# FINALIS

JULY-Aug. 1986

Issue #110-36

Club News



Menny Christmas to All



## Peanut & No-Cal Scale Postal Meet

Let's get going on the Postal Contest again, Skysters! We will have four "Wings" again as always. They are made up of "Indoor Peanut", "OutdoorPeanut", "Indoor No-Cal" and "Outdoor No-Cal". Enter as many times as you wish and every time you better your time with a given model, just jot your time down on a postcard giving the name of the model, the wing you flew in, your models flight time and the date, and send it in to GHQ. The contest starts as you read this and ends on April 26, 1987.



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

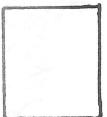
Before we get too far into this issue let us give a GREAT BIG THANK YOU to the editors of our model magazines for the excellent coverage they gave to the Flying Aces Nats Mark V. The post contest coverage sure goes a long way to setting the table for the next one. The editors and their magazines are; Bill Northrop from Model Builder, Bob Hunt from Flying Models and Carl Wheeley of Model Aviation. We cannot forget the columnists who covered for them either, namely, Fernando Ramos, Bill Noonan, Dave Rees and Earl Van Gorder. All gave very good accounts of the contest with some excellent photographs too. Hats off to all of you!

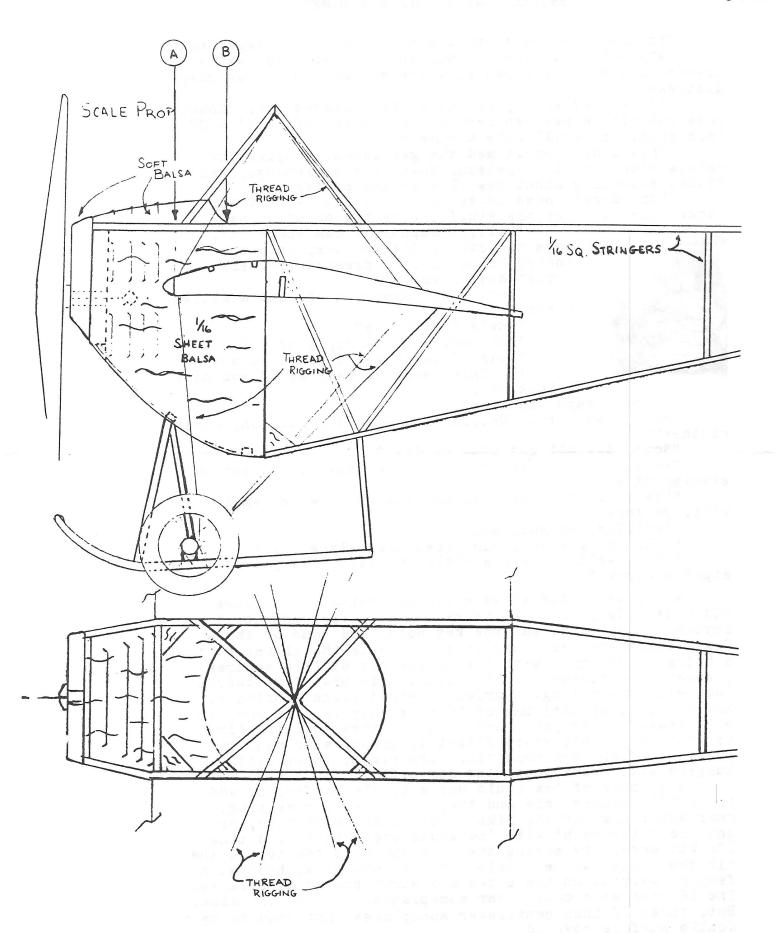
This issue, as promised, will have three plans for you "Tissue Trimmers" as we know you are anxious to get to the work bench as soon as you can. We have plans from two newcomers to the pages of FAC News and we are looking for more of their work in future issues. Bill Marencik from Emmaus, Pa. has submitted several No-Cal plans and most of them look like they will make good flying subjects. And right here from the GHQ Squadron we have two plans from Dave Niedzelski, who is a new member to our local club. These are Dave's first attempts at having plans published and we think they are good enough to have him give us some more, do you hear, Dave?

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

FLYING ACES NEWS 3301 Cindy Lane Erie, Pa. 16506





"Brother, can ya spare a dime?" asked the ragged hobo.
"Why ask me to quench your thirst?" said the welldressed man as he stepped from the yellow cab. "You chaps
distress me."

"I'm not after a jug," says the tattered one, "Comet come out wit' a new ten center. A Taylorcraft wit' a 20

inch span, an' still only a dime!"

"They did!" exclaimed the gentleman, tipping the cabbie with a bill. "Nelson, down at the exchange, mentioned something about new kits in the offing."

"Yup, dere's some udder ones, but dat T-Craft sure looks like it's got the stuff", says the scruffy one.



"Well, I suppose I can spare it", says the other, digging deep into the pocket of his neatly pressed trousers. "Built any others?"

