

EL TORBELLINO

NEWSLETTER OF SAN DIEGO ORBITEERS FREE FLIGHT CLUB

JANUARY 2015



The Prez's Corner – Don Bartick

The contest season is just beginning with the SW Regionals in Eloy, AZ. Arline and I will be there and I believe some other Orbiteers are considering going. It has always been a well-run contest. I've been going since I was an AMA senior. Back in the fifties, the SWR had hundreds of entries. Now they're lucky to get 60. Sign of the times. Regardless, it's still a fun contest.

In early February, the Isaacson Winter classic will be held in Lost Hills. This is probably the largest free flight contest in the US. It draws the international flyers that come to CA for a week of competition. What so important for the Orbiteers at this contest is the 40th anniversary of the P-30 event and the tribute to Orbiteers's John Oldenkamp. John, along with Harry Steinmetz is credited with creating this event and promoting it to be an AMA official event. Clarence Mather and Walt Mooney also contributed to the specifications. This will be a very special event at the Isaacson. I have worked with Norm Furitani (contest director) and NFFS editor Don Deloach to create a P-30 event to include John's Hot Box P-30 published in the July 1977 Model Builder Magazine and all other designs. The Orbiteers will contribute \$100 that is matched by the Isaacson management to make up a \$200 purse. We will also provide a trophy to 1st place. Participants can enter a Hot Box and their other design to have 2 chances to win the \$200. See flyer in this issue. I have made available to the FF community a PDF drawing of the Hot Box and the article published in Model Builder. Come on Orbiteers, this will be a great contest and one not to miss. I have the wing built for my Hot Box. The plane is an easy build.

Congratulation to Bill Booth for making the USA F1B team. He has been pursuing this dream for many years. Bring home the gold Bill!

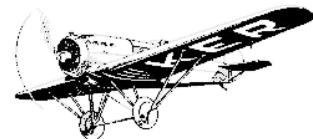
Initial planning is underway for the Dual-clubs FF Bonanza. For the low information folks, this is the SD Orbiteers and Fresno Gas Model Clubs joint annuals at Lost Hills May 16-17. Orbiteers, put it on your calendar and plan to be there.

See you at the awards ceremony.

This is a wrap for now.

Remember: "Life is like a bicycle. To keep your balance you must keep moving."

Albert Einstein



ADDENDUM to MOST RECENT BOARD of TRUSTEES MEETING - J.Merrill

An impromptu on-line meeting was held within a few days of our December board meeting. The topic was concerning our website, and its future. John and Kathy agreed to talk and negotiate with the same person that did the Scale Staffel website, as well as other websites not amongst the model community. The price negotiated and agreed upon was \$250.00, which seemed reasonable to all board members. It was voted upon, and agreed to unanimously. Also, as an interim, Kathy agreed/was volunteered to be at least a temporary webmaster, until which time she can twist somebody else's arm to take over those duties.



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Newsletter Editor / Membership Coordinator

Howard Haupt(858) 272-5656
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ORBITEERS MEMBERSHIP DUES

Annual Membership - \$15
Lifetime Membership - \$250
Non-Member Newsletter Subscription - \$15
Junior Members 16 years old or younger - Free

Submit Dues to Club Treasurer:

Howard Haupt
3860 Ecochee Avenue
San Diego, CA 92117-4622

THE FINE PRINT **THE FINE PRINT**

El Torbellino is the official newsletter of the San Diego Orbiteers, an Academy of Model Aeronautics (AMA) Charter Club (#1113) and a California not for Profit Corporation. This newsletter is sent monthly to all paid members, selected exchange and magazine editors. Non-Members may subscribe at \$15.00 per year within the U.S.A., offshore price will be adjusted to reflect the postage required. Materials from El Torbellino may be reproduced on an unlimited basis by other publications, but proper credit is requested.

