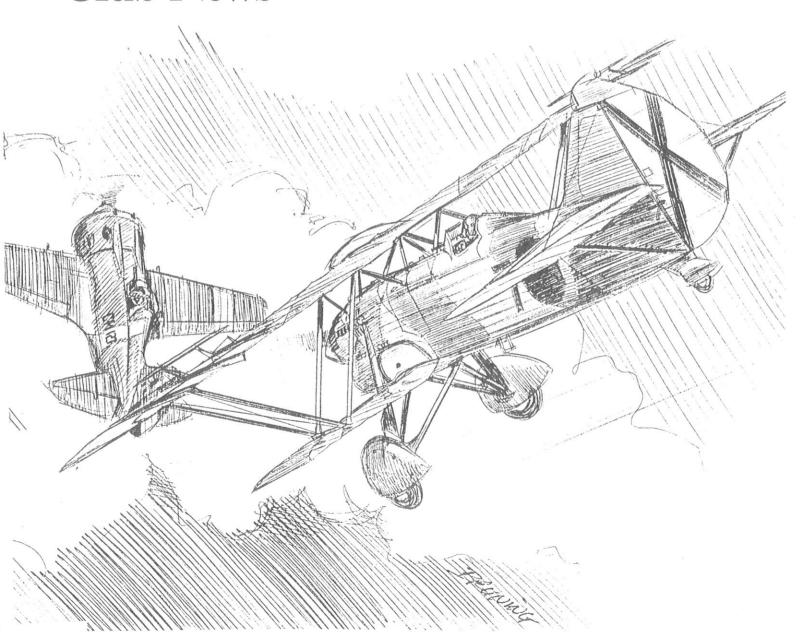
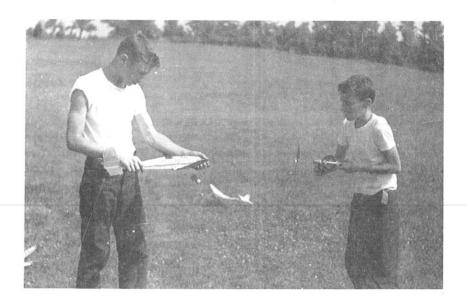
# FINALIS

**Club News** 

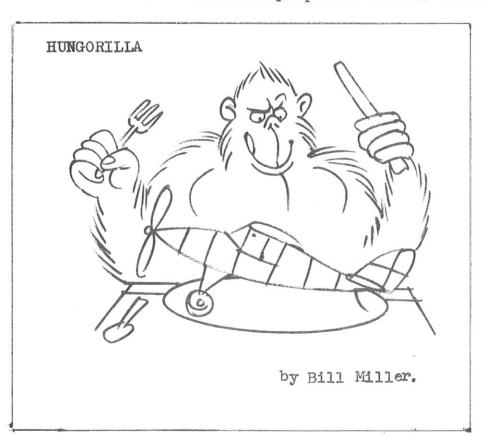
Issue 57



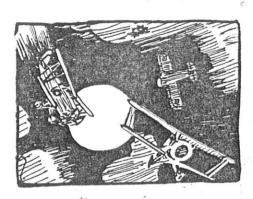
### Down memory's runway



"Will ya lookit that crate!" That snazzy low winger is being held by FAC Capt. John Stott as his cousin Bob cranks in the turns. The ship is a Jasco Hawk. And note that prop... a genuine "Navy Type" Paulowina prop! Not many of those around even in 1955 when this photo was taken. Not much in the thrust department, but sure looked neat! Stick model in background is Jap Eureka "Dove" kit job. Capt. Stott still has his Dove to-day! Model was old style reed and hardwood with aluminum tubing joints and a beaut of a Paulowina prop nine inches in diameter.



Skysters, that fellow von Bruning of the Detroiten Geschwader is just too much! Look at the sparkling cover drawing he's sent us all to enjoy, thrill over, color with our Crayolas, paste on our bulletin board, and use as a reference when we build the ship from the plans he "also sent" (his words). Here he is, like the writer, "busy on a house", but while the writer has trouble rebuilding an ancient Cessna AV model, Pres does a cover and a plan. I don't think we have to even guess who has the real spirit of the skies and the FAC! Helmets off to rres Bruning! Ready? Set? Hip, hip...!



The CR 32 is a really interesting plane, historically. It was the last of the classic biplane fighters to see combat, and saw action on more fronts and on more continents than any other. Designed by Ing. Gelestino (that's Linguini lingo for 'Heavenly boy") Rosatelli in 1934 as an improvement over the already successful CR 30, the CR 32 proved to be an instant success. While the construction was pretty straightforward for the period, the use of Warren Truss bracing in the wings made for a unique appearance that ever after characterizes the Fiat fighters in our memory. Armament was originally a pair of either

Vickers or Breda SAFAT (shooting "Breda Safat stuff", Arch?) machine guns, later augmented in some versions by a brace of 7.7 MGs mounted in the lower wings. Small bombs could also be carried for ground attack.