"Yup, gotta Stearman 76, and a Allied

Sport."

"How's the 76 fly?"

"Not bad, wit' da right prop."
"Jove, I can't get mine to do much
at all! Think you can help me if you have
a look at it?"

"Mebbe", says the tramp.

"Here's my card. Uh...do you have any cl...uh, other clothes?"

"Nope, dey all got glue on 'em."

"Well, we can dine in the garden, then....tomorrow evening at eight."

"Dey still don' give ya no glue or dope in 'em 10¢ kits, ya know."

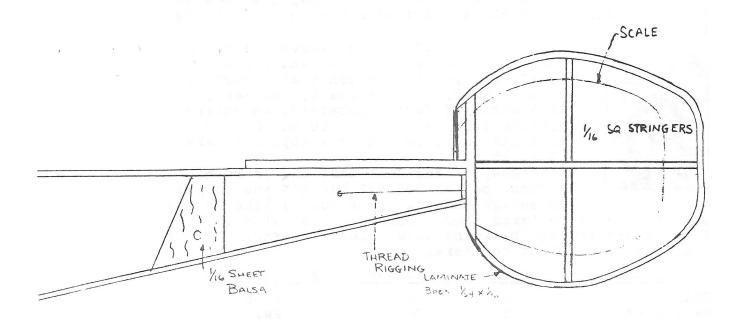
"Realllly, my good man!"

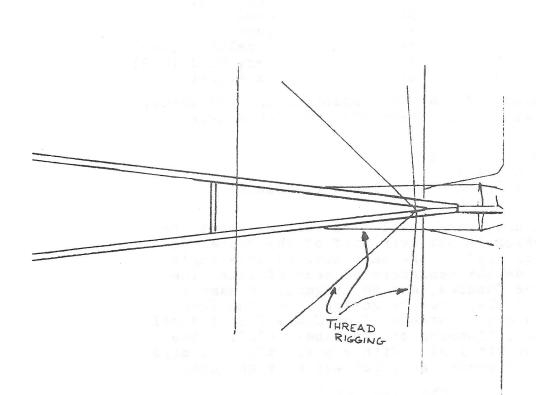
"I'll bring some Flyin' Aces mags along...."
"Ah....well, here's a whole quarter. See you at eight o'clock."

Well, maybe the above never did happen, but those old Comet 10¢ jobs had a character to charm just about anyone. Simplicity was the key note, and some of those Comet designers were sure able to create the illusion of a Stinson 105, say, with just a wee bit of 1/16 squares, sheet, and tissue. Scale R.O.G.'s is what I've dubbed 'em, with their single surface covered flight surfaces. Why gang, at an altitude of 30 feet they look as good as any "heavy" scale job! And boys, do they feel the tiny air currents! Not every flight is great, mind you, but every so often when conditions are right, these little buggers will knock your wind sox off!

Now, some of 'em could use a little beef-up by adding a 1/16 square here and there. A bigger nose plug, rear motor peg, or the like. But to add wing ribs, or get too "high tech" with 'em would spoil their old time 10¢ kit aura. By moving the wing spars to the top of the rib the wings can be single surface covered without much fear of warping on the bipes and strut braced monoplanes. The 16 inch span cantilever monoplanes will be 0.K. also. But, those 20 inch cantilever monoplanes just need to be

double surface covered.





CHIRIBIRI NO. 5
1912 ITALIAN MONOPLANE
1-29-86 DINEDZIELSKI
COLOR SCHEME: TOP: FROM ® FORWARD SILVER
SIDES & BOTTOM: FROM ® PORWARD SILVER
REST OF PLANE IS NATURAL CANNAS AND WOOD

I've found it best not to shrink the covering on the single surface jobs. Just give 'em a coat of clear lacquer to fill the pores. You'll never see those wrinkles at thirty feet up with Ol' Sol shining through the tissue.

A lot of the techniques using stiff paper work well

A lot of the techniques using stiff paper work well just as shown on the plans. Patterns are quite accurate, too.



After a bit, I discovered a formula for props that works quite well, and is simple enough, if you don't mind carving props. Heck, they're small, and easy. As a matter of fact, clubsters, an entire biplane only takes about 18 to 20 hours to build complete, while monoplanes take 13 to 15.

Now, if the fact that GHQ is runnin' a Comet postal contest has got you hopped up enough and you think you'ld like to try

one of these aero tykes there follows a list with info I've gained through building them. Look it over. One of your favorites might be there....