ORBITEER WEB SITE

www.SanDiegoOrbiteers.com

Webmaster: Bob Beecroft

A DAY AT THE FIELD - M.Jasper

The rain has made our Otay flying field green.

Don Bartick came down to trim some of his gas models for the upcoming Southwest Regional's in Eloy Arizona.

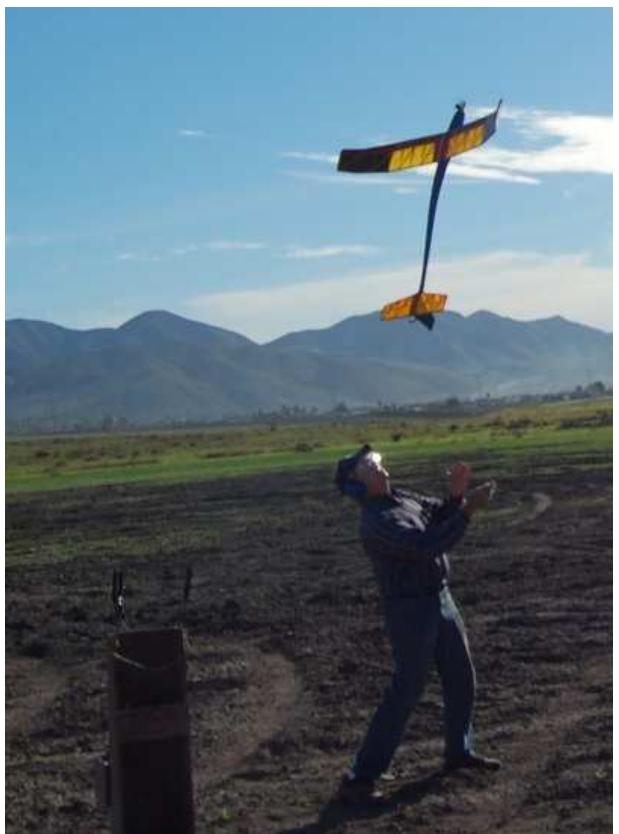
I may go to that contest as well, and came down on the same day to trim my P-30 with it's orange Chinese prop.

Mark Chomyn came to trim his new Super Coupe and fly several other models.

The flying conditions at are our field have been great recently.

(The following pictures taken by Mike Jasper at the Otay flying field where taken the first week in January 2015.) - ED

OTAY FLYING FIELD Photos by M.Jasper



*M.Jasper
11/11*



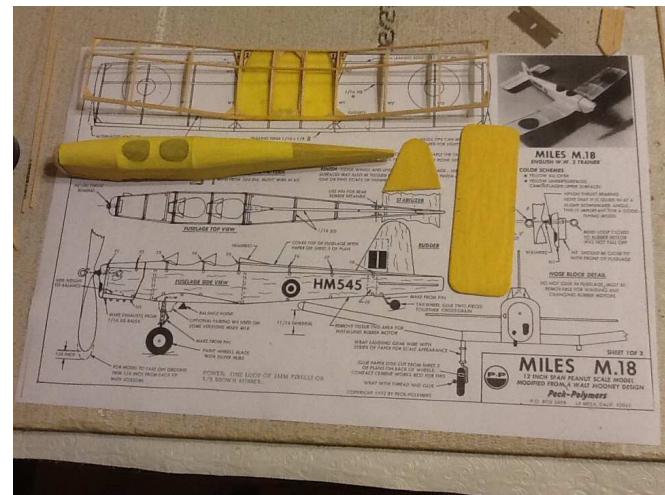
FROM THE WORKSHOP - J.Merrill

Not much happening on the workbench this month.....hurt my back again, so I'm pretty limited in what I can do.

Did figure out a way to cut out some Peanut parts, so started putting together a Miles M.18 from an OLD Peck kit. As you can see from the box (in the accompanying photo), they hadn't started using those familiar orange boxes yet.

Wish I could remember for sure where I got the kit, but it may have been out at the last Weedwackers swap meet.

