike! You have to have seen many of Mike's designs in the model magazines over the years, you've probably built a couple of them. Mike is the owner of his own plan business, the "Ozark Plan Service" which will probably have a new name soon as Mike has moved to Texas. His designs are now being kitted by Dare Design and should be on the market soon.
- 4. Leon Bennet; Leon, also known as the "Glue Guru" has written 106 articles for the newsletter. That comes out to over 17 years of articles. A lot of time and ideas have gone into his work for the FAC. May it continue for many more.
- 5. Bob Bojanowski; Bob is our chief illustrator for the FAC. He has done several covers for the newsletter as well as the art work for almost all of our T-shirts. The T-shirt sales has kept the current dues for members here in the states from being increased. We all owe Bob a debt of gratitude for that.
- 6. Dave Livesay; You should all know Dave's accomplishments by now. He has had lots and lots of plans published here in your newsletter. These were mostly done in our "growing period" and were a tremendous help in making our organization so popular with modelers.
- 7. Ross Mayo; What can we say about Ross that you don't already know? Ross is the "Keeper of the Kanones" as well as a very valuable adjutant to GHQ. If you have been to any of the FAC contests at Geneseo then you know the great job Ross does there. No need to tell you any more!
- 8. Ed Novak; Ed, A.K.A. "Never Ready Eddie" is the Kingpin behind most all of the activity held at Pinkham Field in Durham, Ct. This was the original home of the Flying Aces Club and Eddie grew up on that field learning the ways of the FAC from our then stalwart leaders and they did a bang-up job on him. To us here at GHQ, Ed is the MAN!
- 9. Fernando Ramos; Fernando's qualifications stem from his many columns in the modeling magazines over the years. Fernando has also covered many of the big FAC contests for the magazines. And, he never misses a chance to promote the FAC in his columns.
- 10. (Should have been listed in the first four nominees, sorry Bob)

Bob Clemens, Rules, photographer, builder, competitor, designer and organizer are some of Bob's credentials for induction into the "Hall". He has been the master of ceremonies for the last few nats banquets and was instrumental in getting the site at Geneseo for our nationals contest.

# CLEVELAND, OHIO

CONTEST EVENTS AT LORAIN COUNTY COMMUNITY COLLEGE FFS

_		_	-	-	_	_	_	_		_	_	_	_	_	_	-	
H.L. GLIDER (J)(S)(U) \$1 PUI PRIZE	2. HI-WING CABIN PEANUT EXPERIMENTAL20. 6" STICK CATAPULT GLIDER, \$1 POT	FAC O.T. RUBBER 36" W.S., MAX. AT POL.	. FAC O.T. STICK 36" IN POT PRIZE.	. FAC O.T. TWO BIT 25" MAX., \$1 POT.	. O.T. JIMMIE ALLEN R.O.T., \$1 POT.	. PAC MODERN CIVILSCALE J. ELT. TOTAL	MODERN MILITARY MASS LAUNCH AT	WW I MULTIWING PEANUT M.L.					. GOODYEAR & F.1 RACE M.L. 3:00	33. GREVE INLINES RACE M.L. 3:30	THOMPSON RADIALS RACE M.L. 4:00	.120 MAX. P LUS 36 "S. PER AMA RULES.	
1. FAC PEANUT SCALE, FULL POINTS 19. H.L. GLIDER (J)(S)(U) \$1 POI PRIZE	HI-Wing CABIN PEANUT EXPERIMENTAL 20.	HI-WING CABIN PEANUT PRODUCTION 21.	FAC DIME SCALE 22.	FAC RUBBER SCALE 23.	FAC OH FUNK & WACO LTD.ML 11:30 24.	TUMBO SCALE	FAC PIONEER SCALE 26.	FAC GOLDEN AGE CIVIL AIRCRAFT 27.	FAC GOLDEN AGE MILITARY A C 28.	FAC NO. CAL PROFILE SCALE 29.	NO. CAL WW II 3 FLT. TOTAL 30.	FAC POWER SCALE ELECT. OR CO2 31.	O.T. GAS REPLICA ELECT OR CO2 32.		P-20, 8"PROP, 20gm, 4gmRUB, 3 FLT, 34, THOMPSON RADIALS RACE M.L.	P-30, 9" PROP, 40gm, 10gm RUB., 3 FLT.120 MAX. P LUS 36 "S.PER AMA RULES.	8. JR. RUBBER 3 FLIGHTS, NO MAX.
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AC RULES APPLY WITH INSPECTION OF NO. CAL,DIME, AND COMBAT M.L. HINIMUM ETAIL, AND O.T. PER PLAN. NO SIZE CHANGE FOR 25" MAX PER PLAN O.T. PRE ELECT EVENT FOR MULTIPLE OPTION MODELS. MASS LAUNCH AND OLD TIMER OUT OF OWNDS TO BE SET AT FIELD. ALL MAY PICK A PLAN PRIZE.

UNDAY APRIL 7 CFFS INDOOR CONTEST AT KENT STATE FIELD HOUSE CD MIKE ZAND. CFFS AT LCCC 9AM-5 PM CD RUSS BROWN 216-382-4821. 1-90 EXIT 148 TO RT. 301S ABBE RD. CHECK HOAG RD. OR UPWIND. 56 UNDAY MAY

HURS.-SUN. JULY 18-21,2002 FLYING ACES NAT'S MK. XIII AT GENESEO, NY UNDAY JULY 28 CFFS AT LCCC 9AM-5PM CD GORDON ROBERTS 216-749-4817. 216-481-6525. CD PETER ZBASNIK 216-471-7478. CFFS AT LCCC 9AM-5PM CD JIM HYKA UNDAY AUG. 11 CFFS AT LCCC 9AM-5PM JUNE 9 UNDAY

216-382-4821. CD RUSS BROWN UNDAY SEPT. 15 CFFS AT LCCC 9AM-5PM CD PETER ZBABNIK 216-471-7478. 6 CFFS AT LCCC 9AM-5PM UNDAY OCT.

HECK DOC HACKER OR DON SLUSARCZYK 440-918-0290. HACK IS AT 116-486-4990 END \$COMTRIBUTIONS FOR USE OF ANDREWS SCHOOL TO DR. VERN HACKER AT 5599 BRECKENRIDGE. EUCLID. OH 44117-1807. THE GOAL IS \$ 600 PER YEAR. EUCLID. OH 44117-1807. THE GOAL IS \$ 600 PER YEAR.

AM O.T. FF & R/C FLY 1ST WED OF MONTH AT SHELBY AIRPORT RT. 96 ON 5/1,6/5, RI 7/5, 8/7, 9/4, & 10/2. FLYING AT SCHROEDER'S FARM ON RT. 61, 3MI S. OF F. 224 IS ON 5/15, 5/29, 6/19,7/17,8/14, 8/28, AND 9/18.

HE SAM CHAMPS IS AUG 25-30 AT MUNCIE, IN. FOR FF, NFFS NOSTALGIA, SAM R/C, C NOSTALGIA, AND SPECIAL EVENTS FOR COMET KIT PLAN SPARKY WITH TWO WHEEL. EAR AND 104/2"MAX PROP, FOLD OR FREE WHEEL. ALSO 1/2 A DALLAIRE SPORTSTER ND THE CLASS C BUZZARD BOMBSHELL DESIGN BY JOE KONEFES.

HE MAX. DIMENSION IS 20 INCHES, WITH 20 gm. MINIMUM WEIGHT, 4 gm, MAX RUBBER, ND A COMMERCIAL PLASTIC PROP. 0F 7.6 TO 8.4 INCH DIA. THREE FLIGHT TOTALS ARE IND SEC. MAX., WITH 30 SEC. ADDITIONAL EACH FLY OFF. THERE IS NO BUILDER OF THE IOD SEC. MAX., WITH 30 SEC. ADDITIONAL EACH FLY OFF. THERE IS NO BUILDER OF FLYING TODEL RULE, SO JUNIORS AND OTHERS CAN GET IN WITH ARF'S AND EXPERIENCE FLYING P-30, -20 IS A NEW SMALL FIELD FF RUBBER POWER DURATION. FUN EVENT AS A REDUCED

Cleveland FF Society FAC & FF at LCCC. Russ Brown & Lundy. 9 Cleveland FF Soc. FF & FAC at LCCC. Peter Zbasnik National Air Races at Reno, NV 9-15 15 9 10/ ept Sept

Weight

Area

Engine

Fri.,June 14 8:00 to 5:00 1/2A Texaco, any 1/2A engine

R/C EVENTS

Contestant

...

