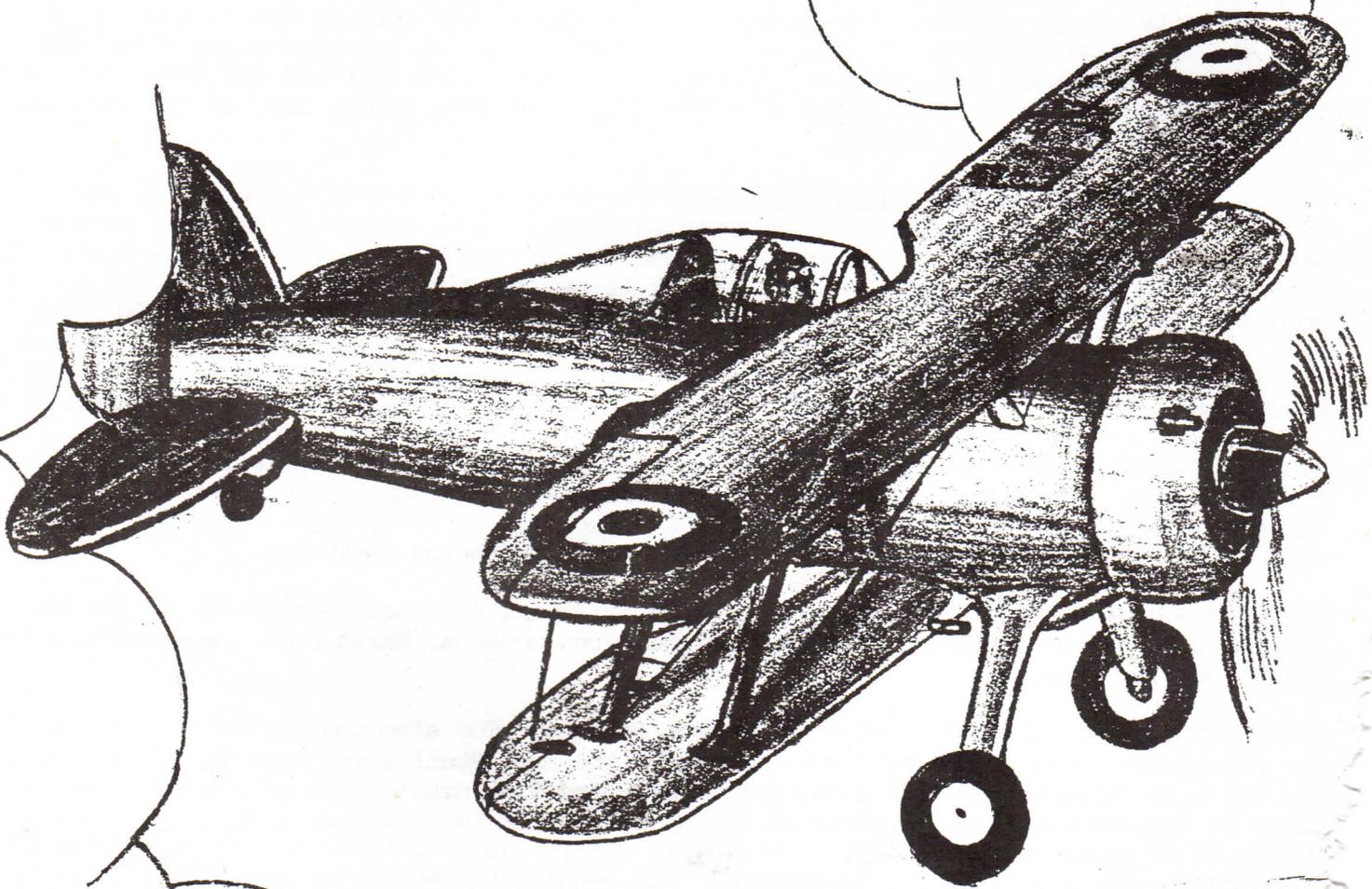


FLYING ACES

Club News

ISSUE #170-96

July/Aug. 1996



By Bob Blair

NEWS ON THE WING!

We have a series of drawings by Rob Blair that he drew when he was just a fledgling and we won't tell you how long ago that was. We chose his drawing of the Gloster Gladiator for this issue because it fits this year's theme of the Flying Aces Nationals. Nice job Bob! I also would like to thank all who contributed to this issue. Thanks for the plans go to Chris Starleaf for his original plan of the DeHavilland Dash 8, Jim Alaback for the Culver Cadet and Dave Livesay for the plan of the Keith Rider R-6. Art Doten sent us the Rainey Model Supply Co. plan of the Curtiss P-6E and we lifted the Farman F.380 from the "Fly In", Australian Modeling newsletter, drawn by Tim Hayward-Brown. Thanks Clubsters!

Some sad news to pass on to you, Pat Ciambrello passed away on July 8, 1996, and we lost a very dear friend to GHQ on July 1, 1996, Rita Russell. Pat was always a fixture at the FAC-Nats with his mobile home, selling all those goodies he somehow managed to come up with. Rita was always on hand to help out in the early years of the FAC Nats, never tiring and doing all that she could to make those first nats a go. Our sympathies go out to their families and many friends. We will miss them both.

We have another new squadron to add to our FAC Air Force. They are from Tulsa, Oklahoma and to join them contact; Willard Kehr, 1127 South Indianapolis, Tulsa, Ok. 74112. They will be known as the "Thunderbird" squadron and they will be Squadron #56, FAC. They'll be glad to hear from you.

WOW! What a nats! Another new record for entries! 163 contestants signed up and had a great time in spite of the weather. On Friday the first day of the meet we had rain and winds that were steady all day at about 20 mph, Saturday, sunshine but no rain and winds about 15mph. Sunday the wind calmed down somewhat at about 5 to 10 mph with sunshine and temps around 80°. All the events were able to be flown all three days with many models lost in the corn field or somewhere over the town of Geneseo.

All the flack about the 15% rubber rules went for naught! It proved to be all it was intended to do. The time to run an event was greatly cut down. As an example, the Greve Race which used the 15% rule was run in approximately 1 hour while the Thompson Race took 1½ hours! The World War Two event also used the 15% rule but it was not timed so i can't give you any idea on how long it took to run that event. But it looks like we just may try the rule again.

The Comradery was just as great as always and so were the models. They seem to get better every year. We also had four Junior modelers in attendance who entered and flew their models.

Blue Max Medals were handed out at the banquet to Glenn Bearry, Mike Nassise, Curt Sanford, Bob Schlosberg, Don DeCook, Dan Driscoll, Bob Isaacks, Tom Schmitt, Roy Bourke, Ted Dock, Al Backstom, George Lewis, Chris Starleaf, Richard Zapf and Terry Pittman. This is another record, to give that many medals at one time. Keep 'em flying Skysters!

Distinguished Service Medals were given to the following for their dedication to the FAC. They are, Chris Niedzielski, Steve Niedzielski, Fred Wunsche, Marie Rees, Jack Moses, Paul Stott and Jim Miller.

Grand Champion for this FAC Nationals was Tom Hallman. Tom also won the Walt Mooney award for his peanut model of the Matinsyde Buzzard. The Earl Stahl award went to Chris Starleaf for his A-26 Invader which was a thing of beauty and flew great. The Achievement award was given to Pres Bruning for his model of the Mistel, An ME-109 dragging a JU-88 underneath it or the JU-88 carrying the ME-109, or whatever, but it was a sight to see flying in the FAC Jumbo event, where it flew for 40 seconds. For winning the World War One event, Dave Stott took home the "Cole Palen" award. Fernando Ramos, who has never missed an FAC Nats, was in attendance again. Fernando has never been able to make even one official flight in all those years due to one thing or another and this time on his very first try his model went out-of-sight, so we presented Fernando with the "CHEETWELL CUP".

The highlight of the banquet, at least to this clubster was the awarding of the "Hall of Fame" plaques to Dave Stott, Bob Thompson, Earl Stahl, Don Srull, Ralph Kuenz, Bob Leishman and to yours truly Lin Reichel. It was an honor that I'll never forget, to be included with this fine group of men as well as great modelers. We had asked for you to vote for your candidates and the top five vote-getters would be inducted into the Hall of Fame. Well, we had a three way tie for the fifth spot so rather than break the tie we decided to honor all seven. Nats results are scattered throughout this issue.

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

Lt. Col. Lin Reichel, CinC-FAC

Have you seen the latest AeroPlans from A.C. Anson? This one is issue No.7 and is the usual high quality that we have been accustomed to from A.C. This issue is all early birds from the World War One era and before. It includes plans for the Rex Scout, the 1916 Roland VIb, and the 1911 Goupy Bi-Plane as well as several 3-views of the early birds. Also included is Part 2 of solid modeling how-to. The price is \$10.95 plus \$2.00 Shipping and Handling. Foreign: \$15.00 surface, \$17.00 airmail. Get yours from; AeroPlans, 8931 Kittyhawk Ave., Los Angeles, Ca. 90045.

THE BOMBERS

by Sarah Churchill (daughter of Winston)

Whenever I see them ride on high
Gleaming and proud in the morning sky
Or lying awake in bed at night
I hear them pass on their outward flight
I feel the mass of metal and guns
Delicate instruments, deadweight tons
Awkward, slow, bomb racks full
Straining away from downward pull
Straining away from home and base
And try to see the pilot's face
I imagine a boy who's just left school
On whose quick-learned skill and courage cool
Depend the lives of the men in his crew
And success of the job they have to do.
And something happens to me inside
That is deeper than grief, greater than pride
And though there is nothing I can say
I always look up as they go their way
And care and pray for every one,
And steel my heart to say,
"Thy will be done"

FLYING ACES T-SHIRTS

This year's T-Shirt features the Gloster Gladiator and is a very fine T-Shirt. It is a light blue shirt with the aircraft done in Pre-War RAF colors. You'll want one of these for sure. Sizes are; small, medium, large, X-large and XX-large. Price is \$12.50 postpaid. Send order to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

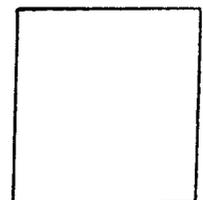
LATEST FAC PLAN PACK

Five brand new, never before published plans by Tom Nallen. GREAT STUFF by one of modelings super designers and builders. Get yours for only \$15.00 postpaid from FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

Douglas A-1 Skyraider	19" span
Halton HAC-2 Minus	21 1/2" span
No. American P-51B Mustang	18 1/2" span
Hawker Hurrican I	20" span
Gee Bee Model "E"	18 7/8" span

Plan Packs #1-2-3-4 are still available from GHQ. Price is \$10.00 each postpaid.

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 and Canada. Overseas the cost is \$20.00 per year. Six issues per year published every other month. This is your last issue under your old membership. Please make checks payable to "Flying Aces". Send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



WHAT COLOR WAS IT?

Part 13. By Dave Stott.

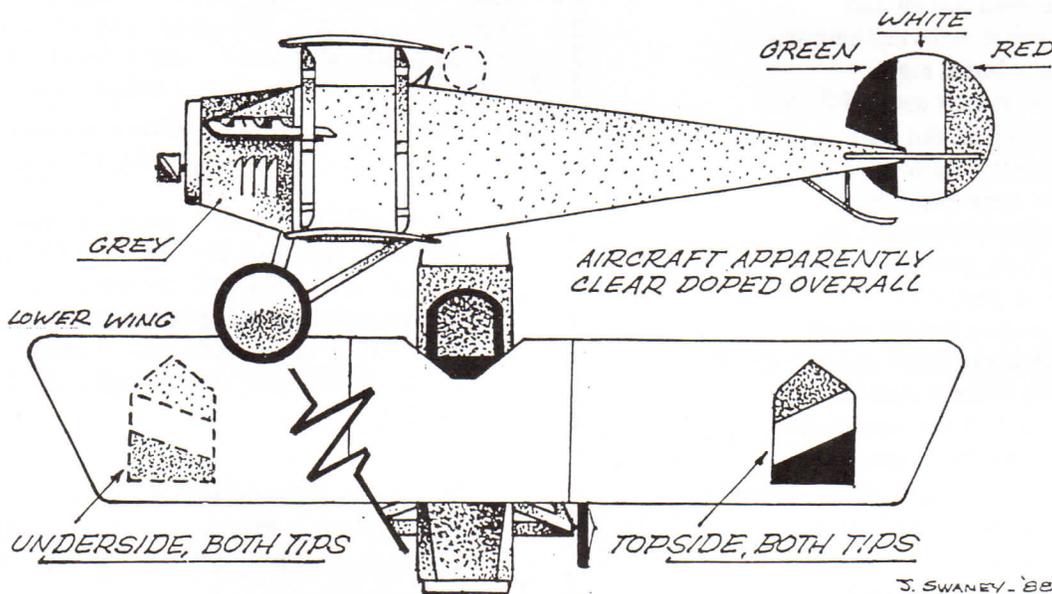
Last part, the colors of one of two Slingsby Motor Tutors ever built were listed. Mr. Harry Volk, owner and operator of Cirrus Aviation Ltd. in British Columbia has been kind enough to provide us with the colors of the other Motor Tutor taken from factory drawings, no less.

SLINGSBY: Motor Tutor, 29b. G-AKJD. Silver with bright blue registry and trim.

The info on the Mexican Air Force ships below was taken from W.W.I Aero, N^o 151. Photos of the Series "H" Parasol indicate that the quadrapodial structure below the fuselage should be placed one bay further forward on the fuselage. Translation of colors is as follows, Alumino= Aluminum. Azul Rey= Royal Blue. Verde= Green. Blanco= White. Rojo= Red.

The Cunningham-Hall drawing was taken from Skyways, N^o 37. The restored GA-36 may be seen at the Amherst Museum Colony Park, Amherst, N.Y. near Buffalo.

1918
MEXICAN AIR SERVICE INSIGNIA
AS APPLIED TO A
MICROPLANO VELOZ



THE CHEVRON WAS SUPERSEDED WITH GREEN, WHITE AND RED TRIANGLES IN 1920's.

REF. JOSEPH WHERRY, MODEL AIRPLANE NEWS, AUG. 1950

RACEPLANE COLORS AND DATA
BY JOHN SUNYAK

*Colors observed by author

MODEL	YEAR	ENGINE	SPAN	LENGTH	COLOR				PILOT	LOGO	REMARKS
					FUSELAGE & TAIL	WING	WING REG. NO./ COLOR	TAIL REG. NO./ COLOR			
Alexander-Todd	1930	Cirrus			Black/White	White	R12E Black	Black	23 Black	E. B. Todd	
Allenbaugh*	1935	Salmson	18'	15'6"	Dark Red Cowl, Bright Red Fuselage & Tail	Yellow w/ Red Leading Edge	R256Y Red	Dark Red	66 White	Roger Don Rae	
Allenbaugh	1936	4 cyl. Argus	18'	16'8"	Red w/ Silver Cowl	Yellow w/ Red Leading Edge	R256Y Red	Dark Red	66 White	Earl McIntyre	Eddie Allenbaugh Model B

RACEPLANE COLORS AND DATA

*Colors observed by author

MODEL	YEAR	ENGINE	SPAN	LENGTH	COLOR					PILOT	LOGO	REMARKS
					FUSELAGE & TAIL	WING	WING REG. NO./ COLOR	TAIL REG. NO./ COLOR	RACE NO./ COLOR			
Alton Brown	1932	Menasco 6	18'9"	19'	Light Blue	Light Blue	NR71Y Black	Black	203 Black	Roy Minor		
Alton Brown	1933	Menasco 6	18'9"	19'	Gilmore Cream	Gilmore Cream	NR71Y Black	Black	203 Black	Lee Shoenhair	Gilmore Lion Gilmore Special	Some say color is Cream Tan. Wedell 121 had same color
Beechcraft C17R	1936	Wright	34'6"	25'11¼"	Dark Blue w/White Stripes	Dark Blue	R15835 White	White	62 White	Louise Thaden		
Beechcraft D17W	1937	P&W	34'6"	25'11¼"	Lucky Strike Green	Lucky Strike Green	R18562 Orange	Orange	13 Orange	Jackie Cochran		
Beechcraft D17W*	1938	P&W	34'6"	25'11¼"	Lucky Strike Green	Lucky Strike Green	NX18562 Orange	Orange	33 Orange	Max Constant		Some sources say race no. was 31
Bellanca 28-70	1934	P&W	46'	25'11"	White w/ Green Cowl	Green	E1-AAZ White	Black (on Fuselage)	29 Black	Col. James Fitzmaurice	The Irish Swoop	Some disagreement on span
Bellanca 28-90	1935	P&W	46'	25'11"	Green w/Orange Cowl Trim, Horiz. Stabilizer	Orange	NR190M Black	190M Black		Capt. James Mollison	Bellanca Flash The Dorothy	New York to Capetown, Africa
Bellanca 28-92	1937	1 Ranger 2 Menasco 6	44'4"	27'8"	Silver	Silver	YR-AHA Black	YR Black		Alex Pappana	Alba-Julia 1918	Some sources list span as 46'33" others 46'4"
Bellanca 28-92	1938	1 Ranger 2 Menasco 6	44'4"	27'8"	Silver w/ Green Anti-Glare	Silver, Green Anti-Glare	NX2433 Black	NX2433 Black	39 Black	Frank Cordova		
Bellanca 28-92	1939	1 Ranger 2 Menasco 6	44'4"	27'8"	Silver w/ Green Anti-Glare	Silver, Green Anti-Glare	NX2433 Black	NX2433 Black	99 Black	Art Bussy		
Boeing 247D*	1934	2 P&W Wasp	74'	51'4"	Grey	Grey	NR257Y Black	Black	Ⓢ On Tail* Ⓢ On Nose & Rear Fuselage**	Roscoe Turner, Clyde Pangborn	Warner Bros. Comet, Boeing Insignia, U.S. Flags	*Black 5 & White Circle **Red Circle, White 57, White Ring
Brown B-1	1934	4 cyl. Menasco	16'8"	16'9"	Yellow	Yellow	NR83Y Black	Black	8 Black	Ralph Bushey	Shell Emblem on Cowl	
Brown B-2*	1934 1935 1936 1937	6 cyl. Menasco	19'3"	19'10"	Red	Red	NR255Y Gold Leaf Outlined in Brown R255Y ('37)	NR255Y Gold Leaf Outlined in Brown R255Y ('37)	33 Gold Leaf	Roy Minor '34 Marion McKeen '35 '36, '37	Miss Los Angeles	Silver Spinner in '37
Brown B-2*	1938	6 cyl. Menasco	21'	19'10"	Red	Red	R255Y Yellow 33 on ft. wing, Yellow	R255Y Gold Leaf	33 Gold Leaf	Marion McKeen	Miss Los Angeles	Retractable gear, wing change
Brown B-2*	1939	6 cyl. Menasco	19'3"	19'10"	Red—Orange	Red—Orange	NX255Y Yellow	NX255Y Yellow	33 Yellow	Lee Williams		Back to regular gear and wing
Burrows R-5	1936	Martin 4 cyl. 4-333	12'		Silver	Silver	NR214Y Red	NR214Y Red		Riley Burrows	American Flag on engine cowl right side	2 different landing gears used
Caudron	1936	6 cyl. Renault	22'1"	23'4"	Dark Blue	Dark Blue	None	No. 6909 C-460 Avion Caudron/White	100 White	Michel Detroyat		Red, White, Blue fuselage stripes
Cessna CR-2	1932	Scarab	18'	14'11"	Silver	Silver	R11717 Black	R11717 Black	34 Black	Roy Liggett	Miss Wanda	Also appeared without R in tail registration
Cessna CR-2	1933	Scarab	18'	14'11"	Red	Red	R11717 Black	R11717 Black	35 White	Roy Liggett	Miss Wanda	CR-2A with bump cowl was red
Cessna CR-3	1933	Scarab	18'11"	17'	Yellow Red Trim	Yellow	NR57Y Red	NR57Y Yellow, Red outline	27 Black	John Livingston		
Cessna GC-1	1930	Cirrus	27'	21'	Red	Red	NR144V Black	NR144V Black	89 White	Stan Stanton	Miss Blackwell Oklahoma	Race No. 16 in a disc (color unk.) for Cirrus Race
Chambers Chambermaid*	1938	4 cyl. Menasco	13'8"	17'3"	Cream Yellow	Cream Yellow	NX95Y Black	NX95Y Black	21 Black	Russ Chambers		Originally called Phantom, had silver cowl
Chester	1932	4 cyl. Menasco	20'8"	17'	Green, Cream Trim & Horiz. Tail	Cream	NR12930 Black	NR12930 Cream		Art Chester		Long fuselage & wing
Chester	1933	4 cyl. Menasco	16'8"	15'	Green, Cream Trim & Horiz. Tail	Cream	NR12930 Black	NR12930 Cream	15 Gold Black Outline	Art Chester		NR on top left wing, 12930 on top rt wing
Chester*	1934	4 cyl. Menasco	16'8"	15'	Green, Cream Trim & Horiz. Tail	Cream	NR12930 Black	NR12930 Cream	15 Light Green	Art Chester		
Chester Special*	1935	4 cyl. Menasco	16'8"	15'	Green, Cream Trim & Horiz. Tail	Cream	NR12930 Black	NR12930 Cream	15 Gold, Black Outline	Art Chester	CHESTER SPECIAL	NR12930 on top right wing
Chester Jeep	1936	4 cyl. Menasco	16'8"	15'	Cream, Green Trim	Cream	NR12930 Black	R12930 Cream	3 Gold, Black Outline	Art Chester	THE "JEEP"	

6.