The plane was a Walt Mooney design, with only a 12" wing span. I'm considering blowing up the plan to twice that size, for our Annual July 4TH 2x Mooney Contest, and then also using it in the Low Wing Trainer event at Westfac V in Arizona later this year. We will have to see how it does first. I can say, the kit is well designed and goes together nicely. I obviously have a ways to go, but so far it's been a fun project, as are all the Peck kits I've built. Another thing that caught my attention is the little red prop that came with the kit; you can see it on the right side in the picture.
Does anyone know when they started using the more familiar gray props? I'd love a little history, if anyone wants to write in to Howard, which would make a wonderful future article for the E.T.

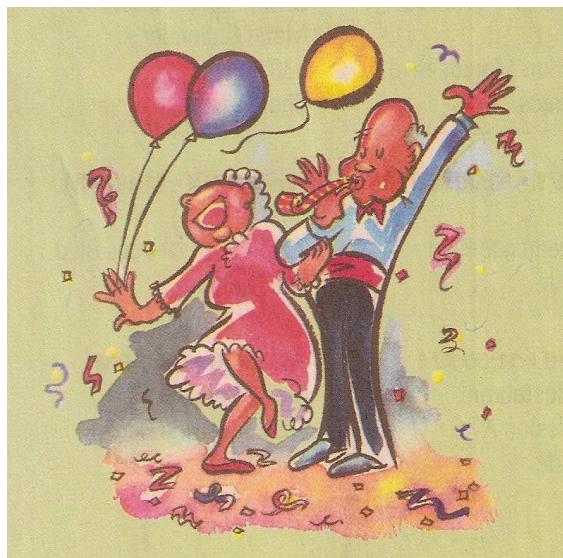


2015 INDOOR FLYING SCHEDULE

- Jan 4 - A-6, Phantom Flash*
- Feb 1 - Penny Plane, No-Cal*
- Mar 1 - Catapult Glider, Embryo*
- Apr 5 - A-6, Phantom Flash*
- May 3 - Penny Plane, No-Cal*
- June 7 - Catapult Glider, Embryo*
- July 5 - A-6, Phantom Flash*
- Aug 2 - Penny Plane, No-Cal*
- Sept 6 - Catapult Glider, Embryo*
- Oct 4 - A-6, Phantom Flash*
- Nov 1 - Penny Plane, No-Cal*
- Dec 6 - Catapult Glider, Embryo*

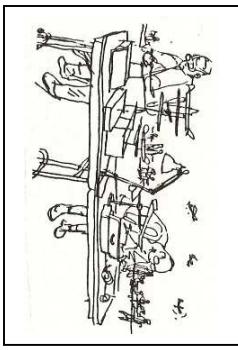
***Non-ORBITEER Points Event**

ORBITEER & SCALE STAFFEL ANNUAL BANQUET - JAN 24TH



Event: A-6 (6 entries)		January 4, 2015						CD: William Scott		
CONTESTANT'S FULL NAME		Airplane			(Best two of five)			FACTORING	SCALE FLT	BONUS
		1	2	3				POINTS	SCALE	POINTS
Richard Wood		175	220	187				407		1
Steve Shepersky		179	156	172				386		2
Mike Jester		190	169	160				383		3
Greg Hutchison		172	168	169				381		4
John Hutchison		154	146	183				337		5
Mark Chomyn		77	77	67				154		6

Event: Phantom Flash (5 entries)		January 4, 2015						CD: William Scott		
CONTESTANT'S FULL NAME		Airplane			(Best three of six)			CD: William Scott		
		1	2	3	4	5	6	FACTORING	SCALE FLT	BONUS
John Hutchison		102	89	112	113	101		327		1
Greg Hutchison		63	61	70	79	80	36	229		2
Nick Panousis		50	56	57	51	45	60	173		3
Don Bardick		25	40	48	46	46	58	152		4
Richard Wood		29	34	44	35	39	55	138		5
Bill Hill		5	31	48	21	26	16	105		6



WHEN & WHERE:

Saturday, January 24TH at 1:00 pm

At GIOVANNI'S Restaurant
9353 Clairemont Mesa Blvd.

