

September/October 2012

SAN DIEGO

Scale Staffel

May/June/July/Aug/Sept





Scale Staffel
FAC Squadron #41
AMA chapter 915

Founded to encourage and advance the hobby of building and flying free-flight scale and sport airplanes.

Club Officers

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Vice President

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Annual Dues: None

Emailed Newsletter Subscription
Fee: None, except we need your e-mail address. E-mail it to the editor.

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(Layout graciously supplied by my wife, Ann Hoff Scott)

**FLYING
ACES
SQUADRON 41**

“WESTFAC IV”

by John Hutchison

President's Column:

WESTFAC IV, July 4 Joint Contest and the Aug 3-4 Scale Staffel contest are now history. WESTFAC IV at Perris, CA was a wonderful contest. It was a magnificent event and great to see old friends and competitors. The much-advertised twin mass-launch went off with great success with Bob Hodes from Nevada winning the prize. Don DeLoach of Colorado drove away with Grand Champion honors. The weather was perfect and the food vendor was great...at least for the first two days. Some confusion had us “food-less” on the third day. Roger Willis' wife, Blanca, jump to the rescue and quickly drove over to the nearest Subway Sandwich shop and saved the day by bringing lunch back to the starving flyers. The Orange Empire Railroad Museum was a marvelous venue for the scale judging and the banquet. The food was great and our flyers had the chance to support a spectacular museum. There were over 200 free model kits distributed to the banquet attendees.

The weather was perfect for the July 4th contest, however, attendance was low. Scale Staffel is upping the ante for 2014. Next year there will be cash awards. \$100 for 1st place in Walt Mooney 2X Peanut, \$100 for Peanut Scale (any peanut), and prizes for 2nd and 3rd. Later this year, I will discuss my ideas about changing the judging procedure. And, of course, we will have the usual hotdogs and goodies.

Stay tuned!

The Scale Staffel Aug 3-4 Contest at Otay Mesa was well attended and the weather was outstanding. There were 11 events, 15 flyers and 56 models entered and a whole lot of official flights. After the contest was completed it was determined that George Mansfield and Bob Hodes only need one more win for a Blue Max. John Donelson and John Merrill are closing in on 'um.

Don't forget out Indoor Flying Events at Grossmont College Gym. We are scheduled for the first Sunday of the month for the remainder of 2013. Be there!

Build! Fly! And have fun!

LLFF! (Long Live Free Flight!)

John Hutchison

The date: April 24, 2013; the location: Perris, California; the event: WestFAC IV. But wait, this is not really the start, I have to go back to the beginning for the whole story.

It was in the last half of 2012 when John H. came back from Geneseo NY and was telling me about how most of the contest winners were flying twins. It was about that time I decided it was time to build my first twin.

In August of 2012 after getting advice from some of the guys on www.hippocketaeronautics.com, I started my twin, Chris Starleaf's De Havilland Dash 8. I was able to build for about a month before I had to put model building on the back burner.

But in late February I found the time to build again. I figured if I could spend 30 minutes, five days a week from now till the event I might be able to get it close to at least showing the model. 50 days and twenty seven hours later. I only had 90% of the bones completed.

Oh boy! Not only did I not have a twin, but as I looked around the garage I discovered I only had one plane ready to go. I was so embarrassed, I even thought of not showing up. I mean, this was the west coast's event of the year. This is where champions come to fly and sharpen their skills. Should I really show up with only a single model? And it wasn't a scale model it was a Moth with no DT. Where did those 18 months plus go? What a newbie! I was emotionally down.

Some how, I convinced myself I should go. What is the worse that could happen? At the very least, I would be there to support the group. I took Wednesday off from work and drove up to see the scale judging and to take photos. These guys were happy to be together, check out each other's building skills, tell stories and give advice to anyone that wanted to listen. I had great time and wish I could have taken the next two days off of work to absorb it all.

I was able to attend Saturday, the last day of the event. I flew my Moth. A lot of people there thought I was crazy to fly a Moth with no DT. It never flew out of site, which I have heard they have been known to do, but it caused me to take some very long walks. I had a great time looking at all of the models again, some were not in their best condition anymore, and some had even flown away. There were new stories to listening to and of course the closing banquet. If you are ever wondering if you should attend a WestFAC contest I would highly recommend it.

William Scott
Editor

INDOOR CONTEST

The first Sunday of every month
Grossmont college
8800 Grossmont College Drive
In the big gym park in lot "C"
Gym opens at 7:30 am

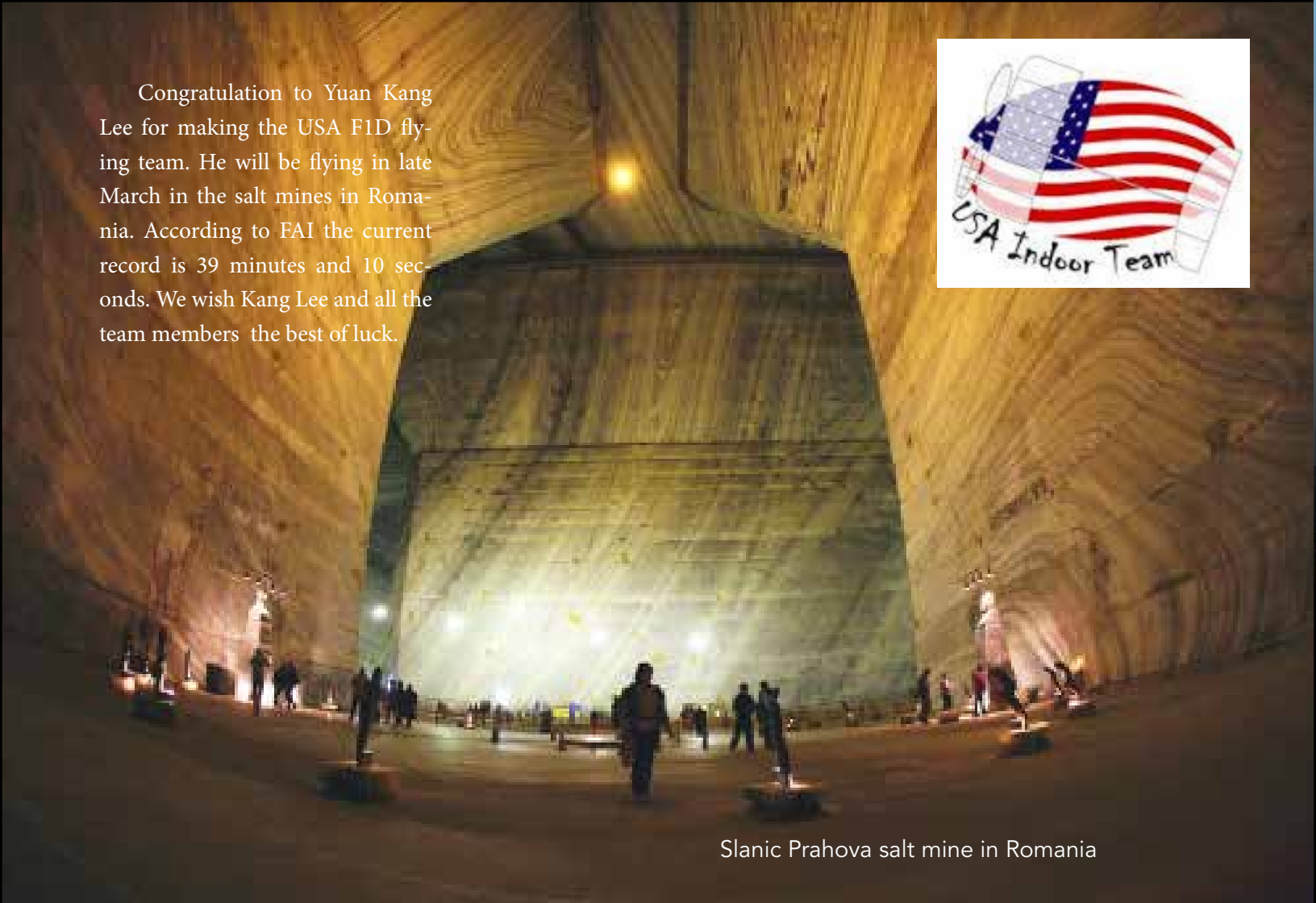
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Cover Photo

John Merrill launching his Gollywock
Photo by Arlene Bartick.

Congratulation to Yuan Kang Lee for making the USA F1D flying team. He will be flying in late March in the salt mines in Romania. According to FAI the current record is 39 minutes and 10 seconds. We wish Kang Lee and all the team members the best of luck.



Slanic Prahova salt mine in Romania

CORRECTIONS

In the previous issue:

Mike Jester should have been noted as the author of "Building the FAC Moth" article.

CALENDAR OF REGULAR EVENTS

EVENTS FOR THE SAN DIEGO AREA

- **Scale Staffel** www.scalestaffel.org
Indoor contest, First Sunday of every month Grossmont College gym
Outdoor contest, Nov. 9 and 10 see flier on page 23.
- **San Diego Orbiteers** www.sandiegorbiteers.com
Sept. 27-29 US FF Championship, Lost Hills
Jimmy Allen all three days
Saturday: mass launches 7:30 a.m. Gollywock, 9:30 a.m.
twin pushers,
10:30 a.m. WWII mass launch
Sunday mass launch 9 a.m. compressed air,
10 a.m. Greve's Thompson
- **17th SouthWest FAI Challenge**
Oct. 26 & 27 Boulder City NV, contacts Bill Booth or Bob Beecroft,
booth@boothsuarez.com or TheAeroSmith@roadrunner.com



WEST FAC IV

By William Scott

What a wonderful event. If you have never been to a WestFAC contest you need to get yourself to one. The folks that put this together did a great job. Only being able to attend two days of this four day event, there were still lots of opportunities for me to visit with other builders, look at their models and watch them fly.

If you are new to building scale flying models then try to attend during the judging it is a great time to see what other people have done and ask how they accomplished a particularly difficult tasks. As a newbie to building flying model and being even a newer newbie to building scale flying models. There are many intimidating transitions, going from a long rectangular fuselage such as a One Night 28 to a round keel fuselage, such as the Grumman Wildcat. But once you ask the question, ‘how do you build that?’ And hear the answer, ‘build the second side of the fuselage using a shoebox where the first side fits inside of the shoebox.’ It all starts to come together and the difficult becomes simple and very soon you will find that it is you sharing the building tips.

If you are wondering what to build next; then come about an hour before any of the mass launch contest begin. There were nine mass launches at this event. This will be the time when the contestants are doing their final prepping of their airplanes. A lot of them are more then willing to tell you stories about how easy or hard their plane was to build, trim and rebuild. Whether it’s a WWI biplane, a different colored Wildcat from WWII or something less well known from the Thompson or Greve Air Races, it seems like there is a builder that has built it and brought it to show, to fly and to talk about. Come visit us at the next WestFAC and see why we all love doing this.

WestFAC IV Kanone Report

Compiled by George Mansfield

FAC WESTFAC 4: KANONE REPORT	FAC CLUB NAME: Scale Staffel Model Airplane Club	CONTEST DATE: 4/24-28/2013
CONTEST DIRECTOR: John Hutchison	Email address: johnhutchison1@cox.net	SQUADRON # 41

TOTAL NUMBER OF FLYERS IN EACH EVENT INDICATED IN PARENTHESES

Mass Launch Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>WW 1 Combat (9 entries)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE	TOTAL	PLACE	Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS			
Don DeLoach	Bristol Scout	63	61	98					1	Y
Herb Kothe	Fokker D7	56	65	62					2	Y
Clint Brooks	SE5Aa	31	28	12					3	Y
Orv Olm	Fokker D7	46	18						4	Y
Mark Chomyn	Fokker D7	18	4						5	Y
Bob Hodes	SE5Aa	14							6	Y
John Merrill	Fokker D7	8							7	Y
John Hutchison	Fokker D7	7							8	Y
John Alling	Nieuport	3							9	Y

Mass Launch Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>WW 2 Combat (9 entries)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE	TOTAL	PLACE	Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS			
Mike Mulligan	KI-61 Tony	87	124	140					1	Y
Don DeLoach	F4U Corsair	80	97	3					2	Y
Herb Kothe	Yak-3	87	125	2					3	Y
Orv Olm	Grumman TBF Avenger	46	48						4	Y
Mark Chomyn	Grumman F6F Hellcat	28	38						5	Y
John Alling	Grumman F4F Wildcat	26	17						6	Y
Bob Hodes	Yak-3	11							7	Y
John Merrill	P51 Mustang	9							8	Y
Mitch Schoonejanes	P51 Mustang	4							9	Y