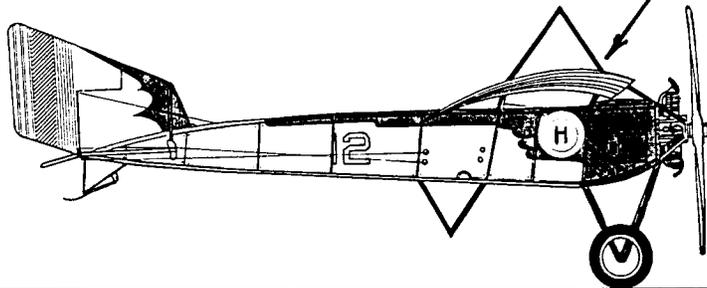
DATOS GENERALES

ENVERGADURA	11.83 MTS.
LARGO	7.50 MTS.
ALTO	3.16 MTS.
MOTOR	AZTATL 6 CILINDROS
HELICE	ANAHUAC

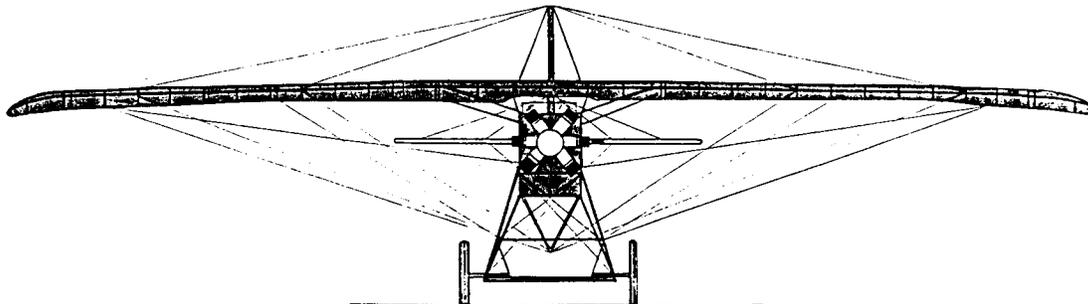
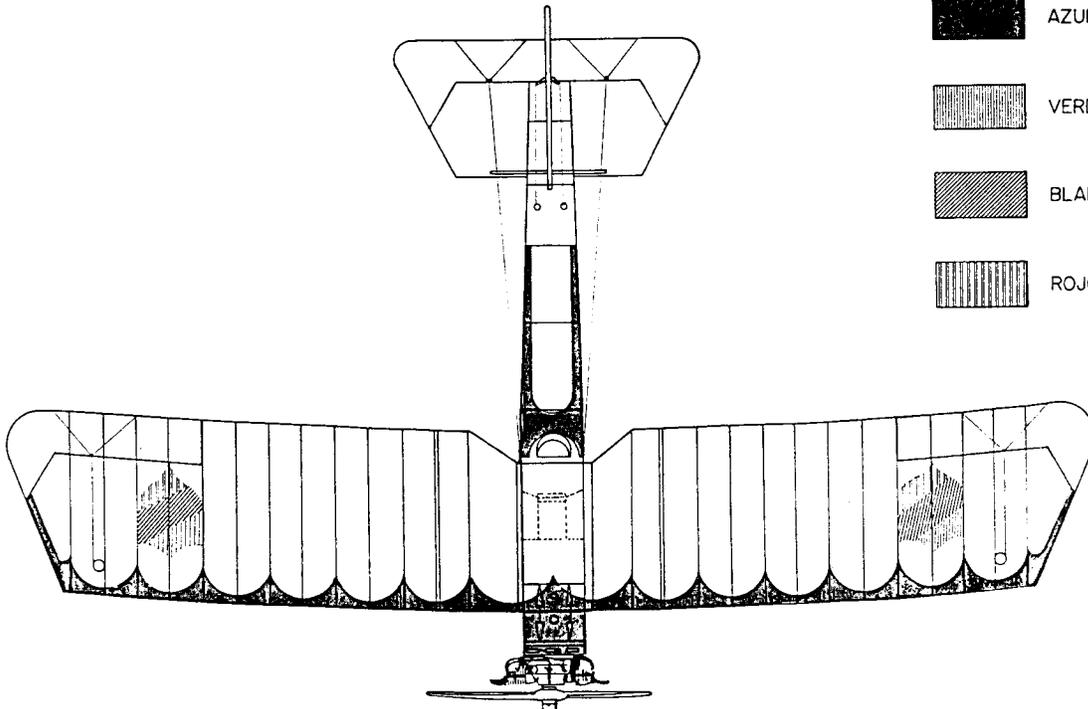
12
N° DE SERIE



NOTA EL ESCUDO DE LOS TALLERES NACIONALES DE CONSTRUCCIONES AERONAUTICAS, VA EN AMBOS LADOS DEL FUSELAJE COMO SE INDICA. LAS LETRAS Y CONTORNOS SON EN COLOR BLANCO.



-  ALUMINIO
-  AZUL REY
-  VERDE
-  BLANCO
-  ROJO



AVIACION MILITAR MEXICANA

PARASOL SERIE "H" 1917

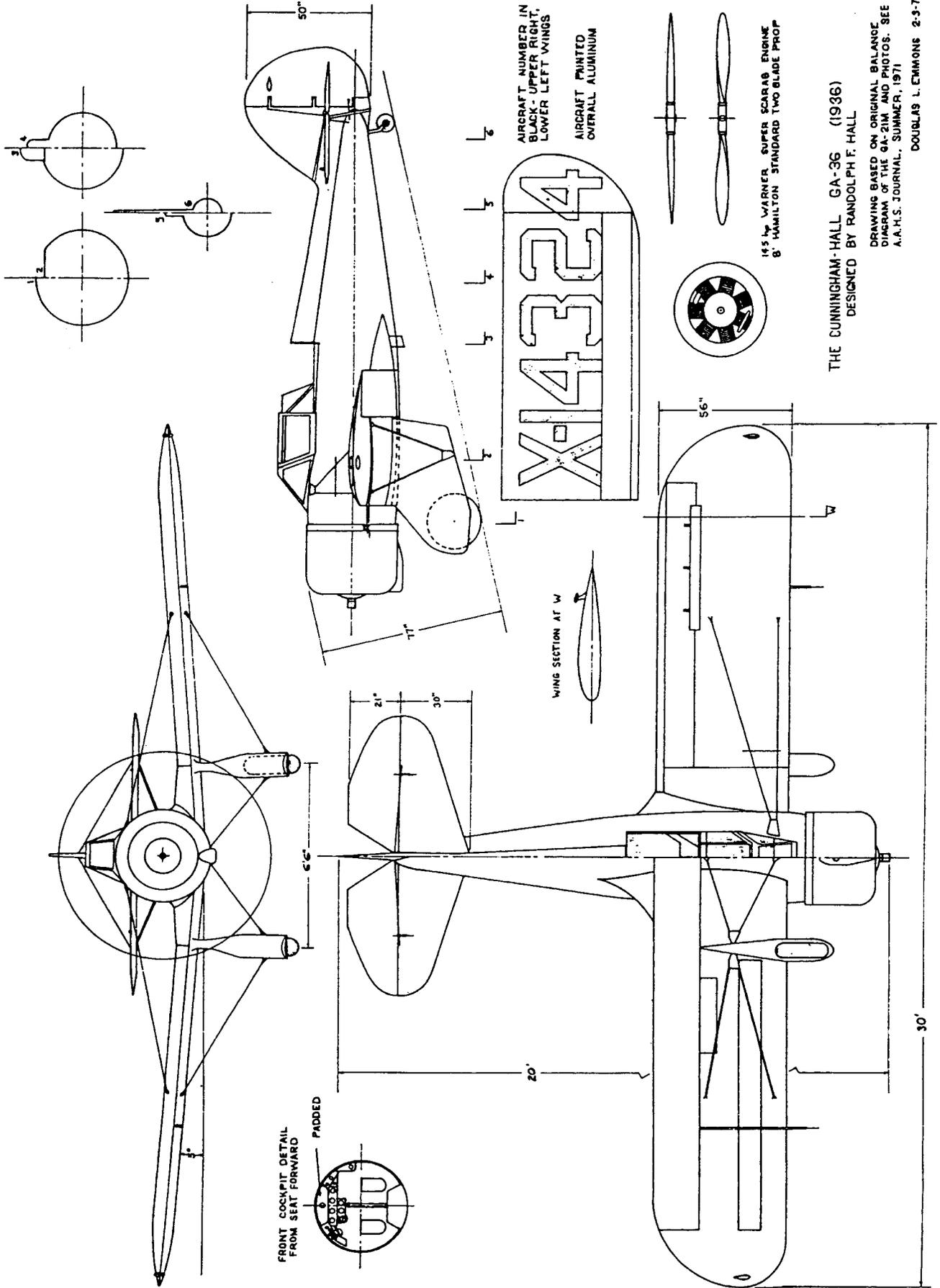
ESC. 1/48 ACOT. MTS.

DIBUJO DISEÑADOR IND. JOSE LUIS DIAZ INFANTE DIAZ

Investigación. Oscar F. Ramírez A.

ALL RIGHTS RESERVED 1995 GRUPO DE MODELISMO PIONEROS MEXICO

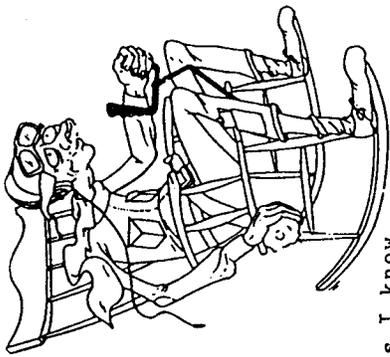
NOTA: EN EL MODELO ORIGINAL, EL AREA SOMBRREADA EN AZUL REY, LLEVA UNA LINEA DE COLOR BLANCO DE UN CENTIMETRO DELIMITANDO EL CONTORNO.



THE CUNNINGHAM-HALL GA-36 (1936)
DESIGNED BY RANDOLPH F. HALL

DRAWING BASED ON ORIGINAL BALANCE
DIAGRAM OF THE GA-21M AND PHOTOS. SEE
A.A.H.S. JOURNAL, SUMMER, 1971

DOUGLAS L. EMMONS 2-3-78



THE FLYING ACES SONG

Flying Aces, fly em' high!
 Flying Aces, in the sky
 We will fly come rain or sleet!
 Flying aces can't be beat!

1. Let me tell you all a story about some guys I know.
 They don't put away their models just because it starts to snow.
 They have known the paths of glory and de agony of de feet,
 But anyone will tell ya' Flyin' Aces can't be beat!

2. Once a stalwart band of fellows in New England's sunny clime
 Began to fly old models and they had a jolly time.
 The movement spread like lightning from sea to shining sea,
 Last year we gained more members than the old AARP!

3. In the Thirties and the Forties, in our hobby's Golden Age
 You could pick up Flying Aces, get inspired from every page.
 You could even build a model right out of the magazine!
 And buy balsa at the drugstore back when you were seventeen.

4. Stalwart aces grace the ozone here, they do it every year
 They come to share their models and to drink a little beer.
 Some say we're like a family, at least that's what I hear.
 So let us sing the praises of our Brothers far and near.

5. Now each year we're getting better, building models every day.
 We have to limit motor size or they will fly away!
 We can't chase 'em like we used to back when we were in our prime
 Our speed is down, but we don't frown, we'll get 'em every time!

6. So Hail ye Flying Aces, may your flag forever wave.
 O'er the green fields and deep grasses, stirring hearts forever
 brave.
 Though our ranks are growing thinner, we get better every day!
 So let's wind them little buggers and let's watch 'em fly away!

By Bill Warner



GIANT SCALE

Pilot	Plane	Scale Bonus	Flt.	Total
1. Tom Nallen II	Secat	68.5	76	144.5
2. Bob Bojanowski	Rearwin Speedster	53	81	134
3. Don Srull	Lincoln PKW	48	82.5	130.5
4. Bob Thompson	Aeronca Chief	46	82.5	128.5
5. Dave Stott	Taylor Cub E-2	51	75	126
Pete Azure	Taylorcraft	47.5	63	110.5
Vet Thomas	Aeronca Chief	48	32	80
Ed Novak	Beardmore	52	48	100
John Houck	ME-108	59.5	39	98.5
Ed Bojan	Cougar	49	61.5	110.5

JUMBO SCALE

Pilot	Plane	Scale Bonus	Flt.	Total
1. Dave Rees	DH Hornet Moth	77	82.5	159.5
2. Mark Fineman	S.M. 92	77	79.25	156.25
3. Don Srull	Short Seaplane	75.5	76	151.5
4. Tom Hallman	Gadfly	67	82.5	149.5
5. Chris Starleaf	A-26	82	64	146
Jack Moses	Mig-3	59.5	66.5	126
Mark Fineman	Lockheed Vega	51.5	71	122.5
Stu Weckerly	Found Seaplane	55	82.5	137.5
Bob Bojanowski	Fike	34	60	94
Vance Gilbert	Standard	71	59	130
Jim Kutkuhn	Cessna 140	49	62.5	111.5
George Lewis	Curtiss Robin	54	79.75	133.75
Dave Rees	Biper Super Cruiser	54	82.5	136.5
Leon Bennett	DH Moth Minor	54	47	101
Bob Isaacks	Pfalz D-III	66	DNF	66
Pres Bruning	Mistel	96	40	136
Dave Stott	Standard	68	50	118
Dave Stott	Curtiss R-4	62	43	105
Jack Noll	Fairey Barracuda	58.5	49	107.5

PIONEER SCALE

Pilot	Plane	Scale Bonus	Flt.	Total
1. Don Srull	Voisin	82	75.5	157.5
2. Jim Miller	Voisin	84	45	129
3. Tom Nallen II	Short T-5	71	57	128
4. Vic Nippert	Bleriot	56	33	89
5. Ed Novak	Bleriot VII	62	9	71
Tin Macdonald	Eastbourne Mono.	51	9	60

OLD TIME RUBBER STICK

Pilot	Plane	1st	2nd	3rd	Total
1. John Stott	Ritz	120	105	90	315
2. Vic Nippert	Gollywock	116	57	120	293
3. Jim Kutkuhn	Ritz	84	--	--	84
4. Gordon Hastings	Gollywock	59	--	--	59
5. Bert Phillips	Korda	42	--	--	42

DIME SCALE

Pilot	Plane	1st	2nd	3rd	Total
1. Gordon Roberts	Taylorcraft	65	104	86	255
2. Mark Fineman	Stinson 105	71	71	41	183
3. Stu Weckerly	Stinson 105	75	60	46	181
4. Dave Robelen	Arado AR-96	48	63	63	174
5. John Houck	Mureaux	54	117	--	171
Mike Zand	Taylorcraft	34	49	35	118
Frank Rowsome	Mureaux	67	--	--	67
Dave Stott	Aeroneer	43	45	51	139
Bob Thompson	Allied Sport	31	22	40	93
Bob Thompson	Arado AR-96	50	--	--	50
Paul Helman	Spad	23	--	--	23
Stu Meyers	Spad	39	--	--	39
Tim MacDonald	Swallow	50	37	30	117
Larry Peavey	Bellanca	49	44	--	93

GOLDEN AGE CIVIL

Pilot	Plane	1st	2nd	3rd	Total
1. Bill Passarelli	P.A.M.A.	97	103	120	320
2. George Lewis	Rearwin	73	58	120	251
3. Stu Weckerly	Stout 2AT	99	48	74	221
4. Dave Niedzielski	Rearwin	69	61	50	180
5. Vic Nippert	Piper Cub	71	38	61	170
Jim Kutkuhn	Curtiss Robin	52	38	57	147
Bob Isaacks	Rearwin	29	--	--	29
Mike Nassise	Cessna C-37	26	32	30	88
Bob Thompson	Cessna C-34	72	41	--	113
Pete Azure	Mr. Mulligan	41	25	--	66
Paul Helman	Curtiss Robin	33	52	77	162
Dan Driscoll	Howard	35	46	45	126

POWDER PUFF SCALE

Pilot	Plane	Scale Bonus	Flt.	Total
1. Juanita Reichel	Piper Cub J-3	39	68.5	107.5
2. Marie Rees	Lockheed Vega	40	55	95
3. Jane Smith	P-51 Mustang	--	15	15
Juanita Reichel	Beech Bonanza	34	21	65

FAC SCALE

Pilot	Plane	Scale Bonus	Flt.	Total
1. Pres Bruning	Breguet 693	85	80	165
2. Tom Hallman	Loose Racer	66	82.5	148.5
3. Jim Miller	Wet Wot	64	82.5	146.5
4. Jack Noll	T-28 Trojan	53	82.25	135.25
5. David Franks	Gadfly	42	82.5	124.5

Pilot	Plane	Scale Bonus	Flt.	Total
Jack Moses	Piper Vagabond	50	29	79
Pete Azure	Monocoupe	40	44	84
Vance Gilbert	Boeing 80A	74	25	99
Paul Boyanowski	Short S-26	79	21	100
Dave Stott	Waco	68	33	101
Dave Livesay	Folkerts	48	62.5	110.5
Ted Lewis	Piper Cub J-3	25	60	85
Bob Lundberg	Piper Cub J-3	23	63.5	86.5
Tom Hallman	Nicholas Beasley	65.5	82.5	148
George Lewis	Waco SRE	55	48	103
Paul Boyanowski	Waco SJW-1	71	53	124
Charlie Hill	Ki-61 Tony	48	41	89
Rob Paisley	FGF Hellcat	33	48	81
Jack Kacian	Great Lakes	69	53	122
Paul Helman	Curtiss R3C-1	64	20	84
Jack Noll	Ki-61 Tony	56	74.5	130.5
Gordon Hastings	Gadfly	42	44	86
Jerry Paisley	Brewster Buffalo	56	54	110
Dave Niedzielski	Mr. Smoothie	54	43	97
Bob Thompson	Waco SRE	62	30	92
Bob Lundberg	Sparrow II	43	47	90
Tom Sandor	Curtiss SBC-4	24	40	64
Mike Iserman	Wittman Big "X"	40	24	64

Rob Paisley is a Junior.