-

1/2A Scale Duration, any 1/2A eng. (1)

Sat., June 15 8:00 to 5:00

A-B Ignition LER

A Texaco (2)

Electric 1/2A Texaco/Scale Duration Combined (5)

Ohlsson Side Port (4)

Sun.,June 16 8:00 to 4:00

Class C LER Ignition

90 Second Cabin (3)

B-C Glow LER

Monogram's Speedie-Bilt F-86 Sabre both S.O.S.--S.O.S. Wanted; copy of plans for front & back of plan. Larry Aycock, 314 Southerland St., Mesquite, Tex. 75150.

5

# GREAT GRAPE GATHERING (Since 1971)

Sponsored by SAM 86 and WNYFFS Geneseo, NY, 1941 HAG Airfield

June 14, 15 & 16, 2002

SAM No. ENTRY FEE PAID: MAAC/AMA No. POSTAL/ZIP: CITY: PROVINCE/STATE: NAME:

Embryo Judge FAC Events Mike Burns TBA BARBECUE FEE PAID: Brockville, Ontario K6V 6Y6 anderson@cybertap.com 135 Margaret Place 613-342-5613 Jim Anderson ENTRY FEES; \$10 for 1st event; \$8 for next ones to \$25 max. \* Toronto, Ontario M2J 2C1 Contest Director: Brooks Goodnow, WNYFFS roybourke@look.ca 56 Clareville Crescent RC Event Director 416-493-0111 Roy Bourke BARBECUE: This is under consideration Ajax, Ontario, L1S 3S8 jimoseley@look.ca 19 Banner Crescent FF Event Director 905-683-3014 Jim Moseley

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Contestant	Engine			-	÷		Engine								Engine						
	Aircraft																				
FREE FLIGHT EVENTS	Fri., June 14 8:00 to 5:00	1/2A Nostalgia (1)	0.020 Replica/1/4 NOS	P30	HL/CL Glider combined (2)	FAC Embryo Endurance	Sat., June 15 8:00 to 5:00	OT ABC Cabin, ABC Pyton Combined	FAC OT Gas Replica Electric (5)	Bob Gordon Trophy (3)	SAM Commercial Rubber	Small Rubber Fuselage up to 150 sq. in.	Large Rubber Stick >150 sq.in.	HL/CL Glider combined (2)	Sun., June 16 8:00 to 4:00	AMA Gas up to 0.15	Small Rubber Stick up to 150 sq.in.	Large Rubber Fuselage > 150 sq.in.	FAC Golden Age Civil Scale (4)	Open Rubber	

#### HENRY STRUCK....an appreciation....by Bob Thompson

On 16 March, 2002, under a threatening March sky and in an appropriate, quintessentially New England setting (small 1746 church on a windswept hill, nearby Greek Revival houses, grey ancient barns, gnarled apple trees, sere fields and gardens, piles of brush readied for spring burning, everything indicating moderation and thrift) took place the memorial services for Henry Struck.

There were many famous and distinguished modelers in attendance, to honor a man whom so many of us knew, if only through his designs and accomplishments with model airplanes.

Quickly the immense playfulness of the man and his models emerged in the eulogy. We who knew him (however slightly) knew well of this, but how many others? (He was, after all, a fierce competitor, if never, ever, an angry or disgruntled "disappointed trophy hound"). He took his victories and defeats with the best of us.

The pastor reviewed Henry's life and a few of his so many accomplishments. Then several members of the congregation arose to speak of cute and funny memories they had of Henry and happy times with him.

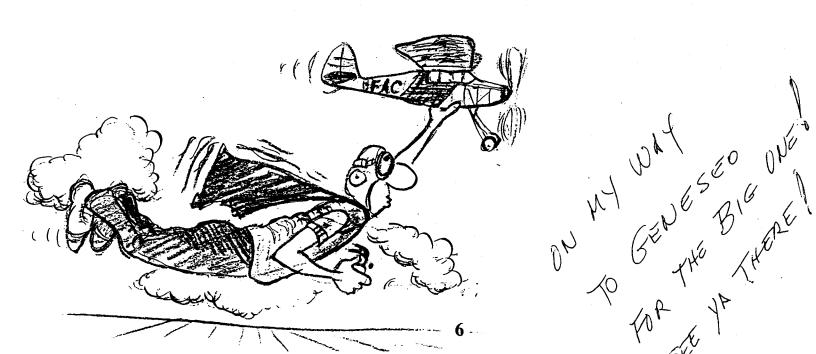
In all, it was a sweet and joyous occasion, reviewing the life of a true Giant of Modeldom, a Washington, an Adams, a Jefferson.

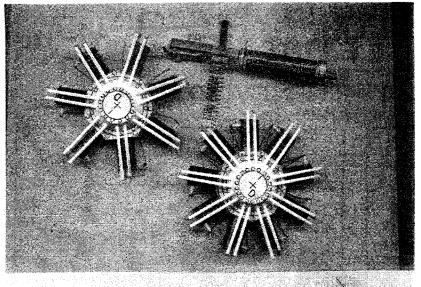
But let's not speak only of his sweetness as a person or his stature among modelers. Let's remember and consider that wherever and whenever modelers gather upon "the Field of Honor", it is there that you will find Henry Struck's designs or their descendants. His legacy lives now and will live on, longer than his children, his grandchildren or his great-grandchildren.

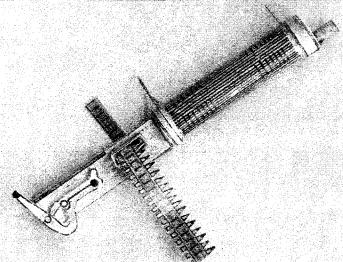
The FUN he created for us!

Skysters: This was a life truly well-lived!

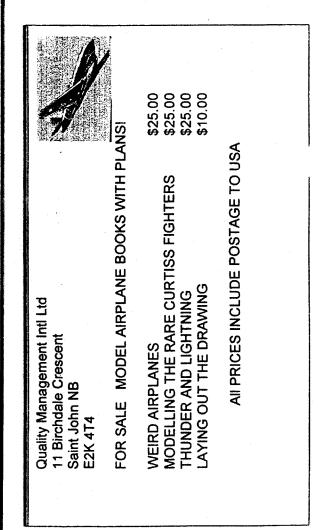
S.O.S.--S.O.S. Wanted by Dominic Sagolla, 1425 B Millersville Pike, Lancaster, Pa. 17603, Plans for 1939 Luscombe Silvaire and plastic kit of the B-25C made by "Accurate Co." Must be in 1/48 scale.







Pictured above are the engines and machine gun that are being offered by Marion Pendergraft. They are made from card stock and are really neat! See his ad in this issue.



#### **HENRY STRUCK**

1916 - 2002



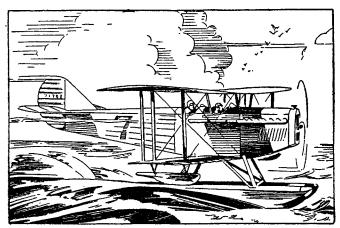
On march 16, a service of thanksgiving for the life of Henry Struck was held at the Grassy Hill Congregational Church, in Lyme, Connecticut. This small wooden church, built in 1746 and normally seating 90 people, was filled with about 100 relatives and friends. After the singing of hymns and religious ceremonies, friends and relatives told us of different incidences in their lives with Henry, while his full scale airplane circled overhead. Tales of inspiration were related by those who were guided to a career in aviation by Henry. Many humorous tales of model flying. Stories told by fellow workers on the design and building of full scale experimental airplanes. It was soon obvious that his work in aviation had many facets. From model airplanes and flying toys, to full scale aircraft, his genius was exposed. What also became obvious was the warmth of his influence, guidance, and friendship.

As a free flight modeler, Henry was both prolific and rounded. So many of his designs were published and kitted it would be a daunting task to list them all. Of course, what interested this writer as a boy was his scale rubber powered models featured in Flying Aces magazine. There was no one his equal in tackling such ships as the Wright Flyer, Curtiss NC-4, and Handley Page 0/400. Before ever having the pleasure of his company in later years, he was my idol and mentor. In my mind, Henry was my friend just as surely as any of my associates of that time. He has left us a great legacy, and in this he is still with us at that most favored place of all, the flying field.