Mass Launch Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>WW2 Mediteranean (6)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE	TOTAL	PLACE	Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS			
John Donelson	KE 2005	103	74						1	Y
Tom Arnold	P39	63	2						2	Y
Mitch Schoonejanes	ME109E	38	1						3	Y
Don DeLoach	P47	138	0						4	Y
Phil Thomas	Macchi 2005	9							5	Y
John Merrill	P39	8							6	Y

Mass Launch Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Battle of Midway (10)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE	TOTAL	PLACE	Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS			
John Donelson	Guardian	70	68	56					1	Y
Bob Hodes	Grumman F6F Hellcat	39	63	49					2	Y
Don Smith	Zero	24	36	38					3	Y
Don DeLoach	Grumman Bearcat	72	120	9					4	Y
Herb Kothe	Vindicator	144	184	0					5	Y
Orv Olm	Grumman TBF Avenger	62	152	0					6	Y
John Merrill	Zero	17	23						7	Y
Tom Arnold	Grumman F6F Hellcat	50	2						8	Y
Mitch Schoonejanes	Zero	4							9	Y
Fernando Ramos	F2A	2							10	Y

Mass Launch Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Low Wing Mil. Trainer (7)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE	TOTAL	PLACE	Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS			
Herb Kothe	Miles Magister	114	94	131					1	Y
Don DeLoach	DH-94	101	85	89					2	Y
Bob Hodes	Miles Magister	41	44	22					3	Y
Phil Thomas	Dewotine 520DC	39	29						4	Y
Tom Arnold	Dornier 335 Trainer	29							5	Y
John Donelson	Fairey Battle Trainer	5							6	Y
John Merrill	T-34	4							7	Y

Mass Launch Event

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Double Trouble (4)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
Bob Hodes	DH Hornet	38	32						1	Y
Fernando Ramos	OV-10	28	19						2	Y
Tom Arnold	Bristol Beaufighter	11	7						3	Y
John Merrill	P82	5							4	Y

Mass Launch Event

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Thompson Trophy (4)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
John Donelson	Lockheed Altair	44	84						1	Y
Bob Hodes	Cessna CR-3	64	83						2	Y
Phil Thomas	SEV-3	24	7						3	Y
Don DeLoach	Cessna CR-2	11							4	Y

Fernando Ramos	Chambermaid	45	70	55					4	Y
Herb Kothe	Chambermaid	95	3						5	Y
Don DeLoach	Bonzo	63	3						6	Y
Phil Thomas	Jack Rabbit	40							7	Y
Bob Hodes	Chambermaid	38							8	Y
Mark Chomyn	Mr. Smoothie	27							9	Y

Judged Scale Event

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Rubber Scale (7 entries)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
Clint Brooks	DH Tiger Moth	61	30	120	82.5	15	62.5	160.0	1	Y
Don DeLoach	F4U Corsair	74	120		82.5	10	60.5	153.0	2	Y
Mike Mulligan	Kawasaki Hein	102	120		82.5	10	44.0	136.5	3	Y
John Alling	Rearwin Speedster	58	83		71.5		47.5	119.0	4	Y
George Mansfield	Miles M5	87			73.5	10	34.6	118.1	5	Y
Clint Brooks	SE5a	46			46	15	62.5	123.5		Y
Clint Brooks	Stampe SV-46	34	24	33	34	15	60.0	109.0		Y

Judged Scale Event

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Power Scale (4 entries)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
Fernando Ramos	Miles Magister	120			120	10	55.5	185.5	1	Y
John Donelson	Fairey Barracuda Prototype	120			120	5	57.5	182.5	2	Y
Fernando Ramos	Bristol MID	58	33	74	74	5	59	138.0		Y

Judged Scale Events - single entry

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Two events, miscellaneous</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S NAME / EVENT	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
Orv Olm / High Wing Peanut Scale	Nesmith Cougar	39	67	80	70		62.5	132.5		Y
Mike Mulligan / Jumbo Scale	Heinkel V2 Racer	58	69	77	68.5	10	50.5	129.0		Y

Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Dime Scale (4)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
Don DeLoach	Chambermaid	120	76					196	1	Y
Orv Olm	Fokker D7	44	47	82				173	2	Y
Lee Campbell	Comet Monocoupe	29	45					74	3	Y
John Merrill	Aeronca LC	8	6					14	4	Y

Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST						FAC MEMBER?		
EVENT: <i>Modern Military (4)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	Y N
Don DeLoach	F8F Bearcat	118	120	91				329	1	Y
Clint Brooks	XP-40Q	49	91	74				214	2	Y
Tom Arnold	Seamew	28	120	11				159	3	Y
Phil Thomas	Detowine 520 DC	41	33	28				102	4	Y

Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Golden Age Civ/Mil (6)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Herb Kothe	Taylorcraft	120	101	120				341	1	Y
Don DeLoach	DH-94	89	29	120				238	2	Y
Bob Hodes	Taylorcraft	45	68	65				178	3	Y
Mark Chomyn	Aeronca Champ	43	81	50				174	4	Y
Orv Olm	DH Tiger Moth	51	47	45				143	5	Y
John Alling	Rearwin Speedster	58						58	6	Y

Non-Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>2-Bit + 1 (5 entries)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Herb Kothe	Flying Aces Moth	100	109	120				329	1	Y
Roger Willis	Flying Aces Moth	78	105	89				272	2	Y
Don Smith	RFC Trainer	62	62	53				177	3	Y
Rod Persons	Jimmie Allen Skokie	66	30	80				176	4	Y
William Scott	Flying Aces Moth	29	52	90				171	5	Y

Non-Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>O.T. Rubber Fuselage (4)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Herb Kothe	Wren	120	120	120				360	1	Y
Don DeLoach	BA Cabin	120	120	106				346	2	Y
Jim Sprenger	Convertible	120	120	85				325	3	Y
Mark Chomyn	BA Cabin	120						120	4	Y

Non-Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Old Time Rubber Stick (6)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Don DeLoach	Red Buzzard	120	120	120				360	1	Y
Herb Kothe	Gollywock	120	120	120				360	2	Y
Mark Chomyn	Gollywock	120	68	108				296	3	Y
John Merrill	Gollywock	120	63	57				240	4	Y
Steve Higginson	Gollywock	115	120					235	5	Y
Lee Campbell	Gollywock	66	78					144	6	Y

Non-Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Jimmie Allen (7 entries)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Don DeLoach	BA Cabin	120	120	119				359	1	Y
Bob Hodes	Skokie	120	120	117				357	2	Y
Herb Kothe	BA Cabin	115	120	119				354	3	Y
Rod Persons	Skokie	43	65	120				228	4	Y
Fernando Ramos	Sky Chief	120	41					161	5	Y
John Merrill	BA Cabin	76	29	47				152	6	Y
Mark Chomyn	Jimmie Allen Special	57	36	32				125	7	Y

Non-Scale "Total of 3 Flights" Event

		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Embryo Endurance (10)</i>		FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS			SCALE FLT	BONUS	SCALE			Y
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Herb Kothe	Go Devil	120	120	120		9		369	1	Y
Don DeLoach	Embryomatic	120	95	120		9		344	2	Y
Jim Sprenger	Prairie Bird	118	120	70		9		317	3	Y
George Mansfield	Debut	91	58	120		9		278	4	Y
John Merrill	Debut	80	54	64		9		207	5	Y
Roger Willis	Debut	62	38	84		9		193	6	Y
Mark Chomyn	Hornet	31	46	66				143	7	Y
Bob Hodes	GR Special	65	37	40				142	8	Y
Steve Higginson	Prairie Bird	55	73	11				139	9	Y
Rod Persons	Jimmie Allen Special	35	41	36				112	10	Y

By the Numbers:
 19 Actual Events Flown
 115 Models Flow in Events
 31 Official Flier Entries

**Retired due to mechanical problems*

April 24-27 WestFAC Contest

Photographed by Arlene Bartick



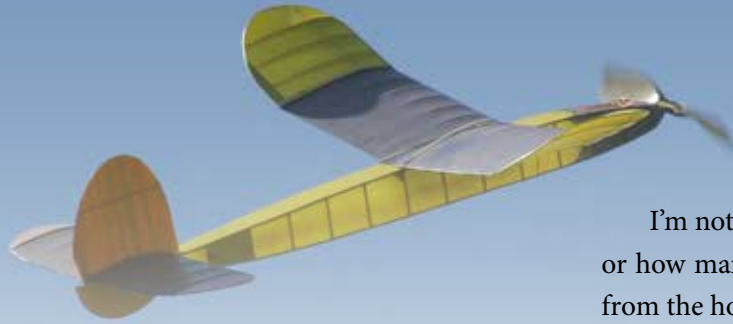






Truth or Urban Myth?

By William Scott



I'm not sure how long people were judging model airplanes today or how many beers were had at the restaurant right across the street from the hotel, but it was enough for the stories to come out.

My favorite is:

Did you hear about R. Smith out in the Midwest? (The name and actual flying location have been changed to protect the innocent.) His plane was stalling on the trim flights. He had put in as much down thrust as he could and was running out of clay for weight. Then someone suggested a small piece of metal might get him to the weight he needed, something small like a key. R. Smith pulled out his keys and after checking the CG with a variety of different keys he found one that seem to be the correct weight. He secure the key with a rubber band and wound for his next flight. It was not a great launch but the corrected CG made the difference; the plane made a wonderful right turn. As the rubber motor was winding out, it flew straight for a little bit then caught a little up draft and started to circle. Another little bump up, and it floated and drifted a little bit this and then that way, all the while it just kept climbing. Pretty soon, R. Smith was having trouble seeing his airplane.

He ran to his mechanic and asked if he could still see the plane. The mechanic responded yes but it was getting hard because it was so small and getting closer to the sun. Then suddenly the mechanics yelled, "It's gone! It was so small that when I blinked it disappeared."

A very sad moment for R. Smith, but also triumphant at the same time. R. Smith had built a plane that could fly away!

Too bad it had his car key attached to it...



June 2 Indoor

Photographed by Arline Bartick



Indoor at Grossmont College Gym:
Penny Plane

CD: Larry Miller Rules: Best 2 flights of 6

Contestants	Flights	1	2	3	4	5	6	Place
Richard Woods			223	96	313	312		1
John Hutchison		89	269	50	47	47	251	2
Greg Hutchison		164	176	219	212	234	54	3
Larry Miller		150	198	240	139	48	48	4
Don Bartick		67	40	218	218	53	36	5
Mark Chomyn		171	160	188	166	180	176	6

Come be part of a global flying contest!



Welcome to the 22nd Annual Worldwide Postal. The reason it's called a postal is, in the past, everyone would send in their flight times to the CD via the post office. And for those of you that love technology please feel free to use the very acceptable term E-postal. This year the contest is a non-judged scale contest, there are three categories. High Wing, Low Wing and Biplane.



Here are the rules.

This contest is being held via the honor systems, and is intended to generate fun and enthusiasm for the sport of scale free flight.

The finished plane must have a wing span of 22" or less.

The plane must be free flight, rubber powered.

The plane must be listed below. There will be no scale judging even though the planes listed below are scale planes.



We will accept 5 official flights, flights of less than 20 seconds do not count. The flights may occur anytime between now and June 30, 2014. And do not have to be taken on the same day. Your flight times must be e-mailed to Caley, the CD, no later than midnight on June 30, 2014, PST.

Scoring will be as follows: Five flights: throw out the lowest and highest times add the remaining three together to get your total. Here is an example. The five flight times are 62, 68, 120, 140, 180. The CD would throw out 62 and 180 add the remaining would give you a score of 328.

When your five flights have been recorded please e-mail them to Caley at caleyannhand@yahoo.com with a subject line of "22nd AWWP times" with a short paragraph about yourself, some details about the day(s) you flew and a photo of you and the plane(s) or just the plane(s). Please limit your photos to 400K jpg's



The planes are
High Wing: Pilatus Porter
Low Wing: P-40
Biplane: Antonov AN2



Any version of the plane is acceptable.

There are plans for each of the airplanes at the end of this newsletter the size may need to be adjusted to fit the less than 22" wing span requirements.

For more information you can visit
www.hippocketaeronautics.com

Click on "Builders' forum", scroll down to "Outdoor Free Flight Forum" click on "Free Flight Scale" scroll down and click on "Worldwide Free Flight Postal Scale Builds"

Good luck to you all!



