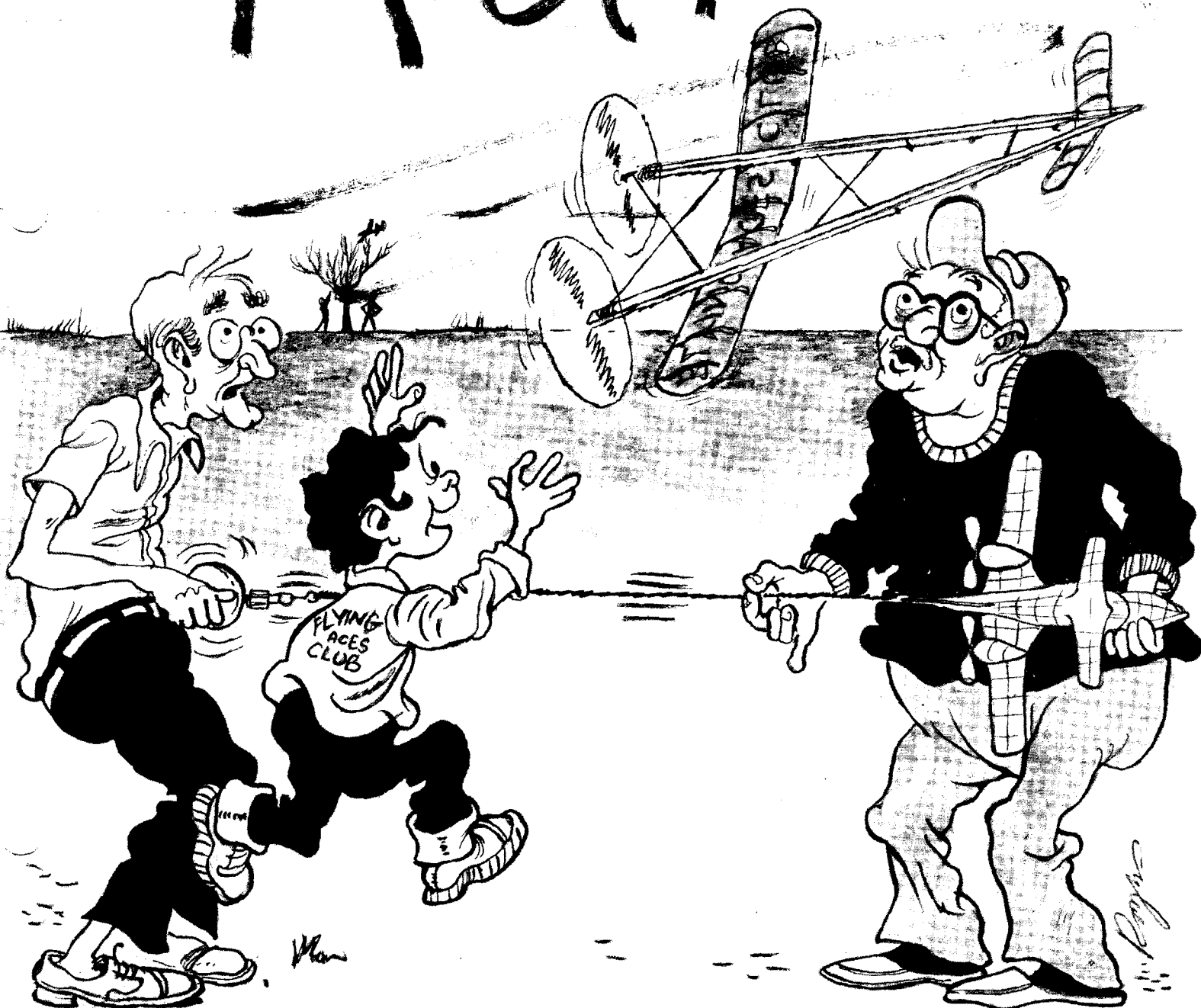


FLYING RACES

Club News

ISSUE #149-55 Sept./Oct. 1985



2.

NEWS ON THE WING!

Another great cover from Bob Rogers, gang. Doesn't it create a great contrast? Two oldtimers trying to get one of the newest "crazes's" (multi's) into the air, when along comes this young upstart with an old time twin pusher and makes them look sick. The twin pusher makes you realize that multi-engined models aren't new after all!

We have just learned that the column "INSIDERS" written by Dave Linstrum in the magazine "Model Builder" is to be dropped. This will be another blow to free flight and we hope that Bill Northrop will do something to keep this column alive. We have often wondered why when some column gets dropped due to a number of reasons, why does it always seem to be free flight? We also realize that the money is in radio control but the rest of our great hobby cannot be allowed to die! If you share our thoughts please write Bill Northrop, Model Builder, 898 West 16th St., Newport Beach, Ca. 92663 and express your views. If enough of us express our views on this maybe we can save it.

As promised in the last issue, we have the new updated FAC rules in this issue. This should let you get to building for the FAC Nats, Mark VII. Don't forget that date! July 13-14-15, 1990 at Geneseo, NY. All information will be in the next issue, including events, dormitory fees, motels, etc. Hope to see you all there!

Dave Diels has another fine kit out Skysters. It is the Grumman F4F Wildcat in 1/24 scale, 19 inch wingspan, from the Model Builder book, Flying Scale Models. Great kit at \$19.00 each plus \$2.50 postage. The kit includes all the usual good stuff, such as documentation, canopy, decals, etc. Get it from; Diels Engineering, Box 101, Woodville, Ohio 43469. Get a new catalog for only \$1.50.

Floyd White of 3737 Green Ave., Apt. 4, Los Alamitos, Ca. 90720 has apparently moved and his newsletter came back to us. If anyone knows his current where-a-bouts please let us know.

We also got back a mutilated newsletter which had the address label torn off. So if you did not receive the last issue let us know and we'll send one right out to you.

Hannan's Runway, that excellent source for books and three-views, etc. has moved to; Hannan's Runway, Box 860, Magalia, Ca. 95954

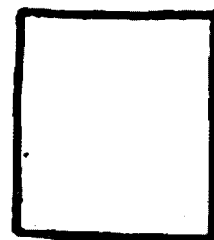
Al Lidberg has come out with some more new plans Skysters! The latest one is a Jumbo scale version of the Monocoupe with a wingspan of 40 inches! Or you can make a clipped wing version of only 29 inches. This plan comes with body trim patterns, stick-on Monocoupe logo, scale references, etc. Looks like a real buy at only \$6.00. Get yours from Al Lidberg, 614 E. Fordham Dr., Tempe, Az. 85283.

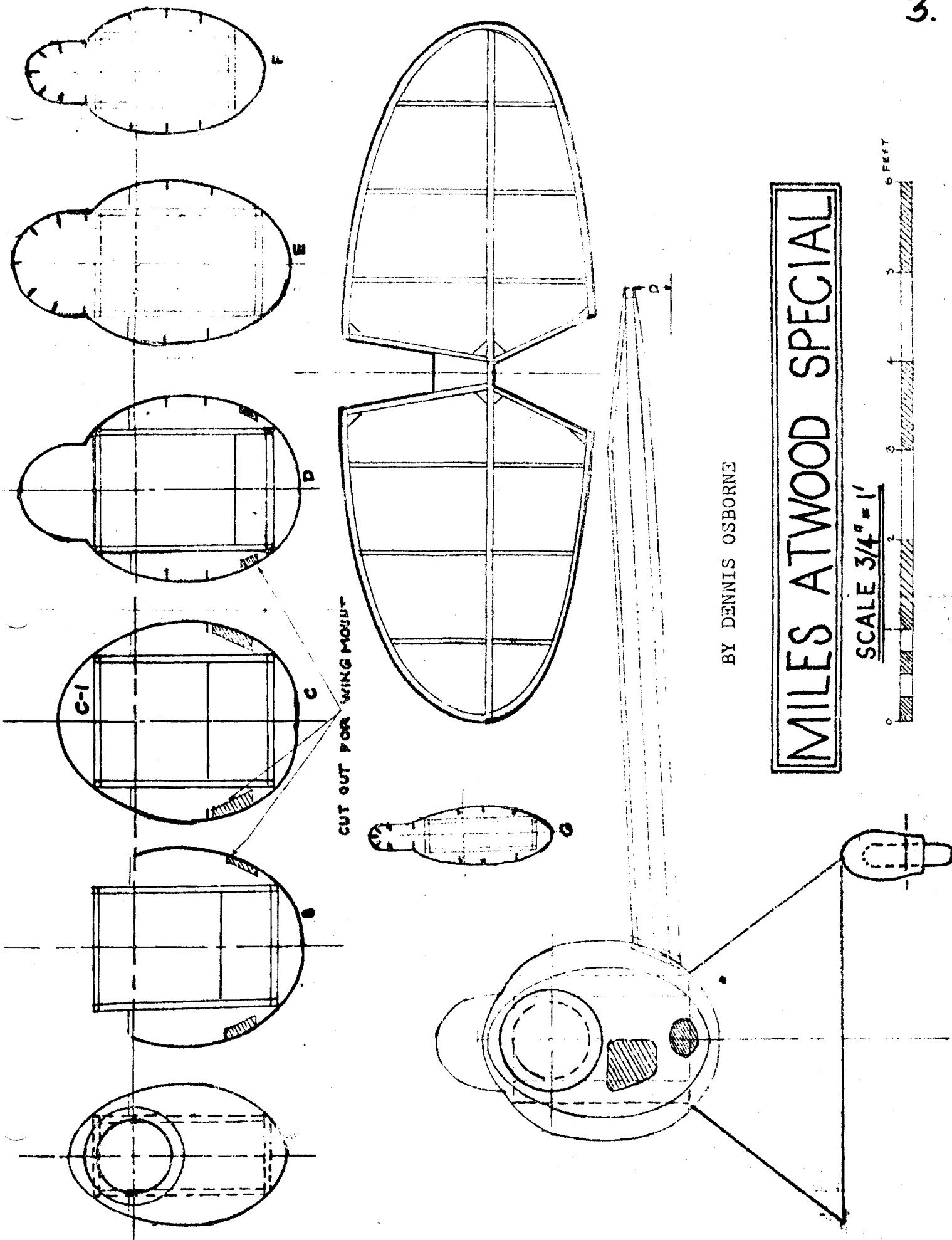
BUILD---FLY---WIN---EFF---AAA---CEEEE!!!!