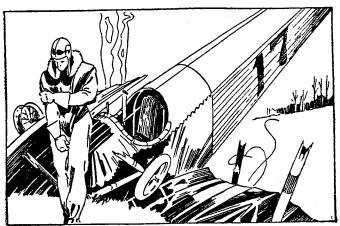
## They Had What It Takes

#### V—HOWARD HUGHES—SCIENTIST OF SPEED

By ALDEN McWILLIAMS



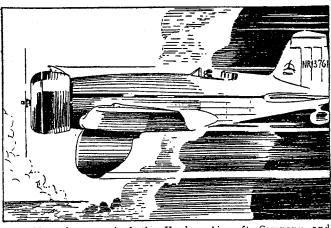
1—Howard Hughes was born in Houston, Texas, in 1905. As a boy he had a flair for mechanics. He first flew at the age of fourteen, when a former Navy pilot took him on a \$5-perhop ride in an old seaplane. Young Howard was thrilled; flying, he decided, was a great game and he intended some day to get into it.



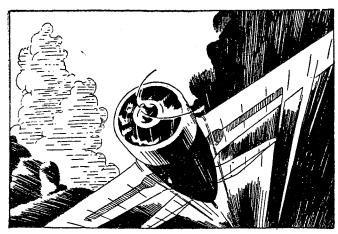
2—Not long after, he was taught to fly by a barnstormer. Then he buckled down to school work, finally attending the California Institute of Technology. Then turning his attention to films, he produced the classic, Hell's Angels. At this time, he cracked up in an old Jenny—but walked away from it with only a black eye and scratches.



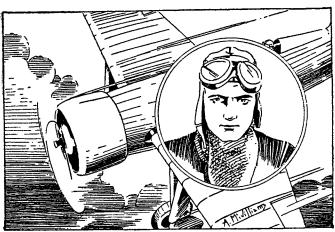
3—Again responding to the call of active flying, Hughes bent his efforts toward acquiring more training. He got just the practice he was after in the position of co-pilot with American Airlines. But he did this flying under an assumed name, and when his real identity was discovered he was forced to give it up.



4—Next he organized the Hughes Aircraft Company and conducted aero experiments. Then bitten by the speed bug, he flashed over a measured course in a Northrop Gamma at 351 m.p.h.—a new land-plane record! And when he turned to transcontinental flying in this same ship, he set a surprising mark of 9 hours and 28 minutes.



5—Shelving his famed Gamma, Hughes now built a startling new racer of his own. And when, a few months ago, he hurled it from Los Angeles to New York in the sensational time of 7 hours and 28 minutes, all other records for the run were consigned to limbo. Hughes' thorough preparations and precise computations did the trick.



6—With Howard Hughes, record flights are not stunts but feats of aero science. His pioneering work has proved invaluable to aeronautical engineers. In recognition of his accomplishments, Hughes has received the Harmon International Trophy. Among the flyers, only Lindbergh and Post have won this signal honor.

## B.L.U.R. Race

Greetings Speedsters, Skysters, Cloudbusters, Maxecuters, Windbreakers, and other seekers of the kanone,

Last summer at the 2001 non-NATS we ran the first ever Bee Line Unlimited Race. The winner was Ed Pelatowski with a host of nearly-famous FAC flyers hot on his

The event is based on speed as opposed to endurance. It provides a refreshing opportunity to fly an event that takes place right in front of your eyes with only a few short minutes between heats. Each heat consists of up to 4 models competing against each other in a straight-line race to the finish line. There is no clock used; the judges just determine the finish order for the 4 models to decide which models move on to the next round.

It's fast.

It's furious.

res rancas.

And it is easy!

The entire event takes about as much time as a single round of an endurance mass launch - All the action is right in front of you - AND, there are no long chases through the July heat!

All you need is an airworthy model of a racer, a motor up to 7 grams in weight, and a bit more down and right thrust to get you ship to the finish line at top

After the humble success of last years event, Dave Nedzielski and EASY-BUILT Models will sponsor the BLUR as an official even at the 2002 FAC-NATS. That means that the winners will receive:

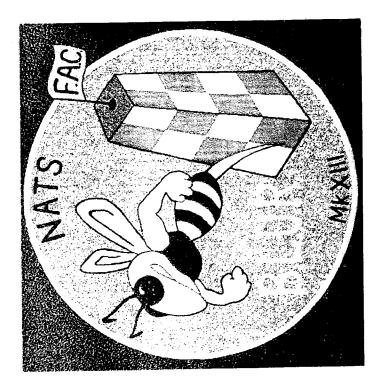
- Official plaques for the top 5 finishers
- And a special prize package for the BLUR National Champion including:
- The walnut BLUR trophy currently held by last year's champ Ed Pelatowski
- 2. An official FAC Kanone

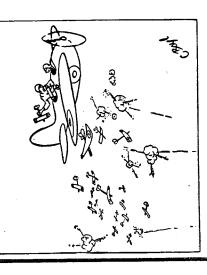
- Enduring fame and respect as the first BLUR NATS winner.
- 4. The first ever, official BLUR Champion Jacket (which won't strike you as a great thing in the heat of July, but by September it will make you the envy of the local FAC troop.)

So check out the RULES, COURSE DIAGRAM, and Frequently Asked Questions in this issue, then get your ship ready.

Note that a new model is not necessary. The contestants last year mostly competed with older racer models that had seen action in Thompson, Greeve, Bendix, and Goodyear races in the past.

For those who participated last year, note that the course length has been extended from 52.8 feet (1/100th of a mile) to 88 feet (1/60th of a mile).





"Are you sure this is cricket, Reggie?"

Glue Guru on the Fokker Triplane-

Here's a new book spelling out the Red Baron's mount with all its virtues and flaws:

Three Wings for the Red Baron

SPAD's Triplane effort was a disaster. MIT proved the concept inherently slow. Sopwith's Triplane was set aside as mediocre. The Curtiss attempt was a flop.

Yet Richthofen saw great merit in threewinged fighters, betting his life on Fokker's design, despite its inferior engine. Why? What did he see in three wings?

Wounded and depressed, was he merely grasping at straws while engaged in denial? Was his death, in a Fokker Triplane, a chance event or one more proof of three wing inadequacy?

The answers are here, backed by solid research in London, Munich and Berlin. Some 240 illustrations are offered, including rare wartime 3-views of the Curtiss, Sopwith and Fokker Triplanes.

The treatment is straight Glue Guu-aerodynamics with a certain verve. I think you'll like it.

The book is available through Barnes & Noble, Amazon, Borders, Books-a-Million and private bookstores as well. Price varies a bit, with Amazon offering the lowest price, but B & N supplies a faster delivery. You can examine some 15 pages without charge by reaching Amazon.com on the internet and then requesting "Three Wings for the Red Baron". In return, you can inspect, or even print out, the first chapter.

Check it out!

#### The Bee Line Unlimited Race

#### **GENERAL**

This event is intended as a contest of actual flight speed. The short course of 88 feet (1/60th of a mile) will provide a relatively simple opportunity for a FF scale model to complete the course without excess difficulty.

The race will be flown in a series of "heats" of up to four models flying the course at the same time. The goal of each racer will be to finish the course ahead of the other participants in a given heat. We will not measure flight duration or airspeed.

The short course allows many heats to be flown in a short time within easy viewing distance of interested spectators.

Since airspeed is the unusual goal of the race, extra effort will be made to ensure that all models are able to safely complete the race course. The judges may disqualify any model at any time if they feel the model compromises the safe completion of the event.

While this event may prompt the construction of purpose-built models, it is expected that many entrants will use the same models that are entered in other FAC racing events such as the Thompson, Greve, Bendix, and Goodyear.

#### CONSTRUCTION

1. Open to models of any aircraft, prop or jet, that participated in any race event (USA or abroad) or were specifically designed for and built as race planes.

Note: Placement of prop for jet aircraft at builder's option.

- Models must be in authentic racing colors and markings.
- 3. Recommended construction is standard balsa and tissue with no foam allowed in the basic construction. Construction is to be in compliance with the General FAC rules. No profile fuselages allowed.
- 4. Tail surfaces and dihedral may be increased, but not to the point that scale appearance is destroyed. Models must closely resemble the original aircraft in terms of outline, three dimensional shape, and proportions.
- 5. Landing gear may be in the retracted position.
- 6. The model may be any size. There is no specific weight limit, but the limit on motor size in Rule #8 is intended to keep the models at a relatively light (and thus safe) maximum weight.
- 7. Scale documentation must be provided and will be checked for all winning/placing models. 3-views and color & marking information must be included. The documentation need not include a build plan.

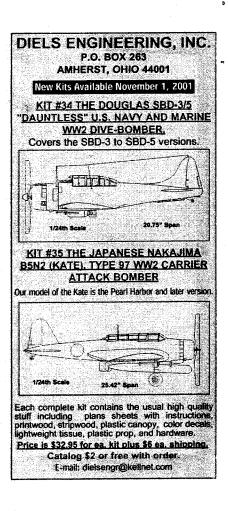
Judges may request documentation to be presented before the event. The winning/placing entrants must present their models, Rubber motors, and documentation immediately after the event.