However, the outstanding thing about the CR 32 was its amazing maneuverability. The plane could do anything, and do it smoothly, neatly, forgivingly, and still hang together. She was strong! Indeed, perhaps she was the best of all the classic biplanes. Certainly her combat record was outstanding.

Mainly, she fought in Spain. When the Nationalists under Franco revolted in 1936, Hitler and Mussolini immediately saw a chance to aid a fellow in need of a friend, as well as test their airplanes. Quantities of CR 32s were shipped to Spain, where they were flown by Spanish and Italian pilots. The plane enjoyed immediate success and was the true Queen of Spanish Skies until the Russian-built I-15s and I-16s began to arrive. The I-15 the CR 32 could handle relatively easily, even though the Russian had the better ceiling. The I-16 could be another story, however, as it was nearly 100 mph faster than the Italian. But owing to poor fighter tactics on the part of the Russians and Republicans, the I-16 would often try to dogfight with the CR 32, thus fighting the Italian's fight, where the CR 32 was supreme. This led the Italian air ministry into believing the biplane still had a place in a modern war, that the open pit "dogfighter supreme" could best a Spitfire, Hurricane, or Dewoitine 520. As events in World War II were to show, this was a disastrous miscalculation. The Italians still had a lot of CR 32s in front line service (mainly in Albania, Greece, and East Africa), where they were no match for more modern fighters. And, of course, its "replacement", the CR 42, was hardly better. The day of the biplane fighter was past.....but Italian fighter pilots loved their open cockpits to the very last. The later wersions of the Macchi 200 and Fiat G-50 were made with open pits...the agrlier versions had the enclosured!

Beside fighting in Europe and Africa, the Fiat saw action in South America, when Paraguay purchased a number to fight against Bolivia in their bloody, nasty Gran Chaco War of 1936-7. (Anybody out there ever see any pics of Paraguayan CR 32s?) Venezuela also purchased several for its air force.

Another purchaser was China, which even obtained a license to manufacture the airplane. Of course, the ship was of far too sophisticated design and technique for the CAF of that period, and those planes that didn't fall apart on take off soon wound up in a "Chinese Three Pointer" (one wingtip, one wheel, and the prop) on some drome in the land of bamboo shoots. Yep, some influential mandarin's son was doing his bit for the Japs. (Question: if a Chinese Ace was somebody who had crashed five

of his own side's phanes, what did they call a "Chinese Ace" in China?) The Fiat fiasco in China is one of the sadder episodes in the history of this plane. This was the result of a lot of political infighting in China, which saw the able and sincere American Jouett Mission sent packing and the corrupt and ineffective Italian mission of General Scaroni (an honorary FAC, yet!) installed in its place.

After its uhhappy combat life in World War II, the Fiat still soldiered on in Spain (together with He 111s, Me 109s, Do 24s, Ju 52s, and other assorted relics of a bygone day), well into the 1950s. By then she was only a trainer, but what an introduction she must have given those onion-eater pilots to "pursuit aviation"!

Yes, she was a grand old bird who was forced by incorrect think-



ing into combats where she was utterly outclassed and so her reputation was marred. But ask somebody who flew against her in Spain if she was a "turkey"? He'll tell you!

And speaking of turkeys, that Loyalist lad in that I-16 looks like he's about to become cold meat. If he'll just glance upward over his left shoulder, he'll see the last thing he'll ever see!

As you probably know, the I-16 ("Russian Boeings" they called them then) was a revolution in fighter design. Just as the Fiat was about the "last of the first", the I-16 was the first of the "second generation" gight ers. She had a

radial engine, retractible landing gear, cantilever internally-braced wing, and many other features of the truly modern fighter. Yet she was a contemporary of the Fiat, being also designed in the early 1930s. Who said the Russians are a bunch of backward clods, stealing all their technology from the West? When these "Russian Boeings were introduced to Spain in 1937, it was one horrible revelation to the Fascists. Them Rooshins had the best plane in the sky! But, as we mentioned earlier, their tactics weren't so not, so the Fiat could mix it with them. Only with the introduction of the Bf 109s in 1938 could the Fascists again be sure they had the best equipment in the ozone.

When war came to Finland with the brutal Russian invasion in 1939, the I-16 formed the majority of Soviet fighter strength. While obsolescent, it was still a very effective fighter. However, by 1941 and the German invasion the old "Ishak" (That's a "donkey" in Kashaland) was obsolete, and a lot of German aces racked up high scores

of I-16s. In the end they were piloted by maniacal Komsomol kids in Kamikaze-like missions against German bombers. With fanatical communist slogans whitewashed on their planes, they would try to crash into a German plane, hoping to take at least one Limburger with them into eternity.

And after the war? Well, of course some were left in Spain when the Republic lost. There again we see the old I-16, still slogging it out as a trainer, together with the CR 32, well into the

1950s. The old adversaries had become friends.