PLANE		PROP	Stab	Enlgant.	Flt.	quality	
SPAD		A		No		Poor	
Me 109 **		B		Yes	1	Fair	
Aeronca Seaplane	#	C		Slight	(	Good	
Vultee Attack **		D		No	]	Excellent	
Curtiss P-36 **		B		Yes		Poor	
Curtiss Falcon		A		No	]	Excellent	
Fairchild 24		B		No		Excellent	(00S)
Tiger Moth		A		Yes	]	Excellent	(00S)
Curtiss Robin		B		No	7	Very Good	
Aeronca Low Wing		B		Yes	7	Very Good	
Great Lakes		A		No	(	Good	
Curtiss Hawk		A		No	(	Good	
Akron Funk		D		Yes	]	Excellent	(00S)
Chester Racer		B		Yes	7	Very Good	(00S)
Stinson 105		B		Slight	]	Excellent	

\*=Double covered wing and stab. Violation of the 10¢ theme. \*\*=Double covered wing only. Warp problem when single surfaced.

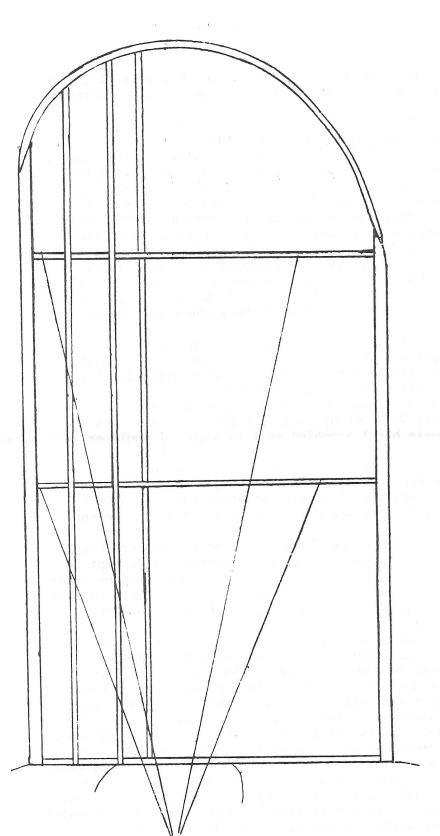
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Prop type "A" 5/8 X 7/8 X 5½

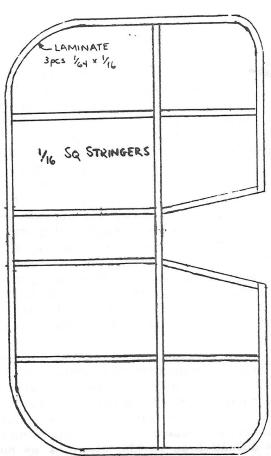
Prop type "B" 1/2 X 3/4 X 5

Prop type "C" 5/8 X 7/8 X 4 (for float clearence)

Prop type "D" 1/2 X 3/4 X 6
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Now there you are, gang. All I've learned about the the ones listed, which is not even half of the number designed and produced. And by the way, some of modeling's great names appear as the designers of some of this line of kits, such as Joe Konefes, and Ed Lidgard, to name a couple. Reprints of plans can be gotten from John Fond, while complete kits may be ordered from Scale Flight Model Co., 630 Fairway La., Bloomington, Indiana. 47401. See FAC News #102-28 for kit list. Either way, it'l cost more than the thin dime of yesteryear, but worth it as much.





OLD MODEL ENGINE SPARK IGNITION ENGINES & KITS FROM THE THIRTIES, FORTIES AND FIFTIES. THORN JONES, 4000 N. Mannheim Rd., Franklin Park, IL 60131 (312) 671-7100

Mumbo Jumbo # 24 from the Glue Guru aka Leon Bennett

Q: What do you do in real life?

A: I was trained as an Aero Eng and spent a generation at it. More recently, I've been recycled as a Bioengineer and do research work on the fluid mechanics of certain hideous diseases.

A: The story is long and dull. Still, if you're interested — blow out the candle, for I am a man of slender means — and I shall enlighten you. It all starts with the dime kit craze of the 1930's, a fad that swept even my tiny village in India. As a mere untutored youth, all success escaped me until I stumbled upon the plans of the Hurricane (low wing sport category— no relation to the Hawker) prepared by Mr. Early Stall. My excitement at crafting a genuine flyer was beyond description. That something fashioned of sticks and tissue could "slip the surly bonds of earth" moved me in some deep fashion. Here was grace and beauty itself, produced by my own clumsy hands. I must learn more about this! How is this machine animated? Why does it fly? What permits it to assuage the air currents? I sought council from the village elders. With nodding heads, they spoke in one voice —"Study Grant's book. He knows these things."

At trmendous cost to the family fortunes, the Grant book was purchased. After months of pestering the postal authorities, it arrived. Richly printed, well bound, each page offered the smell of wisdom itself. But as I turned the beautifully illustrated pages, my heart sank for I understood nothing. Nothing!

Perhaps it was my imperfect command of English. Perhaps I lacked the technical background necessary for comprehension. Oh - perhaps many things - -but what was I to do? As I paced the floor of my humble hut I asembled my life plan - I would go to Grant's country and steep myself in Aeronautical Engineering. Thus prepared, I would frehly tackle the Grant book. The secrets would come tumbling forth and I would soon be rich in knowledge. Once the text had been mastered, I would transpose Grant's wisdom into easily understood homilies. Thus enlightenment would be brought to the teeming masses of America. My life role would be that of a scribe - a lesser guru.