FAC POWER SCALE

Pilot	Plane	Scale Bonus	Flt.	Total
1. Tom Nallen II	Junkers W-33	58	82.5	140.5
2. Dave Rees	B-36	110	29	139
3. Bob Clemens	Farman Jabiru	54	82.5	136.5
4. Joe Barish	ME-Gigant	59.5	76	135.5
5. Jack Moses	RWD-5	52	82.5	134.5
Mark Fineman	F4F Wildcat	42	82.5	124.5
Ed Bojan	SE-5	42	82.5	124.5
Allan Schanzle	ME-262	49	82.5	131.5
Charles Hill	Hansa Branenburg	47	82.5	129.5
Mike Zand	Farman Sport	48	60	108
Terry Pittman	Bleriot	54.5	64	118.5
George Lewis	Short Cockle	51.5	50	101.5
Bob Marchese	Sikorsky S-39	53	28	81
Terry Pittman	Farman Jabiru	58.25	67	125.25
John Lewars	DH Tiger Moth	47.5	63	110.5

LARGEST SELECTION AAA GRADE CONTEST Balsa - SATISFACTION GUARANTEED - SHIPPED 100%

Balsa Sheets		Balsa Sticks		Bundle Deals		Superior Lite		Hard Maple		Ailerons	
1/32 x 2	37	1/16 SQ	10	(20) 1/16 x 3	7.99	1/8 x 6	2.50 3.95	1/2 x 3/4	78	1/4 x 1	57
1/16 x 2	38	1/16 x 1/8	10	(20) 3/32 x 3	9.70	1/8 x 12	3.95 7.50	5/8 x 3/4	85	1/4 x 1-1/4	65
3/32 x 2	46	1/16 x 1/4	12	(15) 1/8 x 3	8.75	1/4 x 12	4.95 9.50	3/4 x 3/4	92	1/4 x 1-1/2	74
1/8 x 2	49	1/16 x 3/8	13	(15) 3/16 x 3	10.50	LITE PLY	12" 24" 48"	SPRUCE / BASS	36" 48" 60"	1/4 x 2	80
3/16 x 2	60	1/16 x 1/2	17	(10) 1/4 x 3	8.75	1/8 x 6	1.00 1.25 2.35	1/16 x 1/4	24 30	5/16 x 1-1/4	74
1/4 x 2	68	3/32 SQ	11	(10) 3/8 x 3	10.50	1/8 x 12	1.25 2.35 4.50	3/32 x 1/4	25 39	5/16 x 1-1/2	75
3/8 x 2	86	3/32 x 1/4	14	(5) 1/2 x 3	6.95	1/4 x 6	1.25 1.75 3.40	1/8 SQ	21 29	5/16 x 2	86
1/2 x 2	110	3/32 x 3/8	15	(20) 1/16 x 4	12.35	1/4 x 12	1.75 3.45 6.50	1/8 x 1/4	28 36	3/8 x 1-1/4	80
1/32 x 3	36	3/32 x 1/2	19	(10) 1/16 x 4	9.00	3 PLY BIRCH	12" 24" 48"	1/8 x 3/8	35 46	3/8 x 1-1/2	83
1/23 x 3	36	1/8 SQ	11	(15) 3/32 x 4	11.50	1/64 x 6	1.40 2.75 4.95	1/8 x 1/2	41 55	3/8 x 2	95
1/16 x 3	36	1/8 x 3/16	13	(10) 3/32 x 4	10.75	1/64 x 12	2.79 5.10 9.50	1/8 x 3/4	47 63	1/2 x 1-1/2	95
3/32 x 3	43	1/8 x 1/4	14	(10) 1/8 x 4	8.75	1/32 x 6	95 1.80 3.25	3/16 SQ	26 38	1/2 x 2	106
1/8 x 3	52	1/8 x 3/8	15	(5) 1/8 x 4	6.25	1/32 x 12	1.80 3.35 6.35	3/16 x 3/8	40 53	1/4 x 2	75
3/16 x 3	62	1/8 x 1/2	21	(10) 3/16 x 4	10.00	1/16 x 6	95 1.80 3.25	3/16 x 1/2	48 64	1/4 x 3	109
1/4 x 3	78	1/8 x 3/4	28	(5) 3/16 x 4	7.35	1/16 x 12	1.80 3.35 6.25	3/16 x 3/4	66 88	3/8 x 2	90
5/16 x 3	1.09	1/8 x 1	35	(10) 1/4 x 4	14.00	1/8 x 6	95 1.80 3.35	1/4 SQ	45 57	3/8 x 3	131
3/8 x 3	1.05 1.15 1.48 1.70	3/16 SQ	24	(5) 1/4 x 4	8.35	1/8 x 12	1.80 3.35 6.50	1/4 x 3/8	53 69	1/2 x 3	154
1/2 x 3	1.35 1.50 1.75 2.05	3/16 x 1/4	18	(5) 3/8 x 4	9.50	4 PLY BIRCH	12" 24" 48"	1/4 x 1/2	61 81	ADD FOR SHAPED, LEADING EDGES	
3/4 x 3	2.25 3.10	3/16 x 3/8	21	(5) 1/2 x 4	13.00	3/16 x 6	1.09 2.15 3.45	1/4 x 3/4	63 110	SPRUCE TRIANGLES	
1/32 x 4	56 66 79 92	3/16 x 1/2	24	Balsa Sheets		3/16 x 12	2.15 3.45 6.85	3/8 SQ	84 85 138	3/8 x 3/8	54
1/20 x 4	56 66 79 92	3/16 x 3/4	30	LIGHT (4-6 LBS)	36" 48"	5 PLY BIRCH	12" 24" 48"	3/8 x 1/2	75 91 154	1/2 x 1/2	75
1/16 x 4	56 68 79 92	3/16 x 1	38	1/32 x 3	78 1.19	3/32 x 6	1.35 2.60 4.90	1/2 SQ	85 105 180	3/4 x 3/4	95
3/32 x 4	66 82 106 114	1/4 x 3/8	27	1/16 x 3	78 1.19	3/32 x 12	2.60 5.00 8.95	1/2 x 3/4	94 125 200	EPOXY	
1/8 x 4	76 93 112 134	1/4 x 1/2	29	1/8 x 3	93 1.44	1/8 x 6	1.45 2.80 5.25	*ADD \$5.00 EXTRA FOR PACKAGING	4-1/2 OZ. 9 OZ.	5 Minute	4.25 6.69
3/16 x 4	87 109 140 156	1/4 x 3/4	42	3/32 x 3	93 1.44	1/8 x 12	2.80 5.50 9.50	GROOVED LG MOUNTS	15 Minute	4.25 6.69	
1/4 x 4	1.06 1.52 1.62 1.79	5/16 SQ	27	1/4 x 3	132 2.02	3/8 x 6	1.50 2.85 5.25	3/8 x 3/4 (1/8)	50	30 Minute	4.25 6.69
5/16 x 4	1.82 2.34	3/8 SQ	36	1/2 x 3	157 2.37	1/4 x 12	2.30 3.80 7.25	3/8 x 3/4 (5/32)	50	2 Hour	4.25 6.69
3/8 x 4	1.65 2.10 2.39 2.85	3/8 x 1/2	40	3/8 x 3	188 3.07	7 PLY BIRCH	12" 24" 48"	1/2 x 3/4 (3/16)	55	20 Minute	4.29 8.40
1/2 x 4	2.49 2.85 3.15 3.36	3/8 x 3/4	53	1/2 x 3	238 3.62	3/8 x 12	2.85 5.50 10.00	TRIANGLES	36"	1/2 oz. Thin or GF	1.85
3/4 x 4	3.50 4.71	1/2 SQ	67	3/4 x 3	375 5.19	9 PLY BIRCH	12" 24" 48"	1/4	29	1 oz. Thin or GF	3.00
MATCHED SHEETS	42" 48"	3/8 x 3/4	53	1 x 3	5.32 7.19	1/2 x 6	2.00 3.50 5.75	3/8	33	2 oz. Thin or GF	5.30
3/32 x 4	1.25 1.42	1/2 SQ	69	1/32 x 4	1.23 1.88	1/2 x 12	3.50 5.80 11.25	1/2	40	8 oz. Thin or GF	16.50
1/8 x 4	1.50 1.69	1/2 x 1/4	49	1/20 x 4	1.23 1.88	HARD MAPLE	18"	3/4	54	1/2 oz. Extra Thick	2.00
3/16 x 4	1.64 1.89	1/2 x 3/4	60	1/2 x 4	1.23 1.88	1/4 x 1/4	45	1	68	1 oz. Extra Thick	3.30
1/4 x 4	1.76 2.05	1/2 x 1	76	1/2 x 4	1.23 1.88	1/4 x 1/8	50	1-1/2	1.31	2 oz. Extra Thick	6.00
BIRCH DOWELS	36"	3/4 x 1	99	3/32 x 4	1.49 2.32	1/4 x 3/8	50	2	2.25	8 oz. Extra Thick	18.00
1/8	16	WING SKINS	36"	1/8 x 4	1.69 2.62	3/8 x 1/2	56	TRAILING EDGES	36"	1/2 oz. Thin or GF	4.25
3/16	17	1/32 x 12	4.79 5.35	3/16 x 4	1.97 3.00	3/8 x 3/8	50	1/8 x 1/2	29	1 oz. Thin or GF	7.85
1/4	20	1/20 x 12	4.79 5.35	1/4 x 4	2.37 3.32	3/8 x 1/2	56	3/16 x 3/4	35	2 oz. Thin or GF	13.85
5/16	27	1/16 x 12	4.79 5.35	3/8 x 4	3.57 5.63	3/8 x 3/4	65	1/4 x 1	39	2 oz. Accelerator	4.15
3/8	37	3/32 x 12	5.79 6.45	1/2 x 4	4.82 6.88	3/8 x 1	75	5/16 x 1-1/4	50	8 oz. Acc. Refill	6.95
1/2	54					3/8 x 1-1/2	1.15	3/8 x 1-1/2	56	Ext tips (6)	1.49
5/8	74					1/2 x 1/2	.75	1/2 x 2	90	Ext tips x glue (6)	1.49

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* Impulse and Props *
Mumbo Jumbo # 75 from the pen of the Glue Guru

Salutations, disciples! Today we shall ponder the curious interaction between rubber motor torque, store-bought props and performance. Thrust impulse drives our models, equal in value to a certain force, applied for a certain time. If we have, say 10 grams of force for 20 seconds, the result is a total impulse of 200 gram-seconds. The total impulse derives from rubber weight. As most events are 'unlimited', we possess near total control over available impulse. Why then aren't all flights maxes?

One major catch has to do with props and the vagueries of matching props to rubber power output. With impulse dependent on rubber weight, a given duration requires a certain % of airframe weight. Typically 15 - 20% of airframe weight in the form of rubber will be enough for a minute or more. Once we know the weight of rubber required, we face the issue of how the rubber is to be arranged. There are only two basic ideas: long, skinny motors and short, fat ones. The difficulty with the long motor is a tendency to bunch up and wedge itself into the fuselage after delivering its power, destroying the glide and sometimes the model. Short motors must have a thick cross-section to reach a given weight. At full turns, such motors deliver enormous torque, overspeeding the prop and delivering its impulse in a rocket-like form extremely difficult to control. As a practical matter, we push for a compromise - something delivering a controllable impulse without bunching. In practice, the art of achieving this special compromise has much to do with who wins.

One way of regulating impulse is with the prop. It has long been known that scale props are hopeless owing to a tendency to 'run away'. Meant is that very form of overspeeding associated with a fat motor. The obvious countermove is to go for a too large prop, one difficult to overspeed. This is general practice, and a realistic one, for any prop smaller than 1/4 of the wingspan will likely overspeed.

Another form of prop 'governor' consists of blade angle, and especially the blade angle at about the 2/3 radius point, where most of the prop action actually takes place. For most of our models, something around 30 degrees is best. Earl Stahl came up with this notion way back when, and it remains near optimum, even a favorite for straight performance classes including Wakefield.

Store-bought props tend to be set at a lower angle. All plastic and hard wood props known to me are made with about a 20 degree blade angle. There's nothing wrong with this setting, one assuring a sprightly performance given a very long motor. However if your impulse is delivered by a 'short and fat' motor, such a prop will overspeed.

What then? Something can be done by lengthening an overspeeding prop. This is done by snipping portions of a cottage cheese container and bonding same to a plastic prop. The chord line arc is a very close match to the container radius. Given an inch of overlap and contact cement developed for bonding plastic laminate, a reasonably strong result follows. In this fashion, I have extended a standard 9 1/2 plastic prop to 11 inches with a great improvement in controllability of an offending model. There is something useful here.

Does performance increase? Some - but that's not the idea. Performance is regulated by impulse - the weight of rubber - and only slightly by prop parameters. In this case, a more reasonable rate of power delivery (lower) required less downthrust and less haring around on the deck at launch. The real gain is in a friendlier model.

THE SECRET SQUADRON SONG (to the tune of McNamara's Band)

Oh, our leader's Captain Midnight, we're a stout and hearty band.
Our contests are spontaneous, our meetings are unplanned.
And if your model will not fly, we'll lend a helping hand.
We are the Secret Squadron, we're the finest in the land.

Oh, our club it has no dues at all; our club it has no fees.
We go to fly at 3 A.M., we live on beer and cheese.
Sometimes its hard to find us, as we fly amongst the trees.
We're patriotic, true and brave, the Secret Squadron, please.

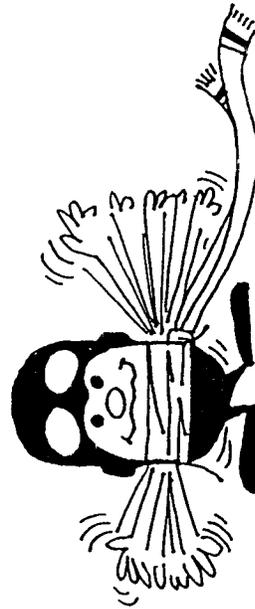
We build models you ain't heard of, and some you've never seen.
When flying over grassy fields, we paint our models green.
When our planes land in a lake or pond they come out nice and clean.
We are the Secret Squadron and we're very seldom seen.

Oh, we paint our models black and then at night they disappear.
And when we lose a model, we all have another beer.
We may go home empty-handed but we're loaded with good cheer.
Defending rights and freedom in the country we hold dear.

So when duty calls we give our all though us you never see.
We're always flying models, though we do it secretly.
We build 'em in the closet so our wives we never see.
In the fight for peace we never cease, you can take it straight from me!

Oh, our leader's Captain Midnight, we're a stout and hearty band.
Our contests are spontaneous, our meetings are unplanned.
And if your model will not fly, we'll lend a helping hand.
We are the Secret Squadron, we're the finest in the land.

By Bill Warner



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

Wanted; 3-views of the Howard DGA-15
or NH-1 (Naval version). Stan Fink,
1810 Pine St., Phila., Pa. 19103

FLYING HORDE

Pilot

1. Rich Miller

NO-CAL SCALE

Pilot	Plane	1st	2nd	3rd	Total
1. Ted Dock	Schlepp	41	63	37	141
2. Dan Kane	Schlepp	96	--	--	96
3. John Stott	Floyd Bean	60	--	--	60
4. Paul Helman	Cranwell CLA-3	13	10	8	31
5. Don DeCook	Tucano	15	6	8	29
Vic Nippert					
	Piper Cub	16	9	--	25
	Piper Cub	9	--	--	9
	OV-10A	8	--	--	8

O.T. ELECTRIC GAS REPLICA

Pilot	Plane	1st	2nd	3rd	Total
1. Jerry Markson	Buzzer	120	120	120	360
2. Bill Passarelli	Trenton Terror	120	120	120	360
3. Dick Miller	Half Pint	99	120	120	339
4. Mark Fineman	Miss America	120	113	89	322
5. Ted Dock	Tomahawk	120	120	74	314
Mike Zand					
	Mini Ruler	69	78	120	267
	Interceptor	42	93	68	203
	Kerswap	70	120	97	287
	Kerswap	119	120	--	239
	Bombshell	120	--	--	120
	Brigadier	60	90	89	239
	Powerhouse	62	--	--	62

Fly-off, with a target time of 90 seconds was won by Jerry Markson over Bill Passarelli, 110 to 116.

EMBRYO ENDURANCE

Pilot	Plane	1st	2nd	3rd	Bonus	Total
1. Sam Burke	Rainbow	67	44	43	9	163
2. Mike Zand	Debut	54	38	32	9	133
3. Mick Nallen	Passport	120	--	--	9	129
4. John Stott	Nit-II	120	--	--	9	129
5. Bob Marchese	Prairie Bird	31	49	33	9	122
Jack Noll						
	E-22	8	32	--	9	49
	Misadventure	3	6	31	5	45
	Twin Tail	49	--	--	9	58
	Tomahawk	57	--	--	9	66
	Korda	76	--	--	9	85
	Snowflake	48	--	--	6	54
	Original	66	--	--	9	75
	Honeybee	38	--	--	9	47
	Honeybee	23	--	--	8	31
	Hornet	3	5	17	9	34

Paul Robelen, and Steve and Chris Niedzielski are Juniors.

This summer's postal contest is now on as you read this. It will be for Golden Age Civil aircraft and Golden Age Military aircraft, each in its own category. Enter as many times as you wish with as many models as you wish in each event. Send your name, the name of your model and the time to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. Contest times also count. All entries must be postmarked no later than October 31, 1996. No size limit on models.

BUILD--FLY--WIN!!! Eff--AAA--CEEE!!!!

GOLDEN AGE CIVIL AIRCRAFT

Pilot	Plane	Time
1. Dave Linstrum	DH Puss Moth	185 sec.
2. Doc Martin	Dornier Komet	134 "
3. Ron Hummel	Farman 400	133 "
4. Doc Martin	Mechanics Flyabout	104 "
5. Juanita Reichel	Piper J-3	77 "
6. Darold Wilken	Leopard Moth	45 "
7. Walt Leonhardt	Mouboussin	36 "

GOLDEN AGE MILITARY

Pilot	Plane	Time
1. Doc Martin	Dornier Falke	35 sec.
2. Walt Leonhardt	Mureaux C-1	30 "

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 Signature Inn (317) 284-4200

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

Doug Wilkey is looking for plans of the following gliders, Jasco Thermic and other balsa gliders as well as any baby ROG plans. Doug Wilkey 1977 Highway 270 West, Clay, Ky. 42404.

Jim Carden, 80 E. Main St.-Apt. 12, Peru, Ind. 46970-2241 is looking for a 3-view of the Franklin PS-2 glider.

Wanted; a copy of the Putnam book, "Gloster Aircraft". Hurst Bowers, 1649 Birch Rd., McLean, Va. 22101.

★ BULLETIN ★

The Estes Company has recently purchased Sterling Models and they are looking for model builders to build some of their kits so that they can display them at Model Trade shows. If anyone is interested in doing this please contact Tom Walker as soon as possible. His phone number is: (800) 525-7561. They will pay for your work.

We have recently heard through the "GrapeVine" that Cleveland Models has been sold and the new owners are going to start to produce some of the old Cleveland kits. Let us hope that they don't charge as much as the current plans are.

PHOTO PAGES By Ross Mayo

Top; Chris Starleaf's DeHavilland Dash 8 airliner. Plan in this issue, great looking model.

Bottom left; DH Hornet Moth, Jumbo by Dave Rees. Model won the Jumbo Scale event.