Walter Mooney 4th of July Contest

Compiled by William Scott

Peanut Scale Rule: Three flights

Contestants	plane	Flights	1	2	3	total	Place
Mark Chomyn	Old Ironsides	22	29	22	73	2	
Bob Overcash	Andreason	13			13	3	
David Sagliano	Peanut Found	65	39	31	135	1	
John Oldendkamp	Fike "D"	8			8	4	

Embryo/Bostonian Rule: Three flights

Contestants	plane	Flights	1	2	3	total	Place
William Scott	Prairie Bird	39	34	61	134	1	
John Merrill	DeBut	93	94	90	277	1	
Mark Chomyn	Hornet	37	43	34	114	3	
Mike Jester	Prairie Bird (red white and blue)						
McPykecny	Prairie Bird	49	54	101	204	4	
David Sagliano	Boston Speedster	62	91	120	273	2	
David Sagliano	Boston Bullet						
John Oldendkamp	Silve Schtick	42	35	120	197	3	
Bob Overcash	Tonft	42	58	43	143	3	
Bob Lamdon		73	56	120	249	3	

2 X Peanut

Contestant Plane	Flights	1	2	3	total	Place
Mark Chomyn Embroer	51	53	60	164	2	
John Hutchison Huntington H-12	52	61	76	189	1	

EVENTS: 3

FLYERS: 13

ENTRIES: 16

— — — R E P O R T S — — —

4th of July Walter Mooney Contest

Photographed by Arline Bartick



August 3 and 4 Scale Staffel Contest

Kanone Report

Compiled by George Mansfield

Scale Staffel KANONE REPORT	FAC CLUB NAME: <u>Scale Staffel Model Airplane Club</u>	CONTEST DATE: <u>8/3,4/2013</u>
CONTEST DIRECTOR: <u>J.Hutchison / G.Mansfield</u>	Email address: <u>gmansfield75@gmail.com</u>	SQUADRON # <u>41</u>

TOTAL NUMBER OF FLYERS IN EACH EVENT INDICATED IN PARENTHESES

Mass Launch Event

EVENT: <i>WW 1 Combat (4 entries)</i>	MODEL	TOTAL FLIGHT SECONDS OR BEST			SCALE FLT FACTORED	BONUS POINTS	SCALE POINTS	FAC MEMBER?	
		1	2	3				TOTAL	PLACE
CONTESTANT'S FULL NAME									
Bob Hodes	SE5Aa	35	30	28				1	Y
John Alling	Nieuport II	28	33	21				2	Y
John Merrill	Fokker D7	28						3	Y
John Hutchison	Fokker D7	7						4	Y

Mass Launch Event

EVENT: <i>WW 2 Combat (7 entries)</i>	MODEL	TOTAL FLIGHT SECONDS OR BEST			SCALE FLT FACTORED	BONUS POINTS	SCALE POINTS	FAC MEMBER?	
		1	2	3				TOTAL	PLACE
CONTESTANT'S FULL NAME									
Bob Hodes	F6F Hellcat	47	58	52				1	Y
John Alling	F4F Wildcat	19	22	28				2	Y
Don Smith	Focke Wulfe TA152	10	17	11				3	Y
John Donelson	Reggiane Re 2005	75	154					4	Y
Mark Chomyn	F6F Hellcat	36	4					5	Y
Bill Hill	F4F Wildcat	6						6	Y
John Merrill	P51B	5						7	Y

Mass Launch Event

EVENT: <i>Greve/Thompson Race (6)</i>	MODEL	TOTAL FLIGHT SECONDS OR BEST			SCALE FLT FACTORED	BONUS POINTS	SCALE POINTS	FAC MEMBER?	
		1	2	3				TOTAL	PLACE
CONTESTANT'S FULL NAME									
Don Smith	Chambermaid	39	61	74				1	Y
John Donelson	Goon	54	62	67				2	Y
Roger Willis	Mr. Smoothie	39	50	53				3	Y
Bill Hill	Mr. Smoothie	44	3					4	Y
Mark Chomyn	Mr. Smoothie	32						5	Y
Bob Hodes	Cessna CR-3	2						6	Y

Judged Scale Event

EVENT: <i>Rubber Scale (11 entries)</i>	MODEL	TOTAL FLIGHT SECONDS OR BEST			SCALE FLT FACTORED	BONUS POINTS	SCALE POINTS	FAC MEMBER?		
		1	2	3				TOTAL	PLACE	Y N
CONTESTANT'S FULL NAME										
John Donelson	Grumman Guardian	79			69.5	5	55.1	129.6	1	Y
Bob Hodes	F6F Hellcat	47	58	52	58	5	59.6	122.6	2	Y
John Merrill	Fokker D7	43	64	32	62	15	43.9	120.9	3	Y
Roger Willis	Mr. Smoothie	37	45	52	52	5	54.4	111.4	4	Y
Bill Hill	Stagger Wing Beechcraft	38			38	15	55.9	108.9	5	Y
John Alling	Nieuport II	22	28	32	32	15	44.4	91.4	6	Y
David Scigliano	Piper cub	24	14	23	24	0	60.0	84.0	7	Y
*David Scigliano	Cessna 150	25	22	21	25	0	42.5	67.5		Y
*Bill Hill	Piper Cub	24	33	30	33	0	59.8	92.8		Y
*Roger Willis	USCG WACO	28	32	28	32	15	50.7	97.7		Y

* denotes extra, lower scoring entry

Judged Scale Event

EVENT: <i>Power Scale (1 entry)</i>	MODEL	TOTAL FLIGHT SECONDS OR BEST			SCALE FLT FACTORED	BONUS POINTS	SCALE POINTS	FAC MEMBER?		
		1	2	3				TOTAL	PLACE	Y N
CONTESTANT'S FULL NAME										
John Donelson	Fairey Barracuda	120			120	5	53.9	178.9	1	Y

Judged Scale Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Jumbo Scale (1 entry)</i>	FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS					SCALE FLT	BONUS	SCALE	Y	
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Don Smith	Aeronca	15	22		22	0	53.8	75.8	1	Y

Scale "Total of 3 Flights" Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Golden Age Civ/Mil (5)</i>	FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS					SCALE FLT	BONUS	SCALE	Y	
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
John Alling	Rearwin Speedster	89	103	120				312	1	Y
Mike Jester	Fairchild 24	43	50	54				147	2	Y
Don Smith	Taylor Cub	27	62	45				134	3	Y
Mark Chomyn	Aeronca	40	41	52				133	4	Y
David Scigliano	Curtis Robin	27	17	21				65	5	Y

Non-Scale "Total of 3 Flights" Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>2-Bit + 1 (5 entries)</i>	FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS					SCALE FLT	BONUS	SCALE	Y	
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Bill Hill	Flying Aces Moth	74	38	53				165	1	Y
Don Smith	RFC Trainer	58	68	34				160	2	Y
Mike Jester	Flying Aces Moth	42	34	65				141	3	Y
Mark Chomyn	Chieftan	27	75	24				126	4	Y
William Scott	Flying Aces Moth	43	27	27				97	5	Y

Non-Scale "Total of 3 Flights" Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Jimmie Allen (3 entries)</i>	FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS					SCALE FLT	BONUS	SCALE	Y	
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Roger Willis	BA Cabin	92	88	120				300	1	Y
Bob Hodes	Skokie	120						120	2	Y
John Merrill	BA Cabin	18						18	3	Y

Non-Scale "Total of 3 Flights" Event		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Embryo Endurance (6)</i>	FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS					SCALE FLT	BONUS	SCALE	Y	
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
John Merrill	Debut	120	120	120		9		369	1	Y
Mark Chomyn	Hornet	42	91	120		9		262	2	Y
Don Smith	Miss Worlds Fair	54	71	66		9		200	3	Y
Don Bartick	Don't Know	28	58	61		9		156	4	Y
William Scott	Prairie Bird	6	42	48		9		105	5	Y
Frank Allen	Some Kinda Box	38	27	20		9		94	6	Y

Non-Scale "Best 3 of 6" Event (7)		TOTAL FLIGHT SECONDS OR BEST							FAC MEMBER?	
EVENT: <i>Phantom Flash (7)</i>	FLIGHT TIMES OR HEAT ROUNDS FOR ML EVENTS					SCALE FLT	BONUS	SCALE	Y	
CONTESTANT'S FULL NAME	MODEL	1	2	3	FACTORED	POINTS	POINTS	TOTAL	PLACE	N
Don Bartick	Phantom Flash	120	36	120				276	1	Y
Bill Hill	Phantom Flash	13	43	112				168	2	Y
John Merrill	Phantom Flash	102	26	23				151	3	Y
William Scott	Phantom Flash	57	37	7				101	4	Y
Bob Hodes	Phantom Flash	92						92	5	Y
Mark Chomyn	Phantom Flash	30	24	28				82	6	Y
Mike Jester	Phantom Flash	28	17	10				55	7	Y

By the Numbers:	
Events:	11
Flyers:	15
Models entered:	56

Flyers:	Frank	Allen
	John	Alling
	Don	Bartick
	Mark	Chomyn
	John	Donelson
	Bill	Hill
	Robert	Hodes
	John	Hutchison
	Mike	Jester
	John	Merrill
	Dave	Scigliano
	William	Scott
	Don	Smith
	Jim	Sprenger
	Roger	Willis







**FLYING
ACES**
SQUADRON 41



SAN DIEGO
Scale Staffel
Outdoor Flying Contest



Saturday and Sunday, Nov. 9 and 10, 2013, 7 a.m. to 12:30 p.m.

Scamps Flying Field, Perris CA

Events Prizes

Awards for first to third place.
First place trophies for WWI
and WWII Combat. *

Fees

\$8 for contest including
entry for one event, \$3 for each
additional event, \$20 maximum
to cover contest entry and 5 to
11 events

Contest Directors

George Mansfield
gmansfield75@gmail.com
phone (858) 453-3857

John Hutchison
johnhutchison1@cox.net
phone (619) 303-0785

Awards Presentation

Immediately following the
contest's final gun on Sunday

Hotel Accommodations

✦ Perris Hotel
480 S. Redlands Ave, 92570
(Less than 2 miles from the
flying field)
(951) 943-5577

Hampton Inn & Suites
12611 Memorial Way,
Moreno Valley, CA 92154
(Less than 12 miles from the
flying field)
(951) 571-7788

✦ As of 9/4/13 the Perris Hotel
is under going renovations and
should reopen in early Oct.

Pilot's Meeting: 8 a.m. on both days

Lunch is at the flier option for both days

FAC Single Model Events

Fly any event on either day, but all flights for a
given event must be flown on the same day

1. FAC Rubber Scale
2. FAC Power Scale (90 second max)
3. FAC Embryo Endurance (ROG)
4. FAC Jimmie Allen (ROG)
5. FAC 2-Bit(+1) Rubber (ROG)
6. FAC Phantom Flash (ROG)
7. FAC Golden Age Civil Scale
8. FAC Jumbo Scale

Mass Launch Events

Saturday

9. FAC World War 1 Combat:
Wind at 8:20 a.m., Launch at 8:30 a.m.
10. FAC World War II Combat:
Wind at 9:20 a.m., Launch at 9:30 a.m.