Lin Reichel, Lt. Col. CinC-FAC

If the box on the right has an "X" in it, it is time to renew your subscription. Cost is NINE DOLLARS per year in the United States and Canada. Overseas cost is TWELVE DOLLARS. Six issues, published every other month. This is your last issue under your old subscription. Send to;

FLYING ACES NEWS
3301 Cindy Lane
Erie, Pa. 16506





4.

Peanut & No-Cal Scale Postal Meet

It's Postal Contest time again Skysters! Get your NO-Cal and Peanut models ready. The contest starts on Oct. 29, 1989 and ends on April 29, 1990. Entries postmarked after April 30, 1990 will not be accepted.

As in previous contests we will have four events or Wings Which are; Indoor Peanut, Indoor No-Cal, Outdoor Peanut and Outdoor No-Cal. Everytime you fly your model send in the time, the name of the model, the date, the Wing you flew in and your name.

Enter as many times as you wish, with as many models as you wish. Every time you better a score send it in.

This contest is open to all FAC members everywhere. If you fly in a contest then that time will also be recognized. Winners get another "notch" on the "Kanone" list as well. We will also have plan prizes for the winners. Let's go Clubsters, get in on the action! BUILD...FLY...WIN!!! EFF--AAA--CEEEE!!!



OUTDOOR PEANUT WING

Pilot	Plane	Time
1. Richard Miller	Lacey	165 sec.
2. Paul Stott	Miles Hawk	45 "
3. Dave Stott	Fairchild 24	43 "
4. Jeff Briehl (jr)	Cougar	28 "
5. Walt Leonhardt	Cougar	22 "

OUTDOOR NO-CAL WING

Pilot	Plane	Time
1. Jeff Briehl (jr)	Turboporter	70 sec.
2. Dan Briehl	Lacey	67 "
3. Dave Stott	Gwinn Aircar	59 "
4. W. Leonhardt	Piper Cub	43 "
5. " "	Cougar	41 "
6. " "	Corben	28 "

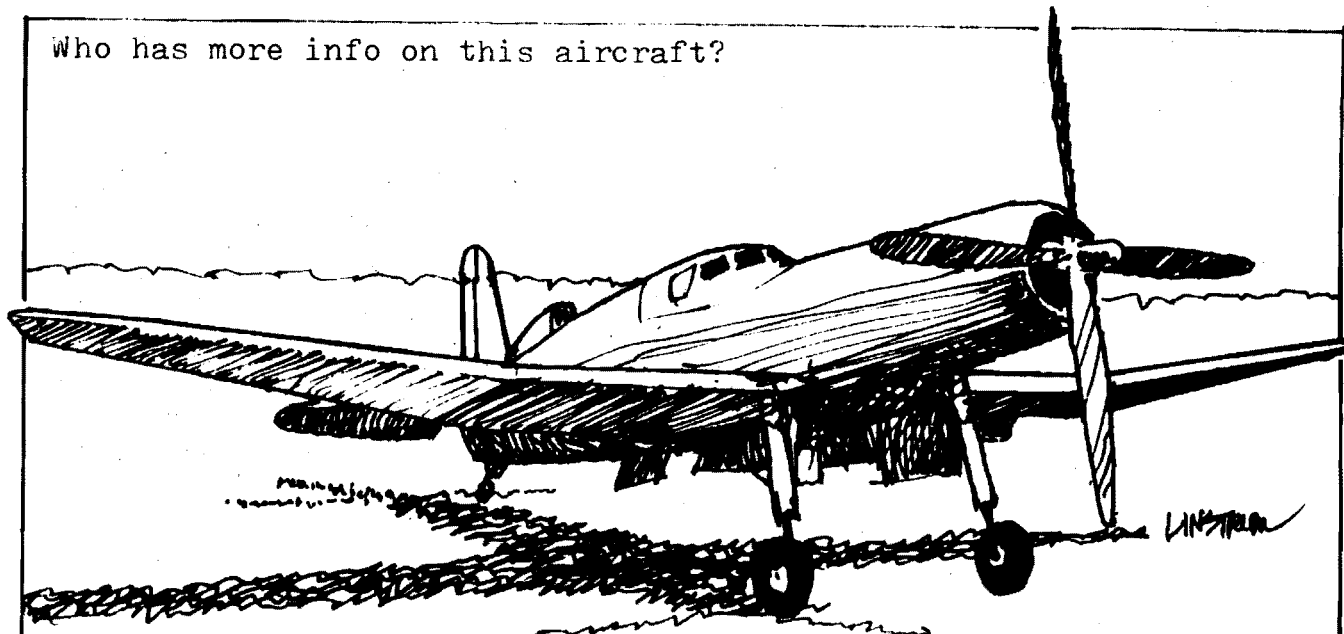
INDOOR PEANUT WING

Pilot	Plane	Time
1. Mike Nassise	Fike "E"	52 sec.

OUTDOOR NO-CAL WING

Pilot	Plane	Time
NO ENTRIES		

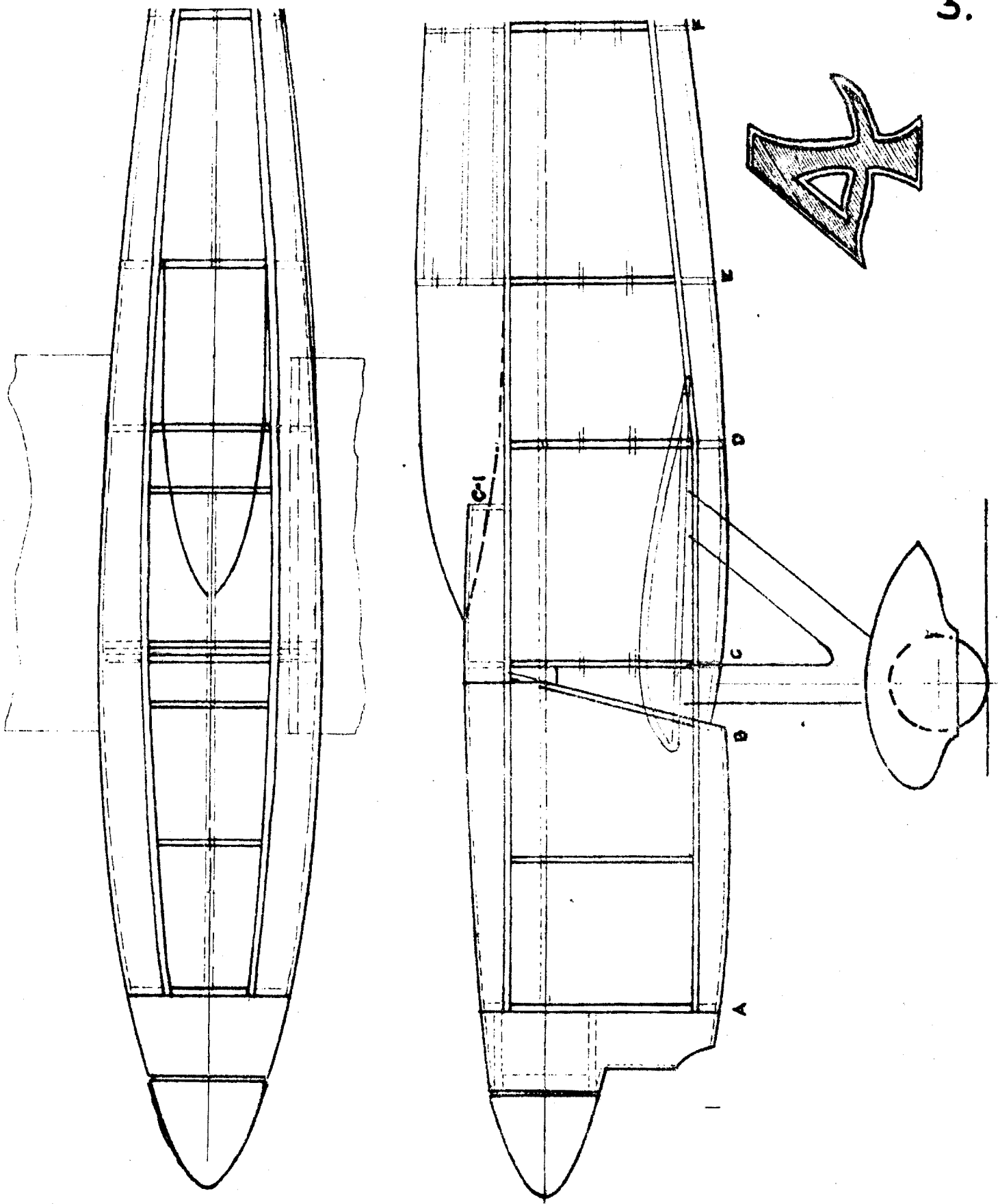
Who has more info on this aircraft?



Sent in by Dave Linstrum

OBSCURE AIRCRAFT 1944 Vought-Sikorsky VS-326A

5.