Bottom right; George Lewis's Curtiss Tri-plane. Too windy to fly the model. Not trimmed yet.

Top left; Gee Bee by Chris Starleaf from a Tom Herr kit. Model flies great while under power.

Top right; Vance Flying Wing by Dave Stott; Dave took third place with it in the Bendix Race.

Middle left; It FLIES! That's Dave Rees' B-36 in flight. Six electric motors power this giant.

Middle right; Jane Smith came all the way from the British Isles to fly her P-51 Mustang in the Powder Puff Derby event. We think it is also from a Tom Herr kit.

Bottom left; That's Earl Stahl receiving his "Hall of Fame" award from Commander Lin Reichel and his Adjutant, Vic Didelot.

Bottom right; Here is the winner of the Walt Mooney award for the best Peanut model at the FAC-Nats. Built by Tom Hallman, the Martinsyde Buzzard also won the FAC Peanut event.

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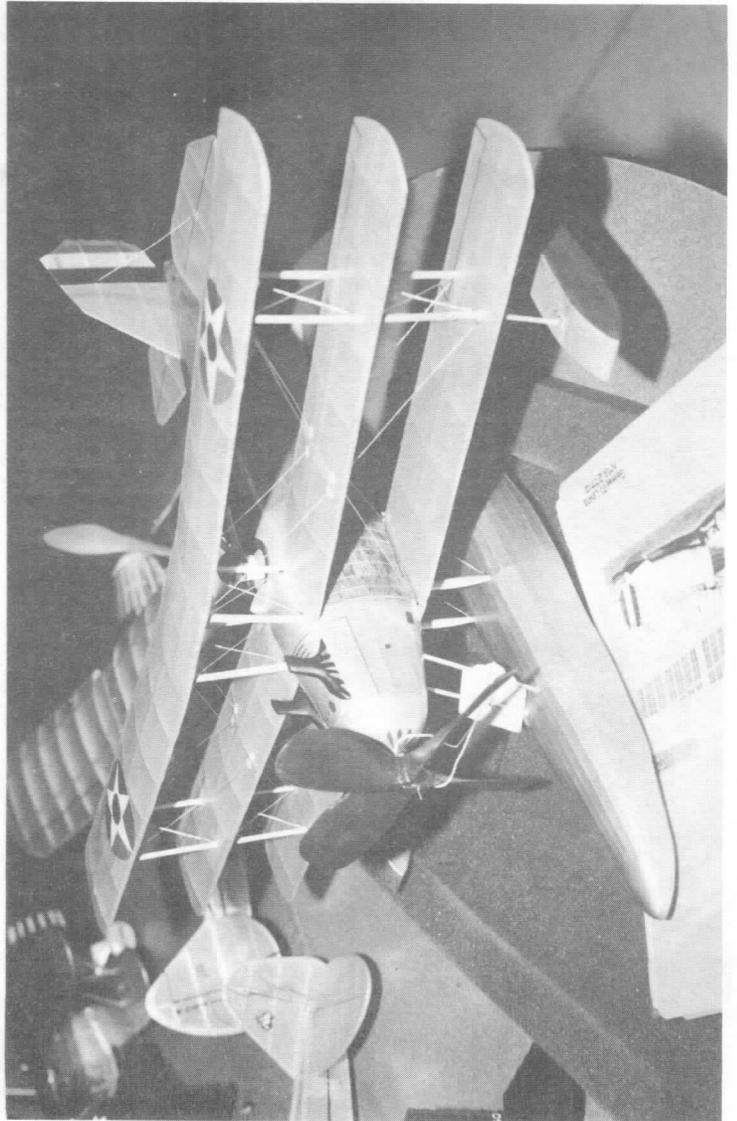
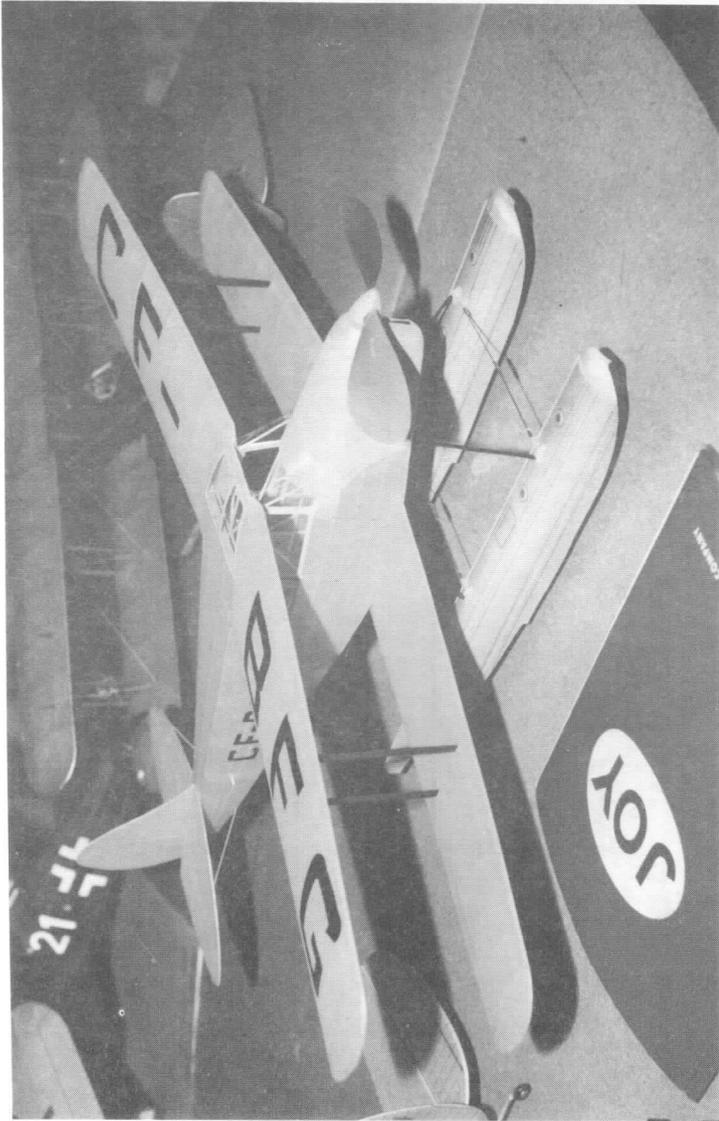
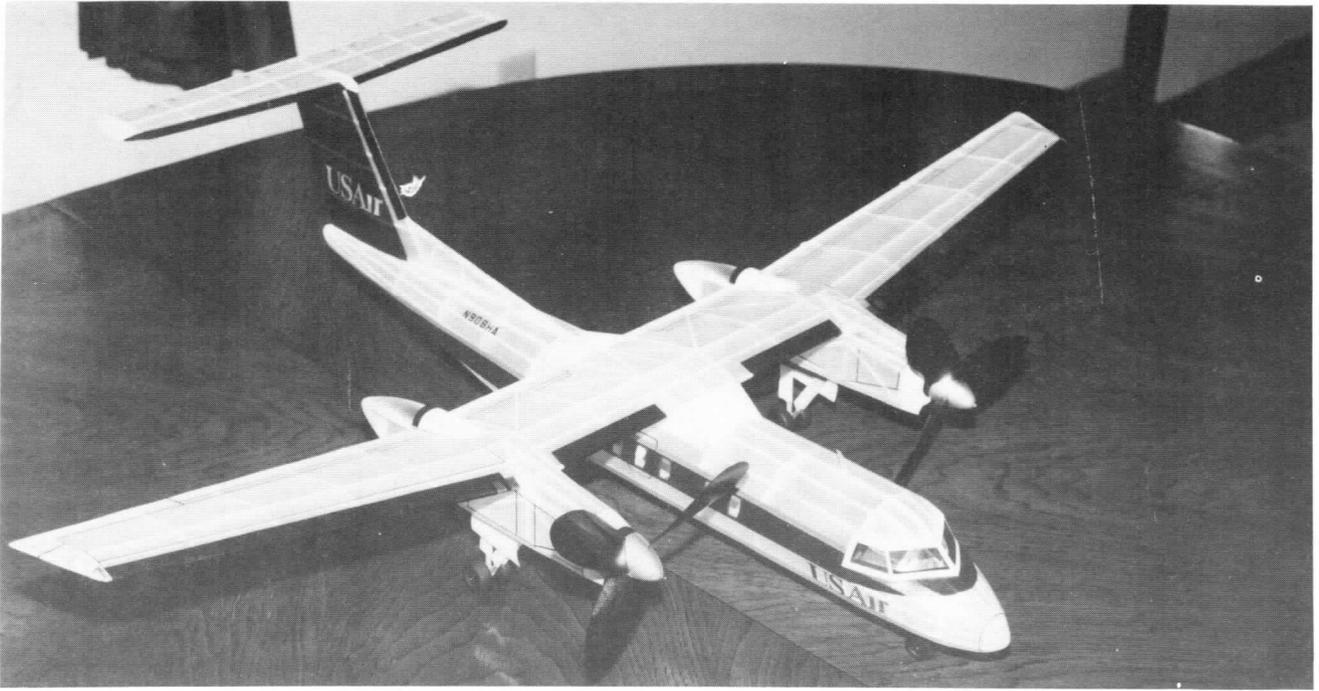
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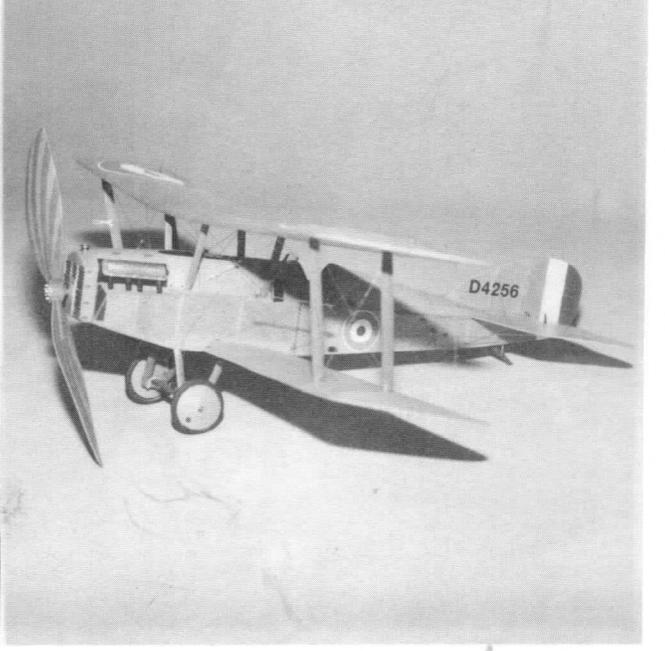
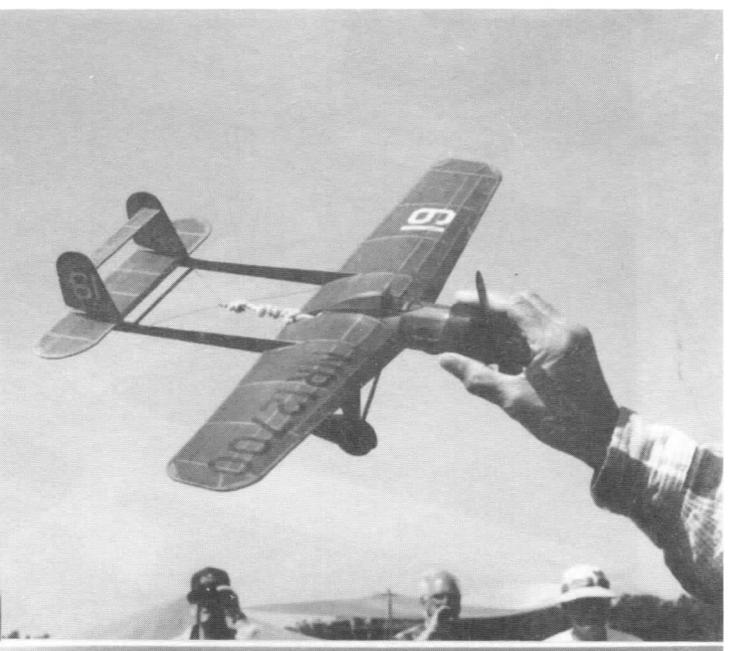
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LOST! A black 3 1/2" lens cap that is difficult to replace at the FAC-Nats. If anyone found it please return to Bill Harding, 4782 Unity Line Road, New Waterford, Ohio 44445. Will pay for mailing costs.



OLD TIME COMMERCIAL RUBBER

Pilot	Plane	1st	2nd	3rd	Total
1. Herb Kothe	Miss Canada	120	120	120	360
2. John Stott	Flying Aces	120	90	120	330
3. Richard Moore	Hi-Climber	120	120	53	293
4. Vic Nippert	Miss Canada	120	--	117	237
5. Vet Thomas	Miss Canada	60	82	--	142
Bob Hammett	Albatross	52	67	--	119
Bill Bell	Fly-A-Bout	25	30	--	55
Charles Schobloher	Flying Aces	40	--	--	40
Bob Isaacks	Pacific Ace	49	59	--	108
Jack Barker	Black Bullet	34	23	--	57
Frank Rowsome	Crusader	89	--	--	89
Elmer Mellander	Sparky	24	47	--	71
Fernando Ramos	Miss Canada	120	--	--	120
Don DeCook	Bebe	120	--	--	120
Paul Stott	Snooky	84	--	--	84
Gordon Hastings	Hi-Climber	59	36	47	142
Ken McConnell	Korda Victory	41	52	--	93
Bruce Foster	3/4 Korda	25	--	--	25
Bill Penny	Conquerer	58	36	--	94
Jerry Markson	Jabberwock	43	43	--	86

Vet Thomas defeated Gordon Hastings in the fly-off for 5th place 77 seconds to 47 seconds.

MODERN CIVIL

Pilot	Plane	1st	2nd	3rd	Total
1. Dave Rees	Citabria	107	105	120	332
2. Paul Boyanowski	Piper Pacer	87	120	120	327
3. Stu Weckerly	Found	30	112	120	262
4. Jim Kutkuhn	Piper Clipper	72	90	85	247
5. Tim MacDonald	Turbo-Porter	60	84	77	221
Dave Robelen	Piper Vagabond	57	53	49	159
Jack Moses	Piper Vagabond	57	54	45	156
George Lewis	Piper J5A	42	65	59	166
Dan Driscoll	Helio-Porter	50	37	35	122
Jim Miller	Piper Clipper	66	48	52	166
Jack Noll	Pilatus Porter	42	64	--	106
Paul Robelen	Piper Super Cub	21	--	--	21

Paul Robelen is a Junior.

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

Will the person who sent me the beautiful super-lite tissue please write or call; John Blair, 443 Henson Road, Warne, N.C. 28909. Phone; (704) 389-3777.

WORLD WAR TWO

Pilot	Plane
1. Gordon Roberts	Judy
2. Larry Sweat	P-51 Mustang
3. Jim Kutkuhn	FW TA-152
4. John Rood	Vultee Vengeance
5. Tom Hallman	Mig-3
Tim MacDonald	????
Tom Arnold	Dornier DO-335
Chris Starleaf	Yak-3
Dave Niedzielski	F4U Corsair
Mark Fineman	Ki-61
Jack McGillivray	Fairey Barracuda
Mike Zand	P-51 Mustang
Richard Miller	P-51 Mustang
Tom Nallen I	Hawker Hurricane
Paul Helman	Yak-9
John Houck	P-51A
Richard Zapf	P-40B
Gene Smith	Regianne 2005
John Stott	Mig-3
Jack Noll	Ki-61
Jim Miller	Fairey Barracuda
Lindsy Smith	Ki-61
Chuck Schobloher	ME-109
Tom Nallen II	B-P Defiant
Stew Meyers	Hawker Hurricane
George Lewis	FW TA-152
Dennis Norman	FW 190A
Charles Hill	Tony
David Franks	Fairey Fulmar
Bob Thompson	Vultee Vengeance
Paul Boyanowski	Ki-61
Jerry Paisley	Brewster Buffalo
Jack Kacian	Fiat G-55
John Felter	Caudron 714

BENDIX RACE

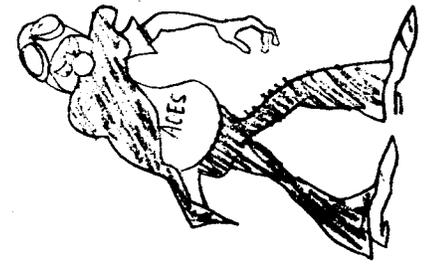
Pilot	Plane
1. Mike Nassise	Keith-Rider R-3
2. Richard Zapf	Laird Super Sol.
3. Dave Stott	Vance Flying Wing
4. John Houck	Wedell Williams 45
5. Dennis Norman	Mr. Mulligan
Tim MacDonald	Beech Staggerwing
Chris Starleaf	GeeBee R-2
Paul Helman	Laird Solution
Stew Meyers	Lockheed Vega

SHELL SPEED DASH

<u>Pilot</u>	<u>Plane</u>	<u>1st</u>	<u>2nd</u>	<u>Total</u>
1. Jack McGillivray	Cessna CR-3	91	120	211
2. Tom Hallman	Loose Special	66	120	186
3. Dave Livesay	Folkerts	71	113	184
4. Charlie Sauter	Keith-Ryder R-4	93	85	178
5. Jack Noll	Jackrabbitt	91	83	174
Bob Ramsey	Keith-Rider	20	--	20
Gene Smith	Jackrabbitt	25	--	25
Chris Starleaf	Keith-Rider	31	--	31
Paul Boyanowski	Cessna CR-3	88	--	88
Tom Nallen II	Chester Goon	39	54	93
Dave Stott	Tilbury Flash	35	34	69
Dave Stott	Fundy Flash	37	46	83
Gordon Roberts	Hosler Fury	24	47	71
Charlie Schobloher	Keith-Rider	31	30	61
Mark Fineman	Schoenfeldt	44	44	88
Gordon Roberts	Seversky	40	--	40
Tom Nallen I	Jackrabbitt	44	35	79
Jim Kutkuhn	Howard Mike	17	--	17
Ross Mayo	Cessna CR-3	26	31	57
Jim Miller	Hosler Fury	30	36	66
Mark Fineman	Cessna CR-3	52	--	52
John Houck	Chester Jeep	30	27	57
Larry Peavey	Chambermaid	55	22	77
Dave Stott	Loose Special	33	40	73
Richard Zapf	Firecracker	33	46	79
Richard Zapf	Laird Super Sol.	47	26	73
Tom Hallman	Mr. Smoothie	43	44	77
Mike Nassise	Cessna CR-3	30	49	79
Mike Zand	Suzy	23	22	45
Stu Meyers	Seversky	34	43	77
Paul Boyanowski	Chambermaid	23	30	53
Stu Meyers	Chester Jeep	22	--	22
Don Sruil	Keith-Rider R-5	52	120	172
Chris Starleaf	Cessna CR-2	51	34	85
Jerry Markson	Mr. Smoothie	56	29	85
Paul Helman	Laird Super Sol.	27	--	27

THOMPSON RACE

<u>Pilot</u>	<u>Plane</u>
1. Jack McGillivray	Cessna CR-3
2. Tom Hallman	Loose Special
3. Stu Meyers	Seversky
4. Dave Stott	Loose Special
5. Mark Fineman	Cessna CR-3
Paul Boyanowski	Cessna CR-3
Chris Starleaf	Cessna CR-2
Mike Nassise	Cessna CR-3
Richard Zapf	Super Solution
Ross Mayo	Cessna CR-3