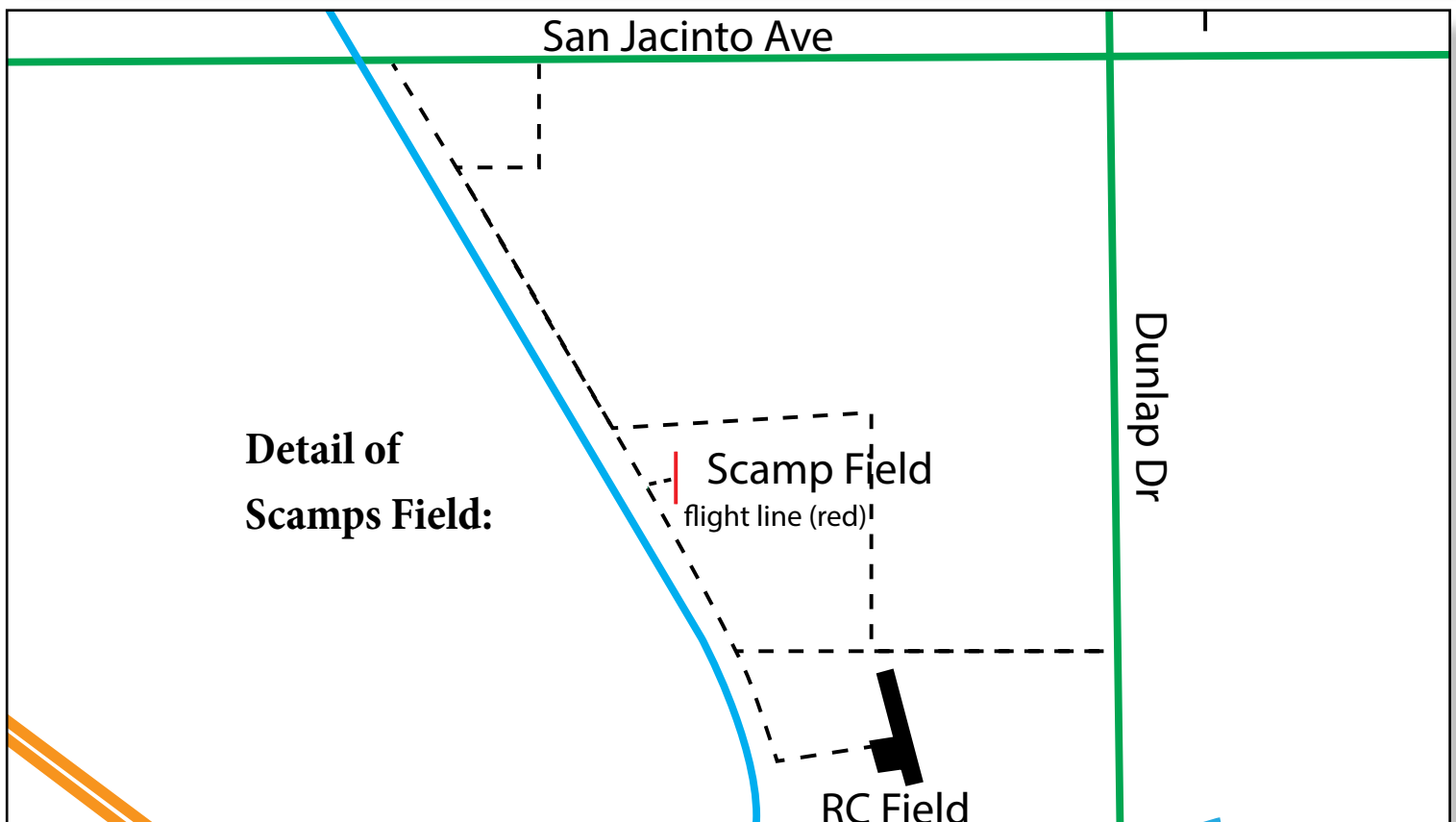
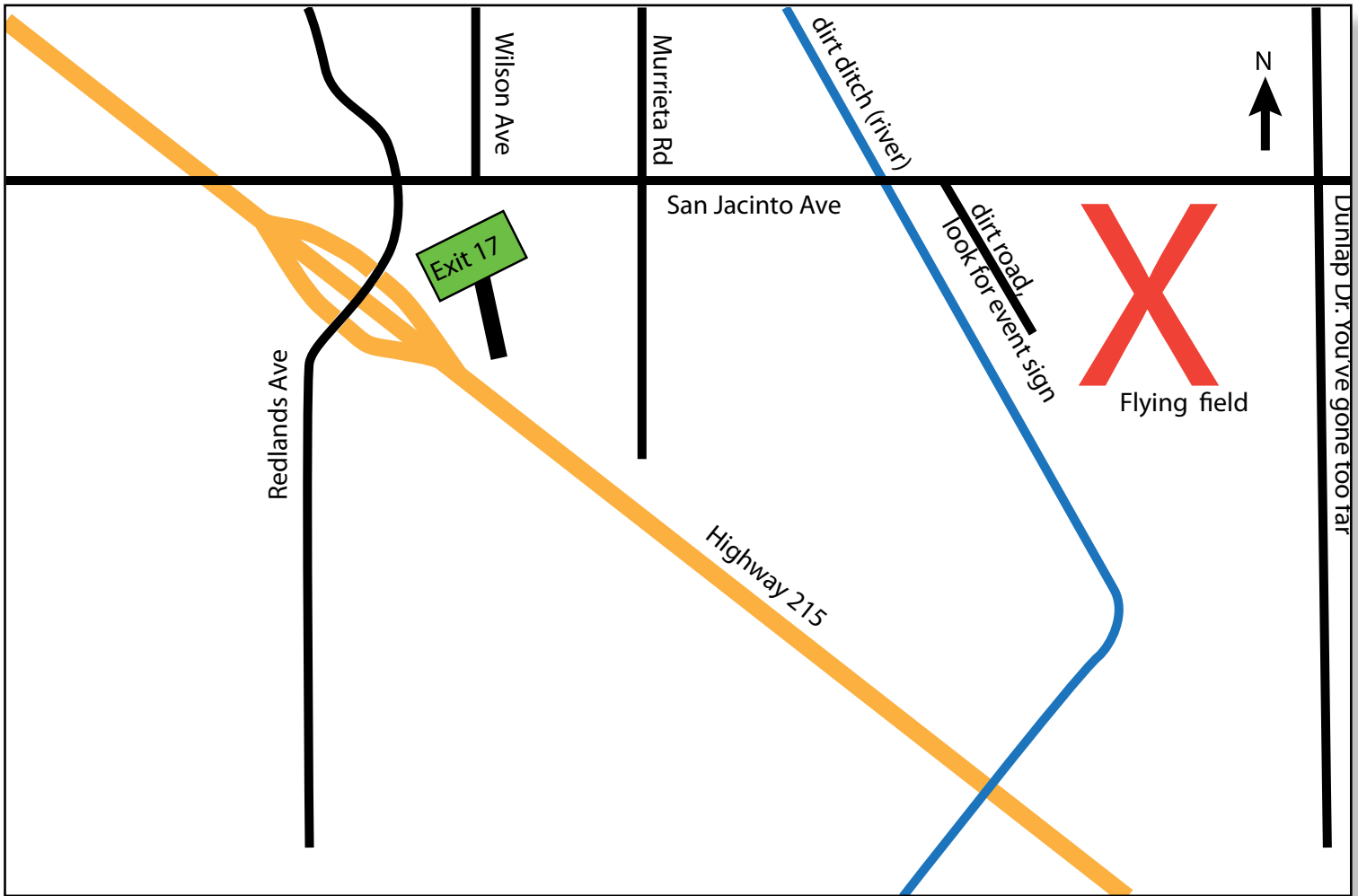
Sunday

11. Double Trouble (Twins)
Wind at 8:20 a.m., Launch at 8:30 a.m.
12. FAC Greve/Thompson Race:
Wind at 9:20 a.m., Launch at 9:30 a.m.

*Earn points towards your GRAND CHAMPIONSHIP. This contest's scores coupled with those of the contest held in August 2013 will determine our annual Grand Champion. The trophy will be presented after the November event to the flier who garners the most 1st to 3rd place points in our two 2013 contests.

Scamps Flying Field, Perris CA

Nov 9 and 10, 2013



Perris CA - Possible Places for lunch

Nov 9 and 10, 2013

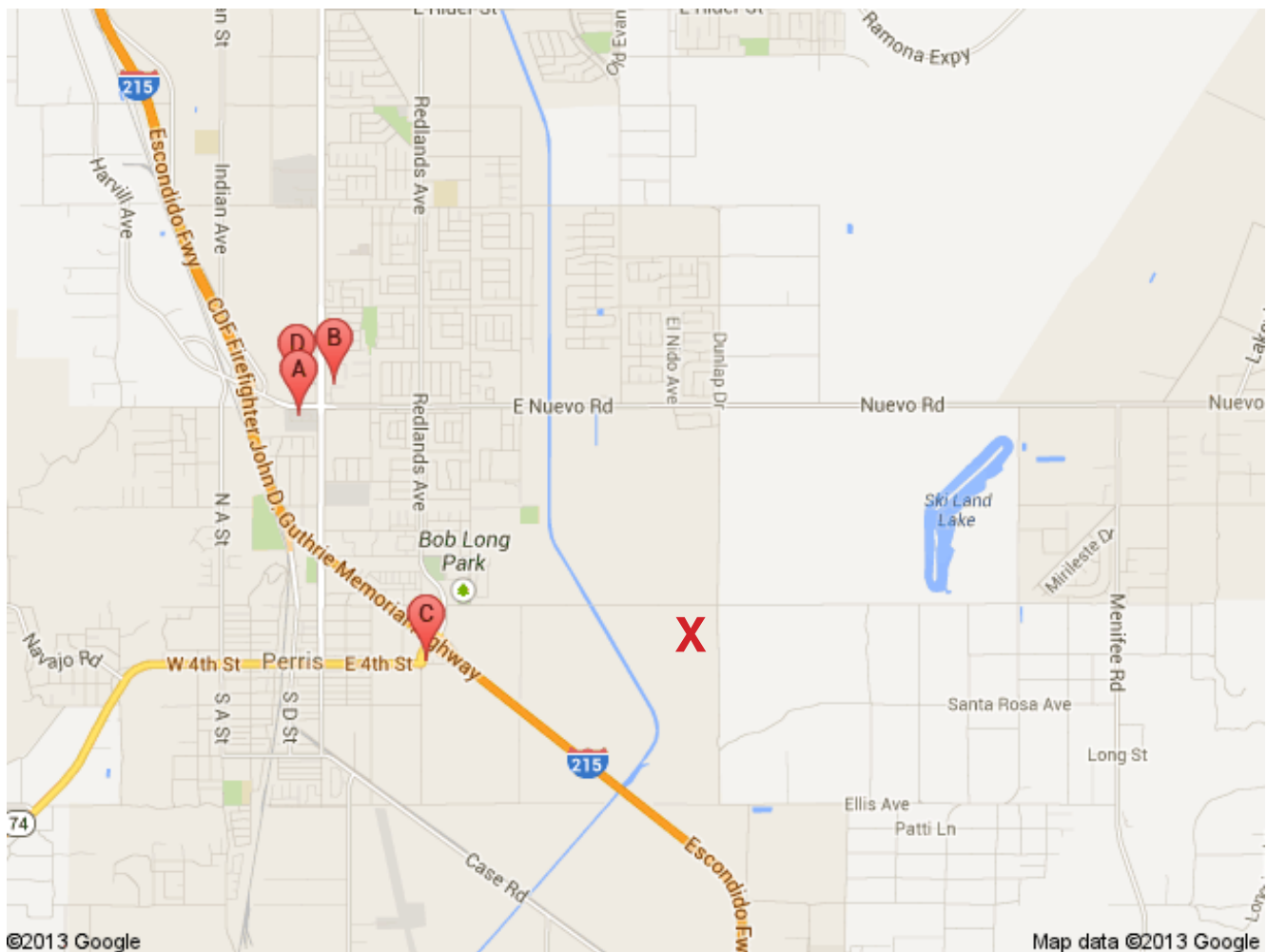
A. Sizzler
91 W Nuevo Rd, Perris, CA
(951) 940-4021
3.7 ★★★★★ 12 reviews \$

B. Jenny's Family Restaurant
1675 N Perris Blvd, Perris, CA
(951) 657-2945
3.9 ★★★★★ 21 reviews \$\$

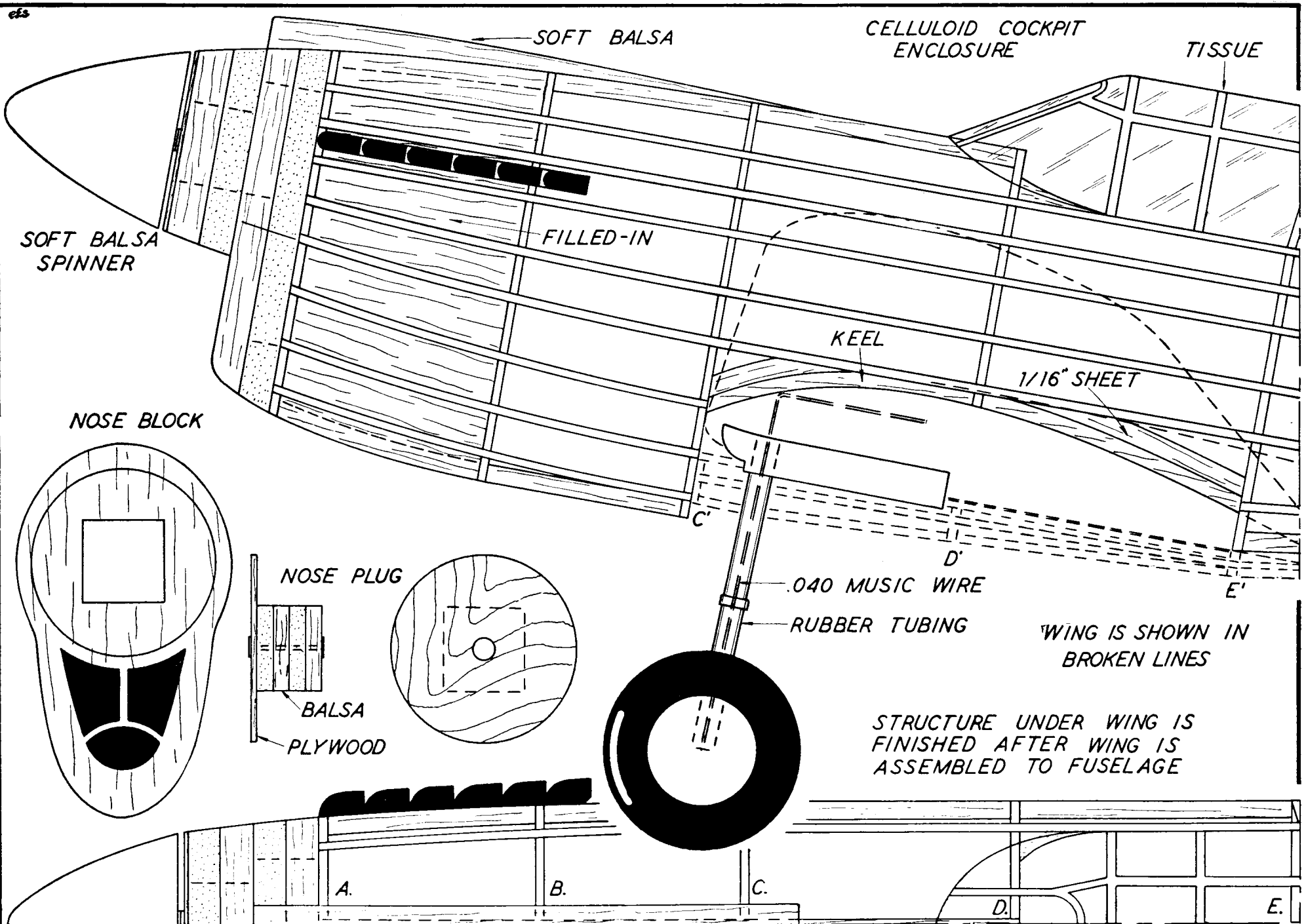
C. Denny's
570 E 4th St, Perris, CA
(951) 657-1123
2.9 ★★★★★ 13 reviews \$