R225-Y

* * * The Flugsport Riddle * * *
Mumbo Jumbo #38 from the pen of the Glue Guru

Mr. Thumbsome and I sat in the Colonel's FAC office, tensely awaiting the reason for our summons. The Colonel leaned back in his mink-lined swivel chair, contemplating the marble walls. He spoke softly, "Gentlemen, a difficult decoding task awaits us. Let us start, but first, why do the Others have a 90 second max, whereas ours is two minutes?"

Mr. Thumbsome was quick off the mark. "That's easy, chief. We can count higher than those dumb Others. Just watch my smoke! One-two-three-four-five-six..."

The Col. Run Likehell's fist slammed onto his rosewood desk. "Shut up, you moron! I posed a purely rhetorical question as a lead-in to our task. You're not supposed to answer rhetorical questions!"

"Sorry, chief, I thought it was the kind of question where you're supposed to answer."

"All right, I'll tell you why - because we demand more of FAC members, that's why. Not for us, the easy road or the cheap max. But human nature being what it is, there has been a certain amount of grumbling, especially from those who bought Grillo kits. Somehow those lucky purchasers find their flight times far removed from the two minute max. Matters have reached the point where Mr. Grillo himself has suggested that we lower our max to something attainable with his kits, say four seconds."

I could no longer restrain myself. "Four seconds? But that would make a farce of our endeavors..."

"Yes, there is that to consider. On the other hand, without Mr. Grillo's active sponsorship, FAC might lose some of its essential accoutrements, such as the HQ Rolls. As you can easily see, we're all in a bind. But fear not, I have the answer. Under the pressure of World War I, a system was designed that would loft even the hardwood and silk models of those days to respectable times. It's some sort of gear system. All that we need to do is decipher these draiwng and foreign text to produce a miraculous gear system, one that will keep even a Grillo aloft for two minutes. With this design, we keep our max and Grillo flyers will be content at last. I should think Mr. Grillo might even produce a nice bonus to celebrate the occasion. All right, Thumbsome, you teach language. What is the language of this descriptive text?"

Mr. Thumbsome pondered the text for many seconds. "If that's the kind of question where you're supposed to really answer it, then the answer is: it's Mexican!"

The Colonel frowned. "Mexican? There is no such language as Mexican!"

Mr. Thumbsome nodded sagely. "That's why I don't know it. I only know known languages."

"Of course you don't know unknown languages, you moron! Nobody knows unknown languages!"

Mr. Thumbsome countered, "Oh yeah? How come there are so many Mexicans speaking it? Got you there, Chief!"

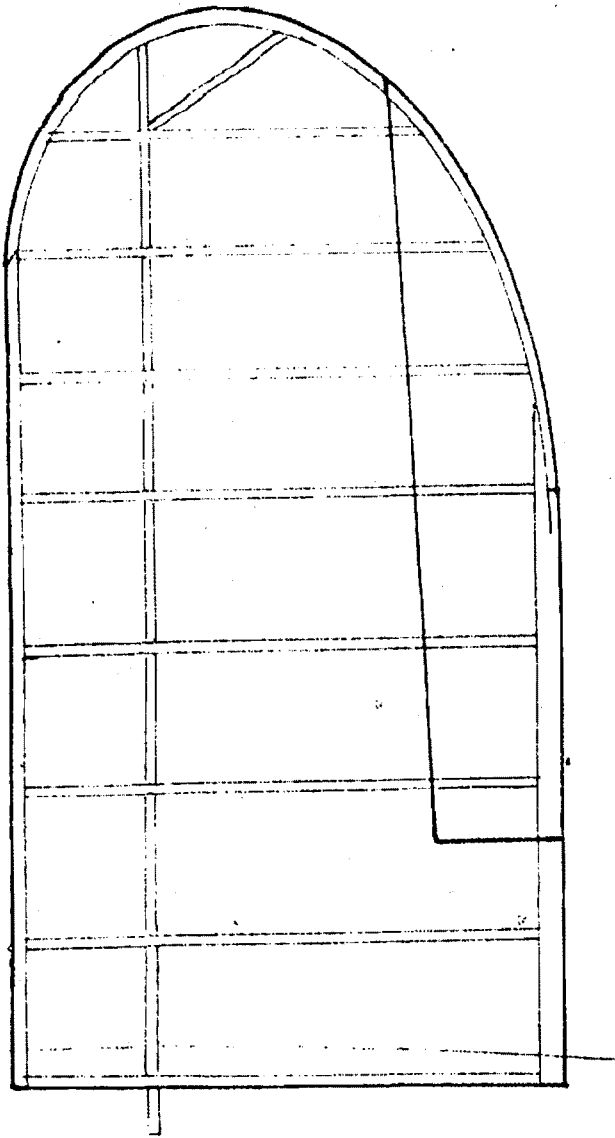
His teeth grinding, the Colonel turned to me. "And you, GG, what do you make of the drawings? You claim to be a gear expert - what about it?"

I studied them for many minutes. "I think it's a system for levering spent rubber motors out of mesh and automatically introducing fresh motors, all done in flight. However I'm not sure. I'm not sure at all. As I cannot read the text, I lack the necessary confirmation of my design intuition."

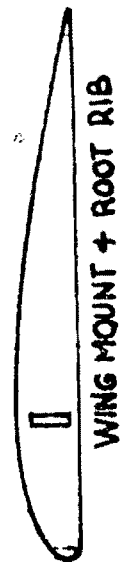
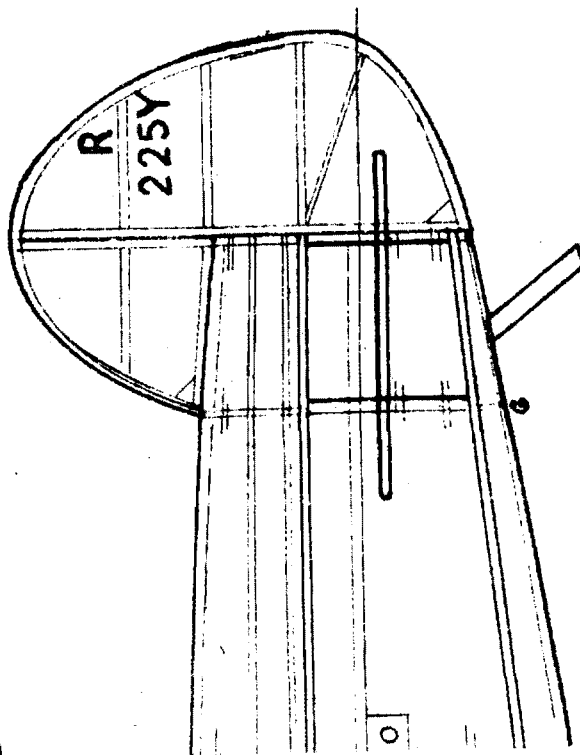
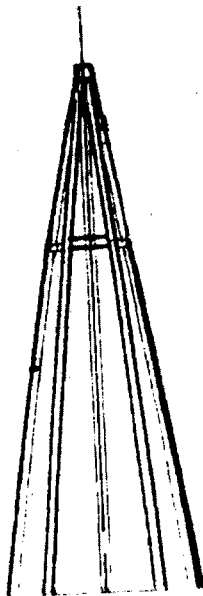
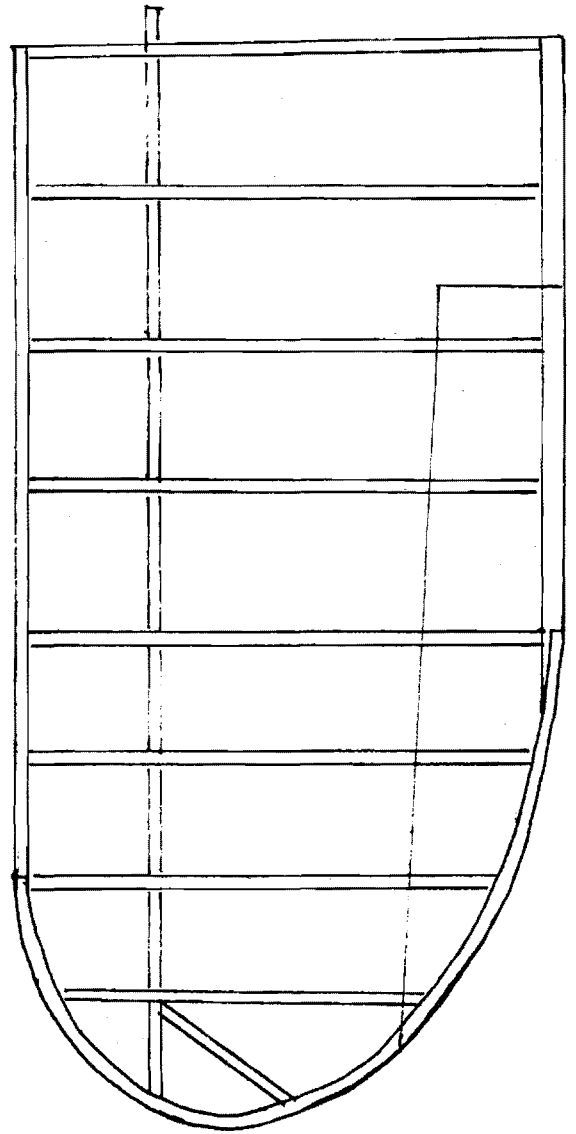
The Colonel suddenly began to weep. "The only thing worse than a moron is an intellectual. In our hour of need, can't anybody play the game?"

* * * * *

Can anybody decipher the enclosed drawings and text? This information just might be important. It's taken straight from "Flugsport, February 1916". The Colonel, Mr. Thumbsome and I, the Glue Guru, would appreciate any leads or hints from German reading modelers.



SPAR 3/16" x 1/32"



WING MOUNT + ROOT RIB

Offizielle Mitteilungen.