WHAT & COST:

Italian Buffet, which includes:
s/b Salad, Spaghetti, Lasagna, Pizza,
Garlic Bread, & Beverage.
All you can eat for \$15, tax & tip included.

We will be charged for a minimum of
20 people, so come on out and join the
party.

THE PROGRAM:

- Eat, Drink, and be Happy
- Annual flying awards presentation
- Show and tell
- Raffle, donations are welcome
- Sharing of tall tales mandatory





San Diego Orbiteers

Presents the
40th Anniversary of the P-30 Event

At the 2015 Isaacson Winter Classic
February 7 - 9

Dedicated to Event Co-creator John Oldenkamp
(1931-2014)



>> \$100 1st Place plus plaque

>> \$100 Highest Place for flying

John Oldenkamp's Hot Box P-30 design

as published in Model Builders Magazine, July, 1977

***You can have 2 paid entries; (any P-30 & Hot Box P-30);
both scores count***

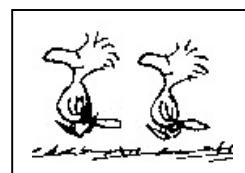
**Hot Box plans available through AMA's Plans Service - Plan #773;
at 5161 E. Memorial Drive, Muncie, IN 47302-9252;
Phone: 1(800)-435-9262 x 507; gregp@modelaircraft.org;
www.modelaircraft.org/plans.aspx;
or PDF file available from Don Bartick
(email: dbartick@4-warddesign.com)**

Plastic props = simple and durable. Balsa props = difficult and fragile. That was my thinking at this stage of my free flight career. I am now about to build a new MAXOUT X Embryo for outdoor competition with some valuable input from Joshua Finn, its designer. My Prairie Bird Embryo would more aptly be called a Prairie "Dog." It was a bear to trim due to warps and has never broken 45 seconds due in part to its relatively short rubber motor capacity and its heavy plastic prop. The MAXOUT X Embryo has a super long nose that requires a lightweight 8" or 10" balsa prop. So, for the first time, I recently built a balsa prop for a model airplane at the beginning of a build.

I have never carved a balsa prop. It seems like it would take forever, and then how do you get the desired pitch? You can start with a commercially available balsa prop blank like the one shown below that is sawn to a helical shape with a predetermined pitch. Apparently you just carve, and carve, and carve the super lightweight balsa prop blank and then sand. Then, after all that work, the balsa prop breaks in competition, or so it would seem to me.