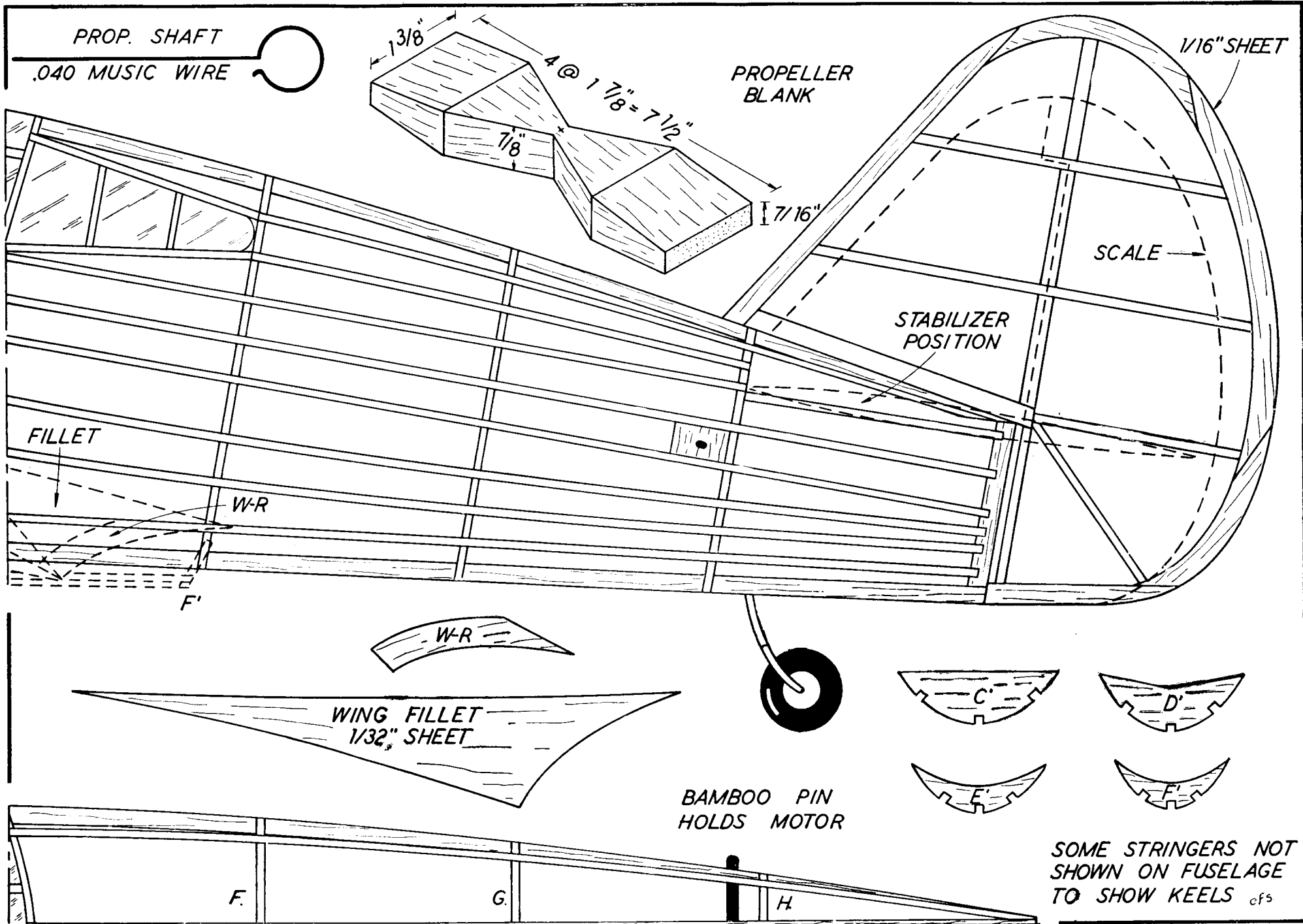
D. IHOP
1688 N Perris Blvd, Perris, CA
(951) 943-1844
3.7 ★★★★★ 15 reviews \$

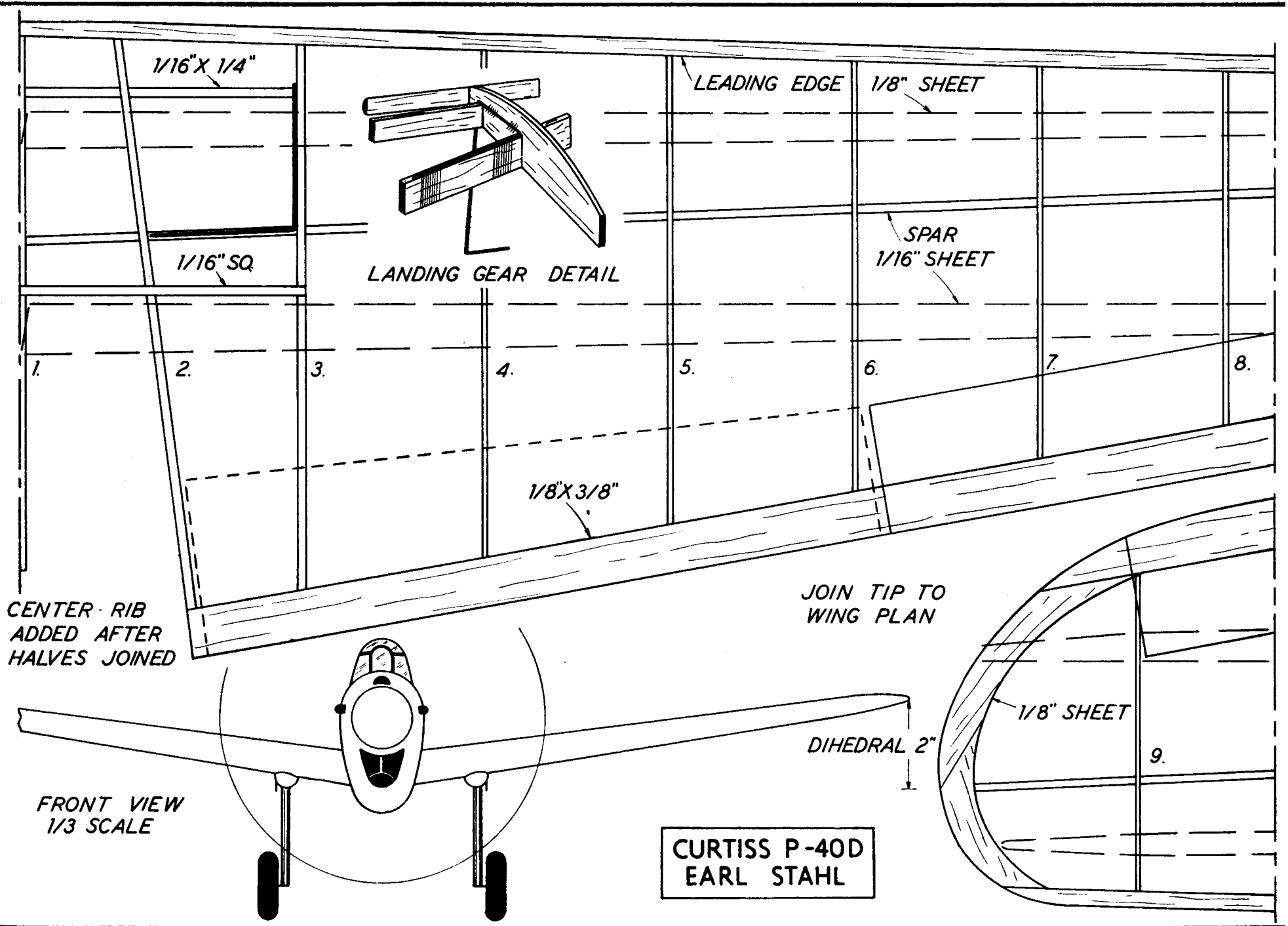
A. Subway
15 Nuevo Rd, Perris, CA
(951) 943-4943
2.7 ★★★★★ 4 reviews \$