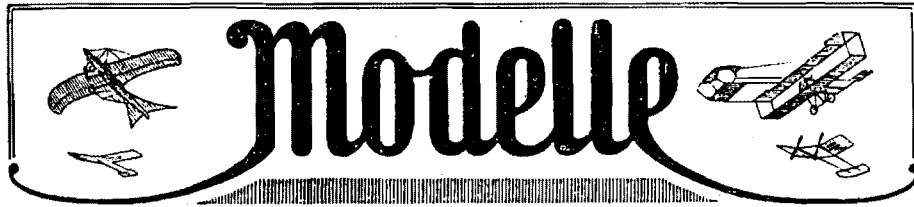
Bund deutscher Flugzeugführer, E. V.

Geschäftsstelle: Berlin-Johannisthal, Kaiser-Wilhelm-Straße 47.

Telegramm-Adresse: Fliegerbund. Fernsprecher: Amt Oberschöneweide 964.

Eintrittsgeld Mk. 20.— :—: Monatlicher Beitrag Mk. 3.50

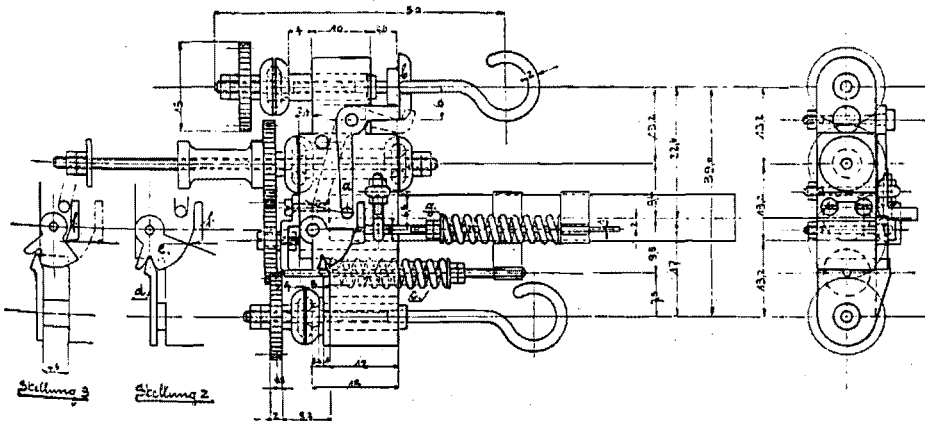
I. Vorsitzender: Felix Laitsch.



Ein neuer Modellmotor. D.R.G.M.

H. Aecherli.

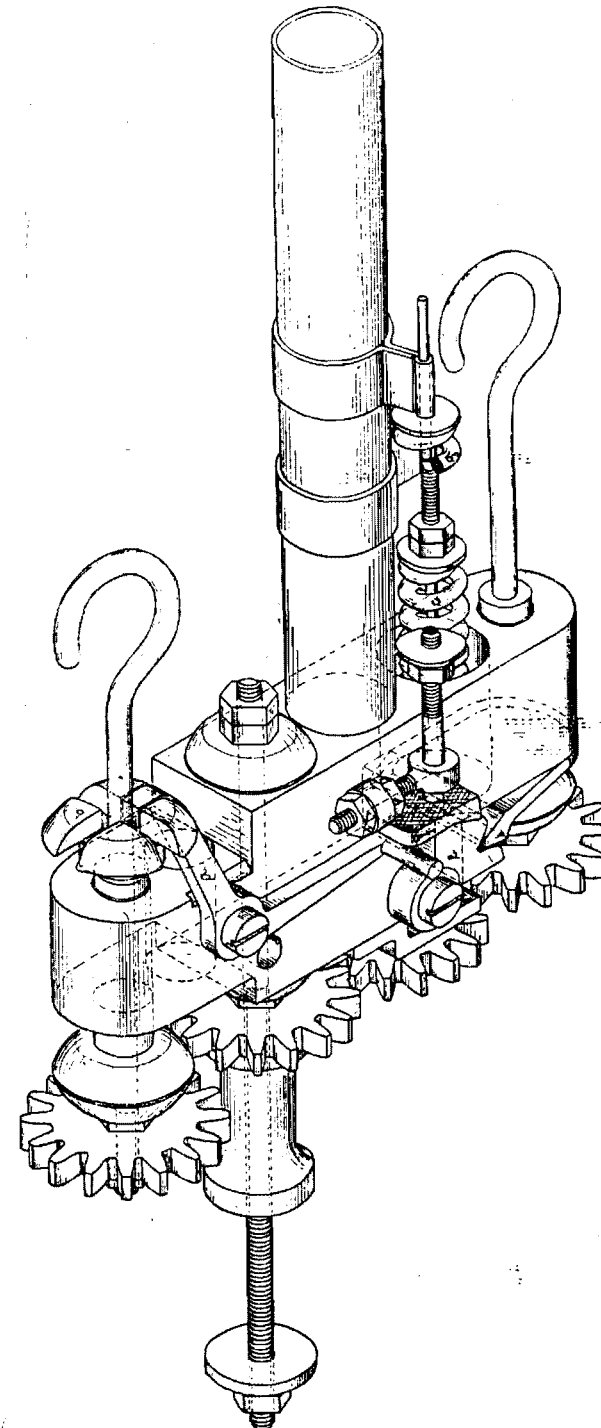
Der Gummimotor war der erste und einfachste Motor, der sich für Flugmodelle bewährte. Er hat nur den unliebsamen Nachteil einer kurzen Flugdauer und Flugweite. So gebraucht man z. B. einen Strang von 1 m Länge um einem normalen Eindeckermodell von 1 m Spannweite eine Fluglänge von 80–100 m zu



Schnitt des Modellmotors.

erteilen. Für Experimentalzwecke und Wettbewerbe werden aber meistens noch größere Strecken gewünscht, was nur durch Anwendung von teuren Preßluftmotoren oder durch längere Gummistränge ermöglicht würde. Um die Modelle aber nicht ungewöhnlich lang zu gestalten, kam man auf die Anwendung von Zahnradübersetzungen mit zwei und mehreren Gummisträngen, die gleichzeitig ablaufen.

THE FLUGSPORT RIDDLE

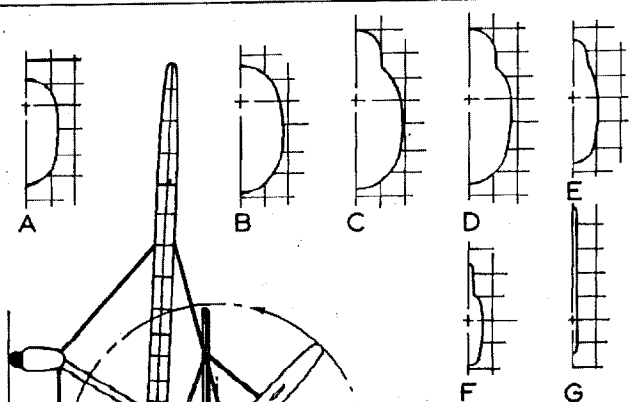


Perspektivenzeichnung des Modellmotors von Aecherli.

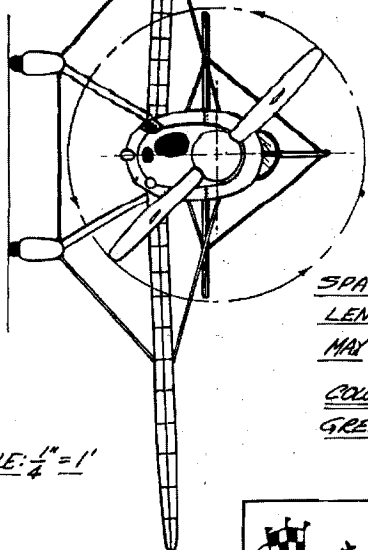
Dadurch erhöhen wir aber nur die Anfangsturenzahl, aber nicht die Flugdauer. Es lag nun auf der Hand einen solchen sogenannten Multiplikator derart einzurichten, daß wenn der erste Gummistrang abgelaufen, der zweite ein- und der erste ausgeschaltet wird, wodurch sich natürlich die Laufdauer verdoppelt. Nach längeren Versuchen ist nun die in beiden Abbildungen angegebene Lösung entstanden.

Der Motor (siehe bestehende Perspektivenzeichnung) hat nur ein Gewicht von ca. 50 gr, mit 20 m Gummi, Aluminiumrohr und Propeller 180–200 gr. Ein Preßluftmotor von gleicher Stärke und Flugdauer würde mit Bombe, Reduzierventil und Propeller bedeutend schwerer, auch sind Einfachheit und Betriebssicherheit vom Gummimotor größer. Da mit einem leichten Motor ein kleines und daher billiges Modell erforderlich wird, so ist er in jeder Beziehung im Vorteil.

Um die Reibung auf ein Minimum zu reduzieren, laufen sämtliche Wellen in Kugellagern, auch werden nur Zahnradchen mit Präzisionsteilung verwendet. Die Arbeitsweise vollzieht sich folgendermaßen: Nachdem man beide Gummi gleichzeitig am Propeller 200 bis 300 mal aufgedreht hat, fixiert man den ersten Gummistrang mit dem



WING CONSTRUCTION:
SPRUCE SPARS, SPRUCE AND
PLYWOOD RIBS, WIRE DOWEL BRACING
FUSELAGE CONSTRUCTION:
WELDED STEEL TUBING - FABRIC
COVERED EXCEPT ALUMINUM COCKPIT
AND COOL AREAS.