Youthful energy can not be denied. In a trice, I was enrolled in the Aero Eng program at NYU and secured a degree. (This happens to be true). However an attempt to examine Grant still found me woefully unprepared. I shrugged and pursued studies leading to a higher degree. (MAE, also true). To futher my insight, I toiled in the university commercial wind tunnel, thus gaining practical knowledge of Reynolds Number effects, stability derivatives.etc. (true)

Slowly but surely I was getting ready. One other major issue remained - the choice of a life partner, a wife suited to share the existence of a guru. History shows few occupations to be as hazardous as that of a guru - those who would bring life's bitter truths to the masses are usually lynched. While I possess the necessary fatalistic outlook to accept such a grim end, one shrinks from inveigling some innocent female into entering upon an existence so likely to end in widowhood. Hence it was with the utmost care that I weighed the few prospects for the position of guruess.

One applicant had impeccable credentials. No swooning lily, she proved a veteran of the Israeli army and a hand grenade instructor at that.(True). Far from merely keening over my demise at the hands of crazed miscreants, here is a true partner — one who can flip a Mills Bomb underhanded with unerring accuracy to a range of 15 meters. Yes, as the maddened throngs stream past my cave screaming "Kill him, he underestimated camber effect!" ,I continue to meditate without concern, for at the cave opening stands the guruess, with a Mills Bomb in each hand and all the determination of the Israeli army in her eyes. Inevitably the mob slinks away and I continue my peaceful existence.

I heartily recommend such a marriage partner. Admittedly her particular prowess discourages straying and inevitably one stubs toes over the crate of Mills Bombs at

9.

the foot of our bed. Still, all in all, she can only be viewed as a life saver.

The day came when I sensed myself as ready for Grant at last. A lifetime of preparation was about to achieve fruition. I adjusted the big wax candle to just the proper angle and reclined on a suitable pile of cushions. Idly, I thumbed through the Grant book, lovingly preserved over the years, seeking a passage both rich and wisea sample of the delights to come. I turned to the discussion of downthrust, page 134. I read "This proves that actually in relation to aerodynamic factors there is no such thing as downthrust . . ."

My screams shattered the air. The book fell from my nerveless fingers as I lost consciousness. Only the ministrations of the guruess kept me this side of death's door as my very soul sought surcease.

Weeks later, still pale, prone to weeping, twitching at all extremities, I was sufficiently recovered to consider my situation. Put simply, I was ruined. My life was in ashes. The prospect of translating Grant appeared at best a sorry jest, akin to espousing the flat earth hypotesis.

I left the university and wandered the globe accompanied by the guruess, who had fashioned a travel costume by fetchingly pinning a Mills Bomb to her blouse. Yet despite the wonders perceived, no prospect pleased, for I was a hollow man, living without purpose.

And then one day, I learned of FAC. Instantly, the Grant memorabilia was carted away and the cave swept out. Each Mills Bomb was carefully polished. With all in readiness, I hastened to HQS to offer my services as a Jumbo guru. The rest you know.

We have settled down to the simple existence of gurus everywhere - a life of grinding poverty offset by an occasional insight. As for Grant, he resides in the Hall of Fame of the Others - side by side with Mr. Grillo. As Mr. Thumbsome is wont to say, "It serves him right".

Q: In plain English, how do you pick a good configuration? Why do you think the Stormovik is better than the P-47 in WW II?

A: What counts is:(a) wing loading or the weight divided by the wing area (b) drag (c) ability to use a heavy motor effectively (d) adequate stability.