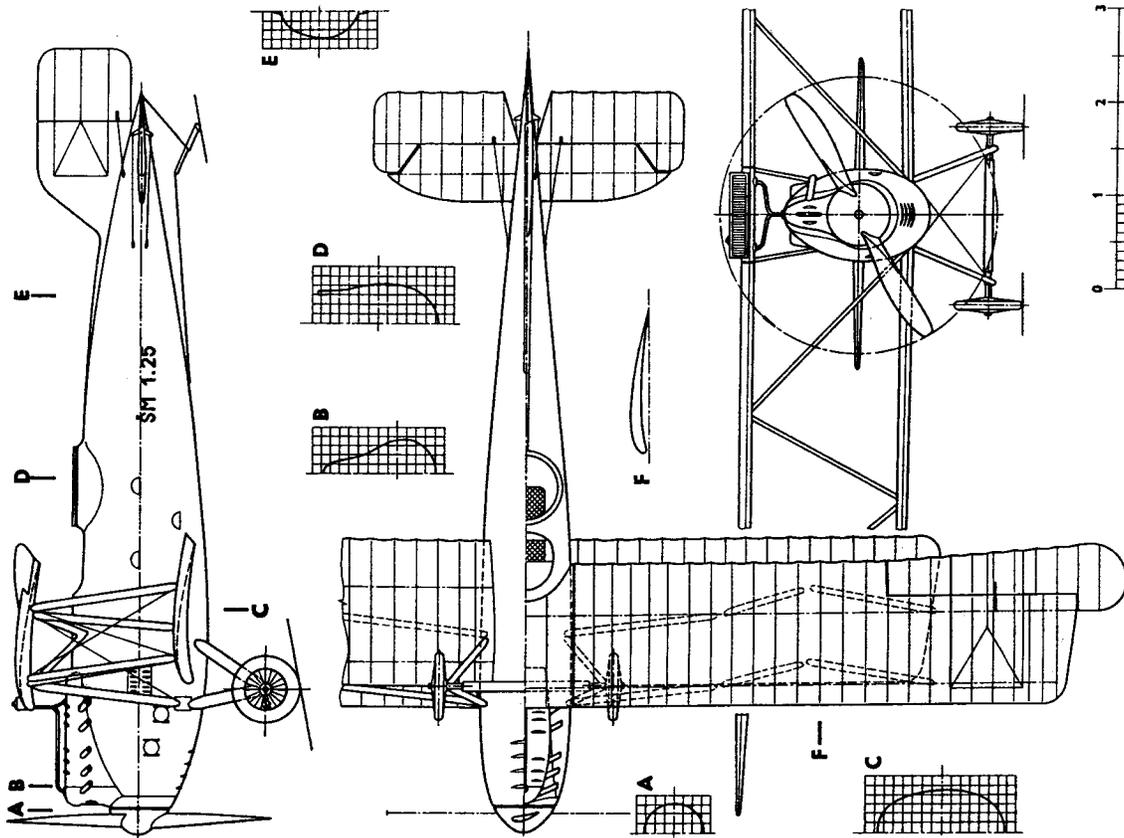
FAC PEANUT SCALE

<u>Pilot</u>	<u>Plane</u>	<u>Scale Bonus</u>	<u>Flt.</u>	<u>Total</u>
1. Tom Hallman	Mart. Buzzard	72.5	82.5	155
2. Chris Starleaf	Kawasaki	66	80.75	146.75
3. Jim Miller	Lemberger	67	76.5	143.5
4. Jack Noll	Floyd Bean	59	79.5	138.5
5. Dave Livesay	Floyd Bean	57.5	74.5	132
Paul Helman	SE-5	63	34	97
Gene Smith	F7-F Tigercat	79	41	120
Del Balunek	Waco UKC	53.5	73.5	127
Mike Iserman	Andreason	64.5	64.5	129
Pete Azure	Grain Kitten	65.5	24	89.5
Gordon Roberts	Waco SRE	55.5	71	126.5
Paul Stott	Farman	60	32	92
Ross Mayo	Farman Moustique	55	41	96
Stu Weckerly	Waco E Seaplane	61.5	60	121.5
Mike Zand	Bristol Scout	69	30	99
Ross Mayo	Dayton-Wright	55	76	131
Mike Zand	Farman Moustique	55	27	82
Bob Marchese	Pietenpol	45	24	69
Ted Dock	Dayton-Wright	51	62	113
Paul Helman	Floyd Bean	52	49	101
Jack Kacian	Saab Draken	56.5	44	100.5
Jack Kacian	Dyke Delta	59	39	98
Sam Burke	Folkerts	59.5	66	125.5
Bob Clemens	Waterman Gosling	57	42	99
Dave Rees	Colibri	66.5	58	124.5
Paul Boyanowski	Heinkel 112	55.5	54	109.5
Jack Noll	Martin MO-1	53	22	75
Richard Zapf	F-86D	57.5	60	117.5
Tom Hallman	Mr. Smoothie	55	82.5	137.5

HI-WING PEANUT

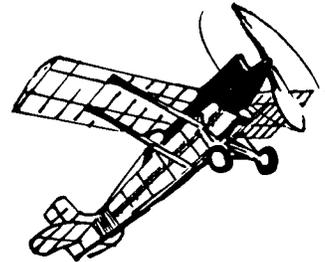
<u>Pilot</u>	<u>Plane</u>	<u>Scale Bonus</u>	<u>Flt.</u>	<u>Total</u>
1. Gene Smith	Piper Colt	53	82.5	135.5
2. Tim MacDonald	T-Tail Cougar	45	79	124
3. Paul Boyanowski	Cessna 190	41.5	81.5	123
4. Dave Rees	Cougar	52.5	69	121.5
5. Gregg Gallo	Cougar	50	70.5	120.5
Dan Driscoll	Cougar	43	53	96
Ted Dock	Bede BD-4	51.5	46	97.5
Bob Isaacks	Buttercup			DNF
Mark Barlow	Cougar	49	49	98
Bert Phillips	Monocoupe	41.5	44	85.5
Jim Miller	Fike	41	78.75	119.75
Mike Zand	Tailwind	41	26	67
Mike Zand	Lacey M-10	51	46	97
Mike Nassise	Ford 2-AT	43.5	31	74.5
Richard Zapf	Pottier	49	69	118
Dave Robelen	Piper Vagabond	53.5	45	98.5
Jack Noll	Fike	50	22	72
Bob Thompson	Rearwin Speedster	40.5	21	61.5

Letov S-1

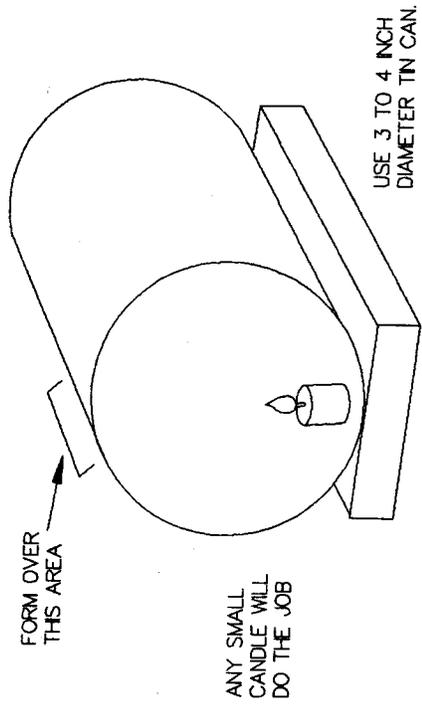


SUBMITTED BY RICK DORT

WANTED: SCALE AIRCRAFT PLANS OF ALL TYPES AND SIZES. PLEASE SEND YOUR LISTS, AND I WILL SEND MY LISTS. I HAVE ABOUT 25 PAGES OF PLANS OF ALL TYPES AND SIZES. **WANTED:** CO2 ENGINES NIB. I HAVE MANY PLANS FOR SALE AND TRADE AND TYPES AND SIZES UP TO 1/4 SCALE SIZE. CALL OR WRITE: [1-402-332-4303] MR. DUANE B. BREHMER 14720 SOU. 234th ST. GREINA, NEBR. 68028-6416 U.S.A.



BALSA FORMING STEAM GENERATOR

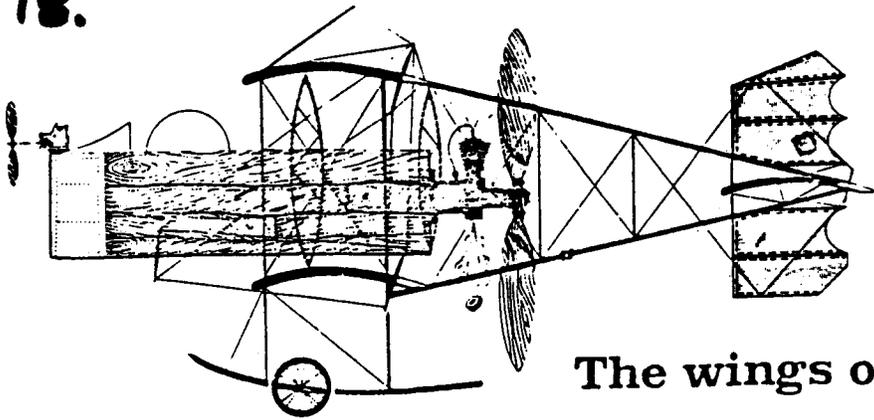


IF YOU'VE EVER NEEDED A CURVED PIECE OF 1/16 SQUARE BALSA FOR THAT SWEEPING LOWER FUSELAGE LONGERON HERE'S THE ANSWER. THIS STEAM-FORMING MACHINE WILL MAKE THE BEND QUICKLY, EASILY AND PERMANENTLY. THE WET BALSAL STRIP (SALIVA WORKS WELL) OR THIN SHEET IS GENTLY WORKED OVER THE UPPER SURFACE OF THE HOT CAN AS STEAM DOES THE TRICK.

TOM NALLEN II DUG THIS HANDY BALSA FORMING GADGET OUT OF AN AEROMODELLER ARTICLE BY THE BRITISH SCALE MASTER, J. D. "DOUG" McHARD. TOM'S VERSION IS SIMPLY A TIN CAN MOUNTED TO A HARDWOOD BASE WITH A COUPLE OF 4/40 SCREWS. A SMALL CANDLE IS MOUNTED JUST INSIDE ITS OPEN END IN A PUDDLE OF MELTED WAX DRIPPINGS. THE UPPER CURVED SURFACE OF THE CAN COMES TO OPERATING TEMPERATURE VERY QUICKLY.

MODERN MILITARY

Pilot	Plane
1. Tom Arnold	Turbo Mustang
2. Richard Zapf	Ryan Fireball
3. Jim Miller	Supermarine 322
4. Jack Noll	T-28 Trojan
5. Chris Starleaf	T-28 Trojan
Mike Nassise	Skyraider AD-1
Tom Nallen I	Skyraider AD-1
David Franks	Fiat G-59
David Livesay	Vultee
John Houck	Xf2L-1
Gene Smith	Grumman F7F
Tom Hallman	MIG-15
Jack Kacian	SAAB 210 Draken
Dennis Norman	Hawker Hunter



The wings of man

From: The National Board for Aircraft Improvement

To: All aircraft manufacturers, home builders, research facilities and military squadrons.

Subject: More effective military and civilian aircraft construction and utilization.

The following directives are to be implemented immediately to reduce cost, improve efficiency and improve front line readiness.

- 1) All funding and research will cease on the bullet proof balloon project.
- 2) Designers shall no longer include the half-moon cutout on the doors of rest room facilities. Recent improvements in literacy have eliminated the need for this historic requirement.
- 3) Concrete will not be used for any airframe despite its availability.
- 4) Catapult launches combined with air starts of the new Gumbo Red Eye engines have resulted in a number of crashes. Starting the engines first should improve the performance of this engine.
- 5) Muzzle loading weapons will no longer be carried by any first line National aircraft.
- 6) Wagers shall not be conducted between designers within the hearing of the test pilots.
- 7) Designers should attempt to use more modern motifs for civilian aircraft. The Russo Pterodactyl has met with less than enthusiastic civilian acceptance, although it is felt that the vertically moving wing could be partially the reason for this.
- 8) All pilots are encouraged to raise the wheels only after the aircraft is airborne.
- 9) All personnel shall direct efforts towards developing a cockpit heating scheme that will eliminate the need for venting gases into the cockpit areas. The present system apparently causes the instrument faces to be covered with an oil film and renders them difficult to read.
- 10) There is an ill-chosen group of words in the latest Slopia Stallion manual. Reference is made to "Wheel UP" landings. This means that the landing should be attempted with the aircraft inverted.
- 11) Silk span or model aircraft tissue will no longer be acceptable as covering for military aircraft.
- 12) Since radio communication is now common, there will no longer be any training conducted using flags for intra-squadron communication. This is to extend to all flight schools and especially to students flying the T-22 Buzzard trainer since it requires that the cockpit be open for the flags to be used.
- 13) The use of sand bags in engine test facilities is encouraged. Note that this means bags filled with sand, not straw. While straw does make the bags easier to handle, the Bork Test Facility has found them less than effective in stopping flying objects.
- 14) Parachutes should be packed before leaving the ground. Attempting to do it in the air and waiting until the last minute is asking for trouble.

From; Fran Ptaskiewicz

P-26 Peashooter

Pilot

1. Phil Cox
2. Dennis Osborne
3. Dennis Norman
4. Richard Zapf
5. Jim Kutkuhn

Aerol Trophy Race

Pilot

1. Tom Nallen I

GREVE RACE

Pilot

1. Jack Noll
2. Mark Fineman
3. Charlie Sauter
4. Dave Livesay
5. Richard Zapf

Dave Stott
Tom Nallen II
Tom Hallman
Jerry Markson

Plane

Jackrabbit
Firecracker
Keith-Rider R-4
Folkerts
Firecracker

Fundy Flash
Chester Goon
Mr. Smoothie
Mr. Smoothie

WORLD WAR ONE

Pilot

1. Dave Stott
2. Pete Azure
3. Chris Starleaf
4. Dave Rees
5. Scott Paisley

Gregg Gallo
Jack McGillivray
Frank Rowsome
Dan Driscoll
Richard Zapf
Stew Meyers
Dennis Norman
Gordon Roberts
John Houck
Roy Courtney
Jim Miller
Jim Kutkuhn
Mike Zand
Stu Weckerly
Dave Niedzielski
Don Srull

Plane

Big Ack
Nuieport 17
Fokker D-7
Marinsyde
Fokker D-7
Fokker D-7
SE-5
SE-5a
Bristol Scout
Fokker D-7
Fokker D-7
SE-5
Martinsyde
Fokker D-6
DH-6
Grain PV-7
SE-5a
Fokker D-7
DH-6
Fokker D-7
Fokker D-7

GOLDEN AGE MILITARY

Pilot

1. Paul Boyanowski
2. Richard Zapf
3. Don Srull
4. Paul Stott
5. Stew Meyers

Chris Starleaf
John Houck
Bob Thompson
Terry Pittman
Tim MacDonald

Plane

Hawker Fury
PZL P-1
Mureaux
Spartan
Vultee V-11

Ikarus IK-2
Sperry Messenger
Waco XJW
Aero A-18
Curtiss Pursuit

High Gumbandery

Hank Struck's solderless free wheeler

A Tube in a Toob

At the In-between-NATS FAC meet in Geneseo on Sep. 2 & 3 this year, Paul Boyanowski and I shared a room and much good company each evening after a hot day's flying. It was the hottest two days I can remember at this great flying site.

This tends to make one cautious and cut back on the exercise of long or repeated chases after models. I promised Shirli I wouldn't fly in the mass launch events if the temperature was too high. For this same reason she asked that I leave the mass launch models at home. I left the models home and true to my promise, I did not fly mass launch events.

So now, back to the evenings in the dormitory. Others more observant than I will relate in detail what transpired on the flying field. What I have to tell you about is a very clever prop free wheeler held open and publicly in secret for almost sixty years.

With the advent of "braiding" rubber motors to maintain the tension of long motors that would otherwise shift back and forth in the model and disrupt the center of Gravity (CG), it was found necessary to devise a positive "free wheeling" (free propping) prop assembly. The common "dog" spiral catch on plastic props that allows the prop to free wheel after the turns in the rubber motor are expended, will not work if there is tension on the prop shaft after the motor runs down. The right angle bend "driver" at the end of the prop shaft will not climb up the spiral because of the pull on the shaft.

The spiral catch found on today's plastic props is a derivative of several methods of accomplishing this same task in early years. Back then it was a lock washer, a wire spiral, filed tubing, or various types of spring release mechanisms to allow the prop to release from the prop shaft driver and "float", coast, or "free wheel" when the power stored in the rubber motor was expended.

Well, back in 1938 or there about, a young man named Henry Struck was pre-tensioning his rubber motors, and I suppose like so many of us didn't like to solder. (Not one of my favorite things. It's messy, stinks, and I don't do a very good job at it). So this clever fellow devised a free floating prop set-up that needed no soldering. He and the folks that knew him have been using this method for years, openly showing it to anyone who asked about it. Obviously we should be asking more. It's one of those things that Dave assumed people knew about but were choosing to use their own type of free wheelers.

When the stored energy of the rubber motor is expended and the prop is coasting or "free wheeling", the wire in the "Z" bar rolls back out of the way when contacted by the driver and will not interfere with the "free wheeling" motion of the prop.

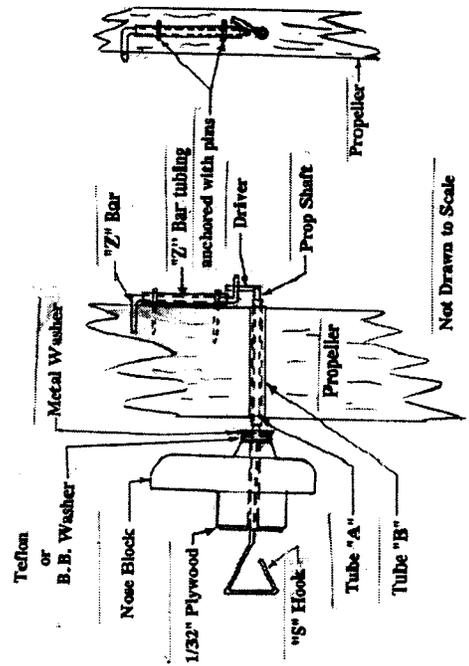
With the "Z" bar installed on the front of the prop, and the larger tubing, (Tubing "B"), glued in the hole in the center of the prop, the prop is slipped over tubing "A", and the 90 degree bend in the prop shaft is made to form the driver. On a balsa prop, a ball bearing can be inserted into the blade opposite the "Z" bar assembly for balance. Installation of a "Z" bar on a plastic prop requires drilling four holes in the blade that is to hold the "Z" bar tubing. This can be done with a pin vise using a straight pin with the head snipped off. Use the cut off end as a drill bit. Drill the holes where each end of the tubing will lay on the blade. Secure the tubing with common pins, with head removed bent in a "U" placed around the tubing through the drilled holes. Twist the pins on the rear face of the blade cutting off excess wire. Epoxy or thick CA is applied over the tubing. Score the plastic around where the tubing will be fastened. Also, installation of the larger prop tube (Tube "B") requires some care as there is just enough plastic at this part of a plastic prop to accommodate the tube without weakening it.

For this solderless fluxless way to provide a truly runny nose on our models, our thanks to Henry Struck, a man of ingenuity, Dave Stott, with his sharing nature, Jack Moses who maintained his cool (beer), and Paul Boyanowski, the effervescent personality who provided the draw for such good company.

Next year I spin will be a topical twist on braiding rubber motors.

Rottensox

1930's "No Solder" free Wheeler by Henry Struck



Not Drawn to Scale

EASY TIP FOR THE TRANSPARENTLY TROUBLED:



BUILD COCKPIT WITH CANOPY OPEN. AVOID DIFFICULT FITS BETWEEN CANOPY, FUSELAGE, AND WINDSHIELD.