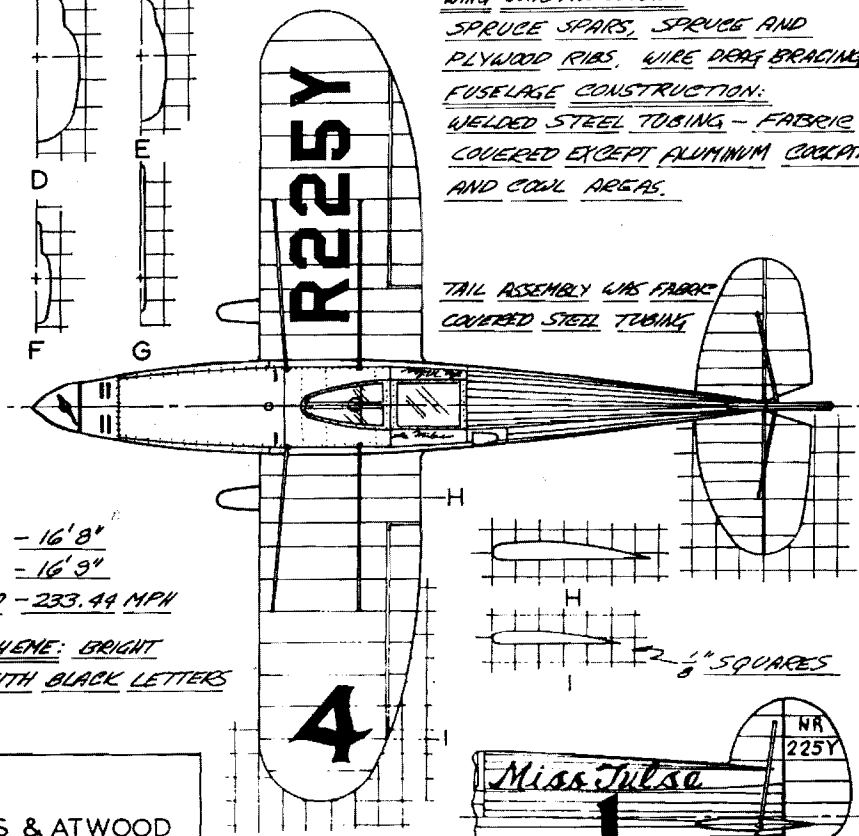


SPAN - 16' 8"
LENGTH - 16' 9"
MAX SPEED - 233.44 MPH

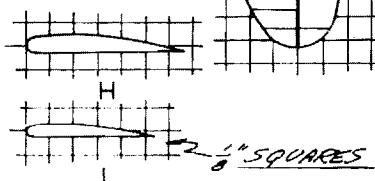
COLOR SCHEME: BRIGHT
GREEN WITH BLACK LETTERS

SCALE: 1/4" = 1'

WING WAS FABRIC
COVERED

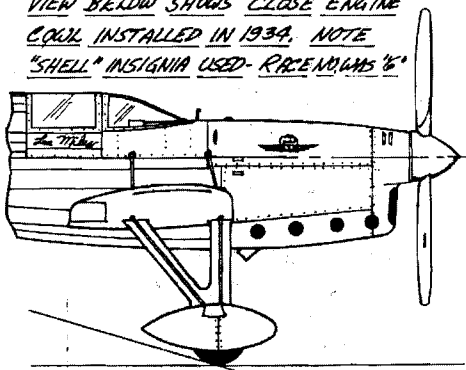


TAIL ASSEMBLY WAS FABRIC
COVERED STEEL TUBING

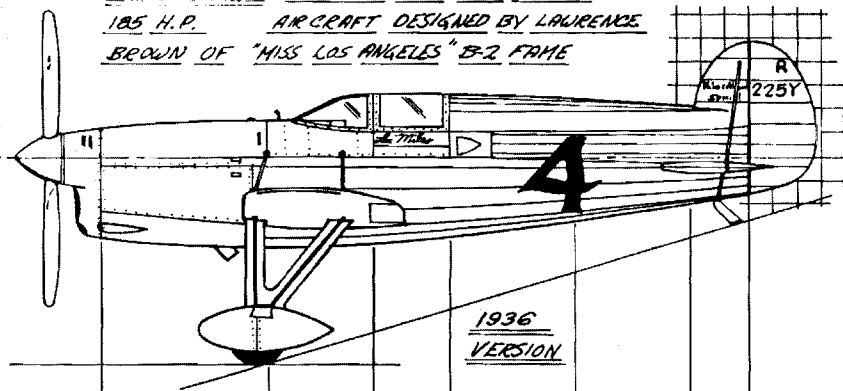


1935 VERSION

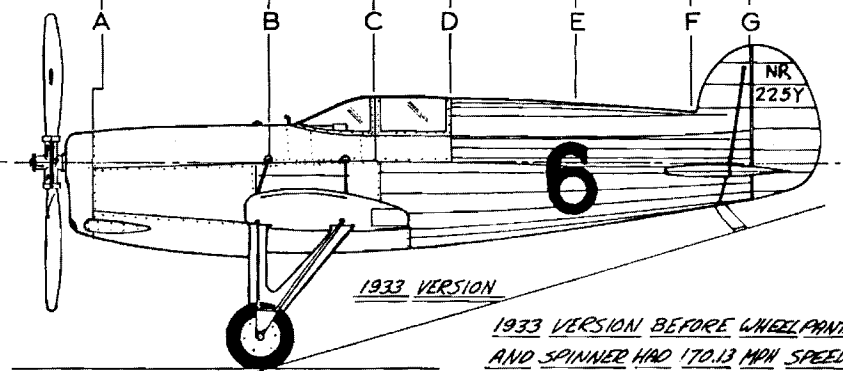
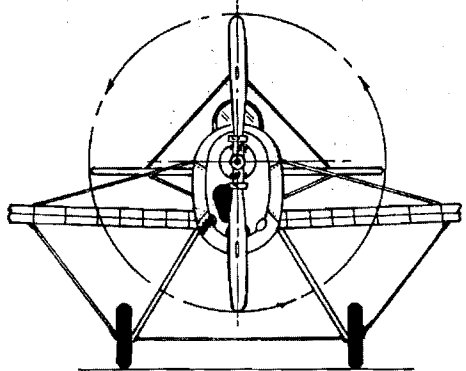
VIEW BELOW SHOWS CLOSE ENGINE
COOL INSTALLED IN 1939. NOTE
"SHELL" INSIGNIA USED RACENUMBERS '6'



POWERPLANT: MENASCO C45 363 C.U.I.N.
105 H.P. AIRCRAFT DESIGNED BY LAURENCE
BROWN OF "MISS LOS ANGELES" B-2 FRAME



1936
VERSION



1933 VERSION

1933 VERSION BEFORE WHEELPANTS
AND SPINNER HAD 170.13 MPH SPEED.

ABOVE VIEW SHOWING WIRE BRACING
ON 1933 VERSION. WITH LARGE COOL
AND NO WHEEL PANTS.

AIRCRAFT FLOWN BY LEE MILES IN NATIONAL AIR RACES 1933-1937.
MILES WON 1934 GREVE TROPHY RACE AT 206.2 MPH, IN FOLLOWING
YEARS THROUGH 1936 AIRCRAFT WON PRIZE MONEY IN VARIOUS RACES

MAGYAR MATES

by Gregor Tuvinks

Well rib slicers, if it is a snappy looking biplane you have a hankerin' for, and you don't mind building up some engine cylinders, then head for the tee square and dust off the old drawing board 'cause this dynamic duo sure have what it takes to split ozone, and that's no goulash.

They are both built in Hungary. The prototype was powered by a Bristol Jupiter VI engine of 420 horses built under license. From the single photo (B&W) it appears to be all over silver with a dark, but not too dark, trim color that I like to think of as being red. Only the wing struts and fuselage strip were trimmed thus. All else is silver.



Now what appears to be the production version of this sporty looking bus has shed it's spinner and grown a bigger rudder. A more subtle change, only as far as we modelers are concerned, is the new engine...a Gnome Rhone of a whopping 700 HP! Now we can understand the need for the enlarged rudder....can you imagine how the pilot would have had to stand on one rudder pedal on take off with the 700 horses and the prototype rudder!

Any how, gang, the one Russian quality photo of the production bus has it sporting the "HA-ARB" registry, some kind of logo on the rudder, and all struts a dark color.

The over all color is light, but lacks the reflective quality that silver usually shows up with in black and white photos. It may have been yellow, white, orange, or even red, as red shows up very light in some types of old black and white film.

Another evident difference between prototype and production version is that the prototype fuselage cross section was more rounded by the addition of formers and stringers to the sides, while the later version was slab sided.

A note on the wing rigging: There are two flying wires anchored at the oleo strut proceeding up and out to the "N" strut, one terminating at the front member of the "N" strut, and the other at the vertical member. This is evident in the side view. Not evident is the double flying wires that run from the bottom wing root to the top of the vertical member of the "N" strut. Also a single landing wire that crosses the double flying wires. These wires are all in the plane of the vertical member of the "N" strut.

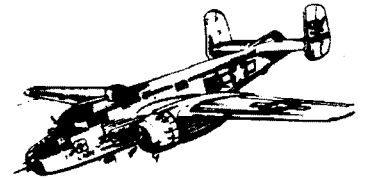
Ref; Letectvi & Kosmonautika, #1, 1984, page 35.