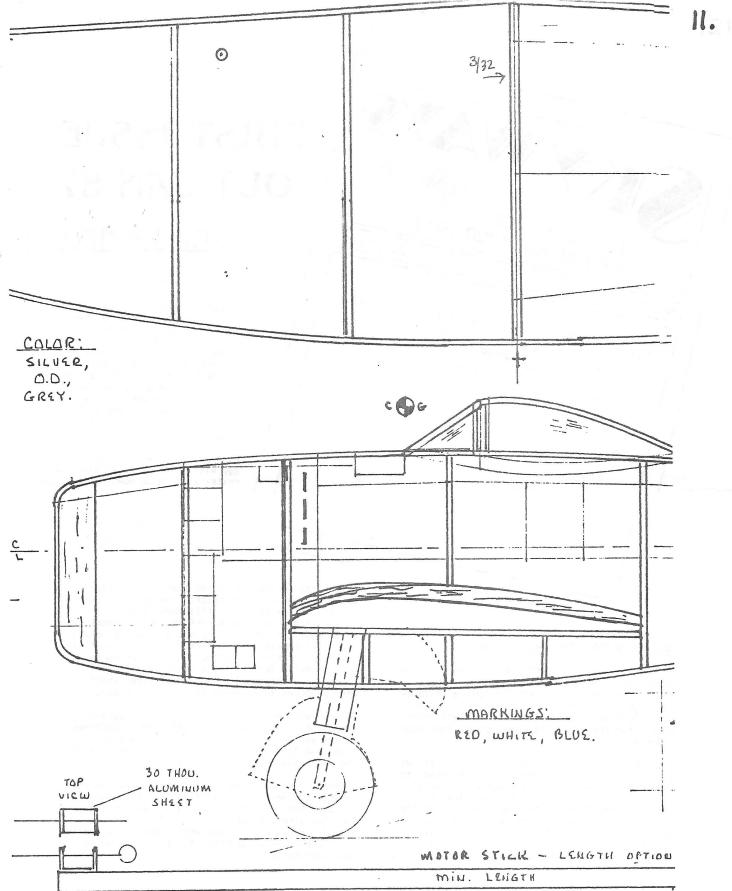
A good configuration will usually do well in each of these categories. However sometimes a flunking grade in one area can be offset by an outstanding grade in another. For example, modern Wakefields have heavy wing loadings by our standards and use relatively light motors, yet they possess a drag so extremely low — much lower than a "gears up" Spitfire — permitting the Wake to easily beat the Spitfire.

When choosing between conventional configurations, say the P-47 or Stormovik, remember that drag is sensitive to fuse crossectional area. Also "bluffness" counts; the P-47 will offer more drag partly because of the greater crossectional area and partly because of the blunt nose presenting the area. More fuse area also means that more lumber is required to flesh out the fuse form. Finally, in-line fighters offer a more rearward wing position, allowing a longer hook to peg distance when the motor is balanced about the 30% wing chord station. The Stormovik wins easily.

Moving on to size - the rules permit a span between 13 and 36 inches. Usually a smaller model can be built to offer a lighter wing loading at the expense of inferior aerodynamics. It follows that there is a best size model. Smaller than best means the drag is too high; bigger than best means the wing loading is too high. The consensus view is that the best span is roughly 30 inches.

If you're willing to accept a 20 inch span, Clarence Mather's Stormovik at a ready to fly wing loading of 0.3 grams per sq. in. looks like a calm summer day winner. Plans were given, full size, in American Aircraft Modeler, Feb 1970. The claimed indoor flight time of 90 Sec. seems justified. To get something more comfortable with outdoor turbulence, it may be worthwhile to scale it up by about 50%, even at the cost of a greater wing loading.

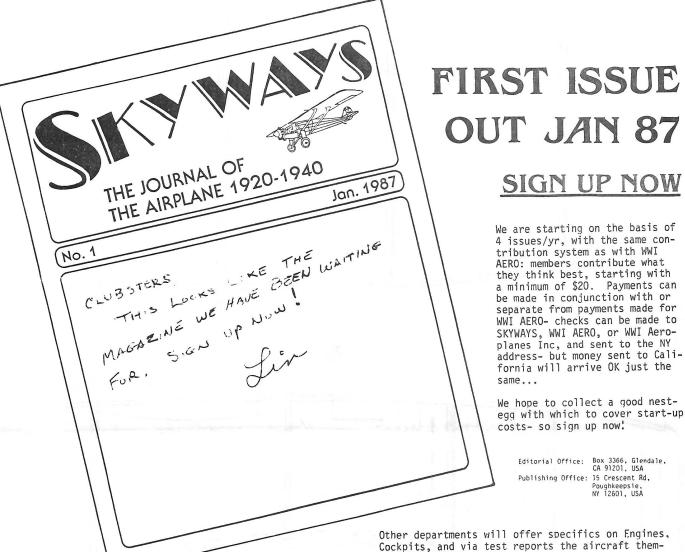
While not to my taste (to get weight down to the quoted wing loading, the design is necessarily boney and frail) the forces of contest logic smile upon the Mather Stormovik. I know of no design more likely to win WWII on a calm day.



NOTE: MOTOR STICK ON RIGHT SIDE - TISSUE WING AND TRIL - TISSUE TOPS ONLY.

WINGS - TAPERED

TRIM RIDS AT T.S. QULY.