Did any of these relics of a bitter war survive to enter museums? There is a CR 32 in the Turin technical museum in Italy. Does anybody have an L-16? It would be a shame to think this great old airplane had become extinct.

oh yes!...we didn't mention another place where Fiat and Polikarpov were friends. That's China. After the dismissal of the Scaroni Mission, Stalin decided to get into the China war, and there the I-16 was flown by Russian pilots against the Japanese. The Russians did pretty well, too, but if we recall correctly, the pilots were rotated in and out so fast that they often gained insufficient combat experience. Thus the Russians didn't know as much as they should have known about fighter tactics when they found themselves in defence of their homeland, come 1941.

Again....let's all thank Pres Bruning for his great drawing and plan....and for a chance to reminisce about two great air planes

of past years.

#### News of the Model Meets

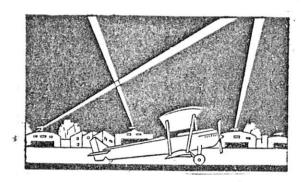
Gene Thomas and the Long Island Escadrille of the FAC held their first meet on July 17 under a blazing 100 degree sun, a soupy sky, and in high winds. Most of us were completely defeated by the weather and never even left our home dromes to attend this worth-while effort. Six brave skysters showed up, and to them goes the Wilted Cucumber Award. Frank Tartaglia spent a hard day judging the splendors of Bob Bender's efforts, among others, but the gang here at GHQ note that no flights were made. The weather was so horrid, the heat so unbearable, that nobody even made an attempt to qualify. All those contestants deserve a place on the Kanone list for their efforts, yet how can we award the winners their "due" if they didn't fly? The FAC is a flying club, as our name states, and only fliers should be pasted up on that Kanone list. What do you think? Surely something ought to go to Bob Bender. He showed up at that meet straight after coming off duty for 40 straight hours, guarding "alleged" looters in the New York Tombs. Wingsters...there's an FAC. All stolen hats off to Bob!

Frank Scott and the Dayton Buzzin Buzzards held a meet at Wright Field on July 10. Their weather was better than Gene's, and there were 19 contestants. Pretty good for a supposed CL club! (Looks like others are getting the FAC message.) There were 12 (twelve!) events, so Frank must have been as busy as a one-armed tissue-trimmer on a KG in that skyful of planes. Tom Majestic won FAC Scale, Iron Mike Midkiff won the TT event, Marion Majestic won reanut (what a one-two punch that couple is...they pose us trophy\_trundlers an even greater threat than the Henns or the Midkiffs!), Frank Scott won No-Cal (You see, Hung does reward hard work!), and John Toth won Embryo. We'd like to know what ships these FACs used, Frank. Can you tell us? Frank also says there were five juniors and five ladies on the flight line. Great news!



Look at that terrible curse the Long Island Escadrille has hurled at us mainland FACs for shying away from their inaugural meet! My Gawd, let's head for the dug out! Even Fleshettes! With the tips rubbed with garlic? Oh mamma mia! Move over there ... generals first in the shelter you insubordinate Looie! Did anyone bring some giggle water? Vin blanc is good for frazzled nerves too.

Oh well, it is nice to see a C.D. giving some turbulence for a change, instead of being on the receiving end.