#### **POWER**

8. Models must be propeller (airscrew) driven and powered by a Tan II motor not to exceed 7 grams total weight regardless of the size and weight of the model.

SPECIAL NOTE: Tan II rubber is currently undergoing some manufacture changes. If FAI Model Supply changes the name (i.e. to Tan III, or something), please understand that the spirit of this rule is to have all racers using the current 'standard' rubber for FF models.

9. Any propeller size maybe used, Geared props are allowed.



CLERGET 9 AND 7 CYLINDER ROTARY ENGINE
HEY SKYSTERSI! How about a Clerget 9 and 7 cylinder rotary engine model

as many as you like. The models are printed on four sheets in two versions colored and uncolored so you can detail and weather as you like. Complete Instructions with tips and hints on how to create a beautiful model from car stock. Detailed instructions for both electric and rubber powered models.

model from card stock. Printed on heavy paper

consist of 80 accurately drawn parts. Buy it

Also included in this offer: A Vickers .30 cal. machine gun WITH AMMO!!! introductory price for F.A.C. members, only \$6.00 plus \$1.00 for the envelope and stamps. Send to: Marion Pendergraft 1515 E. Beach Bivd. # 215
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#### **FLIGHT**

10. The B.L.U.R. race course is configured as shown in the attached diagram.

The distance from the start line to the finish line is 88 feet. The judges may, at their sole discretion, choose to shorten the course length before the start of the event if weather conditions make it excessively difficult for racers to complete the standard 88 foot course.

11. Models must qualify for racing heats by first successfully navigating the B.L.U.R. race course while maintaining "sustained lifting flight".

Three attempts to qualify are allowed.

The BLUR race course and a single judge will be available for qualification flights on the day of the event. The schedule for qualification flights will be announced on the day of the event. Typically qualification flights can be made every hour on the hour up to the event start time.

The course is available for practice when not in official use.

The course will be positioned so that flights are made downwind. This promotes a safe, straight flightpath.

In all qualification flights and during the race heats, the model must be launched from behind the start line.

During both qualification flights and race heats, the model must be clearly generating lift and flying. Any model that is traveling in a ballistic trajectory, or otherwise determined not to be generating lift, will be disqualified.

The decision of any judge is final in this matter of safety.

12. The race is flown in heats of up to four models.

A single judge at the starting line will call the wind-up and start of each heat. Models launched before the "Launch" order is given will be disqualified from the heat.

Two judges at the finish line will establish the order of finish for each heat. The decision of the finish line judges is final.

To complete the course, the model must be launched from behind the start line, then pass over completely over the finish line without crossing either of the side boundary lines.

Flying 'out of bounds' will disqualify the model.

The start judge will be the final authority on any OOB call. An OOB model is disqualified, even if the model eventually passes over the finish line.

SPECIAL NOTE: During the running of the final heat and any runner-up heat, an OOB flight will be used in the place position process, not for disqualification.

13. Based upon the number of models entered in the event, between one and three models will be eliminated in each heat until the finalists are determined.

A final heat will be flown to establish the top finishers.

At the judges discretion, a runner-up heat may be flown after the final heat to determine the place positions for five finalists. This would include any models declared OOB during the final heat.

The total number of expected heats will be posted prior to the first heat. Some changes may be made to accommodate no-shows.

SOS....SOS....SOS.

Wanted; Any old, collectible aircraft kits or old D.C. World War II comic books available? (D.C.

Wanted; Any old, collectible aircraft kits or old D.C. World War II comic books available? (D.C. G.I. Combat, Our Army At War, Our Fighting Forces, Sgt. Rock, etc. George Santikian, 7285 N. Channing Way, Fresno, Ca. 93711. Phone; home, after 6:00 pm P.S.T. (559) 439-3363 or cellphone (550) 280-4534

sos.....sos.....

A high wing, twin radial engine single vertical tail cargo ship. Only two built and delivered to Looking for a 3-view of the Cessna C-106 Loadmaster Boxy fuselage and long engine nacelles the A.A.F. in 1943.

No repairs to the model or the motor are allowed at any time once the actual race heats have begun.

Repairs are allowed between qualification attempts prior to the start of the event.

#### **B.L.U.R.** Race - Comments and clarifications

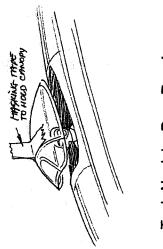
As this is a relatively new event with a unique format, we have received some questions. Below are some helpful comments and clarifications based upon these questions:

- 1. If your model has multiple engines, the total, combined motor weight may not exceed 7 grams.
- 2. If the wing of a model is held on with a rubber band, it is not considered a repair if you reposition the wing after a heat. In general, we expect that models for this event will evolve to favor survivability over duration. This is legal and encouraged to the extent that safety is not compromised.
- 3. It is legal to make balance and trim adjustments during the event. This can include adding and removing weight from the model. Consistent with other FAC events, no test flights are allowed.
- 4. It is legal to change the configuration of your motor between heats. Specifically, so long as the knot in the motor remains tied and the motor is not repaired in any way, it is allowed to change the number of loops in your motor by folding it (or unfolding it) to increase or decrease to torque.
- 5. If none of the models in a given heat completes the course, the Start Line Judge may decide to rerun the heat. Typically this decision will be made when weather conditions are considered to be the primary reason for the failure of all models in a heat to complete the course.
- 6. If a model is damaged during a heat, but finished in a position that allows it to compete in subsequent heats, the judges will determine if the model can be safely flown. If so, then a damaged (but safe) model can continue in the event.
- 7. The event is not timed. Spectators may time the event for fun, but the position of the finishers in a series of heats will determine the outcome.
- 8. The finish line is straight and not curved. This makes the course 88 feet long only when flown perfectly straight. This provides some benefit to a racer that is able to fly the straightest path.
- 9. The number of qualification attempts is indeed limited to three. This is to reasonably limit the number of qualification flights a judge must witness during the day of the event.
- 10. Any model entered must be accompanied by documentation showing that it was indeed specifically built for competitive racing or entered in a documented race event. A "race event" can be the 1930 Thompson trophy, a London-to-Melbourne race, or a documented small race at the Kansas State Fair. So long as the race was a competition between multiple entrants and the results have been documented, a model will be allowed in the B.L.U.R.. The race did not have to take place in the USA. Note: An aircraft that was only flown for speed records, is not considered a competitive race plane. Thus the Bell X-1, for example, would not be a legal BLUR entry.
- 11. Sheet balsa surfaces are allowed, but there must be a clear effort to represent a scale appearance. For wings, this would require some curve to the airfoil. The spirit of this is to avoid '5-cent glider' sheet surfaces on BLUR entrants.
- 12. You may launch the model as hard as you want. The launch must be made from behind the start line, but you may move in any way you choose to give your model the fastest start possible.
- 13. Your model may end up completing the course while making axial or "barrel" rolls. So long as your model is clearly achieving "sustained lifting flight", the flight is legal even if it is rolling. Some axial roll flight patterns may in fact be part of what is clearly a ballistic flight path. In that case your model would be disqualified for the ballistic flight path, but not specifically because it was rolling.
- 14. Consistent with FAC rules, extra-light covering materials like Condenser Paper are not allowed. Covering materials that are heavier than Esaki (Monokote, Litespan, etc.) are allowed for added durability.