### OUR NEW JOURNAL- Kenn Rust, Editor

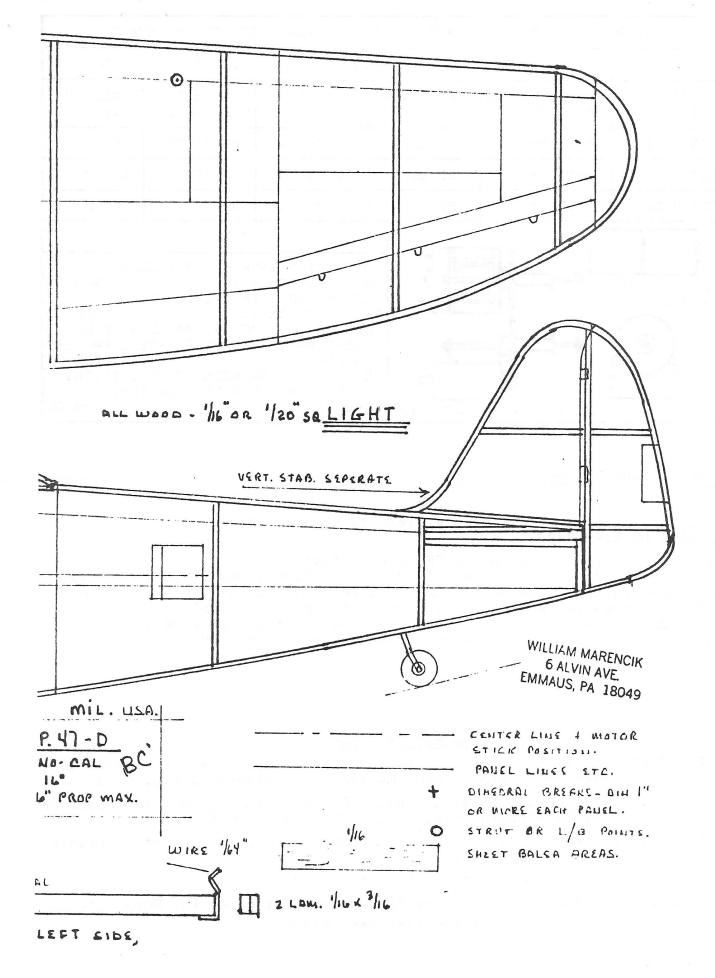
As its full title suggests, SKYWAYS will be concerned with the airplanes of the 20s and 30s, and to provide the greatest possible assistance to those interested in restoring, reproducing, or scale-modeling such aircraft. It will also be a forum where men and women share their knowledge and materials.

Each issue will have two or three main articles, plus a number of departments. One of these, to run through the first 8-10 issues, will be Chronology Highlights for each of the years in SKY-WAYS' period, to establish the character of the period through the important events and machines which moved aviation forward, and to inspire builders of every scale to take on projects they might not have considered before.

Other departments will offer specifics on Engines, Cockpits, and via test reports the aircraft themselves, both well- and little-known types. A Models section will show work in various areas of scale modelling of this period; a Drawings department will provide quality drawings, structural and 3-views. A Racers department will treat these types, world-wide: a Famous Types section will treat the development of important types which were produced in a series of differing models.

Reviews will cover books and other publications; Organizations will deal with the work of different groups and their various facilities and projects; Wants and Disposals will list items as we hear of them to assist members in their work,

SKYWAYS, like WWI AERO, will be a publication of and for its members, to interest, assist, and encourage them. It covers the two-decade period when the airplane came to full life and transformed our planet into one world, where its people live more closely together, for better or worse, than ever before.



FERP	FERRELL ENTERPRISE - 300 W. LINCOLN #82 - DRANGE CA. 92665							
ELECTR	IC FREE FLIGHT	MOTORS FOR	R 18 TO 28 IN. WING SPAN MODELS					
MOTOR TYPE	TYPE         PROP SPEED         TI           .005 2 CELL         2500 RPM         120           .007 2 CELL         2800 RPM         90		WING SPAN	AIR BORN SYS. WEIGHT	ALL UP WEIGHT			
.005 2 CELL			18-22 IN.	27 GRAMS	2 DZ.			
.007 2 CELL			18-26 IN.	27 GRAMS	2 1/2 OZ.			
.007 3 CELL			24-28 IN.	33 GRAMS	3 DZ.			
2 CELL FLIGHT SATT ACTUAL SIZE	ERY	RI RI CI CI BA	EDUCTION ONL' DO7 MOTOR WIT EDUCTION ONL' DO5 OR .007 N LIGHT BATTER' HARGER DO7 MOTOR, HE	PRICE LIST  TH 4 1/2-1 GE Y  TH 4 1/2-1 GE Y  MOTOR, HARNES Y PACK & 2 CE  ARNESS, 3 CEL  BATT	\$28.00 EAR\$28.00 ES, 2 CELL ELL BATTERY\$35.00 L FLIGHT			