Paul McIlrath

VOLARÉ PRODUCTS

Golden Age of Air Racing (E.A.A. book -'91) Index

Index of all photos in this book in two parts: sorted by Manufacturer and sorted by Page Number. Over 830 entries in each part. Also includes a list of 3-views. A must for browsing and researching the book.....only \$5 post paid

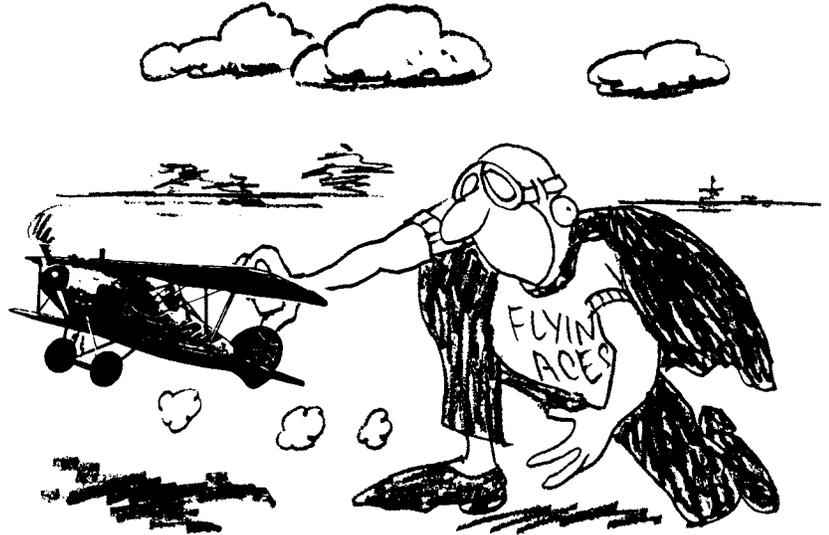
Propeller Design Software for Windows

Volare PropSoft for Windows...an easy-to-use program that generates measurements for carved props, formed props and stacked props. Includes two extras: Cone for paper cones and Strut for true length. Comes with 20 page manual.....only \$20 post paid

PLANS...FAC CONTEST PROVEN...PLANS

10 No-Cals 9 Peanuts 4 FAC Scale
7 Racers 7 WWII 4 WWI

Catalog for SASE
7686 B Drive South
Battle Creek, MI 49017-9557



Bob Rogers

FLYING ACES OUTDOOR CHAMPS

Aug. 31-Sept. 1, 1996

Time; 8:30 am until 4:00 pm. AMA National Flying Site, Muncie, Ind.

REGISTRATION FORM

Please print

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

Entry fee \$25.00 flies all events. Please send before Aug. 15th.

Send to; Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

Awards through third place. All contestants must be members of the AMA or MAAC.

Event schedule

Saturday Aug. 31

Sunday Sept. 1

- World War Two *
- Thompson Race *
- FAC Scale
- Golden Age Military *
- Dime Scale
- Hi-Wing Peanut Scale
- FAC Old-Time Rubber
- Embryo Endurance
- Modern Civil

- World War One *
- Greve Race *
- FAC Power Scale
- Jumbo Scale
- FAC Peanut Scale
- Golden Age Scale
- FAC Old-Time Stick
- No-Cal Scale
- Modern Military *

* Mass Launch events.

Modern Civil is for production aircraft only.

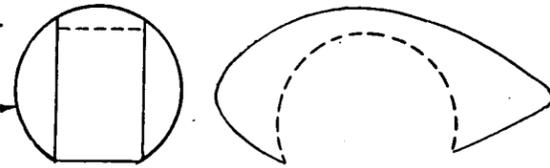
Dime Scale models can only fly in that event.

Golden Age Military must have gear down.

Both Old-Time Rubber events must have all flights turned in by 2:00 pm each day. This gives us ample time for fly-offs.

Be sure to bring your proof of scale for all events!

POSITION OF
PANT
COVER

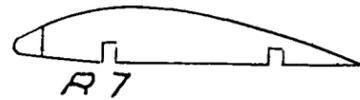
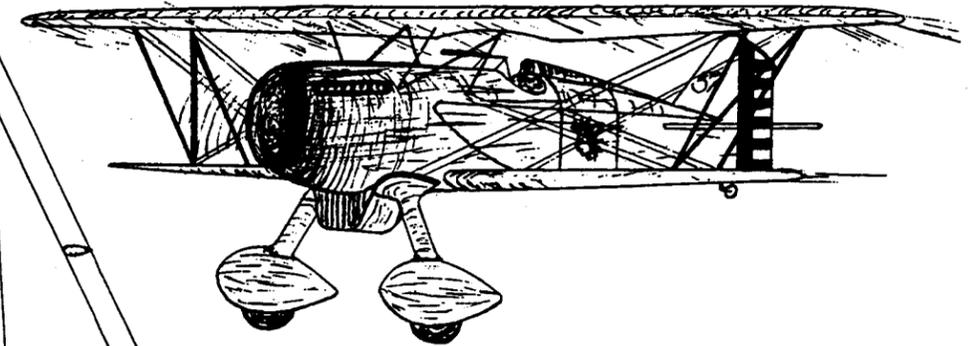


PANT COVER $\frac{1}{4}$ " THICK
CORE $\frac{1}{2}$ " THICK

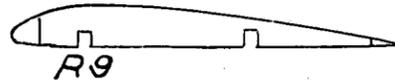
CURTISS HAWK P-6E

RAINEY MODEL SUPPLY COMPANY

COLOR SCHEME
BODY - OLIVE DRAB
WING AND TAIL - YELLOW



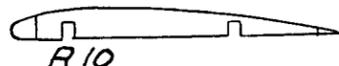
R7



R9



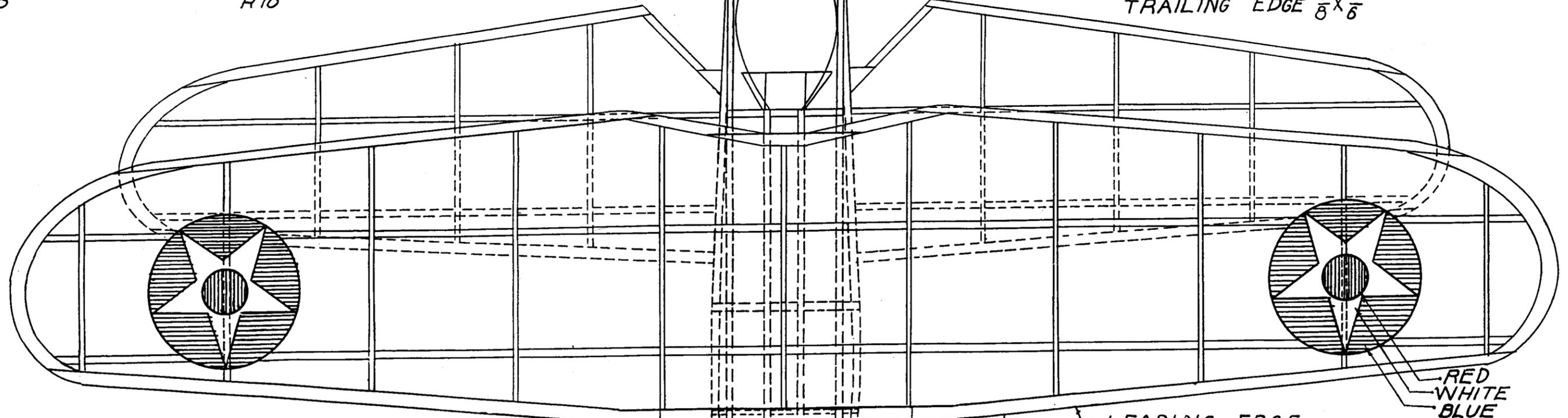
R8



R10

WING STRUT

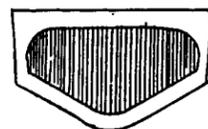
TRAILING EDGE $\frac{1}{8} \times \frac{1}{8}$



RED
WHITE
BLUE

LEADING EDGE
 $\frac{1}{8}$ " SQ.

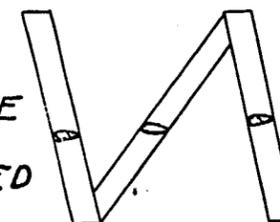
FRONT VIEW



RADIATOR

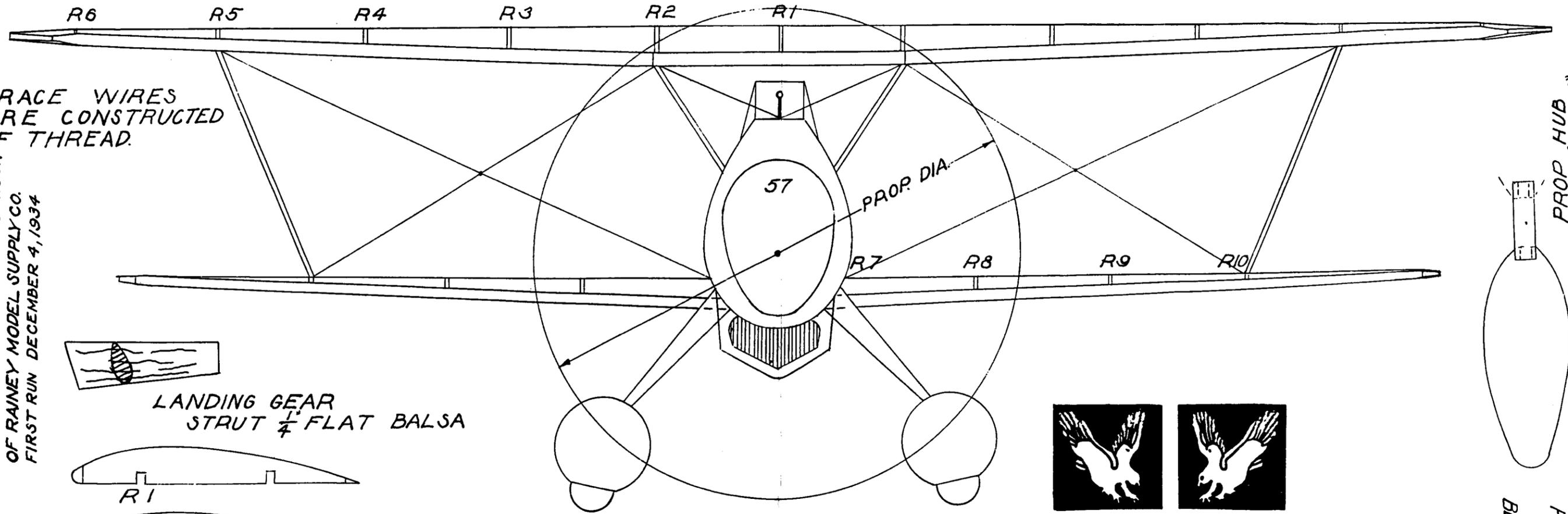
IF MODEL STALLS
CEMENT A SMALL
WEIGHT INSIDE
OF NOSE.
IF MODEL DIVES
WARP ELEVATORS UP.

2 CABANE
STRUTS
NEEDED

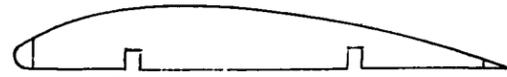


DESIGNED BY STEWART SLEETH
 DRAW'N BY LEONARD ELGENSON
 OF RAINEY MODEL SUPPLY CO.
 FIRST RUN DECEMBER 4, 1934

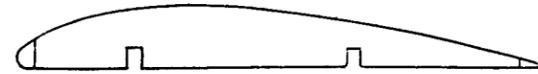
BRACE WIRES
 ARE CONSTRUCTED
 OF THREAD.



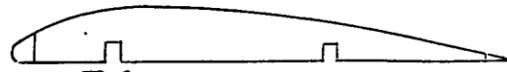
LANDING GEAR
 STRUT $\frac{1}{4}$ " FLAT BALSA



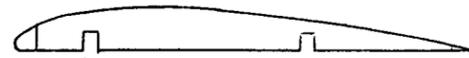
R1



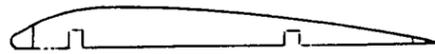
R2



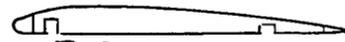
R3



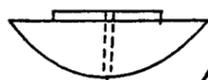
R4



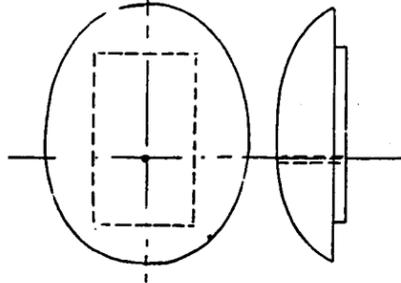
R5



R6

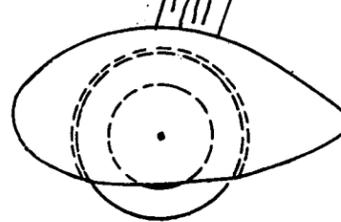


RIBS $\frac{1}{8}$ " THICK
 NOSE BLOCK



F3C

F2C



F3B

F2B

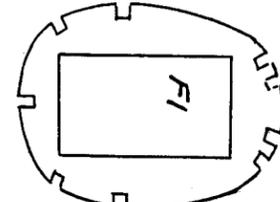
F6

F5

F4

F3A

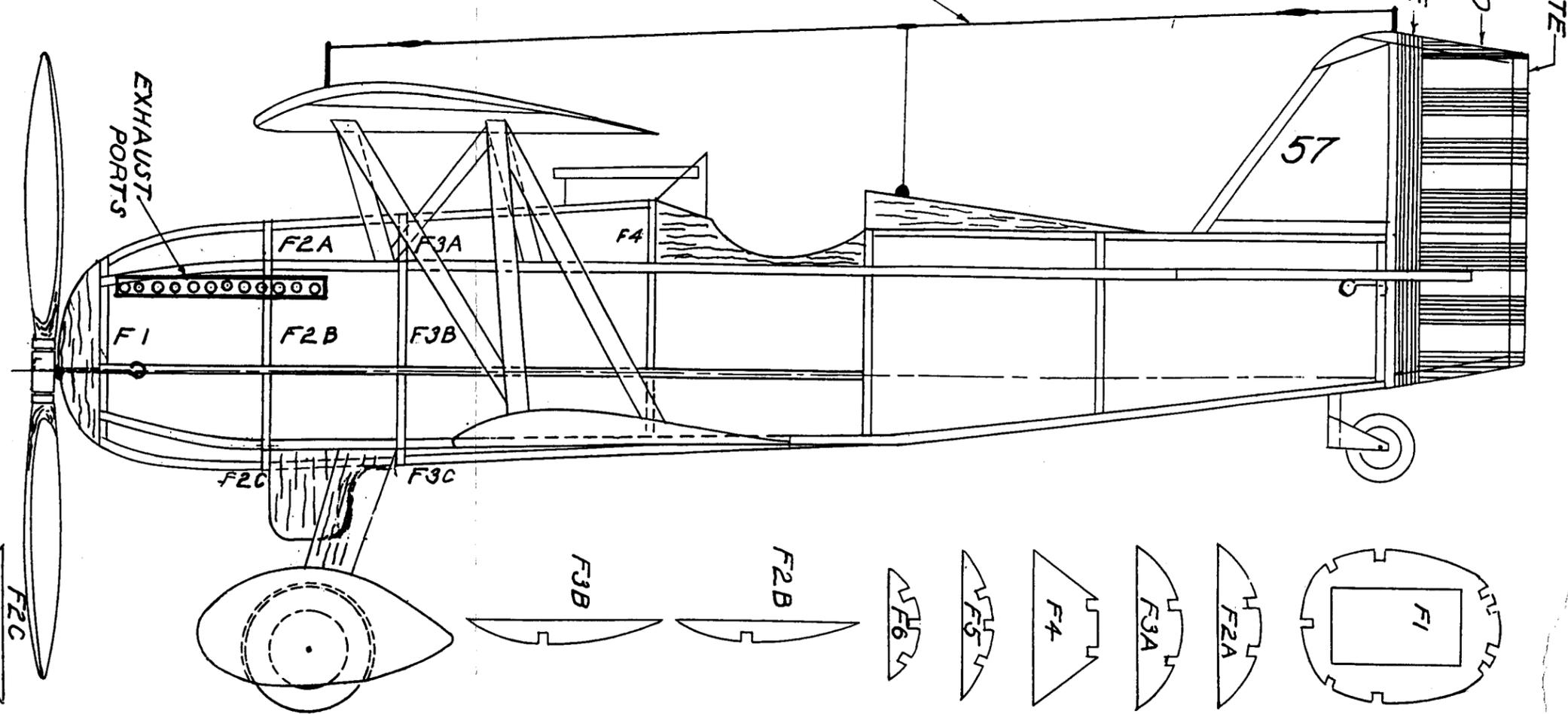
F2A



F1



RADIO ANTENNA



EXHAUST
 PORTS

F2A

F3A

F4

F1

F2B

F3B

F2C

F3C

57

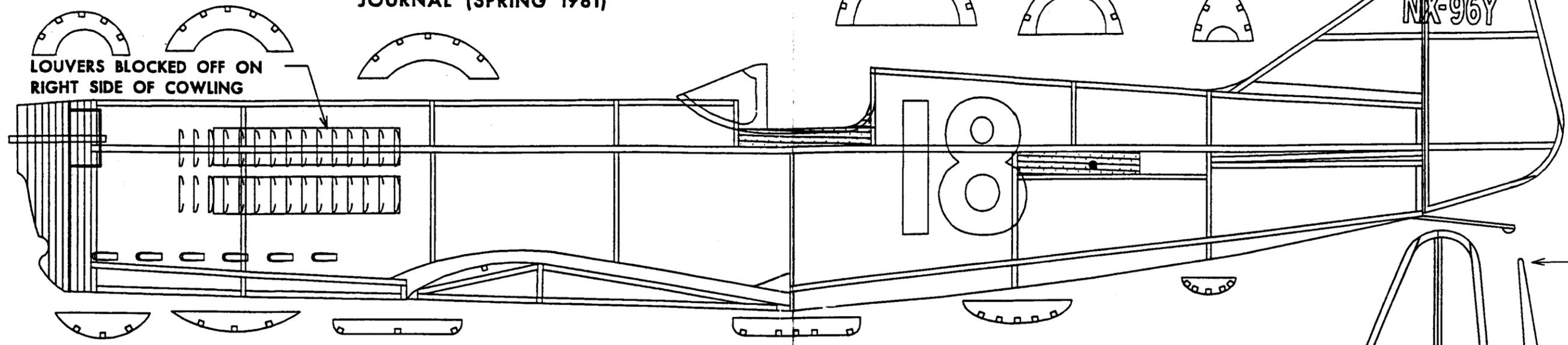
BLUE

RED

WHITE

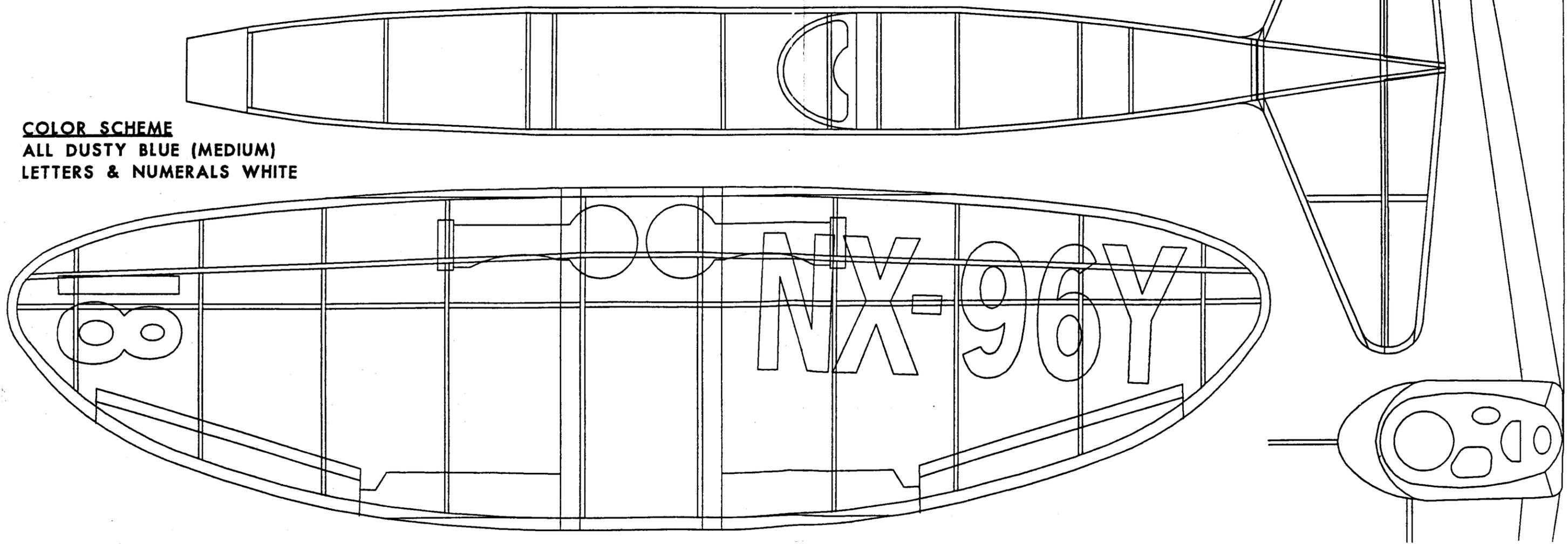
PROP. HUB $\frac{3}{4}$ " SQ. X $\frac{3}{4}$ "