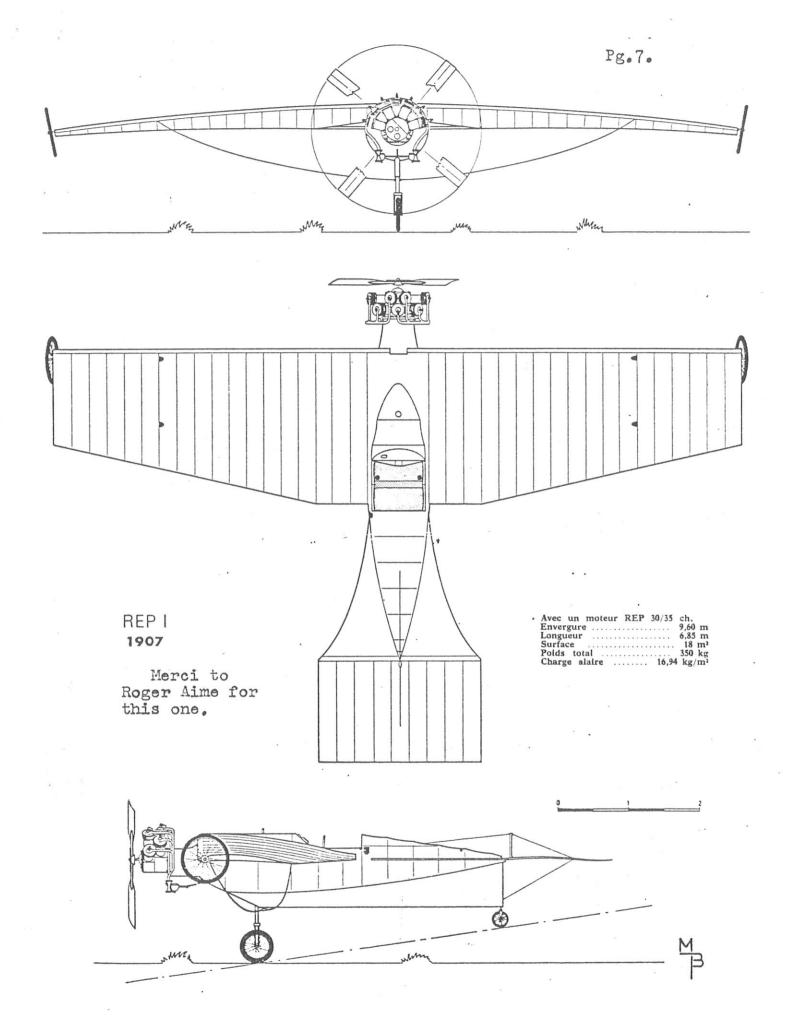


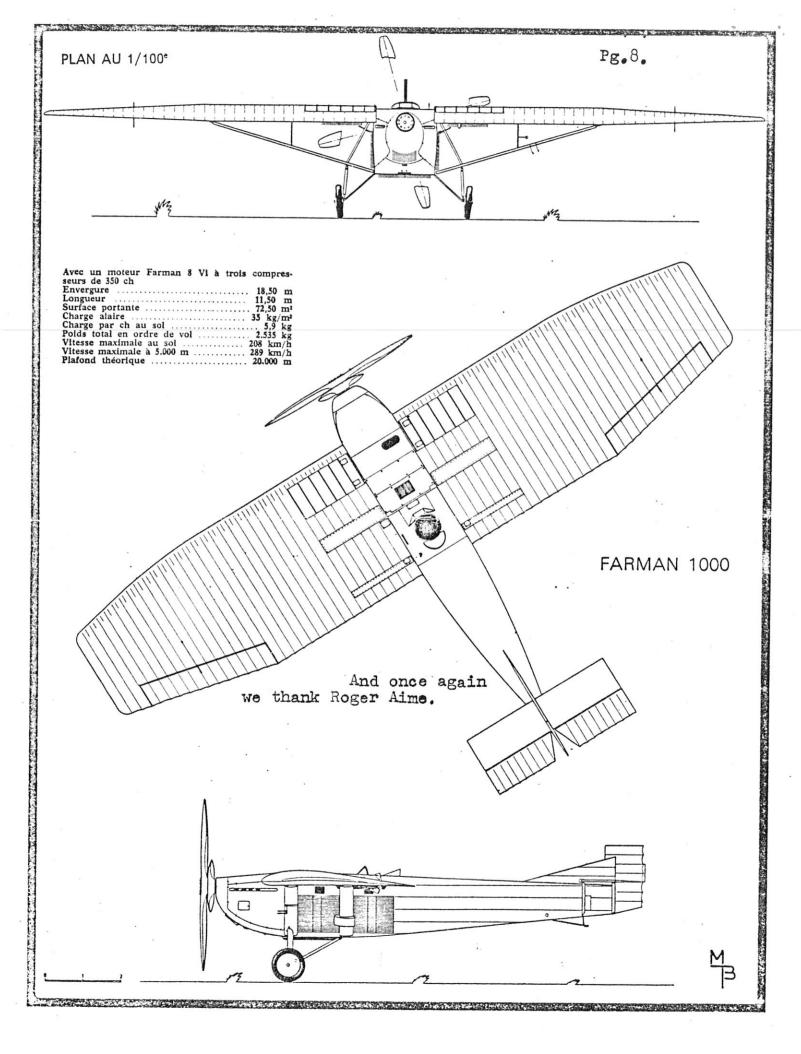
#### THREE VIEW SALOON

Or should we say "estaminet" for this one, for here we have the REP No I. This little Frog aerial hurtler was the first creation of M. Robert Esnault-Pelterie, ergo the name REP. Esnault-Pelterie was really quite ahead of his time. His airplane featured (laregly) internally braced wings, a steel tube fuselage, a lightweight engine of odd number of cylinders designed by Esnault-Pelterie himself, and quite a bit of streamlining for its day. It was cobered with red muslin and even its landing gear presaged the B-4/-B-52 by about forty years. Pretty good!

As a model subject she isn't too bad for an early ship.....
there is a pretty large nose moment, something you Bleriot-lovers haven't seen in an age. There is one problem. No rudder; and if you choose to build her, you'll have to add yourself a "cheater" somewhere out there among those elevator cables. Otherwise, her proportions and areas are pretty nice.

Later REPs had a small sub-rudder under the ventral fin and a quite large dorsal fin. Evidently M. Esnault-Pelterie found that even though you do turn on the ailerons, you need that rudder, too.