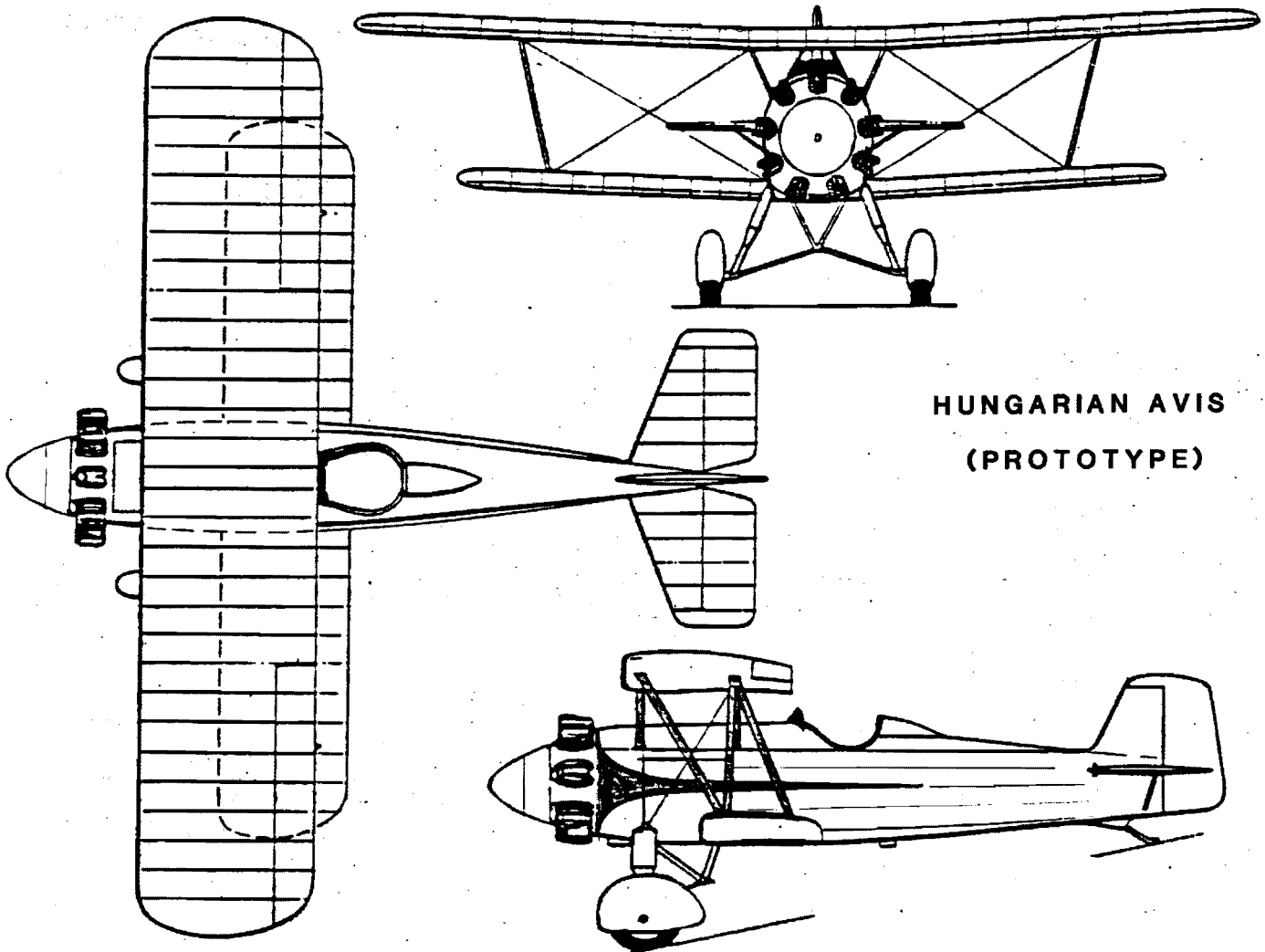
(Who is Gregor Tuvinks?)

FINAL STANDINGS---COMET POSTAL MEET

Another Comet Postal contest has come and gone, Clubsters and here is the final standings. Thanks to all who participated this year and congratulations to Eric Anderson and his Stinson SR-7 for finishing in the winner's circle. A Kanone and a plan prize goes to Eric. Great race for first place!

PILOT	PLANE	TIME
1. Eric Anderson	Stinson SR-7	289 sec.
2. Tom Nallen, Jr.	DH Tiger Moth	277 "
3. Tom Nallen, Sr.	Corben Super Ace	166 "
4. Dave Stott	Harlow (O.O.S.)	148 "
5. Dan Briehl	Taylorcraft	102 "
6. Don DeCook	Taylorcraft	84 "
7. Stu Weckerly	Cessna	75 "
8. Dave Niedzielski	Ercoupe	56 "
9. James Check	Piper Cub	56 "
10. Gordon Roberts	Piper Cub	53 "
11. Paul Helman	Corben Super Ace	47 "
12. Jack Tisinai	Rearwin Speedster	44 "
13. Walt Leonhardt	Curtiss Robin	33 "





**HUNGARIAN AVIS
(PROTOTYPE)**

12.

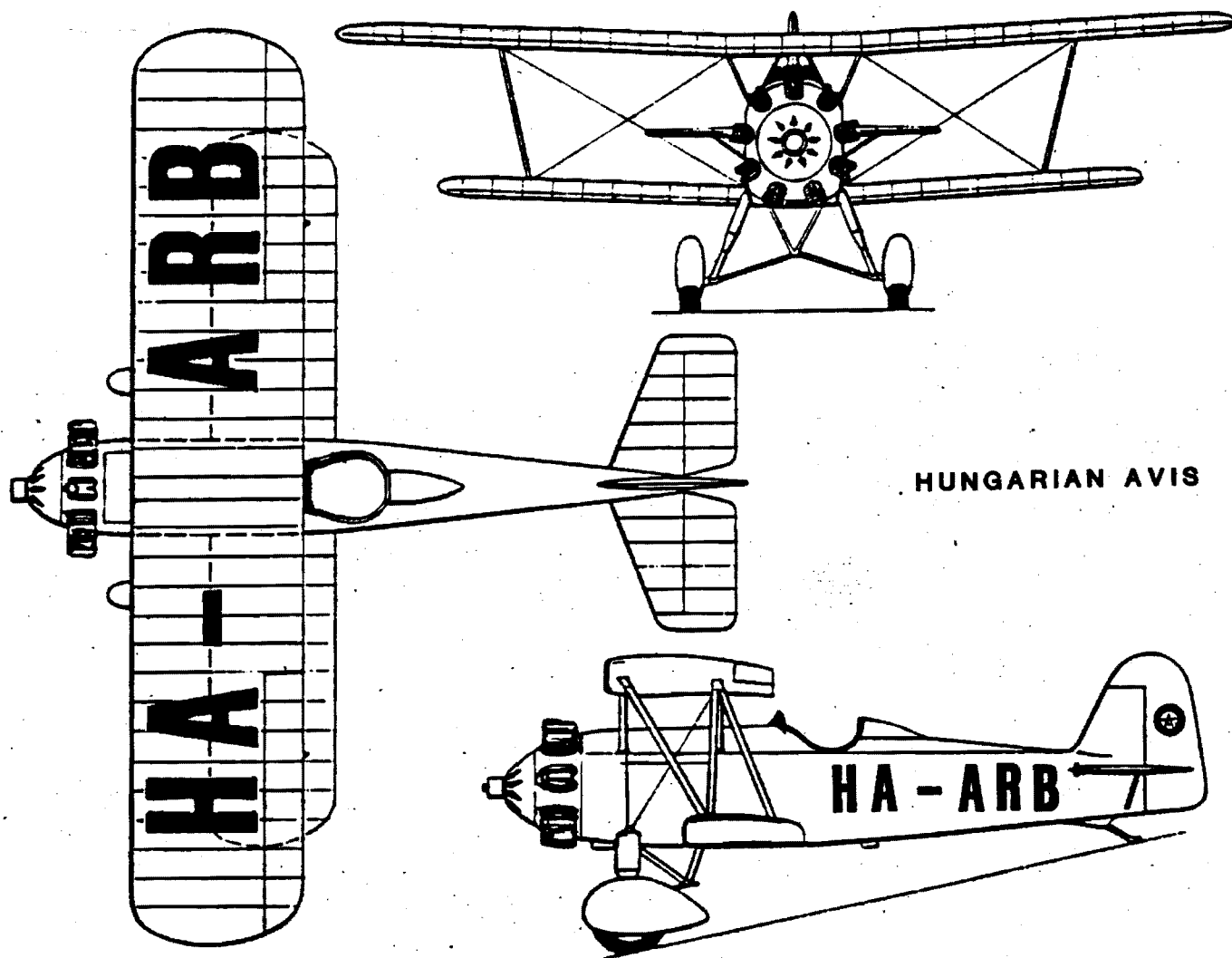
S.O.S.--S.O.S.--S.O.S.

Wanted; a copy of printwood patterns for the Heston Phoenix, a Comet kit, Two Star series, kit # 519, circa 1936. Bryan Wheeler, 7604 Appleton, Raytown, Mo. 64138.

Doug Wendt, 910 Kuhns Rd., Whitefish, Mt. 59937 has many issues of old magazines dating back into the thirties for sale or trade. Send a S.A.S.E. for list.

We have to pass on the news of the passing of another Clubster. Allen Williams of Painted Post, New York, left us on November 29, 1988. This a late notice, but we just received it. Our sympathy goes to his loved ones.

Our featured plan in this issue comes to us from Dennis Osborne and it looks like it could be a contender in the race events. Nice job Dennis and thanks for sharing it with us. Due to the rules taking up so many pages, we could only give you one plan in this issue. Hope to make up for it next time. Lots of goodies coming Clubsters, stay tuned! Keep the good "stuff" coming in Skysters.



OFFICIAL1990 FLYING ACES CLUB RULES

(indoor and outdoor)

FAC EVENTS

SCALE EVENTS:

1. Flying Aces Rubber Scale.
2. Flying Aces Peanut Scale.
3. Flying Aces Jumbo Scale.
4. Flying Aces Power Scale.
5. General Headquarters (GHQ) Peanut Scale.
6. NO-Cal Profile Scale.
7. Golden Age Scale.
8. Shell Speed Dash.