### PHOTO PAGE

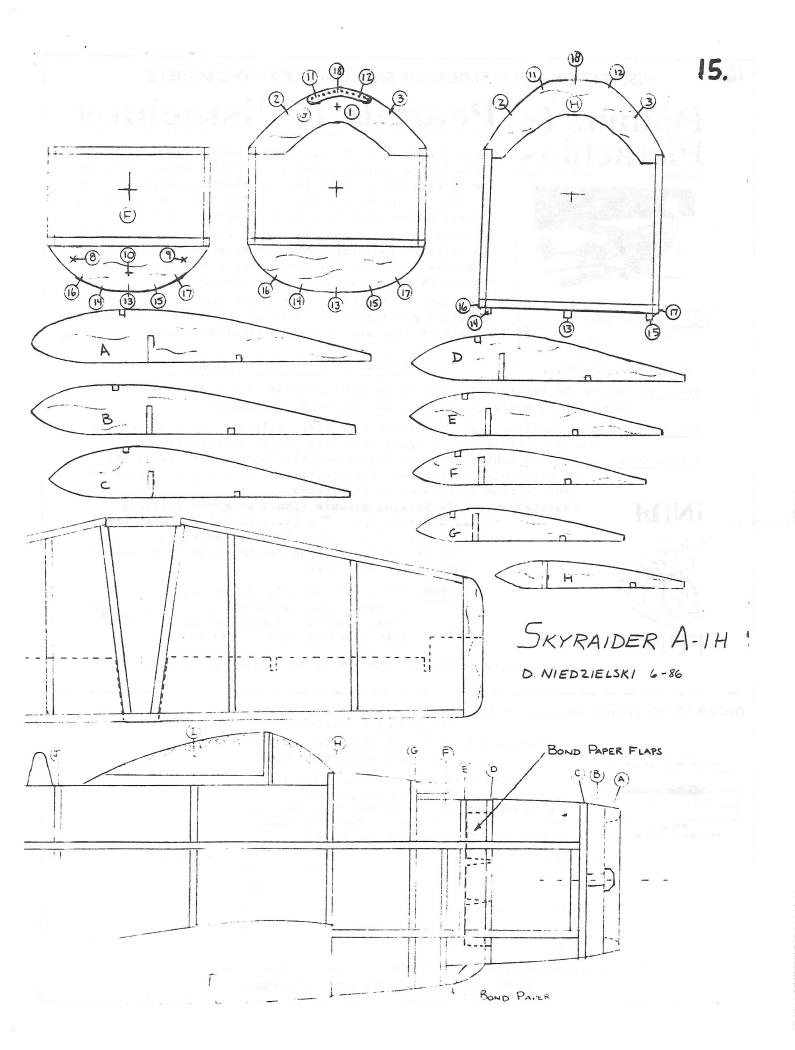
Across, top, left to right, middle, left to right, bottom, etc. All photos by Ross Mayo.

- 1. Dan Breihl with a nice Cessna CR-3, good flyer.
- 2. John Stott and his Cessna CR-3, also a good flyer, must be a good design.
- 3. The Vegas Vulture, Bob Haight and a Laird Solution in Schell Oil colors.
- 4. A Co/2 powered Velie Monocoupe, a great flyer by Bob Schlosberg.
- 5. A Thompson Trophy winner by Roland Hoot, a Laird/Turner racer.
- 6. That's Terry Stott hiding behind husband Dave's Jumbo DH-4.

### CONTEST CALENDAR

- Dec. 27,28,29..Delta Indoor Meet, Tampa Airport, Tampa, Fla. FAC events plus reguler events. "Doc" Martin, 2180 Tigertail Ave. Miami, Fla.
- Jan. 2,3,4....King Orange International, CD, Don Brimmer, 5924 16th Lane NE, St. Petersburg, Fla. 33703 Ph. 813-525-6867
- Jan. 18......Midwinter Madness Meet, FAC Events, CD, John Stott, 8 Bradley Lane, Sandy Hook, Ct. 06482
- Feb. 14???.....CFFS Indoor Meet...More info later.
- april 28......Indoor Meet at McComb Feildhouse, Edinboro, Pa. More info later.

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# Peanuts & Pistachios

A concise booklet of inspiration for builders of small scale flying models, compiled by Bill Hannan. Featured are brief articles covering the history and philosophy of tiny flying models, model photos from many parts of the world, and five full-page three-view drawings.

International in scope, Peanuts & Pistachios displays the works of modelers, photographers and artists from countries including Belgium, Czechoslovakia, England, France, Germany, Japan, Switzerland and United States.

Dedicated to the idea that small can be satisfying, Peanuts & Pistachios is ideal for enthusiasts hampered by lack of time and/or short attention-spans.

### HIGHLIGHTS OF THIS BOOKLET:

Articles review the heritage of tiny scale flying models, their attractions and detractions, nostalgic appeal, and universal acceptance.

Photographs gathered from eight different countries display a wide variety of Peanuts & Pistachios ranging from very simple to ulta-complex.

3-View Drawings by Otto Kuhni, Emmanuel Fillon and Bill Hannan are useful items of documentation suitable for projects of almost any size model ranging from Pistachios to Pachyderms...