Farman 1000 Stratoplane.

If you really want to get out of the social sipper class and get real high, this is the nectar to do it for you. Sure, we know the tail feathers are small, but a good designer can remedy that. Lots of wing area for it's span gives it a Peanut flavor, nest paw?

This was quite a remarkable machine for it's time. Pilot and co-pilot sat in a pressurized boiler like tube for high altitudes. Low altitude flying was done by sitting on the aft rim of that circular opening that locks like a cockpit with a set of auxilary plug in controls! What appears to be a scoop behind that circular opening is an abreviated bucket seat! The bulge on the port aft wing strut was an instrument panel viewed from inside the pressurized cabin via small windows under the wing root. We wonder what iceing must have done to this set up? Lucien Coupet, who was pilot of this strange bird must surely have had his hands full at all times. When Lucien got inside at about 15,000 feet to pressurize the cockpit, the opening was cover with a lid not unlike a man-

Comet kitted a 10% 16 incher of this Farman that is pretty far from being scale. It was probably drawn up from photos of the time. Popular Science Monthly for Octber, 1932 describes the color as "silvery white". The single photo of the entire ship shows the surface radiators a dark shade...probably copper or brass. Registration was "F-AKFK" carried in large black letters across the wing with letter height about 60% chord and on each fuselage side between wing and stab in large letters. "F 1000" was in black on the rudder full chord between the tip and the next rib below. The letter "F" appeared on both stabilizers about 75% chord in height and about a letter's width inboard from the tip. Wing and tail markings were undoubtedly repeated on undersides. Later modification 4 blade (all 4 blades in the same plane as is normal practice)

#### FLYING ACES MODEL LABORATORY

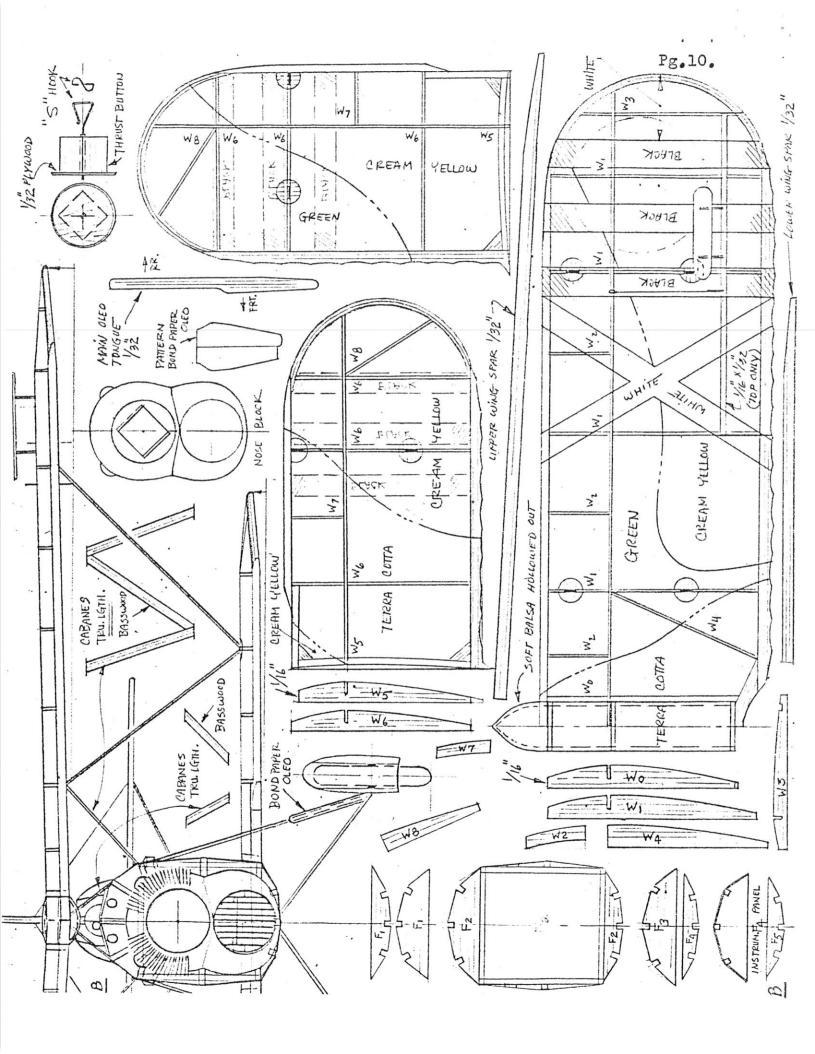
The following pages and the segments below are of Pres Bruning's Peanut Fiat CR 32 spoken of in the Cover Story pages.