## FAC T-SHIRTS

We have some T-Shirts left over from the last couple of years. All in short supply. Get'em while you can! Monocoupe from 2001 in sizes large and extra large and the Lockheed Orion from 2000 in sizes small and large. \$12.50

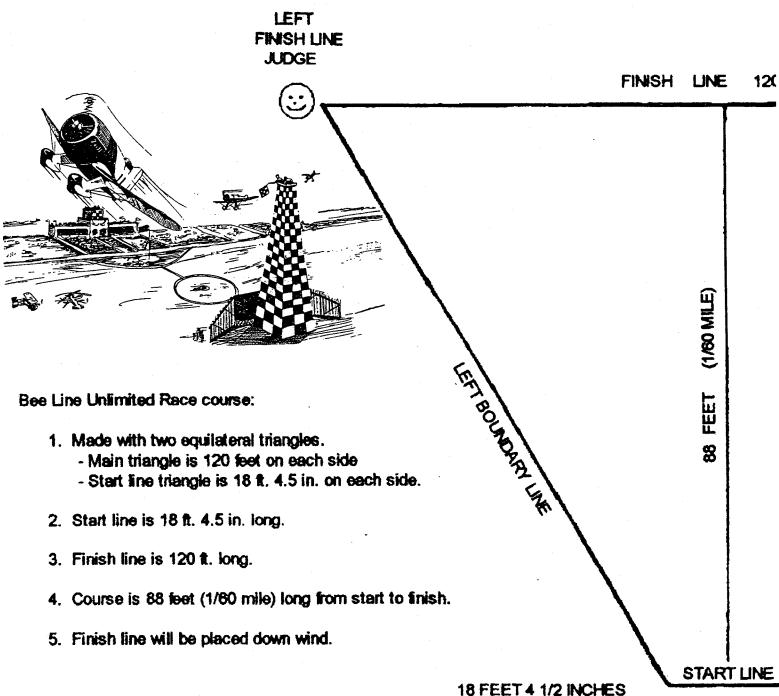




Tech-Neek by Pres Bruning

- 15. If the wind shifts significantly during the event, the judges may reposition to course to keep flights heading substantially downwind.
- 16. The exact formula used for setting up the individual heats will be determined based upon the number of entries. The judges will announce the heat formula prior to the start of the event. In general, the participants in specific early heats will be chosen based upon the order in which they qualified. The judges will make no attempt to adjust the individual participants in a given heat.
- 17. If a model bounces over the finish line, it did not complete the course. The model must maintain "sustained lifting flight" until it completely passes over the finish line.





#### **FAC Postal Contests**

The Winter Postal Contests are now being run. The events are below along with the current entries. Peanuts must fly in their own events. Fly as often as you like with as many models as you wish and each time you better a previous time with a particular model send it in. Contest times count too. The contest will end on May 26, 2002. Entries potmarked after May 28, 2002 will not be accepted. Send all entries to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

#### **OUTDOOR PEANUT**

Pilot	Plane	Time
1. Mike Heinrich	Boo Ray	320 sec.
2. Al Likely	Keith-Rider	R-6 119 "

#### OUTDOOR SCALE (no peanuts)

Pilot	Plane	Time
1. Al Likely	Fairchild "24"	411 sec.
2. Al Likely	Howard GH-1	155 "
3. Mike Heinrich	PWS-10	144 "

#### **OUTDOOR NO-CAL**

Pilot	Plane	Time
1. John Stott	Dornier Falke	268 sec.
2. Mike Heinrich	Fairey Spearfish	185 "

#### **INDOOR PEANUT**

Pilot	Plane	Time
1. Stu Weckerly	Stout 2AT	120 sec.
2. Mike Thomas	Lacey M-10	115 "
3. Frank Hirleman	Cougar	57 <b>"</b>

#### INDOOR SCALE (no peanuts)

Pilot	Plane	Time
1. Dave Linstrum	Ford 2AT	116 sec .

#### INDOOR NO-CAL

Pilot	Plane	Time
1. Mike Morrow	FW-190D-9	185 sec.
2. Mike Morrow	BV-P-211	134 "
3. Walt Leonhardt	Grum. Hellcat	50 "

#### S.O.S.—S.O.S.

Wanted; Red plastic tank mount for Tee Dee .049 and/or .051. Mike Ransom, 701 N. Grand, Okmulgee, Ok. 74447.

#### PHOTO PAGE

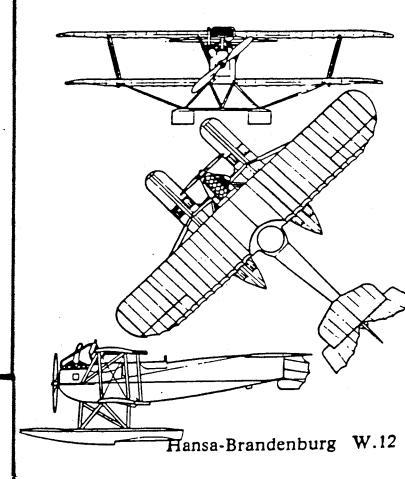
Top left; A fine rendition of a Watkinson "Dingbat" Dime Scaler from the pages of your FAC newsletter by Jiro Sugimoto from Japan. This is a good flying model!

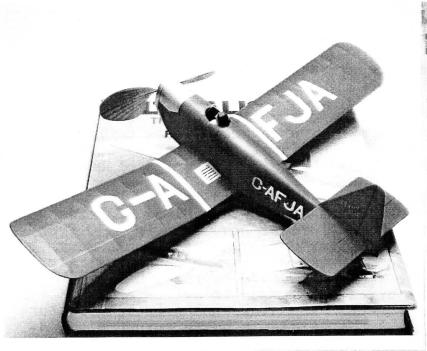
Middle left; Roger Willis sent this pic of Tom Arnold and his Dornier Pfiel 335. Also a good flyer.

Bottom left; Here is Bill Melvin's model of the F-4 Phantom. Don't know much more about the model. Looks good though!

Right top; Here is Lloyd Shales' model class at Mother Teresa School in Kingston, Ontario, Canada. Lloyd teaches these classes regularly there at the school.

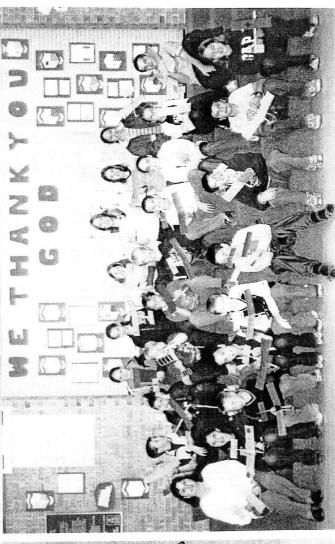
Right bottom; Phil Thomas sent this photo of his Golden Age Reproductions kit of the Heinkel HE-112. Phil modified the kit to give it a more scale-like appearance.

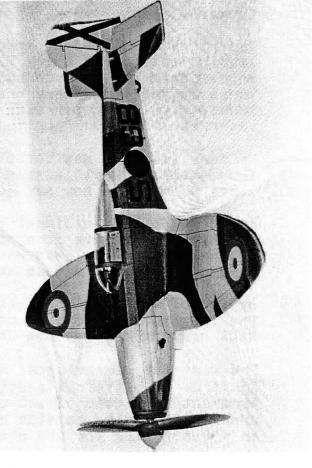












### THE GOLDEN AGE by Fran Ptaszkiewicz

The Curtiss F8C-4 "Hell Diver", an airplane worthy of its name and considered well capable of filling its diverse and unusual duties, has been chosen for this month's feature. The first of a line of dive-bombers which would eventualy culminate in the 1940's, SB2C series of aircraft.

In the early 1930's, few aviation enthusiasts would fail to hear the name of the Curtiss "Hell Diver" without sensing a feeling of pride and confidence in our naval protective forces. Developed in 1930 from the famous A-3 "Falcons", the "Hell Diver" after going through many phases of constructive changes was made the mainstay of our Naval Air Service. It was a truly remarkable airplane, its sturdy wings had borne the brunt of many headlong test dives, sometimes in excess of 350 M.P.H. without showing undue signs of strain. The airplanes principal feature was the ability to become what was then called a human guided missile. Meaning its splendid design and construction had enabled the "Hell Diver" loaded with eight bombs to hurtle directly towards the objective, whether a battleship, or some huge front line installation and discharge its deadly cargo and be up and away from danger in an instant.

Dive bombing tactics, it must be remembered, were at the time an innovation that it was hoped would prove to be one of the most effective offensive weapons delivery methods of all of the Air Services during the years to come.

General construction consisted of a dural steel tube fuselage assembled by both welding and riveting which was covered with linen fabric and supported by a light aluminum superstucture from the pilots cockpit forward.

The wings consisted of spruce spars and truss type ribs having a metal leading edge and a heavy flexible cable trailing edge outline. These were fabric covered and had no dihedral in the upper or lower wings. These rugged wings were built to withstand abnormal and unprecedented loads, with the upper wing having a pronounced sweep-back or more technically called "lonitudinal dihedral.

We were learning new technical terms here, along with the above I have found many old, old airplane drawings using the term entering edge in place of what we now say leading edge.

Power was a nine cylinder Pratt & Whitney "Wasp" R-1340-88 engine of 450 h.p. which gave it a maximum sea level speed of 137 m.p.h.. A townend-ring cowl was used on the original series of aircraft while some of the later models utilized a NACA cowl.

By way of explanation of the two cowls with respect to their differences, The Townend ring covered only the engine cylinder heads, while the NACA cowling covered the complete cylinder block.