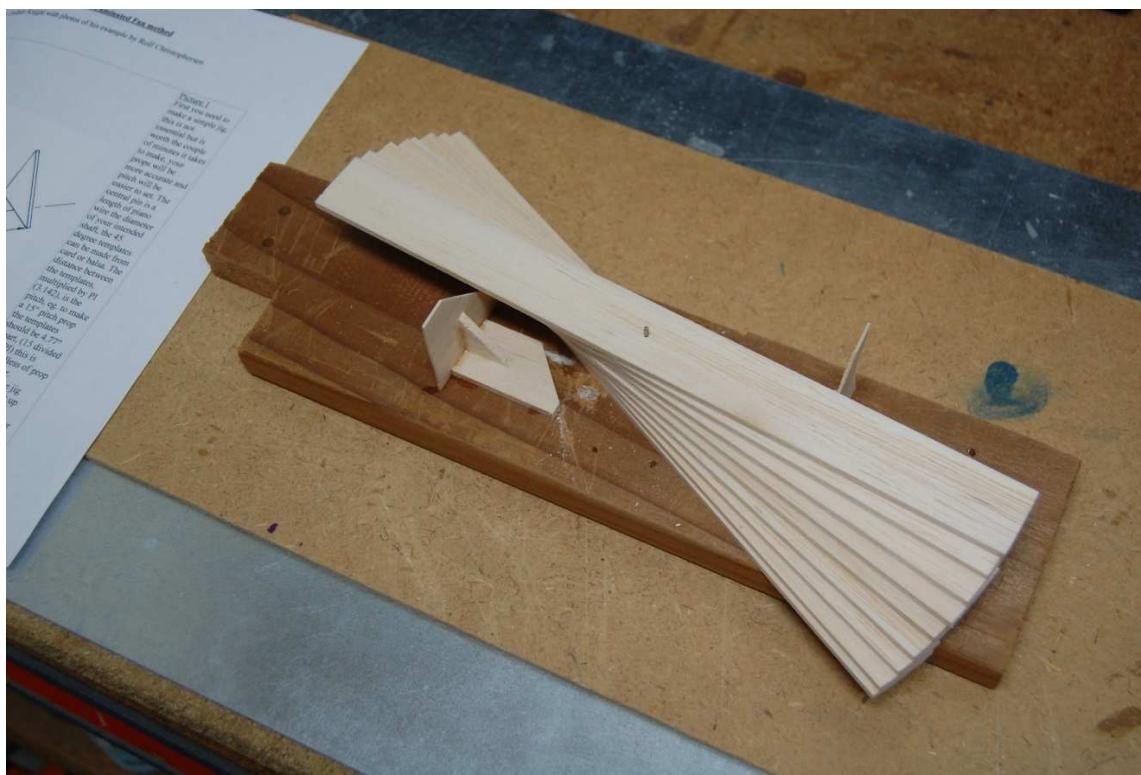


I ran across an article by Graham Knight published some time ago entitled "Making Balsa Props using the Laminated Fan method" that seemed to offer an easier, more accurate way to make balsa props. It also seemed that the laminated construction would have more durability than a carved balsa prop. So I decided to give it a go.



As shown below, a stack of identical rectangular $1/16$ " sheet balsa strips with a hole drilled in the center were slid over a segment of $1/16$ " music wire. I used nine strips of $7\# 1/16$ " balsa sheet in making my laminated balsa Embryo prop. The strips were fan folded or staggered against the inclined 45 degree edge of opposing sheet balsa templates mounted on a block of wood that forms part of the jig. The example in the picture is actually the beginning of the construction of the prop form I made for forming $1/32$ " sheet blades for indoor use, but the process is the same. I forgot to photograph my Embryo prop at this stage of its fabrication.

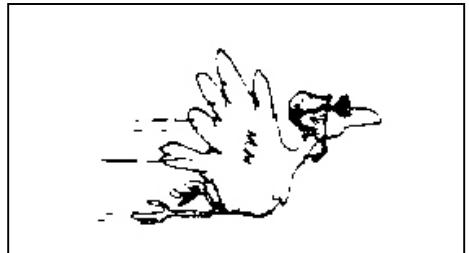
The templates are positioned apart a distance X that will yield the desired pitch. $X = \text{pitch divided by } \pi$. If you do the calculation the 45 degree templates need to be $3.18"$ apart, or each $1\frac{5}{8}"$ from the music wire, in order to get a prop with a $10"$ pitch. This gives an $8"$ diameter prop with a P/D of 1.25 which is a low enough pitch to get a good climb outdoors. John Barker recently published a neat tool for determining the length, width, thickness and number of balsa strips you need to make a laminated prop with a given pitch, chord and diameter. John Barker lives in the UK and is an icon in free flight. I have used his balsa stick and sheet density table regularly since I began my first efforts in free flight about ten years ago.



I removed all the balsa strips from the jig and then painted one face of each set of opposing surfaces with carpenter's glue as I reassembled the laminated sandwich. After drying overnight I sanded away the steps formed by the longitudinal edges of adjacent strips using a cylindrical sanding drum mounted on an electric drill. Then I used a sanding block to get a rough prop shape with a weight of 5.12 grams, as shown below.