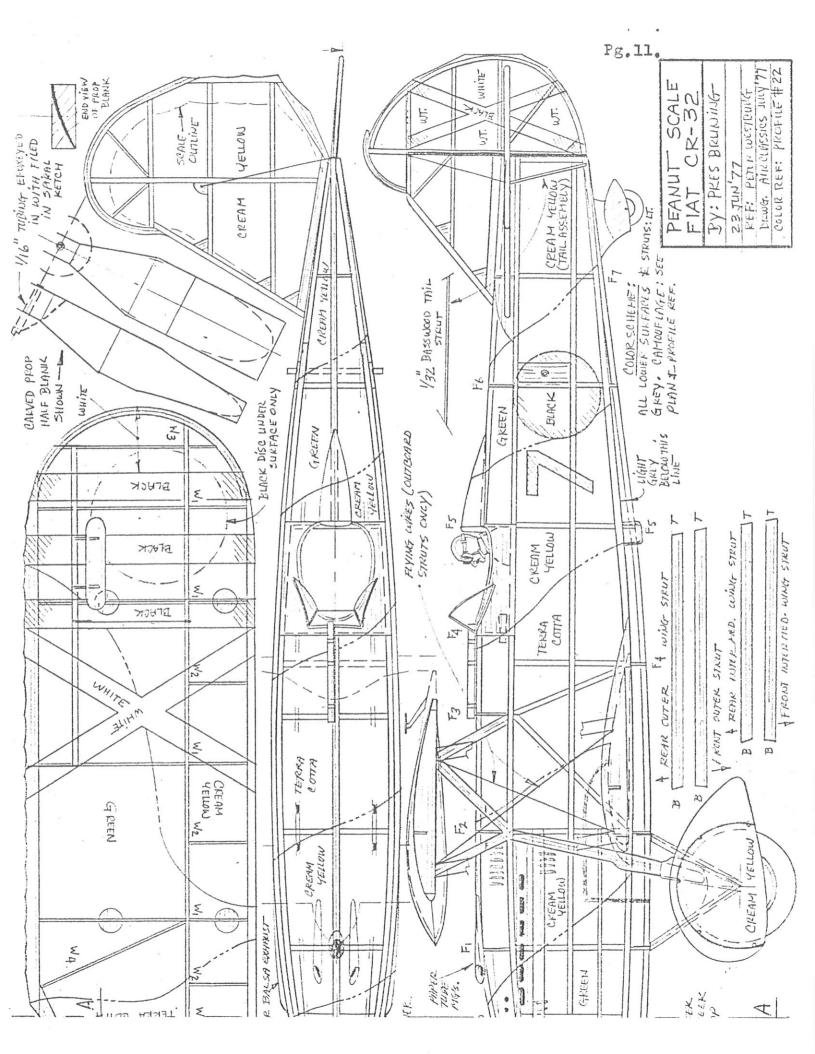
Info concerning the aero-trinket, "Snowbird" are spotted on the

plan. When built up structure is used she is some flyer, gang!

Onit Earn

On





Rudder.
Originally 1/32
sheet. Actually
built of 1/32
square wraped
outline and
spar and cross
members.

Stabilizer.
Original 1/32 sheet.
Actually built of
1/32 X 3/32 strips.
All tail surfaces
covered one side only
and given one coat of
pure lacquer.

#### WING HALF.

Originally called for 1/16 sheet. Actually built up from tapered sheet leading and trailing edges with Marquardt S-2 airfoil ribs of 1/32 sheet. (About 4 per panel) Covered top side only and given one coat of pure lacquer.

Built up model was powered by one loop of 1/8 Pirelli turning a prop finished from an old 8 inch machine cut blank.

Model placed first in FAC "Fund Fly" a few years ago. (In R.O.G. catagory)

Dihedral angle not given in original article and cannot be remembered for built up version. It is remembered that due to light structure, a certain amount of dihedral was added by flight loads.

#### Old Timers

#### USE OF BALSA WOOD.

The following is extracted from Model Aircraft Engineer magazine for June 1934. It is a note by the editor, Mr. John Carisi.

Up to 1911, balsa wood was unknown in the model building world. While working near the docks in Long Island City your editor discovered a man chopping wood in a boat factory. The chunks from his axe were so large that I figured to myself: "That man is very powerful, the axe very sharp, or the wood is very soft and light." Investigating I found my last assumption to be correct, and went so far as to ask for a sample of the strange new wood. To my surprise, I was presented with a log the size of a railroad tie--which I shouldered and carried (under the admiring eyes of onlookers, who thought I was probably advertising a vaudeville strong man act) to the New York Model Aero Club. This log was the first balsa we used in model construction.

#### FOLDING PROP.

To the right is a clip from the early British publication, "The Aero", for December 14, 1910. It seems this design not only folds when torque is gone, but decreases it's efective diameter when torque is just lessened. In a way; a "constant speed" prop.

Say SAM-7, does this mean we oldtime contest fliers can put folders like this on our early crates to hassle those Golliwocks and Dyna-Moes?