SCALE REFERENCES:
AMERICAN AVIATION HISTORICAL
JOURNAL (SPRING 1981)

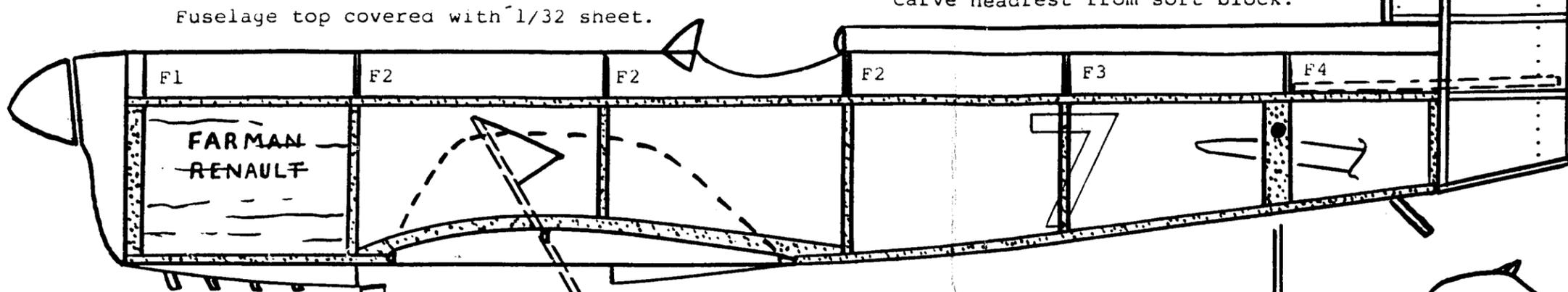


PEANUT SCALE
KEITH RIDER R-6 1939 NATIONAL AIR RACER
Drawn by: David Livesay (9-10-95)

COLOR SCHEME
ALL DUSTY BLUE (MEDIUM)
LETTERS & NUMERALS WHITE



All longerons and spacers from 1/16 square strip.



Fuselage top covered with 1/32 sheet.

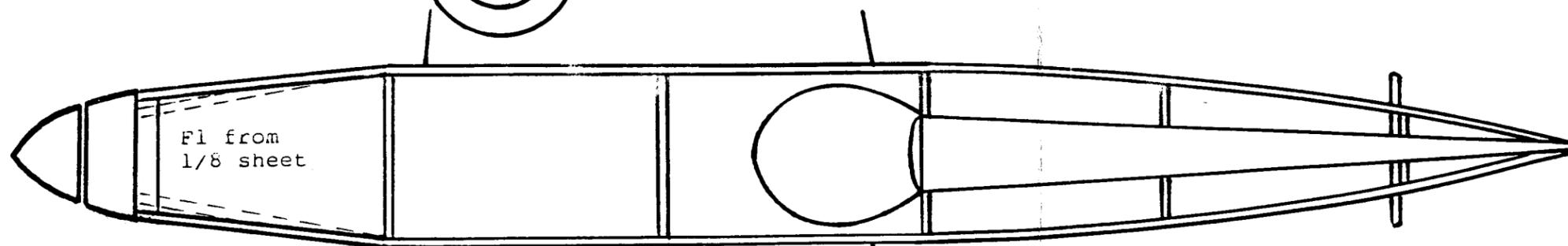
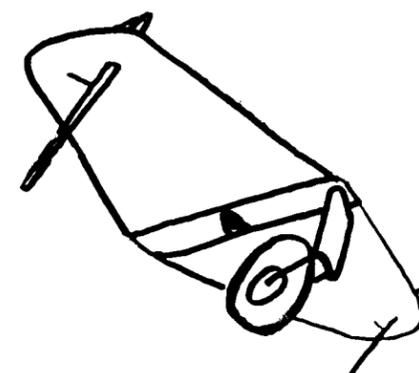
Carve headrest from soft block.

Scale tail surfaces shown as dotted lines - try them at you're own risk! Horizontal tail should be set a 2-3 degrees negative incidence.

Exhaust pipes from 1/16 O.D. aluminium tube.

Colour: French Racing Blue with white letters and numbers.
References: l'Aerophile (June 1933).

Note arrangement of single u/c wheel and wing tip skids.

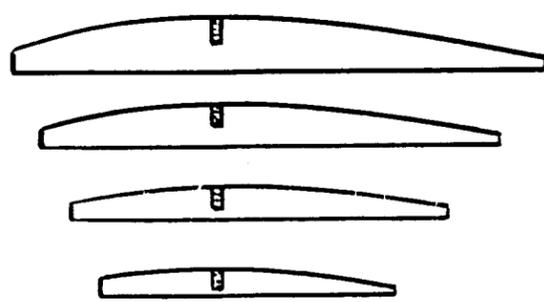


F1 from 1/8 sheet

FARMAN F.380

A 1930's French Racing plane drawn as a 'Peanut Scale' rubber-powered flying model by Tim Hayward-Brown.

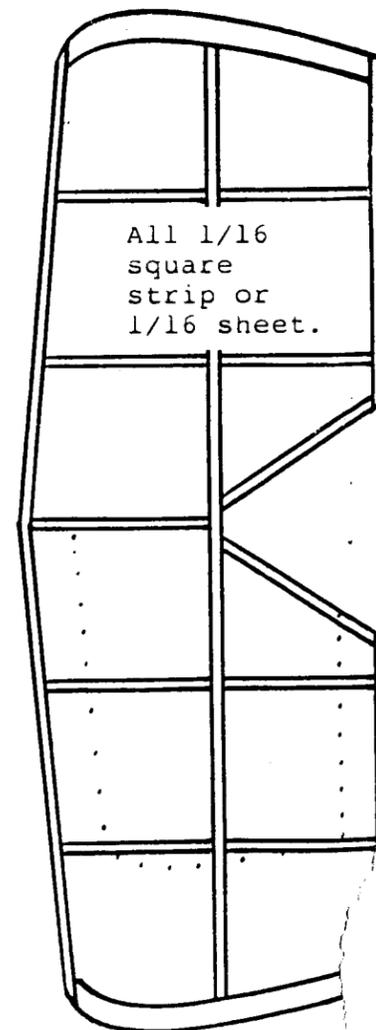
All 1/16 square strip or 1/16 sheet.

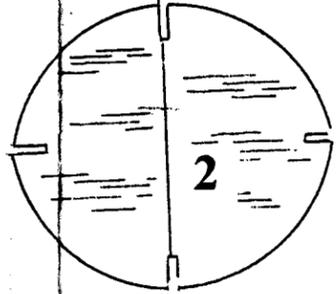
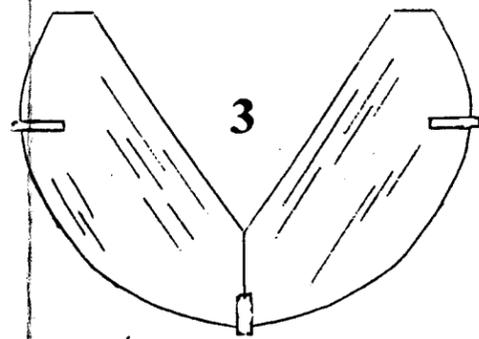
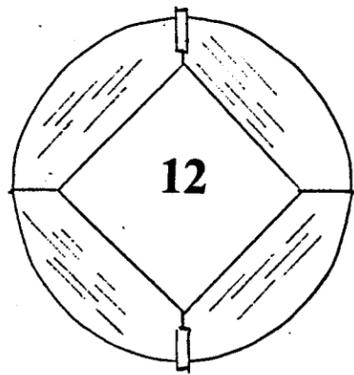
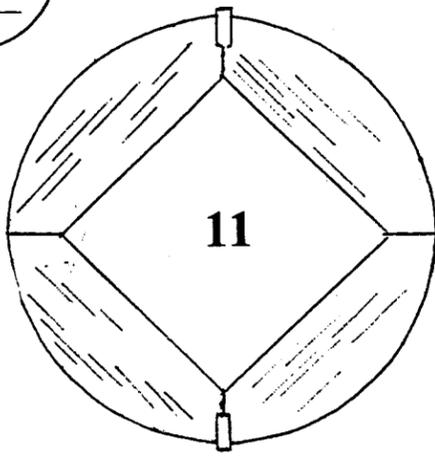
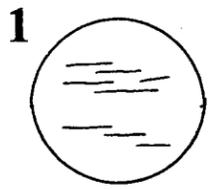
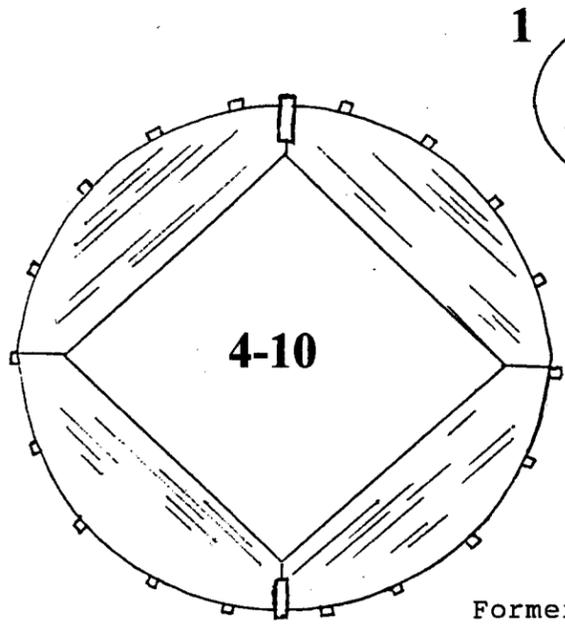


Wing tips from light 1/16 sheet.

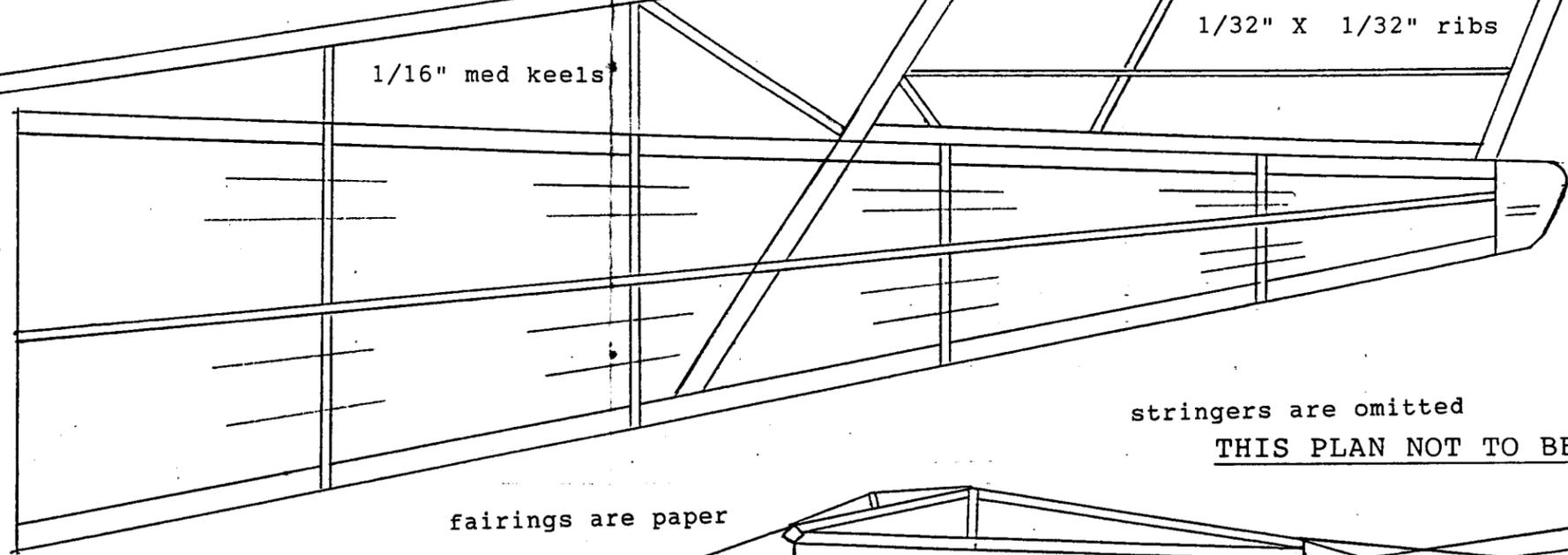
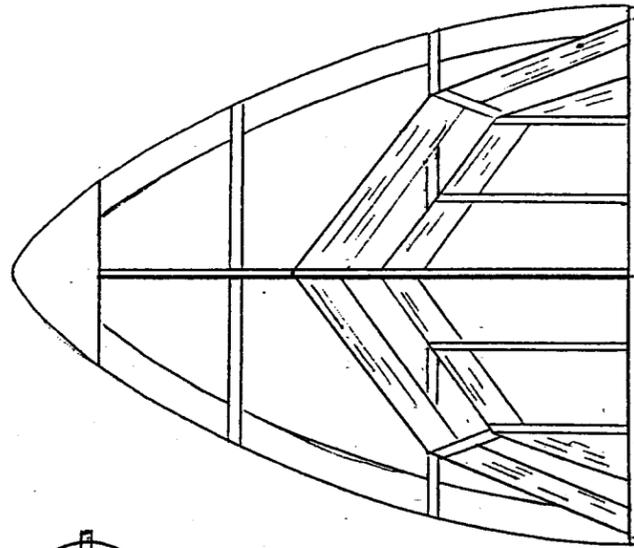
LE, IE and spar all 1/8 by 1/16 strip.

Model should balance at about 1 inch behind





Formers are med-soft
1/16" lighting holes
optional



1/16" med keels

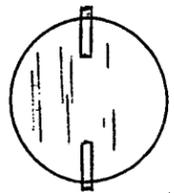
1/32" X 1/32" ribs

1/16" soft rudder cap

1/16" soft rudder spar

stringers are omitted

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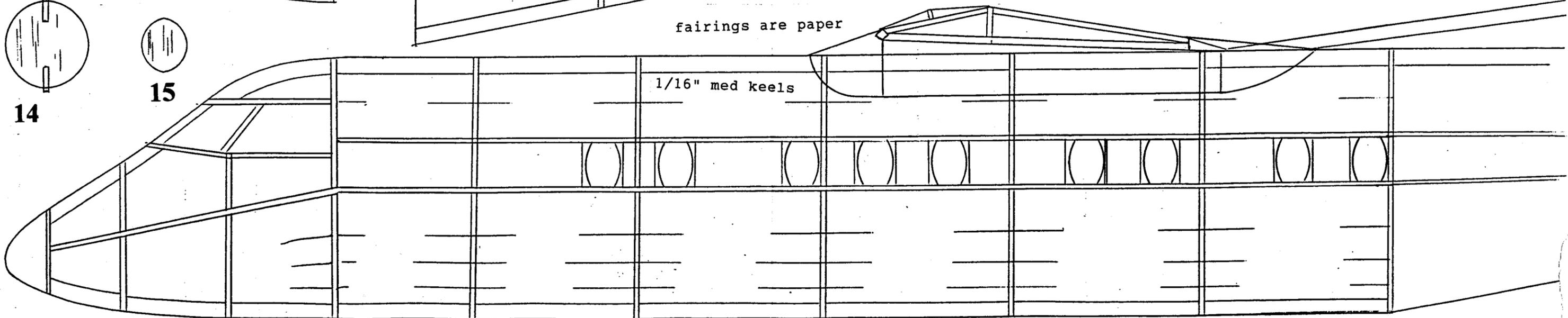


14

15

fairings are paper

1/16" med keels



Nose soft balsa

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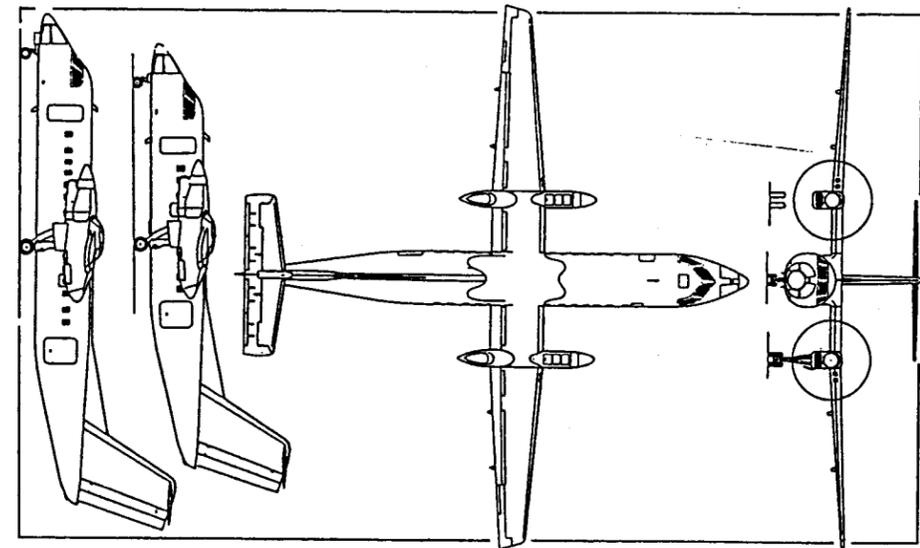
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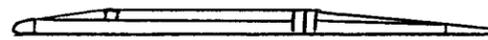
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Stab root cutaway