I inserted a 1/16" Aluminum tube in the predrilled holes to serve as a bushing for a 1/32" inch prop shaft. I didn't have any Brass tubing this size and worried that it would be too heavy in any event. CA glue was sparingly applied around the opposite ends of the Aluminum tube to secure its position inside the balsa strips. More sanding with a Dremel tool and a sanding block yielded the final shape of the prop shown below. I used an A2Z pitch gauge to make sure that the blades had equal pitch. I also made sure that the prop was dynamically balanced by mounting it on a segment of 1/32" music wire, letting it rotate freely, and sanding the heavier blade. Mostly by hand, I sanded in some under camber. The two red ink dots on the hub of my balsa prop were marked to remind me that this was the front of the prop during sanding of the under camber.





After 4 - 6 hours of work, I ended up with a balsa prop that weighs 3.15 grams as compared to the new orange plastic Chinese prop of roughly similar diameter that weighs 5.08 grams.



Perhaps I used too much carpenter's glue. Maybe I could have sanded my laminated balsa prop thinner, but I want it to survive some hard landings at our club's Otay Mesa flying field. On the brighter side, it would appear that the balsa prop I made is extremely strong due to its laminated construction.

The build of my MAXOUT X Embryo will be tricky and time consuming. It has a geodetic construction on both the wing and stab. The wing is under-cambered. This model also has a pop-up wing DT. I am hoping to achieve a final Embryo airplane weight (without rubber) under 20 grams, and the laminated balsa prop I made will help me achieve that goal. Looking at the wonderful shape of the new orange Chinese prop makes me think that it would be a whole lot more efficient than my balsa prop, but hey, I tried something new. However, I still am disinclined to carve a balsa prop.

I am continually dealing with a Ying and Yang philosophy in this hobby. On the one hand, I think, well I am a relative neophyte and should do what everyone has always done in this sport. On the other hand, perhaps I am delusional in thinking that maybe I can implement some new or little-used approaches that will yield better results. Stay tuned for further developments with my MAXOUT X Embryo and its laminated balsa prop.



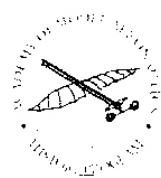
A NOTE ABOUT CLARENCE - H.Steinmetz

I first met Clarence in the late summer 1964. We met at the Clairemont dump flying site. We were both assigned to start teaching at Madison High in Sept. We chatted, flew, and I mentioned that I was doing some major rebuilding on my house. As the wind came up we went our separate ways. About 1:30 there was a knock on my door; there stood Clarence with a hammer in his hand offering to help. He had built several houses in the Midwest and his experience was a great help.



The AMA History Program Presents: Biography of CLARENCE MATHER

Born August 12, 1922 AMA #8133



Written by AMA staff (01/2004); Formatted by JS (12/2005), Reformatted by JS (10/2009)

The following was printed in Model Aviation's AMA News column about the 2004 Model Aviation Hall of Fame winner. (February 2005)

Clarence Mather

Clarence Mather, 81, is a lifelong Free Flight aeromodeler who lives in Bishop, California. Born in 1922, he grew up in Lemont, Illinois, a Chicago suburb.

Clarence has enjoyed the hobby for more than 70 years, starting as a youngster with his own airplanes crafted from orange-crates wood and whatever tools were available. For 10¢ and an oatmeal box top, Clarence purchased a Vought Corsair kit through an advertisement in a magazine.

"That box of tiny, fragile balsa strips and sheets, tissue, glue and a very complicated plan was a real eye-opener for me. That model was a biplane with an oval fuselage – about the worst possible model for a youngster who had never seen a built-up structure or a construction drawing before."

Undeterred, Clarence completed the model and began purchasing and constructing other 10¢ models. His farm chores left little time for his hobby, but if he hurried, he could manage a few minutes of flying before breakfast. "Those periods were short but they were gems of pleasure. That time of day is best; the air is cool and smells of green plants."