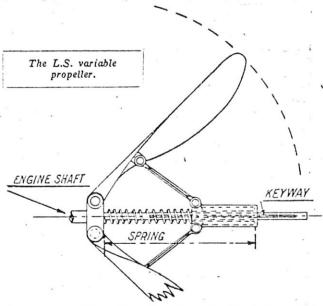
#### DOPE.

Once again an extract from Model Aircraft Engineer by it's editor, John Carisi.

Dope was not discovered for model use until 1912, when Frank Shober found it in a coffin factory.

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VARIABLE PROPELLERS.
Sir.—In your issue of last week I note the remarks on propellers by Mr. W. Allender Roberts.
I enclose sketch of one I designed slightly over three years ago, the workings of which, I hope, will be quite



clear to you. You will notice, from the description which the above named gentleman gives, that his idea and mine are practically identical. I hope to fit one on a model biplane I intend building this winter.

L.S. Walkerville-on-Tyne.

#### Pa. 15.

#### \* 18 18 1×

#### . NATIONALS REPORT!

Whoa! Hold the presses! Flaps down; stand on the brakes, reverse pitch, and throw out the anchor! We got some hot news on Nats results concerning those events both official and unofficial dear to the hearts of FACs all over the map. And we have a helmets off to the fast action of Major Bill Hannan in getting this to G.H.Q. just before we go to press. Let's take a look at the official event results first off, gang .... Winner, Outdoor Peanut.....Maj. Clarence Mather...Davis DA-5A Winner, Indoor Peanut....Bob Randolph...Cougar ghostplane, "sob" Winner, Outdoor Peanut, Sr. class, Capt. Ken Hannan...Fike Winner, Indoor Peanut, Sr. class, Capt. Ken again! Fike too.

Well skysters, we are glad to see FACs in the fore in national competition, but a bit sorry to see that in spite of all the re-writing of the Peanut rules we are still plagued by the ghostplanes. It seems to us here at GHQ that action speaks louder than words and we're going to continue to see ghostplanes in action until we get a ten foot high C.D. who is simply going to tell such modelers who enter these insults to the theme of this sport to "get that thing out of here before I CRUSH BOTH OF YOU!!

Air racing was one of the unofficial events and was divided in two catagories. "Golden Age" for pylon polishers of 1939 and before, and "Unlimited" for all other type of closed course racers. Here is how the "Golden Age" event went with eight entries. (Feeling was a bit more publicity would have brought out more models left at home.)

1: Clarence Mather ........ Caudron

Bob Haight......Super.Solution

"Unlimited" class went thus....
1; Don Srull, Blue Flight, FAC (D.C. Maxicuters)...Waterman Gosling

2; Bill Warner.....Bleriot

3. Bob Haight, allowed to re-emter because of T.T. troubles, Laird 4. Bill Hannan, P-51 of Anson Johnson (modified Peck kit)

For the first time another FAC event found it's way to the Pacific coast, Embryo Endurance using the new additions to the rules giving bonus points for Wheel pants, and exhausts. There were 7 entries; one canard, onebipe, and the rest high wingers.
1: Bill Warner, 2.Bob Clemens, 3.Bill Stroman, 4. Jack Lueken,
5.Bill Hannan, 6.Chuck Roth, 7.Lonnie Cope.

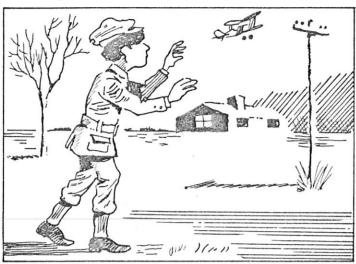
G.H.Q. sure hopes the boys on the Western Front enjoy the ol! Embryo and give it whirl at their local meets soon. FAC Kanone victories will be credited to all above listed winners. BUILD: FLY: WINI

F.A.C.I

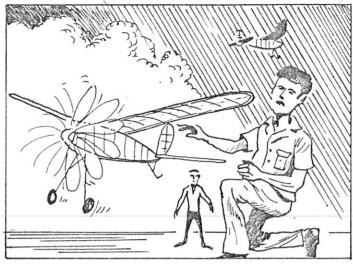
## They Had What It Takes

#### THE YOUTHFUL JULIAN HUBERTS

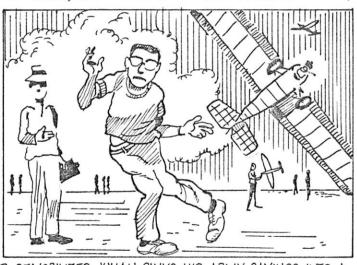
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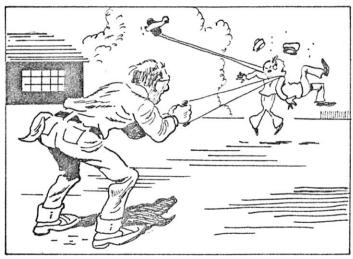
I-THE YEAR IS 1929. THE FIRST ISSUE OF FLYING ACES HITS THE STANDS AND YOUNG JULIAN IS SMITTEN. HIS FIRST FLIER IS A 12" S.E.S., DESIGNED BY GENIUS AVRUM ZIER.