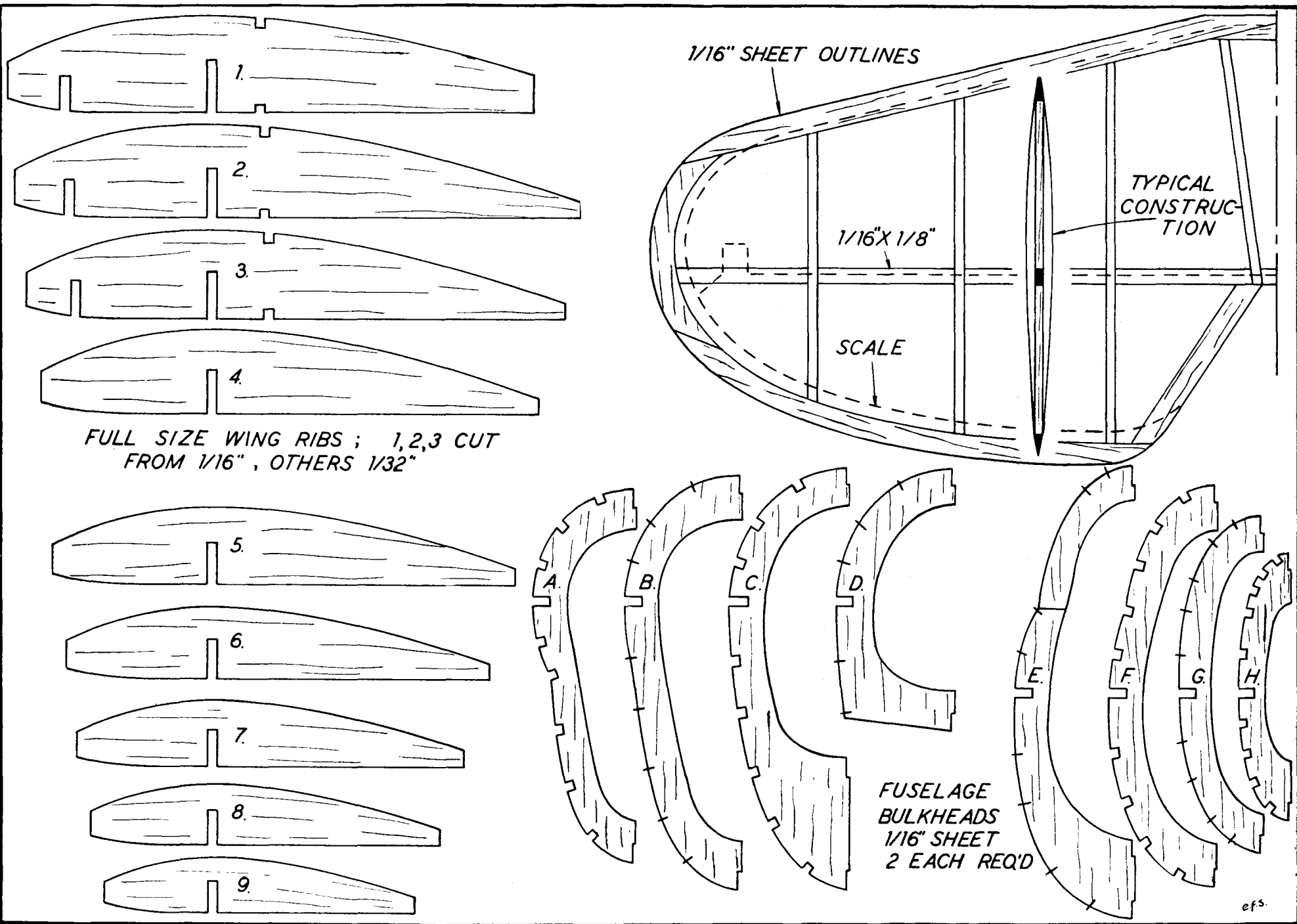


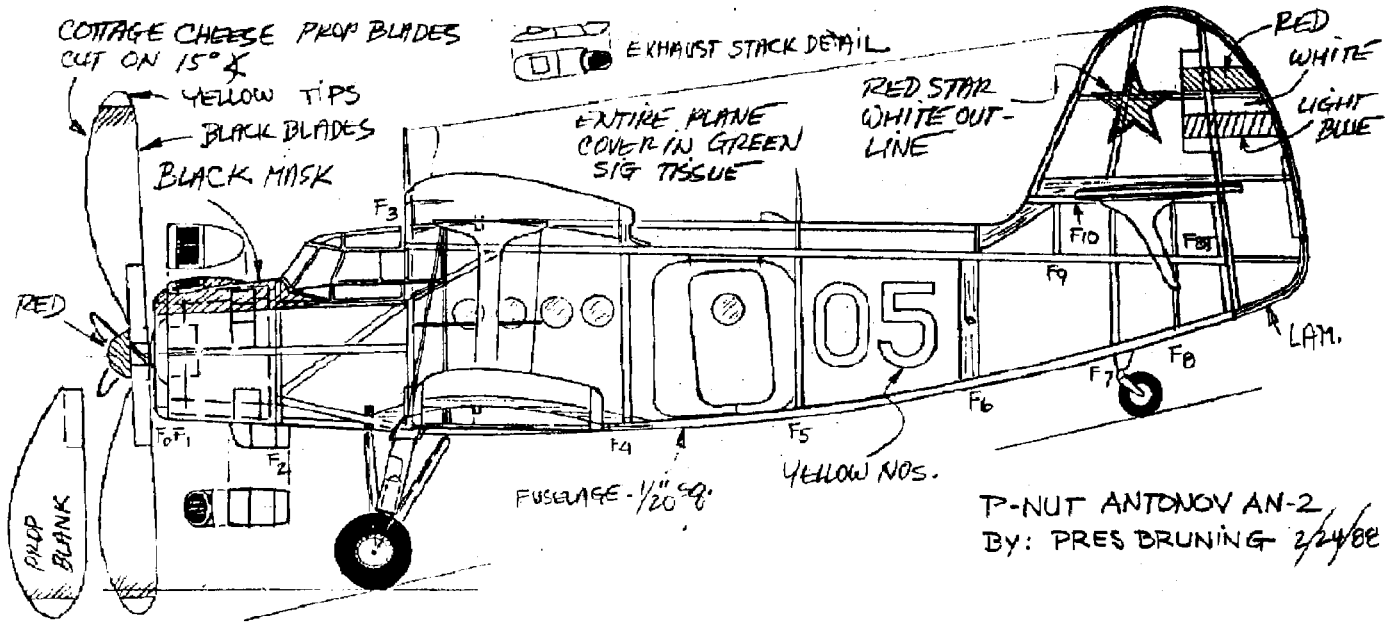
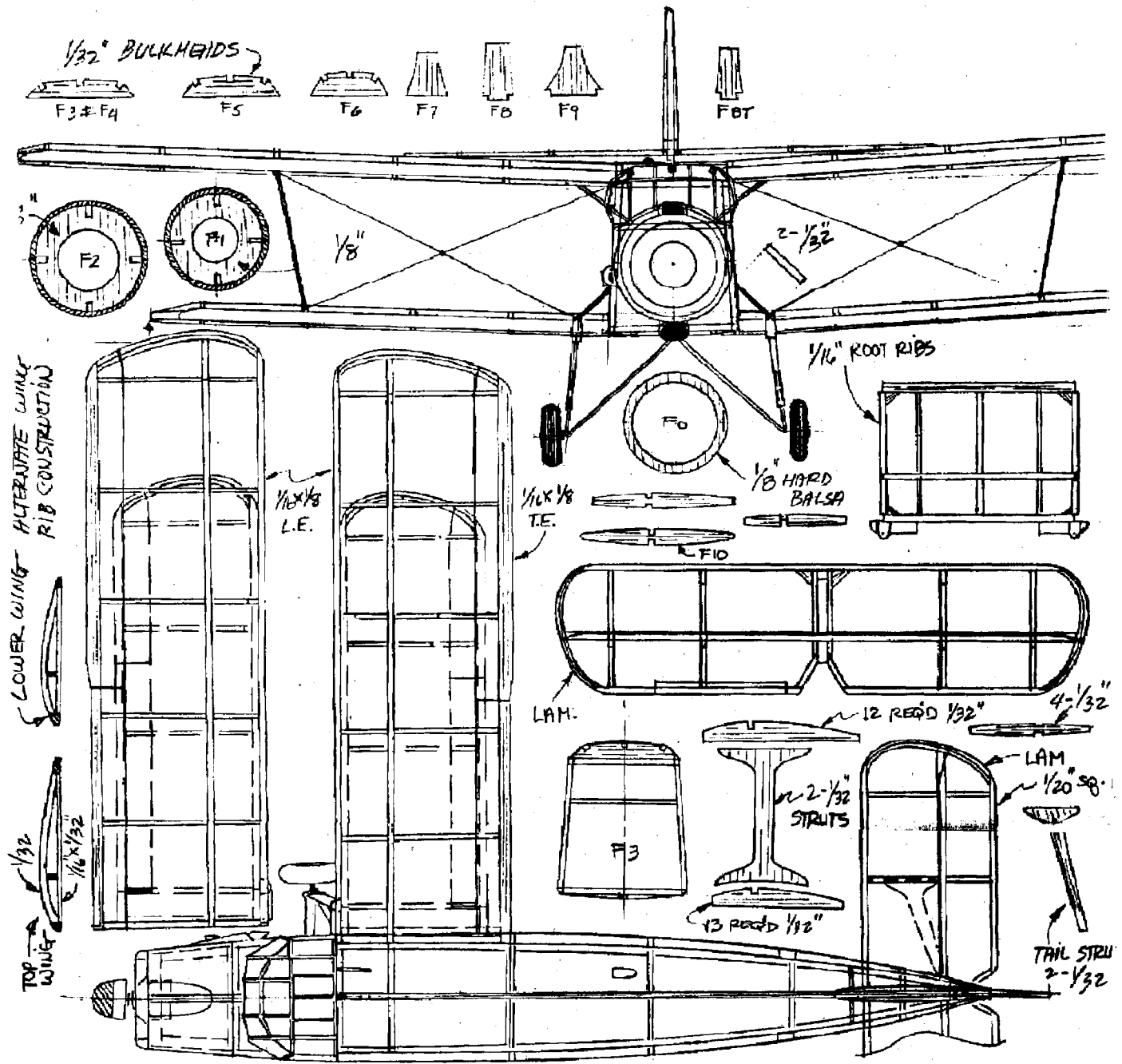
X Scamps Flying field



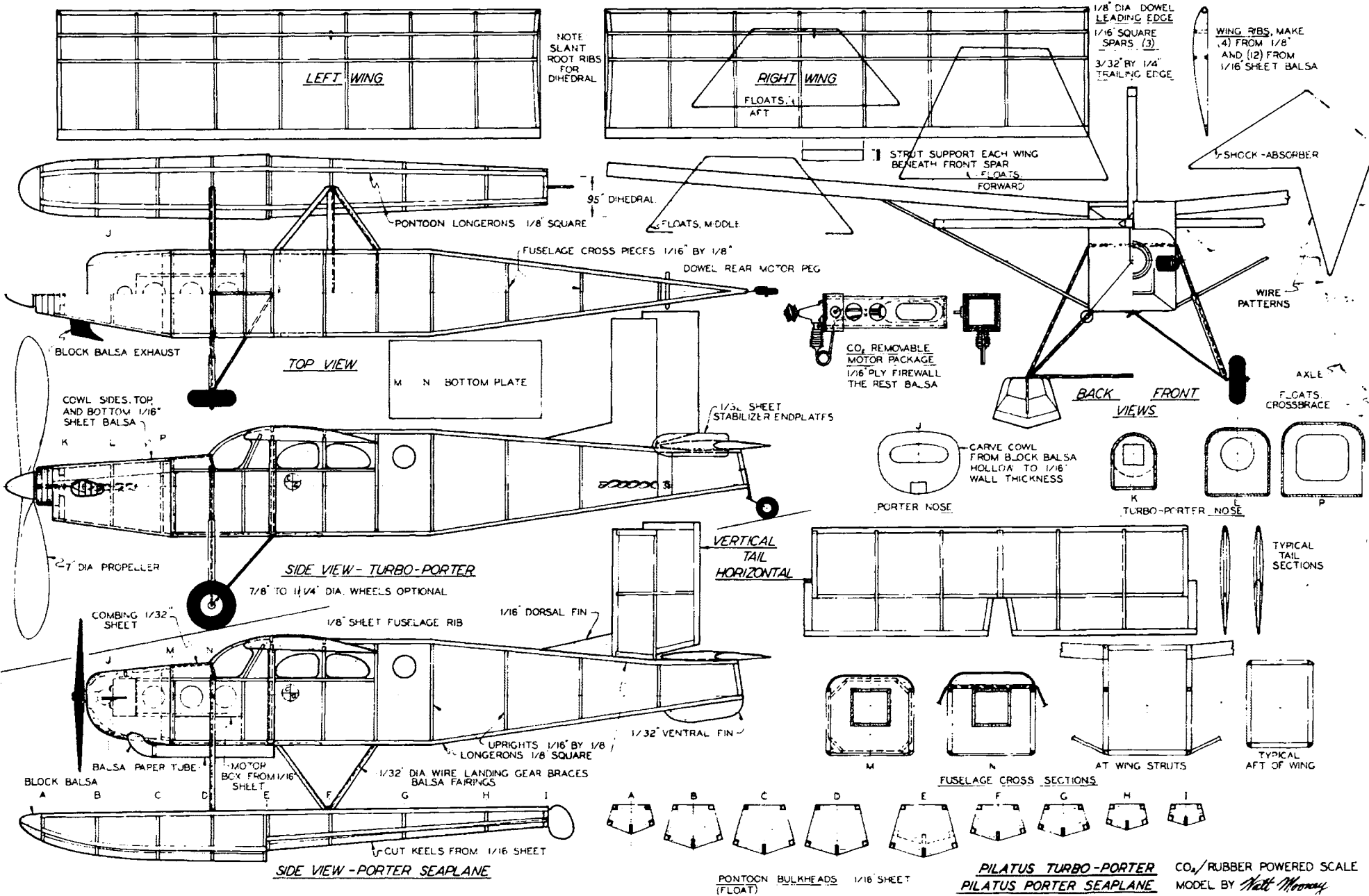








P-NUT ANTONOV AN-2
 BY: PRES BRUNING 2/24/88



NOTE
SLANT
ROOT RIBS
FOR
DIHEDRAL

1/8" DIA. DOWEL
LEADING EDGE
1/16" SQUARE
SPARS (3)
3/32" BY 1/4"
TRAILING EDGE

WING RIBS, MAKE
(4) FROM 1/8"
AND (12) FROM
1/16" SHEET Balsa

STRUT SUPPORT EACH WING
BENEATH FRONT SPAR
FLOATS FORWARD

SHOCK ABSORBER

95° DIHEDRAL

FUSELAGE CROSS PIECES 1/16" BY 1/8"

DOWEL REAR MOTOR PEG

CO₂ REMOVABLE
MOTOR PACKAGE
1/16" PLY FIREWALL
THE REST Balsa

WIRE
PATTERNS

TOP VIEW

M N BOTTOM PLATE

BLOCK Balsa EXHAUST

COWL SIDES, TOP
AND BOTTOM 1/16"
SHEET Balsa

1/32" SHEET
STABILIZER ENDPLATE

BACK FRONT
VIEWS

AXLE
FLOATS
CROSSBRACE

CARVE COWL
FROM BLOCK Balsa
HOLLOW TO 1/16"
WALL THICKNESS

PORTER NOSE

K TURBO-PORTER NOSE

P

SIDE VIEW - TURBO-PORTER

7/8" TO 1 1/4" DIA. WHEELS OPTIONAL

VERTICAL
TAIL
HORIZONTAL

TYPICAL
TAIL
SECTIONS

COMBING 1/32"
SHEET

1/8" SHEET FUSELAGE RIB

1/16" DORSAL FIN

1/32" VENTRAL FIN

UPRIGHTS 1/16" BY 1/8"
LONGERONS 1/8" SQUARE

M

N

AT WING STRUTS

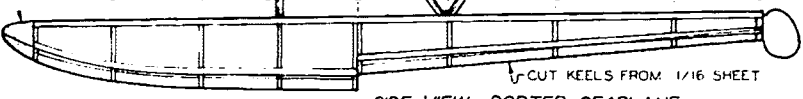
TYPICAL
AFT OF WING

BLOCK Balsa
Balsa PAPER TUBE

1/16" TOP
BOX FROM 1/16"
SHEET

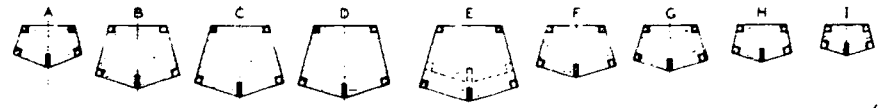
1/32" DIA WIRE LANDING GEAR BRACES
Balsa FAIRINGS

FUSELAGE CROSS SECTIONS



SIDE VIEW - PORTER SEAPLANE

1/2" CUT KEELS FROM 1/16" SHEET



PONTOON BULKHEADS 1/16" SHEET
(FLOAT)

PILATUS TURBO-PORTER
PILATUS PORTER SEAPLANE

CO₂/RUBBER POWERED SCALE
MODEL BY *Nell Moomay*

Hardworking Porters



BOTH CO₂ AND RUBBER POWERED, LAND AND SEA VERSIONS OF THE PILATUS AND TURBO-PORTERS MAY BE BUILT FROM THESE PLANS.

by WALT MOONEY

The Pilatus Porter and Turbo-Porter are not what one might call beautiful models. They are angular and not very well streamlined. However, beauty is as beauty does, and the Pilatus Porters do an awful lot. They are extremely efficient workhorse types of airplanes and they have good short field takeoff and landing capability.