Featured are: 1924 Bristol Brownie (Short wingspan version)

1926 Farman Sport "La Carte Postale" (Post Card)

1932 Gee Bee R-1 racer "Flying Barrel"

1935 Farman F.450 "Long Nez Moustique" (Mosquito)

1935 Corben Super-Ace

FORMAT:  $8\frac{1}{2}$ " x 11" size, 70 lb. stock; 16 pages plus two-color card cover with Duro Sheen finish. ISBN 0-9611652-3-5 \$3.95

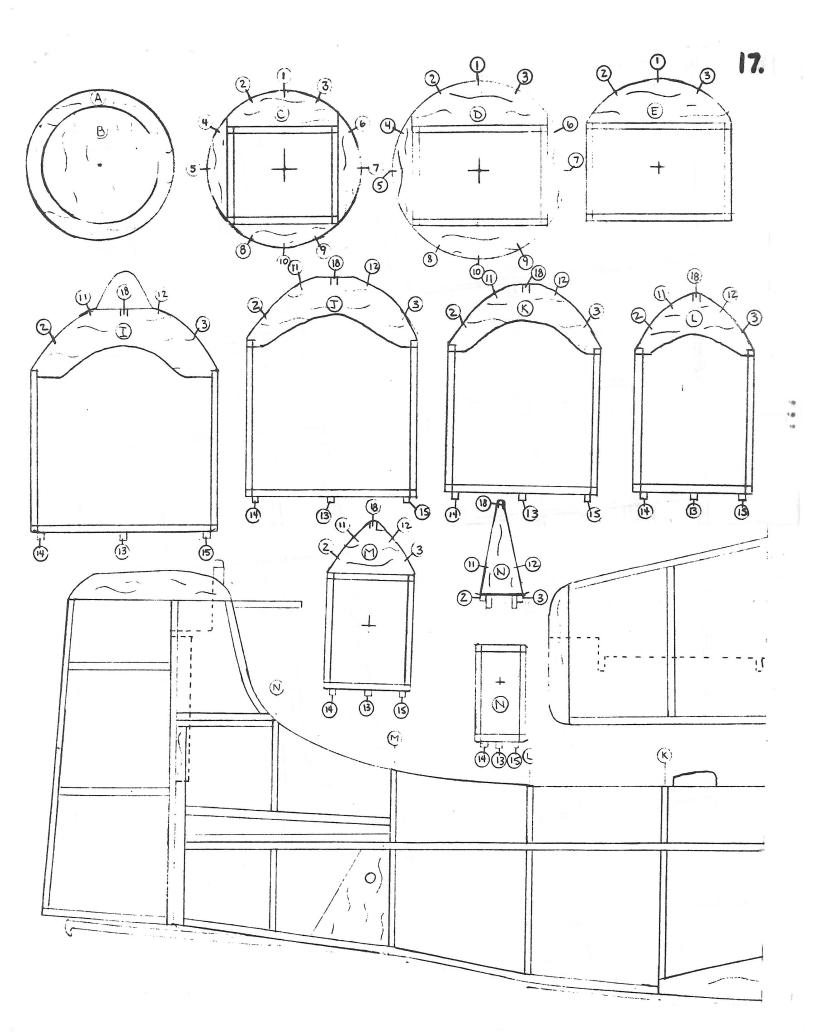


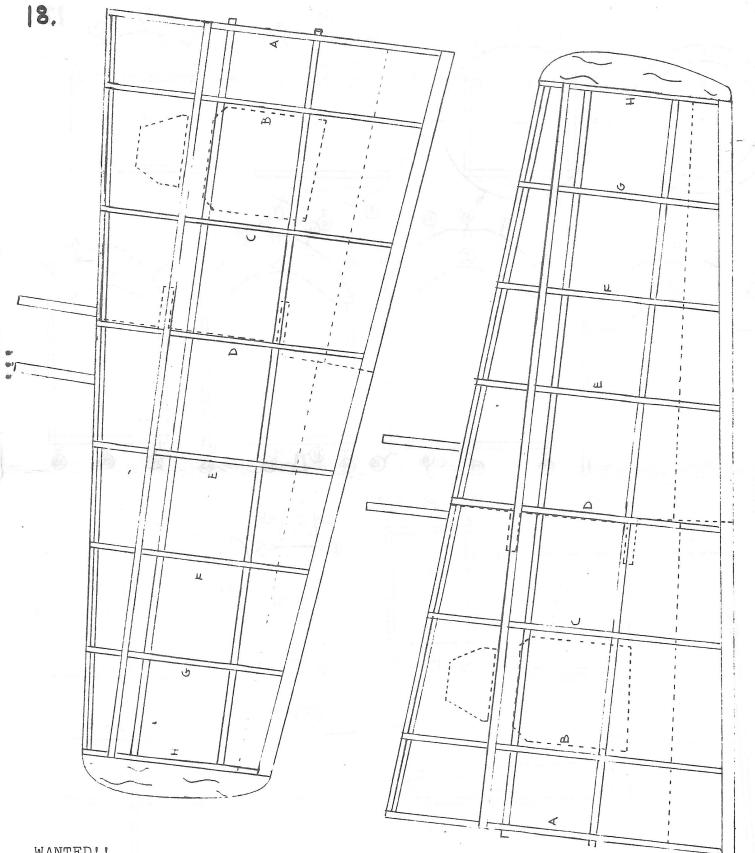
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