The wingspan of the upper wing was 32 ft and the fuselage lenght was 25 ft 10 in. Airfoil section was a modified Clark Y or Curtiss C-70. Armament consisted of .30 caliber Browning machine guns mounted in the upper wing firing outside of the propeller arc and a single gun mounted on a scarf ring for the observer / gunner in the rear cockpit.

The rear cockpit was also outfitted with a set of flight controls which could be used to spell the pilot in long observation flights or case the pilot should possibly become disabled.

The "Hell Diver" was designed by Charles Hathorn, a native american who also designed the Curtiss "Falcon" and "Seahawk" models.

The original airplane was rolled out in late 1928 and testing began in early 1929. It was later destroyed in a spectacular crash killing both occupants. The cause was determined to be the failure of the entire tail section.

After modification and srenghtening the "Hell Diver became a perfect dive-bombing airplane. The first order for the F8C-4 or company Model 49B was placed in late 1928 with the first delivery of the order of 25 aircraft reaching the Navy on May 1, 1930. These being assigned to sea duty on board the aircraft carrier USS Saratoga.

As the first dive-bombers with the fleet they served well until the newer and faster fighter planes joined the fleet and when it was found they were becoming slower than the fighters they were flying with another search was begun to replace the original "Hell-Divers".

Does anyone out there remember the old movie called "Hell Diver" which starred Wallace Berry and I believe a young Clark Gable?

An excellent set of very detailed three view drawings may be found as a two part series consisting of four paged in the November and December 1963 issues of Model Airplane News.

#### **OUT OF SIGHT**

In the November issue of Model Aviation, Bill Baker writes of his first out of sight (OOS) flight. He says that no free-flighter will ever forget their first OOS experience.

I remember mine. It happened to me when I was around eleven years old. It was a much safer time then and my parents would drop me off at the flying field on Sunday and pick me up 3 or 4 hours later. I would watch the big guys fly their free flight gas models and sometimes would be allowed to chase their models.

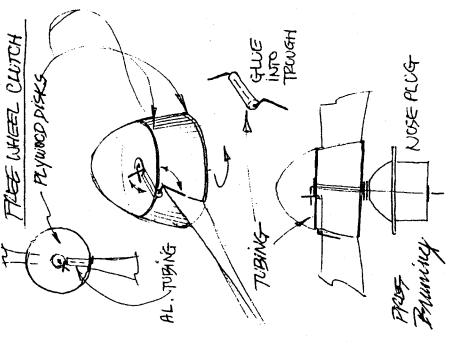
On the memorable day, I had brought along my "Army Interceptor". If you are in my age bracket, you will remember this as Jim Walker's American Junior folding wing catapult glider. It was the forerunner of the "404" Interceptor that was introduced in 1948. I had flown it occasionally along with my watching and chasing gas models.

It was getting close to the time that my parents said that they would meet me. I was walking toward the road when a grown-up stopped me and asked me if my little airplane really flew. I replied, "You bet it does" and stretched the rubber loop catapult as far as I could and let fly. When the wings unfolded at the top of the launch, the glider started to circle. It didn't lose altitude. It kept circling and rising and drifting away. I didn't chase it. I just stood there awestruck and watched it become a small speck in the sky and then disappear

I've thermalled many models since then, but I'll always remember that flight as special.

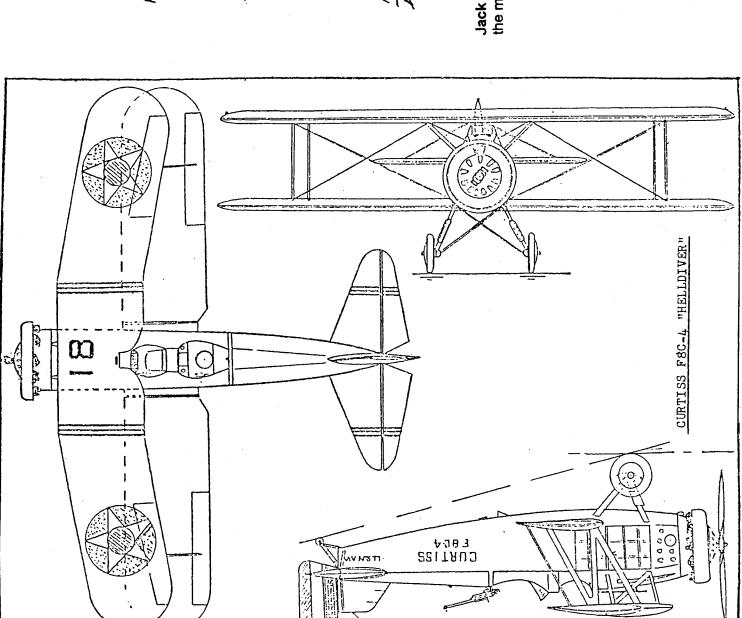
If your first OOS flight was memorable, you might like to share it with our readers. If you can describe the event in less than 200 words, please put it in writing and send it to the newsletter editors in care of the club secretary. We will edit it and put it in the best format for the newsletter. Thanks.

Don Lang



Jack Moses sent this in as a Tech-Neeks. It's from the mighty pen of Pres Bruning. No excuse, now!

"Something wrong, Sir?



Dear Lin.

Sorry to report the passing Dick Mallow, one of the most dedicated scale judges I have ever had the priviledge of being associated with. I know he worked very hard at the first few FAC gatherings at Johnsville. He was both a good AMA scale judge and an FAC judge. He knew his aircraft and the awarding of points like the best of the judges in our organizations. Although he had not competed for the last 20 years or so he was always there to call on to judge at most all contests on the east coast. He was a founding member of the famous SOTS club in the Philadelphia area.

Best regards and thermals to you all at headquarters.

Alan Mkitarian, SOTS, NFFS, FAC, Palmyra, N.J. AMA 5008.

#### PHOTO PAGE

Top left; Here is Pres Bruning "stuffing" his P-47H Peanut model for a flight at an indoor contest at Oakland, Mi. Photo by Merle Davies.

Middle left; A Sopwith Tri-plane from a Lee's Hobby kit, Peanut Scale, by Dan Marek. Dan's pic.

Bottom left; Dave Linstrum sent this photo of his PWS-11 Peanut model built from a Pres Bruning plan.

Top right; A huge 40" span electric powered free flight Sopwith "Pup" by Bob Bojanowski. Can't wait to see this one in the air at the FAC-Nats in July! Photo by Chris Starleaf.

Bottom right; A neat Hall-Springfield "Bulldog" racer by Pres Bruning. This one will probably appear in the B.L.U.R. Race at this year's FAC Nats. Pic by Pres.

esfic

The Western New York Free Flight Society presents the 33rd Annual

#### Empire State Free Flight nampionships

Aug 16-17-18, 2002

AMA Class AAA Sanctioned Contest

Registration • Open all three days. AMA of MAAC license is required. Entry Fee • Fee of \$25 for all events, or \$10 for 1st event, \$8. for each additional event.

additional event.

Awards • Trophies to 3rd place will be awarded in all events.

Note • There will be a 50/50 raffle. • Chase bikes are permitt

• A banquet is planned for Saturday night at Yard of Ale in Piffard. Details and sign up at the registration desk.



FAC EVENTS Contact Jack Barker 2067 Rt 65 Bloomfield, NY 14469

716-624-2844

AMERICA'S CUP Contact John Clapp 116 Hillcrest Dr Sayre, PA 18845 18840 570-888-0997

DIESEL FUN FLY Contact Don Yokel 149 Glenview Lane Rochester, NY 14609 716-288-8270

#### Rules for this contest - AMA Catagory III except:

- OLD TIME GAS Engine run:16 sec for ignition (no glo) 12 sec for diesel
- **CLASSIC TOWING** Straight tow, no bunt

AMERICA'S CUP

Flown in 1 1/2 hour, overlapping rounds starting at 8 AM both days i.e, 8 - 9:30, 9 - 10;30, etc

NATIONAL CUP

Qualifying events this contest: 1/2 A. AB,+CD Classic, Moffett, P-30, Mulvihill Early 1/2 A, A & 1/2 A Nostalgia. Nostalgia/Wakefield Jr P-30, Jr OCG

DIESEL UNOFFICIAL FUN FLY 3 Flights Friday and/or Saturday, 12 sec run, 120 sec max. Total of 250 sec or more qualifies for Sunday 8 - 10AM flyoff 12 sec run

FAC RUBBER SCALE (Judging 8 - 12 noon)

OLD TIME ELECTRIC GAS REPLICA **FAC Bules** 

#### Schedule of events

#### Friday August 16 8AM - 5PM

- A-B Classic Gas
- B-C Nostalgia Gas 1/2 A Early Nostalgia Gas
- Old Time Rubber
- Classic Towing

#### Saturday 8AM - 5PM August 17

- 1/2A-D Gas
- 1/2 A Classic Gas A Nostalgia Gas
- 1/4 A Nos/.020 Rep
- Mulvihill
- Nostalgia Rubber/Wakefield FAC OT Electric Gas Rep
- FAC Embryo Endurance
- FAC Golden Age Scale
- FAC Rubber Scale
- America's Cup F1A, F1B, F1C
- Diesel

#### Sunday August 18 8AM - 4PM

- C-D Classic Gas
- 1/2 A Nostalgia Gas
- Old Time Gas
- OHLG/OCG Combined
- America's Cup F1G, F1H, F1J
- Diesel Flyoff

#### Jr Events P-30 OCG

May be flown any day, but all flights within the catagory must be completed the day the event is begun.