So far our Porters have taken two firsts, a second and a seventh place. The firsts were as a landplane Junior entry at the August Orbiters scale contest, and as a Junior seaplane entry at the second N.A.R. Flightmasters contest. The second was an Open entry at the Flightmasters seaplane contest. The models shown are convertible, seaplane to landplane and CO₂ to rubber power, and fly extremely well in either of the several configurations. The seaplane will consistently ROW unassisted, although the rubber-powered version requires twice as much power to get off the water as it does to take off the ground on its wheel landing gear.

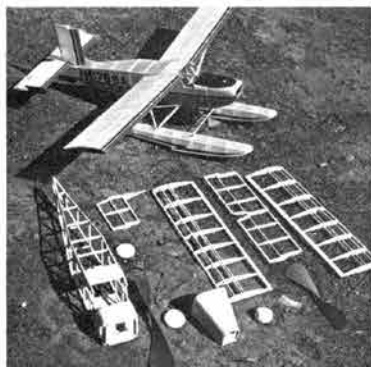
The CO₂-powered version is a Pilatus PC-6 and the Turbo-Porter is a PC-6/B-H2 powered for real with a 550 shp Pratt and Whitney PT6A-6 turboprop engine. Turbo-Porters have been equipped with several different engines, but this version has the simplest cowl shape.

Although the plans look a little complicated, especially because two versions are shown, it can be built by a beginner who has never built a scale model before—provided he is careful and patient. Several have been built by Juniors with little experience. In fact, their building efforts and questions resulted in several changes to the plans, and hopefully to an improved model article. It is my hope that these Porters will inspire some newcomers to try Scale and so a description of the model construction is in order.

The body is started by building two sides directly over the plans, using 1/8" square balsa for the longerons and 1/16 x 1/8" on edge for the uprights. Cut the fuselage cabin ribs from 1/8" sheet and make them part of the sides. To obtain the sharp corner in the longerons aft of the wing, carefully break the stick at the correct point and cement it back together, bent the correct amount as you lay the longerons down over the plan. To get the sides exactly alike, it's best to build them both at the same time directly over each other. It is also important to have all the longerons made of balsa of the same stiffness.

While the sides are drying, cut out the fuselage formers, the fuselage bottom plate and the parts for the motor mount if you are making the CO₂ version. This version is made so it will hold a quick change motor installation as shown on the plans. It was designed this way because anyone owning one of these great little engines will want to put it in several models. The motor mount thus consists of an open-ended box built into the first two fuselage formers aft of the cowl. This box can be omitted if you are building only a rubber-powered version, but will be needed for the CO₂ and the convertible model which will have the rubber motor running through it when it is not being operated as a CO₂ job.

Cement the two forward formers to the bottom plate and build the motor mount box inside the formers, being careful to have everything properly aligned. Now remove the sides from the plan. Carefully separate them, inspecting them for any loose joints, and remove any fuzz or plan paper stuck to them. Then carefully cement them in place on each



Simple box structure makes a pretty but angular model. Three-spar wing is not highly warp resistant, so keep it pinned to your board when shrinking and dopping.

side of the bottom plate and former assembly. Next, install all the cross members in the forward parallel sided part of the fuselage. If the formers and bottom plate were properly lined up, your fuselage will automatically be correctly aligned—if not, it will be crooked, so it is very important to check the assembly of the formers and bottom plate against the plan as you put it together.

When the forward part of the fuselage is dry, crack the longerons at the bend and bring them together at the back of the fuselage. Cement the rear uprights of the body together after thinning them and tapering the longerons as shown in the top view. These aft uprights should be exactly even, and the fuselage will be perfectly aligned. Check it before the cement dries and then add all the aft cross braces.

Use 1/16" dia. aluminum tube, the width of the fuselage, cemented on the front side of the second former for the upper landing gear attach point. Add the forward combing, the cabin top sheeting and round off the longerons as shown in the sections. Do not round off the longeron where the horizontal tail attaches, nor the ribs where the wing will attach. Carefully sand the fuselage structure smooth using fine sandpaper.

The wing is a fairly simple multi-sparred structure. Make a left and right wing. Ribs are cut from 1/16" and 1/8" sheet as needed, or laminate one thick one from two thin ones if desired. The leading edge is made from a birch

Here's Douglas Mooney's CO₂ Porter. He's almost as fine a builder at 15 as his dad. If flown with a Cox 010 with restrictor, additional dopping would be needed.



dowel, 1/8" in diameter. If your model shop doesn't carry them your hardware store or local lumber yard will. This type leading edge has two advantages—it is already the right shape for the leading edge of the finished wing, and it will almost never be broken in a crash. The spars and trailing edge are balsa of rather strong stock. Note the position of the strut support and install it in the wing structure. Also note that the ribs that attach to the fuselage are slanted outward at the top so that the wings will have the proper dihedral when they are later cemented to the fuselage.

The horizontal and vertical tail are constructed in the same general manner over the plans using material 1/16" thick by the width shown on the drawing. After they are removed from the plan, soft balsa pieces 1/16" thick are added to the top and bottom of the cross pieces and the assembly is then sandpapered to the tail sections shown on the plan.

The cowl for the CO₂ model is carved and hollowed from solid balsa blocks. Two pieces of 1 x 2 x 2" block balsa are lightly cemented together and then carved to the outside shape. The seam between the two blocks should be on the vertical centerline of the cowl. After carving and sanding the block to shape, use a thin razor blade to separate the two halves, and hollow each half to approximately 1/16" thick all over, except at the very front where it is 1/8" thick. (See the dotted lines in the plan.) Air inlet holes must be cut in the front of the cowl and access holes are necessary to get the cowl over the top of the engine and for the CO₂ filler point. The openings cannot be just painted on, as the engine needs the heat from the air passing by to run efficiently. This applies to its tank also, which must be well ventilated if the engine is to develop enough power to fly. This is especially true for the seaplane version which requires almost twice as much power as the landplane to take off.

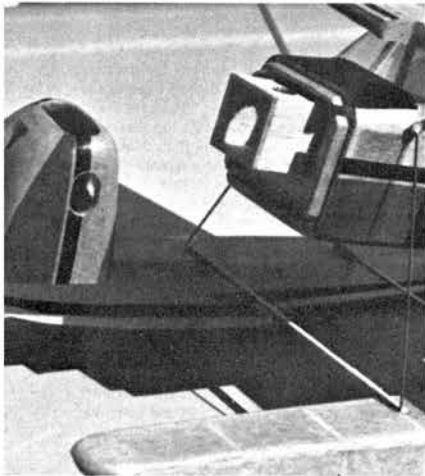
The Turbo-Porter cowl is built up out of sheet balsa with formers for shape and a block balsa front end. Cut former "K" from 1/8" sheet, "L" and "P" from 1/16". Cut two sides and a bottom from 1/16" sheet and assemble as indicated. When dry, plank the upper surface with balsa strips, carefully beveling their edges for a good fit. Note that "K" is located about 1/8" from the front. The nose block is laminated up of four pieces of 1/8" balsa, circular in shape and a square one to fit into former "K". One circle is smaller than the others to be fitted up against "K" inside the front of the cowl. The cowl locator pieces form an irregular hexagon cemented to the front face of former "M". These should be made to fit your cowl snugly and precisely locate it on the front of the fuselage structure.

Exhausts are made from block balsa and paper tubing as required. In the case of the CO₂ model, the forward part of the exhaust stack is cemented to the cowl and is a slip fit in the aft part of the exhaust stack which is a tube attached to the finished fuselage.

The landing gear depends on the model. The floats, or pontoons, are built like two separate fuselages. Build them upside down over the top view by pinning down the two top pontoon longerons and cementing the bulkheads "A" thru "I" in place. Then add the keels shaped to the contour shown in the side view, and the two bottom longerons (or chines). When the pontoon is dry, sandpaper the upper longerons to a round cornered

contour, but keep the corners of the chines sharp—even the slightest roundness to the bottom side of the floats will increase the water drag tremendously and keep your seaplane from taking off.

Wire patterns are shown for all the landing gear structure. Be sure to smooth the ends so they will fit into the cross tube in the fuselage. There are no rigid points with respect to the fuselage of the landplane landing gear structure. The main attach point, at the upper end of the shock absorber strut, just below the windshield, is inserted into the cross tube and left free to swing fore and aft. The other two points of contact are where the braces touch the fuselage on the bottom centerline. A washer is soldered at the apex of each "V" to make a pressure pad for bearing on the bottom of the fuselage. These pads are free to slide around on impact. There are actually two wire pieces to the landing gear structure. One piece is bent up to make the shock absorber and forward brace all in one piece, and the other is bent to make the rear braces and the wheel axles all in one piece. The axle part of the rear brace is slipped



Nose box for the CO₂ installation. Box also holds the tank.

through the bottom bend of the shock absorber part and the bottom apex of the gear structure soldered on each side.

Prepare a jig to hold the wires in the right position for soldering. It should consist of a block the width of the fuselage at the landing gear position with a hole located at the right place for the upper end of the shock absorber strut. Put the upper ends in the hole and locate the top of the sidebrace bend in line and in the center. Slip a washer between the block and the top of the side braces and solder it in place. Then locate the aft brace/axle piece by slipping the axles through the shock absorber/side brace bottom bends and putting the aft brace bend against the block. Slip a washer between the bend and the block and solder it in place for the rear fuselage bottom bearing pad. Check that everything is aligned and then solder the lower joints where the axles go through the shock absorber side brace bends. Wheels are installed on the axles by soldering on a retaining washer. Many different wheel and tire sizes have been installed on various

Porters, so wheel scale is not critical on a Porter model.

The landing gear structural assembly for the float version should only be done after the floats have been covered and doped. When completed and installed on the model, the floats should be aligned parallel to the body in the top view and as shown in the side view. The tops of the floats should be exactly parallel. The cross braces should be strongly attached to the floats so that the two braces and two floats make a rigid assembly. On the original model the float struts were taped to the cross braces in two spots on each brace with a single fold of masking tape. The upper end of the front strut of course inserts in the cross tube and the aft struts are taped to the bottom of the fuselage in two places with a 1/2" square of masking tape. In the event your seaplane hits the shore, the tape will pull loose without damaging the floats. To prevent tearing tissue on the fuselage bottom, put a small piece of transparent tape over the bottom tissue where the struts are taped on.

The struts for the seaplane are all streamlined by the addition of balsa fairing sticks. The landplane uses round section shock absorber struts which can be simulated with plastic tubing.

Your Porter structure should now be all assembled. Very carefully sandpaper all the parts so they have no rough edges, or strings of cement attached, and so they have the proper airfoil shapes and contours. Often what prevents newcomers from building nice-looking models is that they don't take time enough to do a good job with the sandpaper. Take it carefully and patiently, but don't overdo it. Do not sandpaper the bottom corners of the floats round—they must be sharp edged.

Cover the model with tissue. Almost any color scheme will do as this is a civilian bird. If you have access to back issues of model or aviation magazines, it will be easy to find pictures of specific Porters to copy. Water shrink the tissue by spraying the parts lightly with water. When dry, give all the parts two light coats of clear dope. Color trim was put on the original models by doping contrasting tissue in place. This is all the finish the landplane needs, but it's not enough for the seaplane.