OTHER EVENTS:

1. Embryo Endurance.
2. Flying Aces Old Timer Rubber.
3. Any pre-publicized specific events retaining the spirit of the Flying Aces Club.

MASS LAUNCH EVENTS:

Any of the following events may, at the contest directors (CD's) discretion, have qualifying flights. The CD will select the number of models that are to fly in the event, and the flight times for the qualifying flights will be ranked by endurance. The top qualifiers are then selected for the event.

1. Greve Trophy Race: Models with inline engines of aircraft that were entered or flown in either the Thompson or Greve Races or other races held from 1929 to 1939.
2. Thompson Trophy Race: Models with radial engines of aircraft that were entered or flown in either the Thompson or Greve Races or other races held from 1929 to 1939.
3. Aerol Trophy Race: Model aircraft that have been entered in the Shell Speed Dash (qualifying event for the Greve and Thompson Races) but which did not qualify for either race event.
4. World War One: Models of aircraft that were in actual combat or been massed produced and intended for combat during WW-I (1914-1919). The CD may, at his discretion, limit this event to multi-winged aircraft. Must have guns, struts & rigging.
5. World War Two: Models of aircraft that were in actual combat or been mass produced and intended for combat during WW-II (1939-1945). Must have guns struts and rigging.
6. Any collection of model aircraft for a specific category of aviation history, provided they retain the spirit of the FAC (such as WW-I Peanut, WW-II Jumbo, etc.).

GENERAL RULES

1. All events are for rubber powered models except FAC Power Scale and prepublicized special events.
2. No folding or feathering props allowed.
3. Only one example of each design permitted each builder. (No duplicate back-up models allowed). However, each contestant may enter two different models in each event except in mass launches, where only one model may be entered.

4. Each entrant must be the builder of the model he/she enters.
5. Proxy entries may be allowed if announced by the CD in advance.
6. At least three models by three different builders must be entered and make a qualifying flight in an event before the winner can be credited with a Kanone.
7. No condenser paper or other ultralite covering material may be used to cover your model.
8. All racing events have a maximum wingspan of 24 inches.
9. Wingspan for Jumbo Scale will be 30 inches or greater for multi-wing models and 36 inches or greater for monoplanes. Peanut models limited to no more than 13 inch wingspan.
10. All mass launch aircraft must have a minimum of 40 scale points to qualify, not including bonus points.
11. Minor rule modifications to fit local conditions is left to the discretion of the CD.
12. Once a mass launch event starts, there will be no replacing rubber motors or any repairs made to the models. There may also be a time limit set by the CD as to when and how much time contestants have to retrieve their models and be ready for the next heat, including winding time.
13. Foam construction is prohibited in all events. However, foam is permitted for the use of air scoops, radiators, machine guns, etc.
14. No single model may be entered in more than one judged event or in more than one mass launch event.

FLYING ACES RUBBER, PEANUT, AND JUMBO SCALE

The intent of these rules is to offer the modeler the opportunity to exercise his skill in producing a good flying model which retains most of its scale appearance without being burdened by excessive scale requirements (scale rib spacing, scale stab area, etc.) or too small a prop due to ROG requirements. It is hoped that the bonus system will bring forth here-to-fore neglected subjects which have been considered non-competitive due to their complexity, design, or lack of inherent flight qualities.

BASIC RULES

1. Any two models built from published plans, kit plans, or from original plans of any heavier than air, full size aircraft, built or proposed, may be entered. Model plans, kit or published, may be embellished and/or improved upon to make the model more closely resemble the real machine.
2. If the model is built from original plans, the builder must present a 3-view, photos, or any other material used in creating the entry.
3. Models must be accompanied by the building plan or any additional 3-views, photos, etc. used by the builder. This material should aid the judges in verifying coloring, marking, and details.
4. Tail surface area and dihedral may be increased moderately, but not to a point that the scale appearance of the model is destroyed. The general outline of all surfaces and fuselage cross sections must be retained.
5. All models must closely resemble the full scale aircraft with respect to outline and proportions. The opinion of the judges in this matter is final.
6. Undercambered airfoils are not allowed unless the full sized aircraft utilized this feature.

7. All flights are hand launched. Consequently, there is no limit to prop diameter, and any retractable landing gear may be represented in the up or down position. Full flush retracting gear may be represented by nothing more than ink lines or the like. Props will not be considered for scale or workmanship points except those on dummy engines.
8. All surfaces must be double covered, except where single surfaced on the full scale machine.
9. No extra points for exact scale rib spacing, tail area, or the like.
10. Any model of a prop driven, or jet propelled multi-engined airplane with thrust provided by a single prop in a non scale position on the nose or tail of the fuselage may be entered. However, no extra bonus points will be awarded for location of propeller(s).
11. Motor sticks may be used on multi engined models without penalty. Propellers must be in scale location on nacelles.

SCALE POINTS

Scale points are the sum of the points awarded for Construction and Details, Color and Markings, and Workmanship.

1. Construction and Details;

A maximum of 30 points will be given for general accuracy and the extent of detail, such as struts, rigging, engine cowl, exhausts, armament, etc. No cockpit or cabin interiors will be considered, except for the windscreen and instrument panel, unless a full panel is impossible due to a high thrust line.

<u>NOT MUCH</u>	<u>SOME OF IT</u>	<u>MOST OF IT</u>	<u>ALL THERE</u>
0 to 10	11 to 20	21 to 25	30

2. Coloring and Markings;

A maximum of 20 points will be given for accuracy and extent of coloring and markings. Judging will consider items such as insignia, numbering, striping, etc., and correct coloring or serial number for a particular subject modeled. Where a model is built of a proposed design, the full scale prototype never having been built, then its color and markings should reflect its designed purpose and era of its creation. Silver colored tissue may be used to represent polished aluminum. There will not be any difference in scoring between the proper colored tissue and painted surfaces.

3. Workmanship;

A maximum of 12 $\frac{1}{2}$ points will be given for workmanship: Good covering, alignment, neatness, etc.

FLIGHT POINTS

A maximum of 82 $\frac{1}{2}$ flight points will be awarded for each flight as follows:

- 0 - 60 seconds: one point per second.
- 61 - 90 seconds: one half point per second.
- 91 - 120 seconds: one quarter point per second.
- Over 120 seconds: no points.

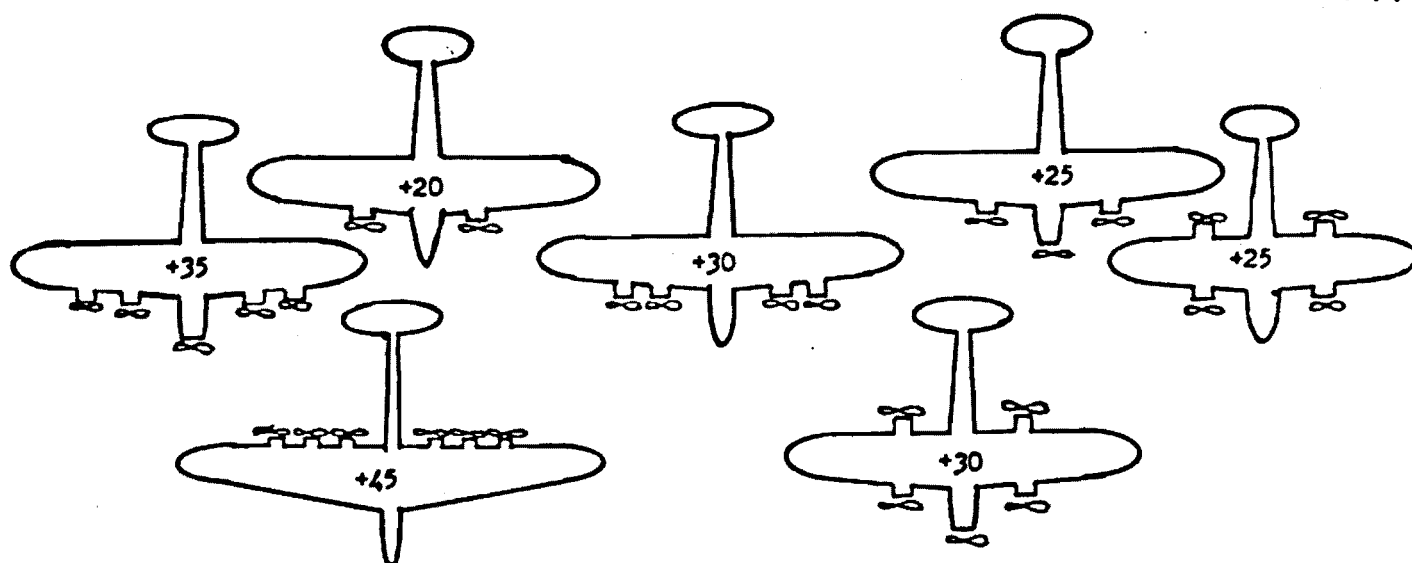
Three official flights are allowed. A flight of 20 seconds or more is considered an official flight. At least one official flight must be made to be awarded the scale points. In the case

of large entries in any one contest, the CD may require an official flight before the model is judged for scale points. Flight points are determined from the highest single official flight time.

BONUS POINTS

The following bonus points will be awarded for inherent flight qualities of different types of models. The total bonus points is the sum of the points for all categories.