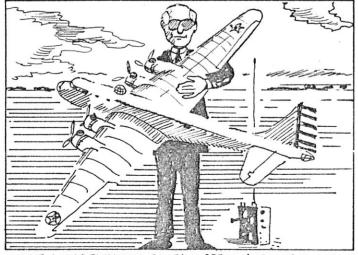
2- IN 1939, JULIAN ESSAYS TO BEAT DICK KORDA FOR A SPOT ON THE WAKEFIELD TEAM. HIS ALAN ORTHOF "BEBE" (JULY, 39, F.A.) PERFORMED CREDITABLY.



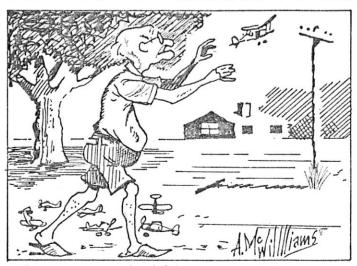
3-DEMOBILIZED, JULIAN SINKS HIS ARMY SAVINGS INTO A G.H.Q. ENGINE AND GOES TO THE 46' NATIONALS WITH AN "ORBIT" (JUNE 38, F.A.); WINS A TROPHY FOR THE WORST CRASH.



4- U-CONTROL WAS THE RAGE IN 1956. HUBERTS, DURING THE CARRIER EVENT, MISCALCULATES, SERIOUSLY DISORDERING A LT. COMMANDER & A SEAMAN 24 CLASS.



5- THE AGING BUT LOYAL F.A. FAN: SPENT 4 YEARS BUILDING THIS 8-19 FROM H. STRUCK PLANS(DEC.1945) IB CHANNELS-EVERYTHING WORKED BUT THE 4 JAP SAKITUMI ENGINES.



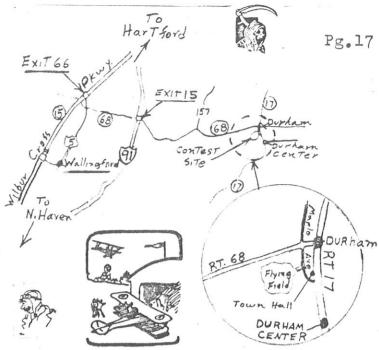
G-TODAY MR. HUBERTS IS AN OUTSTANDING FAC CLUB MEMBER. HIS COMPLETE COLLECTION OF PLYING ACES IS SUPERB. HE IS A WORLD AUTHORITY ON P-NUT SCALE.

#### Flying Aces Club Fall Meet

# FLYZING

OCT.2,1977 9:00 AM to 5:00 PM At Durham Meadows, Durham, Ct. For out-door rubber powered models. AMA membership required. (You may join at field.) All events combined age groups. (JSO) AMA sanction #1181. Entry Fee \$3.00 (Under 21 free) For info or rules write FAC GHQ 66 Bankside St., Bpt. CT. 06606 Bob Thompson, C.D.

NINE EVENTS!
TROPHIES AND PRIZES!



- 1. FAC Scale; Two models may be entered in this one that awards bonus points for difficult to fly types. Bring all scale data and plan used to build model.
- 2: Peanut Scale; Originated by the FAC. FAC rules still used.
- 3. Embryo Endurance; Another FAC original for non scale models of certain proportions. Card table take off!
- 4. No-Cal Scale; A profile job no bigger than 16 inches gets you in this one.
- 5. Spirit of St. Louis; Special event this year only for Ryan N.Y.P. monoplanes sponsored by the sixth Granville Brother, Lt. Royall Moore.
- 6. Shell Speed Dash; For pre-war raceplanes only, not exceeding 24 inch span. Two random official flights must be in by noon to place models for other race plane events in the afternoon, so get to the field early.
- 7. Greve Trophy Race; Not a race at all, but an endurance event with mass launches. First down is out. Blown motor puts you out. Tree landings and damage also puts you in the spectator stands! Round fly ing at it's most hazardous, but what fun!!!
- 8. Thompson Trophy; More in the style of the Greve. The "worry dew" will be sure saturating you helmet in this one, Pylon Polishers!
- 9. Aerol Trophy; One big mass launch for those who did not qualify for the Greve or Thompson. No one goes home without racing!

BY TURBULENCE SKYSTERS, THERE IS A BUSY DAY FOR ANY TISSUE TRIMMER! BETTER GET TO THE 'DROME BRIGHT AND EARLY WITH EVERY ENTRY PRE FLIGHT TESTED AND READY TO GO RIGHT OUT THE HANGAR DOOR AS SOON AS YOU OPEN IT! BUILD! FLY! WIN! EFF\*AYE\*SEEEE!!!