#### A BUM JOKE

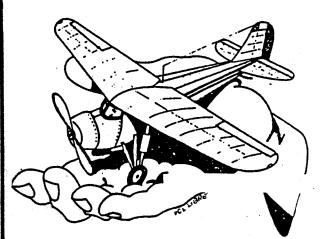
A bum asked a man on the street for \$2.00. "Will you buy booze?" the man asks, to which the bum replies, "No."

"Will you gamble it away?" Once again the bum replies, "No."

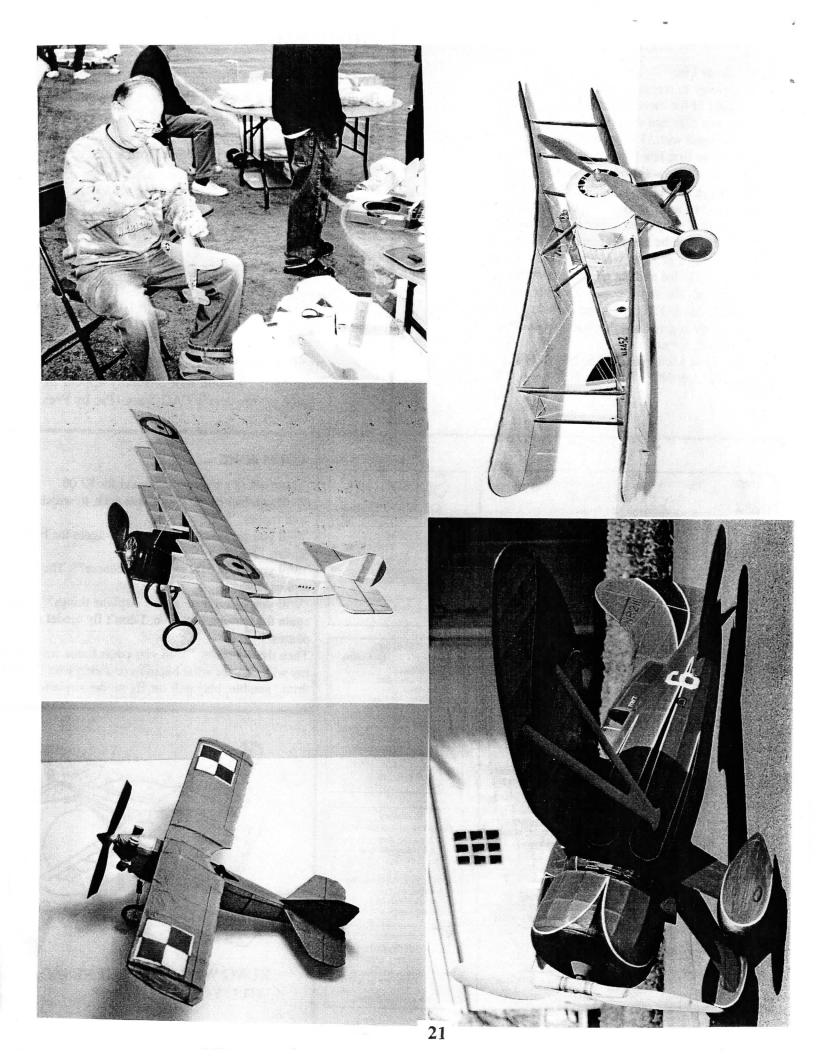
"Will you make bets at the golf course?" The bum replies, "No."

"Will you spend it on model airplane things?" Once again the bum replies, "No, I don't fly model airplanes."

Then the man asks, "Will you come home with me so my wife can see what happens to a man who doesn't drink, gamble, play golf, or fly model airplanes?"



HUNG WILL BE AT GENESEO, WILL YOU BE THERE?



#### \* Rubber Energy \*

Mumbo Jumbo #106 from the pen of the Glue Guru

Today we shall contemplate the issue of rubber energy expenditure. Are we efficient? Do we achieve a reasonable return for our investment in rubber weight? What exactly does a good lube do?

Oddly enough the answers were set out in 1912, courtesy *Flight*, Sept. 28., in a series of studies that remain the latest word. Here's one technical area that doesn't suffer from overcrowding.

First, our terms. Unit energy will be described as ft.-lbs./lb. This means the ability to do a certain amount of work (the ft.-lbs. or numerator part) possessed by each pound (the lb. or denominator part) of rubber. In words, unit energy equals work potential per pound of rubber.

The work to be performed can be expressed as height, and in the case of slingshot gliders, or Wakefield, success or failure has much to do with getting plenty of altitude. However, rubber scale is a different game, and height alone is a poor measure of prowess. Even so, height serves well as a useful standard – the greater the unit energy, the greater the ability to stay aloft.

In a rough sort of way, tests show the value of rubber unit energy to be about 2000 ft.-lbs./lb. This means that a perfect model (no drag; no prop losses) weighing one pound, and equipped with one pound of rubber has the potential of reaching 1000 ft. of altitude. A more practical model, with say 10% of its weight given over to rubber, but still enjoying no drag or prop losses, would reach 200 ft.

If we throw in a realistic prop efficiency value of 50 %, the altitude becomes 100 ft., and if we then correct for drag, we end with the usual 25 ft. or so seen in most rubber scale models.

In short, rubber unit energy values have much to do with our game. An improvement in energy translates into more

performance.

Over the years, much has been said about lubrication as a means of increasing the winding turns potential of rubber. Specifically, rumors of a magic elixir "soft soap" have told of great wonders achieved in the way of increased turns without fracture.

This has always seemed hard to believe. What possible difference can there be between one soap and another? Yes, we all use some sort of lube (castor oil here) and our various lubes do something useful in the way of preventing torn motors. But why would one lube be superior to others?

The 1912 study indicates that a good lube works by increasing the permissible rubber unit energy; typically from 2000 to 3000 ft.-lbs./lb. The operator realizes this improvement by putting on more winds, and does so without rubber failure. As for soft soap, it really was best of all tested, taking the energy value up to about 3600 ft.-lbs./lb.

Of course, operating at a higher rubber energy level brings in other problems. More winds mean more torque and all the difficulties of dealing with a high torque, high thrust launch. These can be ruinous.

Indeed, if a peaceful existence is desired, there is much to be said for not pushing rubber energy levels. The single best technique for NOT blowing a motor, assuming that some decent lube is being used, is to restrain turns to 75% of handbook values. Raising turns to 85% not only makes a blown motor more likely, but repeated flights at this rate turns some brands of rubber into mushie., torque is reduced and the model is unable to repeat flight characteristics.

Still, for the courageous few willing to eschew the peaceful 75% route, there really is convincing evidence of a potent rubber energy raiser - soft soap. As to a vendor, I suspect the 1912 supplier is gone. Regrets.

#### DB on Dee Tees

Attacking a greasy hamburger and heaping plate of fries with his characteristic lip-smacking gusto, "Dive-brake" Donigan took time between mouthfuls to expound on any number of topics. His "nom-de-flight" had been assigned by flying buddies, not because he'd flown Douglas Dauntless Divebombers' but due to his models' frequent, precipitous contact with terra firma. Dive-brake, or DB as he was usually called, could on occasion wax ineloquently on any number of subjects. The range of subjects was only exceeded by the range of his girth. He, by studiously avoiding any semblance of reasonable nutrition, had developed a belly like the pregnant underfuselage of the O-47 observation plane of the thirties. He never met a greasy hamburger he didn't like.

Of "Iron-man" constitution, he suffered no physical problems however, other than an occasional back strain, probably engendered by too frequent bending over to pick up his field strewn model pieces.