BONUS POINTS	AIRCRAFT CHARACTERISTIC
0	High wing cabin monoplane types.
3	Parasol wing types.
5	Shoulder and mid wing types.
5	Canards and tandem wings.
10	Low wing types.
15	Biplanes.
20	More than two wings.
15	Seaplanes, flying boats and amphibians.
15	Unorthodox designs (Flying wings, autogyros, etc.)
1	Each jet engine pod, regardless of how many engines were contained in it on the full scale machine.
2	Each dummy nacelle with a scale diameter free wheeling prop.
5	Single engine pushers.
MULTI-ENGINED AIRCRAFT, EVEN NUMBER OF MOTORS	
5	If any of the off-center motors are pushers or in tandem.
10	Centerline tandem engines, if both props are powered in such a manner as to contribute generously to the thrust and duration of motor run needed for flight. (Example: Fokker D-XXIII)
20	Off center-line twins.
10	Any additional pair of motors at different off-center locations, provided all are equally powered.
MULTI-ENGINED AIRCRAFT, ODD NUMBER OF MOTORS	
5	If any of the off-center motors are pushers or in tandem.
25	Tri-motors, provided the off center motors contribute enough power to sustain flight for a minimum of 20 seconds with center prop and rubber installed in the fuselage. Contestant must be prepared to demonstrate above capability if challenged.
10	Each additional pair of motors at a different off center location provided all motors are equally powered.



EXAMPLES:

Convair XB-46 (with non-scale prop on nose or tail)
 5 points for shoulder wing.
 2 points for jet engine pods.
 7 total bonus points.

Sikorsky S-40 (with two props driving and two dummies)
 3 points for parasol wing.
 15 points for being amphibian.
 20 points for being off-centered multi-engined.
 4 points for two dummy props.
 42 total bonus points.

TOTAL SCORING:

Total score = Scale points + bonus points + flight points.

Highest total point aircraft wins. In the event of a tie score, a fly-off will be held. Bonus and scale points once again added to the flight points to determine the winner. Where two ships are entered by one contestant, only the higher scoring of the two will be used to determine the modeler's standing.

FAC POWER SCALE

1. Power must be other than rubber, such as glo, diesel, gas, CO-2, electric, etc.
2. Same scoring as FAC Rubber Scale except bonus points will be added to the highest flight time (in seconds) before the flight score is determined as in FAC Rubber Scale. Therefore, the flight score, including bonus points, cannot exceed $82\frac{1}{2}$ points.
 Example: A model given 50 bonus points and having a best flight time of 80 seconds will have a flight time of 130 seconds, which becomes $82\frac{1}{2}$ points.
3. In the event of a tie, the model with the highest scale points (exclusive of bonus points), wins. If scale points are identical, highest flight time is winner. When scale points and flight times are the same, multiple awards will be made.

G.H.Q. PEANUT SCALE

1. Open to any scale model of not more than 13 inches wingspan.
2. Flight score determined by total of three official flights, hand launched.
3. Unlimited attempts to gain three official flights. Any flight of 20 seconds or more is official.
4. There will be no maximum flight time.
5. All models must be covered with Jap tissue or equivalent.
6. All surfaces must be double covered, unless the real ship was single covered.
7. Planes with retractable gear may be built with gear represented in the up position with no penalty.
8. Scale points:
 - A. Color: Reasonable effort to use tissue and/or dope to simulate realistic coloring.....3 points.
 - B. Markings: Civil registration and striping, or military insignias, serial numbers, squadron markings, etc.....3 points.
 - C. Details: Struts, cowls cylinders, pilots, rigging, armament, exhausts, windshields, Stark:-3 points.
 steps, control surface outlines, and any Lax : 0 points.
 other outstanding details. Good : 3 points.
 Great: 6 points.
9. Scale score determined by multiplying scale judging points by the first two digits of the best G.H.Q. peanut flight score of the day. Example: If the best three flight total is 279 seconds, then everyone's scale score is multiplied by 27. If only two digits comprise the top score (say, 97 seconds), then only the first digit will be used as a multiplier, everyone's scale score being multiplied by 9.
10. Highest total of flight and scale score wins. Ties to be broken by a single flight fly-off, multiplied by 3, and added to the scale score.

NO-CAL PROFILE SCALE

1. A simple event for recognizable profile models with a wingspan limit of 16 inches.
2. Total of three flights to determine score. Highest total score wins. Fly-off to break ties.
3. Any flight of 20 seconds or more is official. All flights to be hand launched. No maximum flight time.
4. Model must have control outlines, registration numbers or letters, etc. Model must be in correct color scheme, have documentation to prove it. Model must also have full landing gear, either one, two or three legged. No profile gears. Retractable gear may be built in the up position. All wing struts must also be on model. Judges decision is final.

GOLDEN AGE SCALE

1. Models of any aircraft produced from 1920-1940, but excluding military aircraft produced from 1935-1940.
2. Retract gear planes must have gear in down position.
3. Planes eligible for race events are excluded.
4. No scale judging required, but the 40 minimum scale point criteria will apply.
5. Official flights are 20 seconds or more, and a three official flight total is the score. Highest total time is the winner. Fly-off to break ties.

1. High wing and parasol types are not permitted.
2. All racers must be their proper color, tissue or doped, and carry proper race numbers and registration.
3. Any model of a race plane that had a retractable landing gear may be built with the gear represented in the up position.
4. Construction:
 - a. Sheet covering over built up structure is acceptable, where the real aircraft was wood or metal covered.
 - b. Wings: Non-scale airfoils may be used, as long as they are not undercambered. Dihedral may be increased as long as it is not to the extent of damaging the appearance of the model.
 - c. Fuselage: Scale cross sections required.
 - d. Tail: Area may be increased provided it is not to the extent of damaging the appearance of the model.
5. Proof of eligibility and compliance with the text and intent of these rules is the total responsibility of the contestant. Judge's decisions are final. If you are uncertain as to a models eligibility, write to GHQ for a ruling. Eligible aircraft list available for a self addressed stamped envelope.

AEROL RACE

One large mass launch for all planes that did not qualify in the Shell Speed Dash for the Greve or Thompson race. Last one down is the winner.

SHELL SPEED DASH

This event may be held to qualify models for the Greve or Thompson races. Two official (20 seconds or more) timed flights will be made. Highest total wins the Shell Speed Dash event. Fly-off to break ties. The top ten qualifiers for planes eligible for the Thompson and Greve are selected for these two racing mass launch events.

EMBRYO ENDURANCE

1. For rubber powered models with not over 50 square inches of wing area for monoplanes. For biplanes, not over 70 square inches, with 45 square inches maximum for the largest wing area. Stab area not to exceed 50% of wing area.
2. Fuselage volume to enclose a space 1.25 x 1.50 x 3.00 inches or larger.
3. Wing and tail to be built up, covered on both sides with Jap tissue or equivalent.
4. Model must ROG from a card table top UNASSISTED from a three point rest.
5. Landing gear legs must be in a conventional configuration and have 3/4 inch diameter wheels or larger. (Example, two wheels on one landing gear leg is prohibited).
6. Unlimited attempts for three official rise above table top level flights.
7. A bonus for the following details will be given:
 - 5 seconds: For a raised cabin or windscreen with open cockpit and headrest.
 - 3 seconds: For 3-dimensional wheel pants.
 - 1 second: for 3-dimensional exhaust pipes.
8. Highest flight total plus bonus points wins. Fly-off to break ties. Bonus points once again added to the flight points.

FAC OLDTIMER RUBBER

1. Any non-scale endurance type model built from a kit or plan published before 1942 is eligible.
2. Fuselage must be built up, no stick models.
3. Wingspan not to exceed 36 inches.
4. Must have fixed landing gear. Wheel diameter must be as per plan.
5. Propellor diameter must be as shown on plan or not more than 1/3 of wingspan. No folding props.
6. Structural changes may be made to incorporate a D/T.
7. Original airfoil must be used.
8. Original structure may be beefed up but not lightened. Same size wood and as many ribs, etc. as on plan.

KANONES

In the first big "Fuss", WW-I, German pilots were credited with a victory for each enemy aircraft they shot down. After 16 confirmed victories, the pilot was awarded the BLUE MAX medal. The spirit of this pilot competition is continued by the FAC. First place winners in any of the FAC events will be credited with a Kanone (Ka-no'-nuh, German for "canon", or in English, a "big shot" or "ace"). After 1 victory, you will have the rank of Lieutenant. After 5 Victories, you will be promoted to Captain. Each successive 5 victories will earn another promotion. After 16 victories, you will have earned the coveted BLUE MAX medal, which is usually awarded at the following FAC National Championships.

NOTES ON RULE CHANGES

We have noticed that in the World War I and World War II mass launch events that more and more models are showing up with just about enough scale points (40) to be legal. Missing from the models are guns, struts and rigging. From now on all of these features must be on your model plus the 40 point minimum.

Basic rules #11, on motor sticks on multi-engined aircraft, propellers must be in a scale location on nacelles.

Bonus points, multi-engined aircraft, odd number off motors. See rules for tri-motors.

No-Cal #4, all wing struts must be on model.

New rules for Golden Age.

Embryo, unlimited attempts.

Look at the new event rules, FAC Oldtimer Rubber. We here at GHQ and the DC Maxecuters have been flying this event for two years now and it is very popular and lots of fun. CDs, try it, your contestants will want it included in every contest, we'll bet!

PHOTO PAGE

All photos by Paul Helman, thanks paul. Left column, top to bottom; Paul himself with his Jumbo Comet Winnie Mae, geared motor. BIG Jumbo Joe Ott Cessna Airmaster by Jack Tisinai. Long bodied embryo by Ed Konefes. Right column, top to bottom; Ted Kowalczyk (in background) and nephew Maciej Gancarczyk (recently arrived from Poland) holding his uncle's Blohm-Voss BV-141. Joe Konefes with a CO/2 powered version of his Buzzard Bombshell. Big Henry Struck design of the Interstate Cadet built by Bob Moulton.