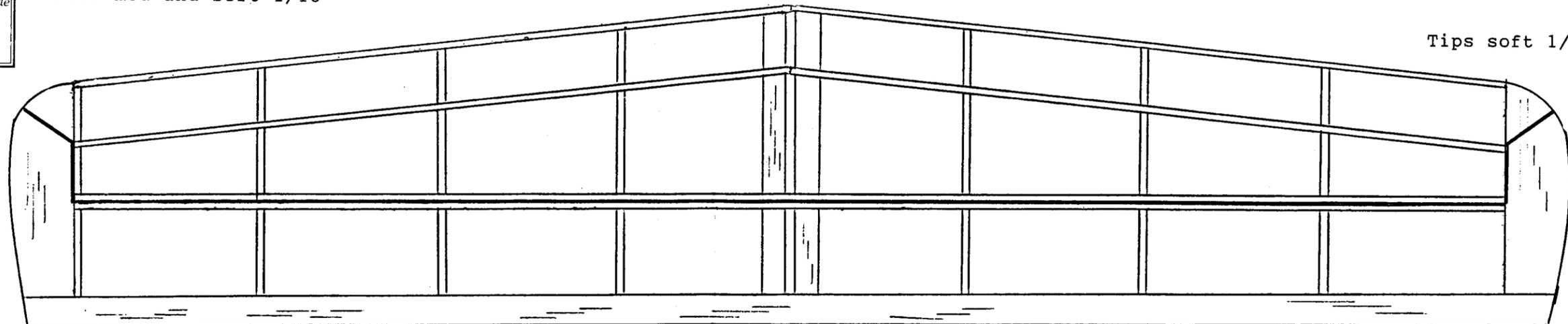


stab med and soft 1/16"

Stab must be hinged due to
the T-tail configuration and
the lack of any external braces

DeHavilland Dash 8
by Chris Starleaf

Tips soft 1/8"



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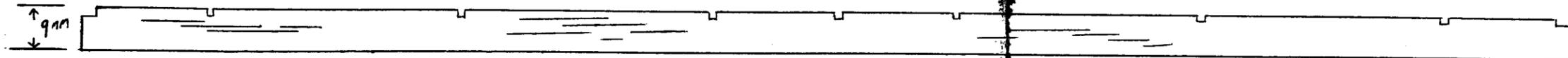
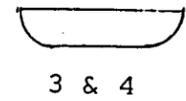
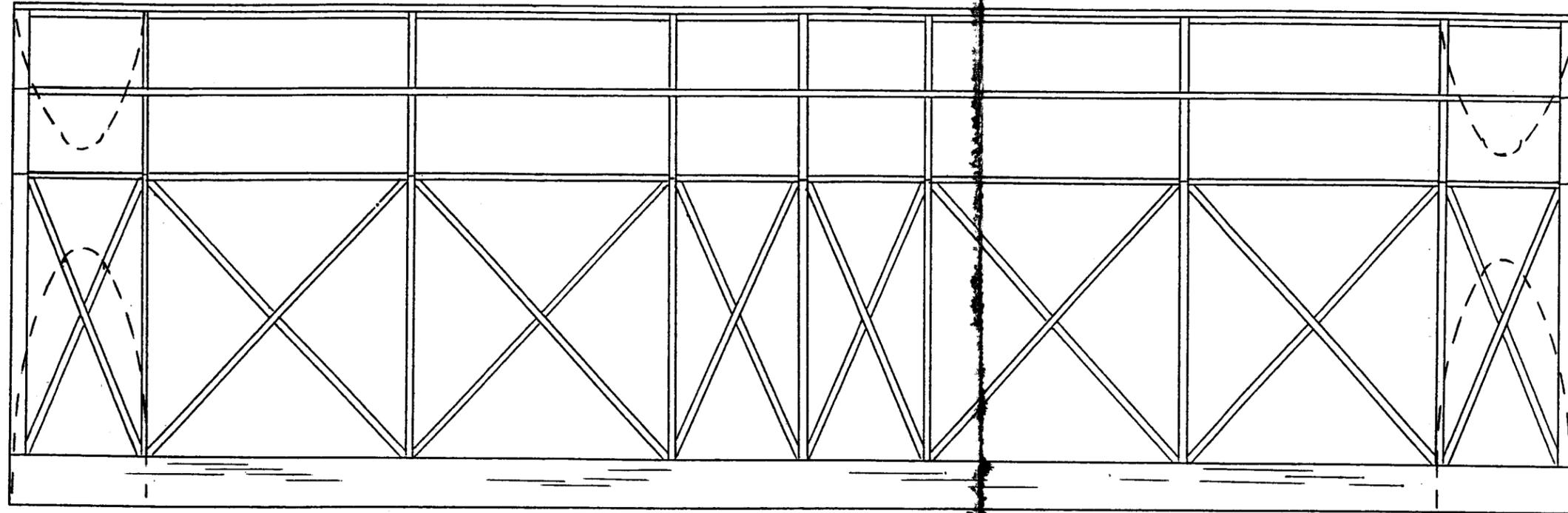
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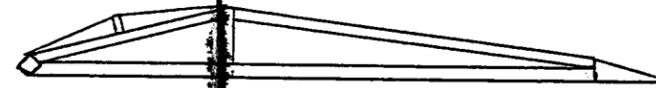
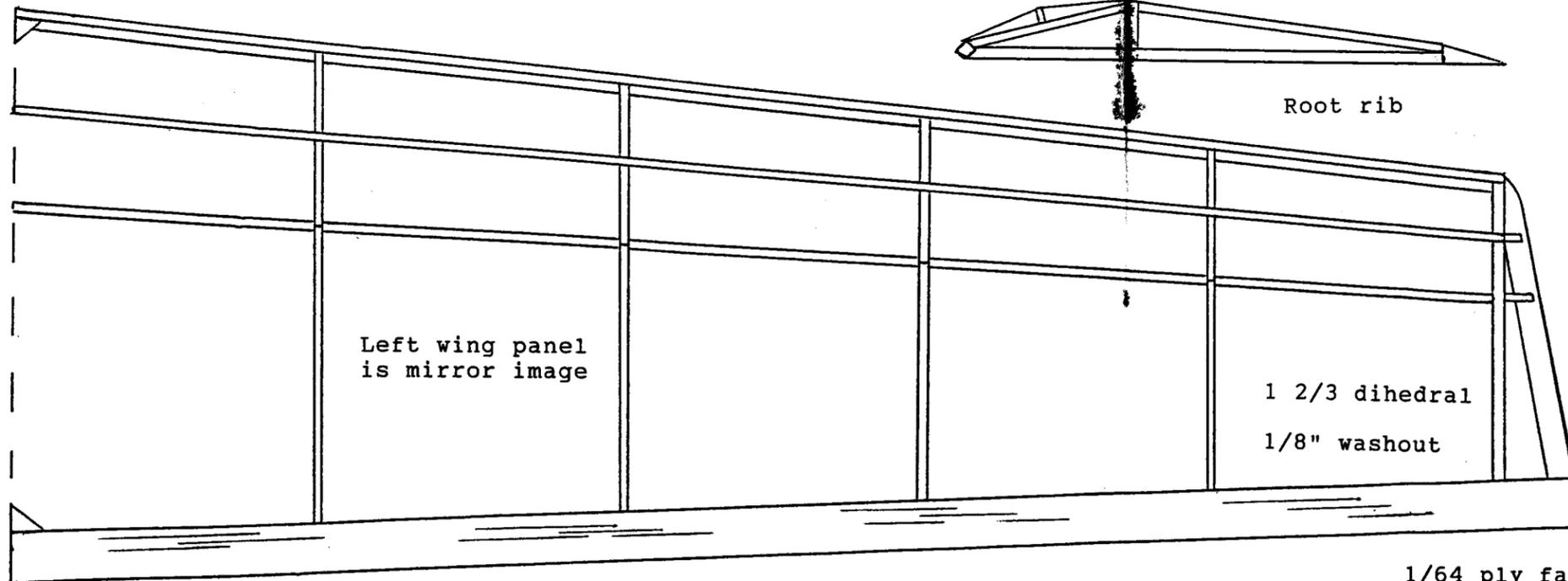
Box 134, Robesonia, PA 19551

Wing center section

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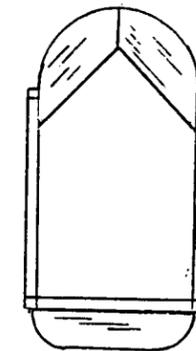
Full size spar 1/16 med.



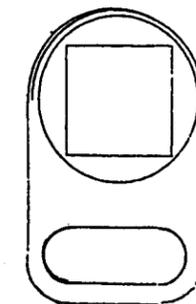
Root rib

Left wing panel is mirror image

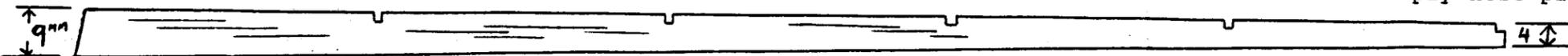
1 2/3 dihedral
1/8" washout



station 2



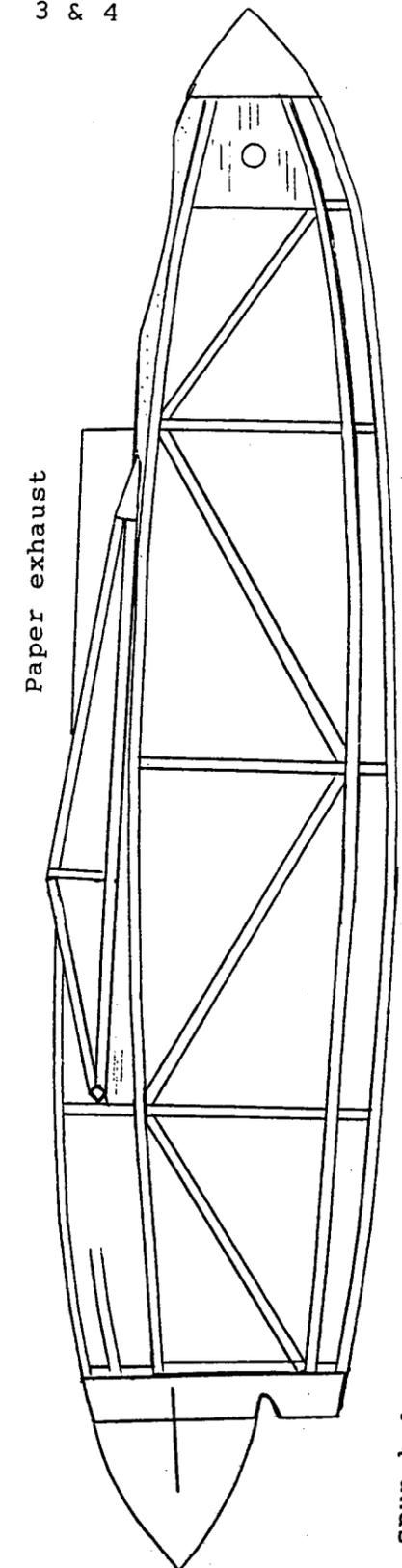
station 1



Full size spar

1/64 ply face disc
same dia for 1/32
ply nose plug

4



Left & Right Nacelles are identical

spun balsa spinner

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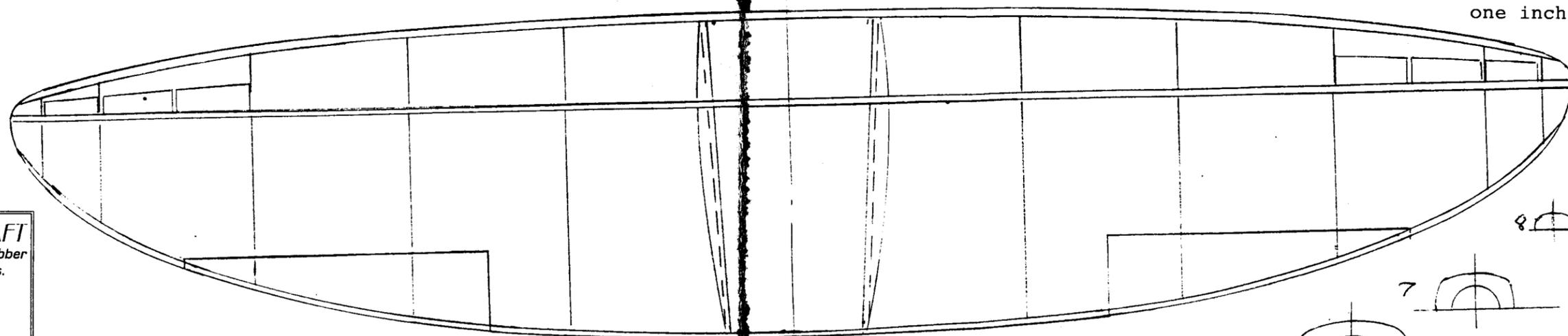
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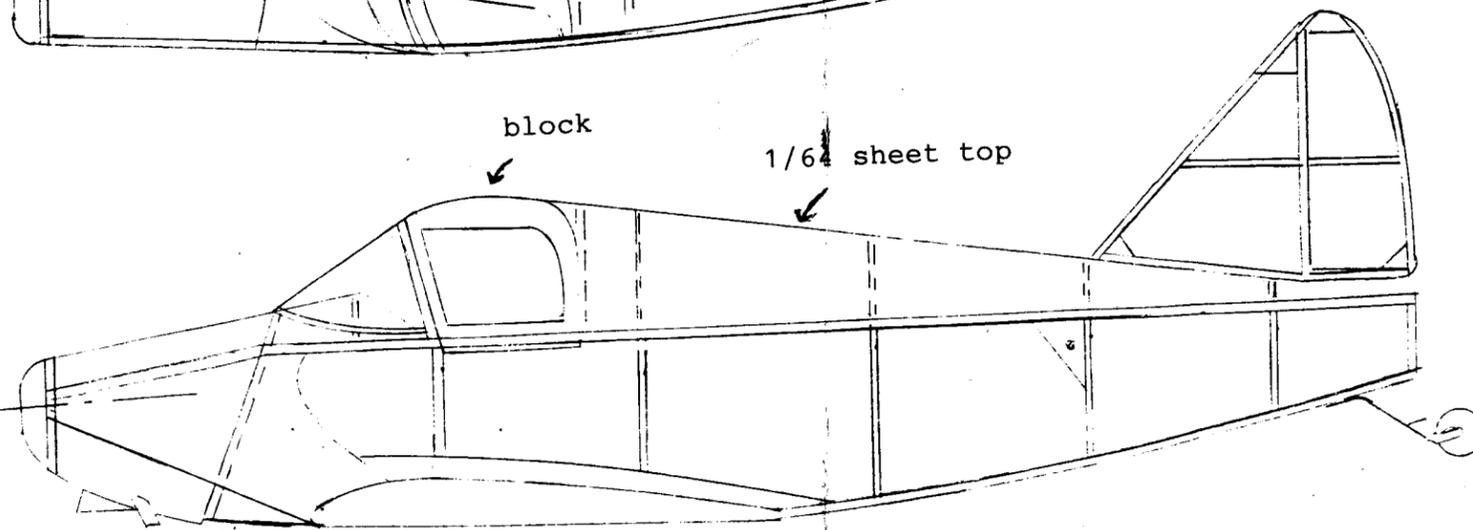
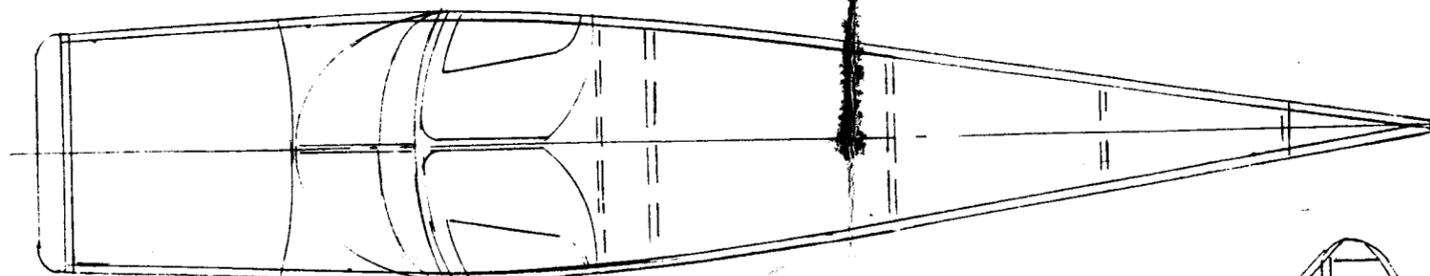
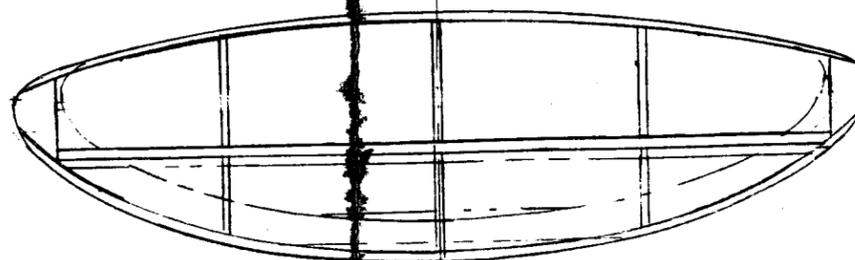
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one inch dihedral

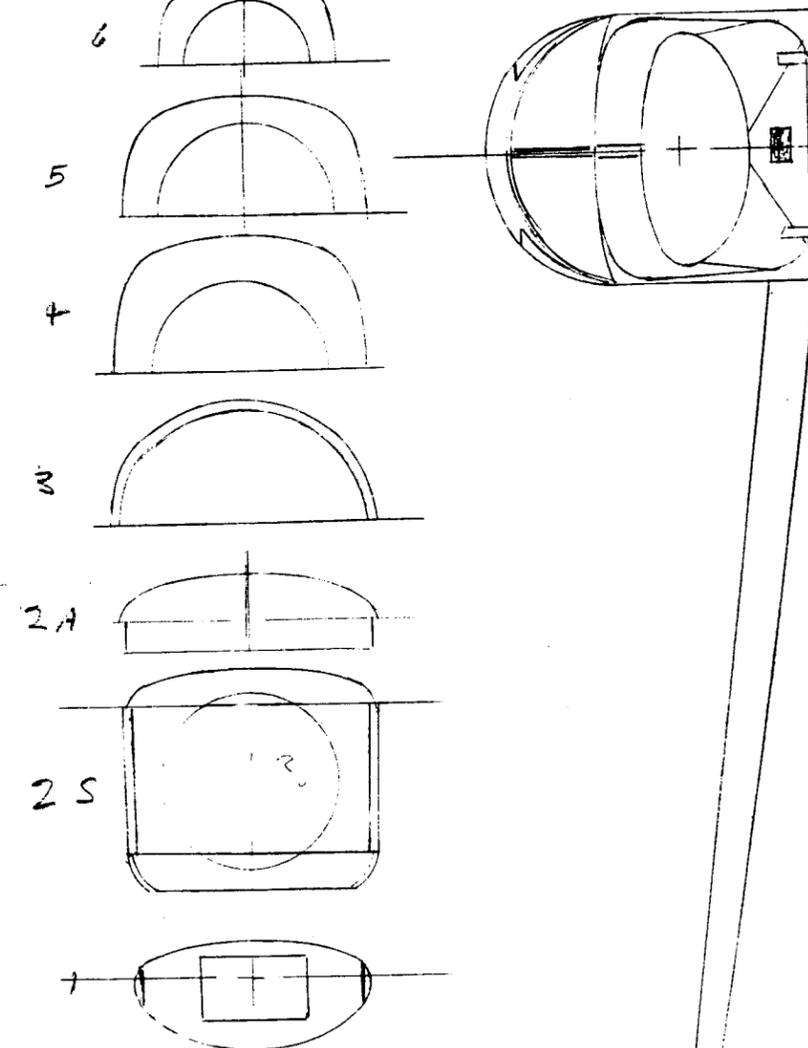
use cracked or sliced ribs

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1/8 sheet filler block

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CULVER CADET
 by Jim Alaback