Add two more coats of dope to the seaplane and then a third, suitably plasticized so it won't shrink too tight and warp the structure. I plasticized my dope by dissolving a piece of camphor the size of a sugar cube in two oz. of thinner and then adding two oz. of dope. Half a teaspoon of castor oil will also work for this much dope. It will also be necessary to put a couple of coats of dope on the inside of the cowl and on the inside of the nose and motor mount box of the seaplane version.

For the CO₂ version, a Cox 4½-2 propeller was used and worked very well. For the rubber-powered landplane version, a 7" dia. propeller is recommended. It is too big in diameter to be used for a rubber-powered seaplane however, so use a propeller that is only 5½" in diameter which will result in only a slight decrease in performance. I used an 8" dia. Paulonia propeller cut down to the desired diameter as a propeller on the original models, but you can carve one of your own if desired. (Paulonia props can be obtained from American Hobby Center, New York if not at your local hobby shop.) The rubber-powered model propeller hook follows standard

practice. Use your favorite freewheeler device if desired.

Install the windows and windshield as the last step. On the original models the windows were simulated with light blue tissue doped on and a thin inked line drawn around them. If you prefer to make them transparent, very carefully cut some out of thin plastic, cut holes in the tissue of the fuselage and cement the windows in place using thin dope as adhesive. The windshield has compound curvature—it bulges and cannot be made exactly to scale out of a flat sheet. Ours were made by carving a wooden form to the correct shape, sanding it smooth and using it as a mold for a Mattel Vac-U-Form. The windshield is just about the maximum size that can be made on the Vac-U-Form. If you don't have one of these most useful toys for the small scale builder, you can heat your plastic and hand-pull it to shape over the form. If neither of these alternatives suits you, take a slight deviation from exact scale and make the windshield from flat sheet bent with only single curvature. This will make the windshield a straight line in the side view, from the front of the rib to the top of the combing at former "N".

After all the doping is completed, add the license numbers or letters. Numbers one-in. tall on each side of the aft fuselage are proper for a Porter with United States registration. Decals this size are available at most model shops.

Three-views of the Porters are published in several issues of Jane's *All the World's Aircraft*. They have also been published in *The Observer's Book of Aircraft* (1965 and 1966). Perhaps the best data is obtainable in Kenneth Munson's *Private Aircraft, Business and General Purpose*, published by Macmillan Co., 1967. The Pilatus PC-6 is on page 26 and the Pilatus Turbo-Porter is located on the following page. These are only two-views, but they show both top and bottom details. Best of all, they are in color.

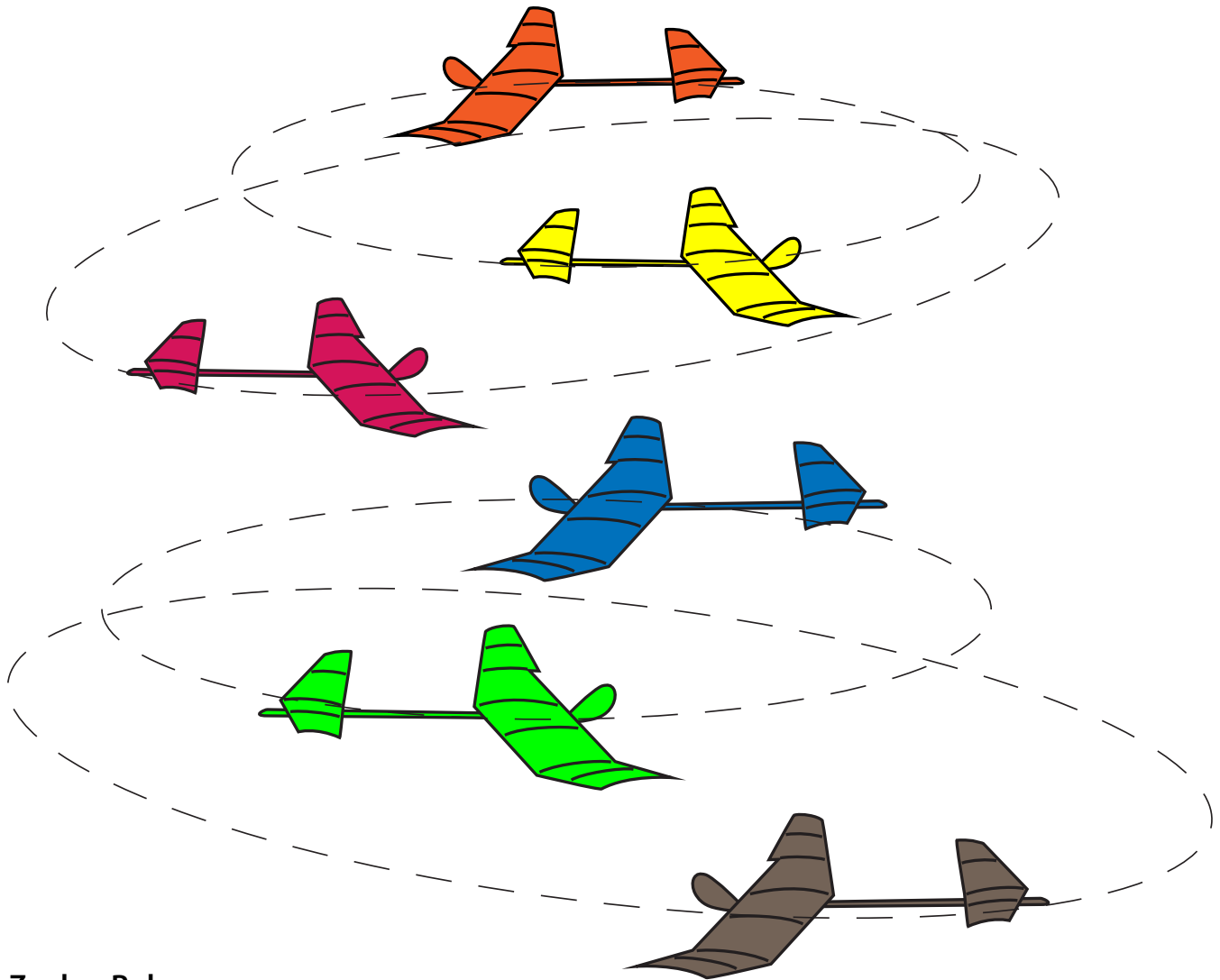
Flying the product of your patience and efforts is always the reward one seeks, and the Porter models should not disappoint you. Make sure the center of gravity is in the right place. The model should balance in a horizontal position if you support it at a point directly above the CG indication. The original rubber Turbo-Porter model balanced perfectly right off the board, but the CO₂ model turned out to be slightly nose heavy. It was ballasted with a small lump of clay stuck to the fuselage under the tail.

For the landplane model, standard trimming procedure is used. Balance the model, test glide it, shimming the tail to get a good glide. Check for a straight glide and remove wing warps or rudder warps if it turns. Start flying with short motor runs and low power, adjust the thrust line to give a good power pattern. Straight or gentle right turns are desired. Use downthrust if it stalls under power.

For the seaplane models, all of the above applies, however, it is amazing how much more power it takes to get off the water. Two loops of 3/16" is needed for the rubber model. It is extremely important that the model taxis on the water in a straight line. The CO₂ model required considerable right thrust to accomplish straight takeoffs. A 1/32" thick shim was used under one side of the engine crankcase, as well as a high power setting for the engine, and the model took off like a charm.

INDOOR CANARD CONTEST

November 3, 2013 Grossmont Gym



The Zephyr Rules:

All Classes: Wood must be 1/16" square or greater.

Class 1: A wooden propeller using the building instructions included in the article: 1/32" thick propeller, maximum diameter 8 1/2" flat or twisted. 1/8" square balsa hub, 1 1/4" long, sanded round

Class 2: A plastic single piece molded propeller, maximum diameter 8"

Class 1 and 2 Competition:
"Best three flights out of six"

Mass Launch Competition:

All competing planes welcome in the mass launch.
One flight.

There will be an official contest timer and an assistant timer (in case the official timer would like to be in the contest). Flying will be conducted in rounds with trim flight possible between rounds.

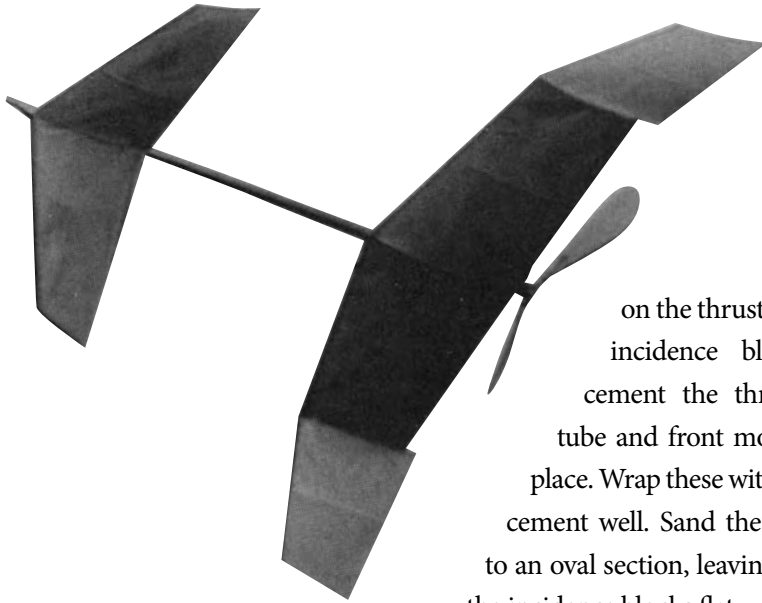
Contest Director

William Scott
wscott127@mac.com
phone (619) 701-2457

The Zephyr

From *Model Builder*, March 1979, Volume 9, Number 86

By Randy and Irene Wisley



on the thrust bearing and incidence blocks. Next, cement the thrust bearing tube and front motor hook in place. Wrap these with thread and cement well. Sand the motor stick to an oval section, leaving the tops of the incidence blocks flat.

Wing

Make an airfoil template from 1/16 plywood. Cut out 14 ribs of light 1/16 sheet and set them aside. Pin down the leading and tip trailing edges on the plan. Cement the #1 ribs in place. Use shims to raise the center section trailing edge up off the plan as required and cement it to the #1 ribs. Add the rest of the ribs, trimming them at the aft end as necessary. When everything is dry, crack the leading and trailing edges at the #1 ribs and raise each tip 2 1/4 inches. Re-glue the joints with Titebond or Hot Stuff.

Canard

The canard is built just like the wing. Use the leftover wing ribs, and when dry, raise each tip 1 3/8 inches for the proper dihedral.

Propeller

Cut the prop blades from 1/32 sheet balsa. The hub is 1/8 square balsa, 1 1/4

inches long, sanded round. Push a pin through the center and cut a slot 1/32 inch wide and 3/8 inch deep at each end. The slots should be about 60 degrees relative to the pin. Cement the blades to the hub. Put a coat of dope on the back side of each prop blade to get the proper curve (see side view). When dry, balance the prop as best you can.

The prop shaft is a piece of 1/32 music wire. Bend a loop in one end for the rubber motor, slide the shaft through the thrust bearing tube, add two glass beads, slide the prop on and bend the barb in the shaft as shown on the plan.

Covering

The wing and canard are covered with tissue. Don't shrink the tissue with water or dope, please, or you'll have to get your template out again, cut out 14 more ribs, and build a whole new wing and canard. By the way, the wing and canard are covered on the top surface only.

Assembly and Flying

Glue the wing to the motor stick. Spot-glue the canard in place. The motor is a single loop of 1/8 inch rubber with about 2 inches of slack. Balance the model where indicated with the motor in place. Hand glide the model to get the final trim, adding small bits of clay to the nose or tail as required. When you're satisfied with the glide, try a few hand wound power flights. The Zephyr should fly in left circles, spiraling up under power. Tilting the canard toward

A simple stick model that would be great for club contest. Full size plans on next two pages.

The "Zephyr" is a simple little rubber-powered canard that is a real eye-catcher and quite a performer to boot. Canards are fun and are capable of surprisingly good flights. Being a stick model, the Zephyr is very quick to build. Indoors or out, its consistent performance will make you wonder why this type of layout isn't explored further. (It's interesting to note that, according to Webster, a canard is "an obsolete kind of airplane with the rudder and elevator in front." Somebody better tell Burt Rutan about this, so he won't design any more "obsolete" airplanes like the Vari Vigen, Vari Eze or Quickie!)

Motor Stick

Cut the motor stick to length from a piece of rock-hard 1/8 x 1/4 balsa. Glue

the direction you want the model to fly will control the turn. Use a winder for maximum duration. Have a ball, and

remember, Zephyr is capable of going O.O.S. on the slightest bit of warm air. After all, that's how it got its name!