Having demolished most of his lunch, he pushed back in the booth and launched into a discourse on scale modeling. Oddly, depite a propensity to have the aforementioned less than casual approach to flight trimming, DB enjoyed rubber scale over performance models by far. And he had a surprisingly keen eye for scale fidelity. Warming up to the subject, he emitted a Giant Scale belch and proceeded to point out discrepancies observed in recent publications. "Didja see the RC P-38 with the humongous fins?----and pictures of stuff like P-47's with retracts that looked as though they came from an AT-6?" hequeried.

DB reflected for a moment and shifted in his seat to relieve the overload in his stomach. Knowing the signs of an impending topic close to his heart, I listened without comment as he intoned, "When the 'Founding Fathers' created the rules for FAC Scale models, they must have done a great job cuz basically no earth-shattering changes have been necessary."

Obviously not about to suffer speaker's block, he was cranked up like a 10 to 1 winder with only 15 seconds to launch. "Sure, the rules allow reasonable stab and prop enlargement but of late a few Zealot Peelots have started monkeying around with flight 'enhancers' borrowed from non-scale free flight. For instance there was the stab tilt----and adding Dee Tees!! Preposterous!" (When DB is agitated, his vocabulary increases proportionately) "Whoever heard of a cockamamy slonched stab on a real airplane? Or a fuselage with bungee cords, levers, cables, knobs or like clutter on its outside surfaces? Heresy!!" he opined.

He paused in his spiel to search for any fries that had escaped from his plate.

Recognizing the apparent apex of his fervor, I somewhat timidly tried to play Devil's Advocate, "What if the DeeTee paraphernalia is completely inside and therefore out of sight?"

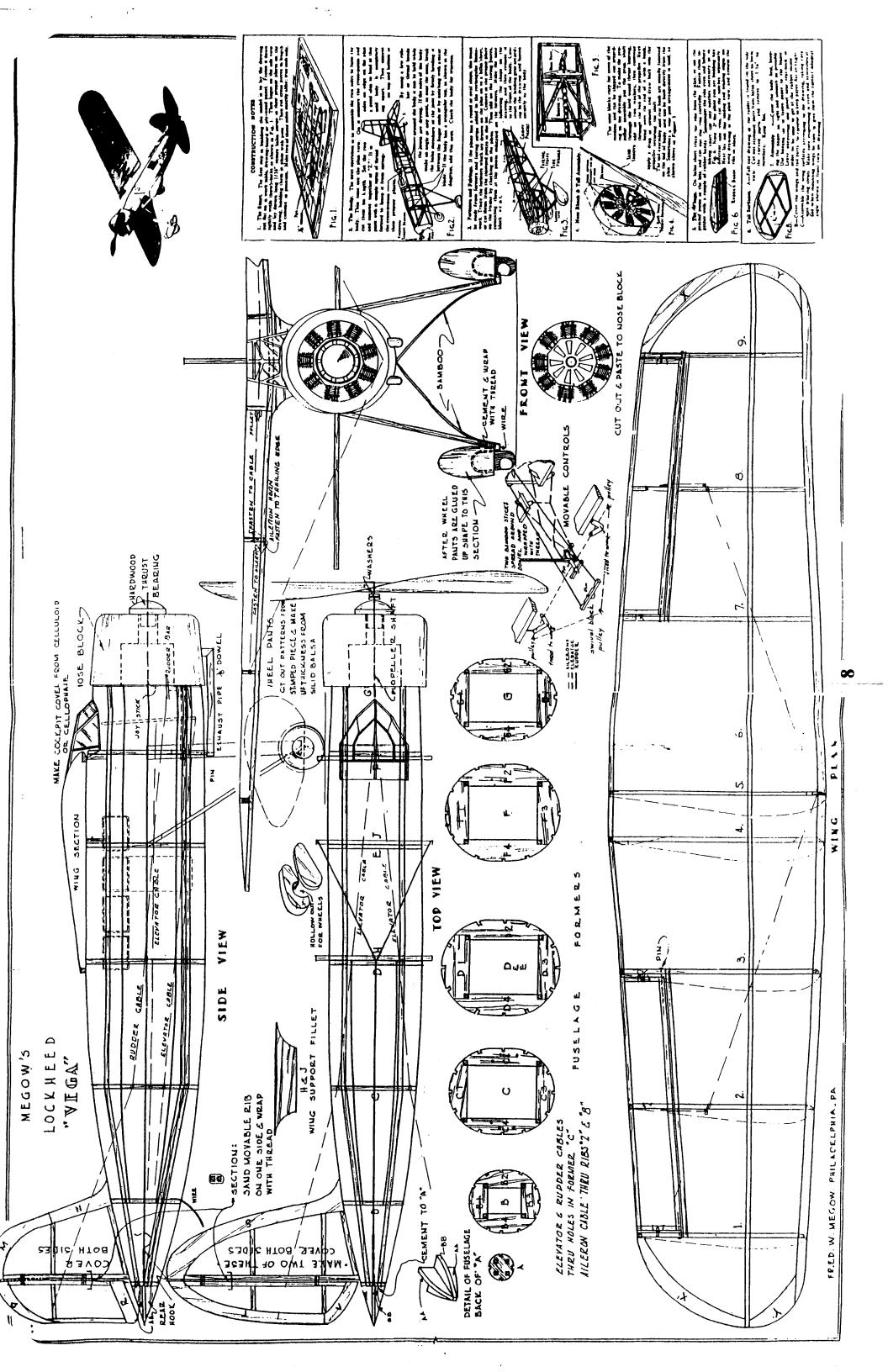
"Aha!" he triumphantly exclaimed, "The object of those time-proven rules and spirit is to make like the form of a real airplane and have it react in a reasonable flight pattern: climb, cruise AND glide. Yes GLIDE----not dive, flutter or mush to ground with a flip-up stab, wing or other device!!Most of those superlight, endurance-like scale models get that way because a lot of structure, that should be there to flesh out the shape, is inadequate or not there. Scale is SCALE and 82.5 max flight points are enough!! No guts--no glory!!!!!!!!!" Fly right!!"

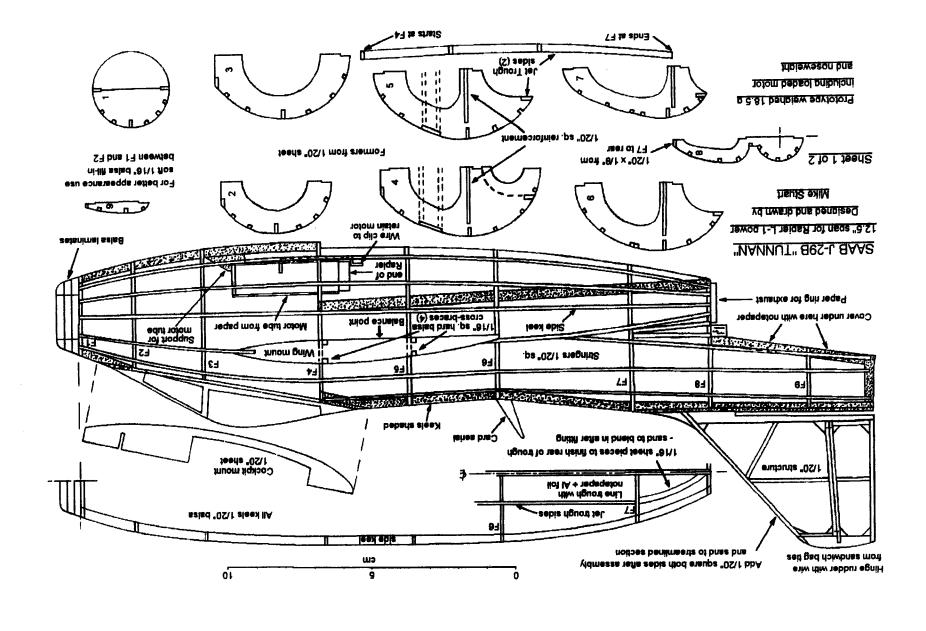
Finished with his speech and finally unburdened, DB smiled benignly, relaxed, then contentedly intoned to the waitress, "Double fudge sundae, please.....lotsa nuts and sprinkles."

"Right-on, DB, you hit that right on the ol' prop-boss!!", I agreed. Then to the waitress, "Make that two, please."

Al Lawton

5-02





This plan is for the Rapeir L-1 power unit.

To use the Rapier L-2 unit enlarge the plan to around 16" span. Or, enlarge it even bigger and hang a prop on the nose for rubber power.

Go for it!