Clarence enlisted in the Army Air Corps at roughly the same time the United States entered World War II. Trained as an aviation mechanic, he was assigned to pilot training and eventually became a flight instructor. Clarence managed a little modeling at each place he was stationed, building rubber-powered and gas-powered models of his own design.

Following service, Clarence entered college and continued to build models. Robert Clemens, who nominated him for the Hall of Fame award, met Clarence when he began using the family's workshop for his model building. "My dad [Lou Clemens], my younger brother Jack and I all learned much about building and flying from having Clarence working beside us."

The four attended the first post-war Nats in Wichita, Kansas and Jack won in Junior Rubber Cabin. A few weeks later the boys' father died but Clarence continued mentoring them and taking them to contests.

Clarence earned a master's degree in biology and physics, became a high school teacher in Ann Arbor, Michigan, and taught college-level physics courses at night. He began flying Indoor with members of the Detroit Balsa Bugs, using Rubber Scale models. Clarence won many contests and awards in both Indoor and Outdoor Free Flight.

In 1964 Clarence moved to San Diego, California, continued to teach high school science, and joined the San Diego Orbiteers club. He served as the club's president and helped develop the popular A-6 event, a casual competition for small, easy-to-build Indoor models.

Clarence earned a place on the 1968 and 1970 United States FAI Indoor teams and competed in Japan and Romania. His Peanut Scale model of the Nesmith Cougar homebuilt monoplane was kitted by Peck-Polymers in 1970 and is still in production today.

"I've flown in nearly every Free Flight event," said Clarence, "both indoors and out. I've tried many experimental designs, including canards, push-pull twins, flapped Wakefields, biplane microfilm models, and zero-decalage models. I've competed in many local, regional, and national contests and have placed and won at all levels."

Between 1970 and 1980, Clarence held three national records. He has been the Indoor Contest Board representative for District X for 25 years. A Contest Director for 28 years, he served as an event director at the Nats and the FAI Team Selection director.

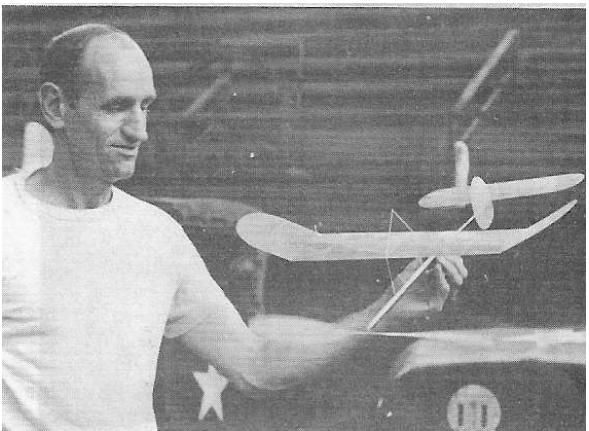
Many of his designs and articles have appeared in publications including *Model Airplane News*, *Flying Models*, *Model Aeronautics Yearbook*, *American Aircraft Modeler*, *Sport Models*, *Free Flight Digest*, and *MA*.

Clarence retired from teaching in 1986 and moved with his wife to Bishop, California. At age 81, he is still an active modeler, competing in several contests each year. He was recognized by the National Free Flight Society (NFFS) in 1992 and elected to its Hall of Fame.

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historyprogram @ modelaircraft.org





CLARENCE MATHER (1922 - 2015)

Some things I remember by H.Haupt

In addition to the AMA developed biography for Clarence, I wanted to share some of my personal life experiences interacting with Clarence over time.

I first met Clarence when he introduced himself as my senior year physics class teacher. Early in the first semester of this class, he brought in an indoor model airplane to demonstrate to the class. This indoor model was a F1D model and made quite the impression floating over the heads of the students in attendance.

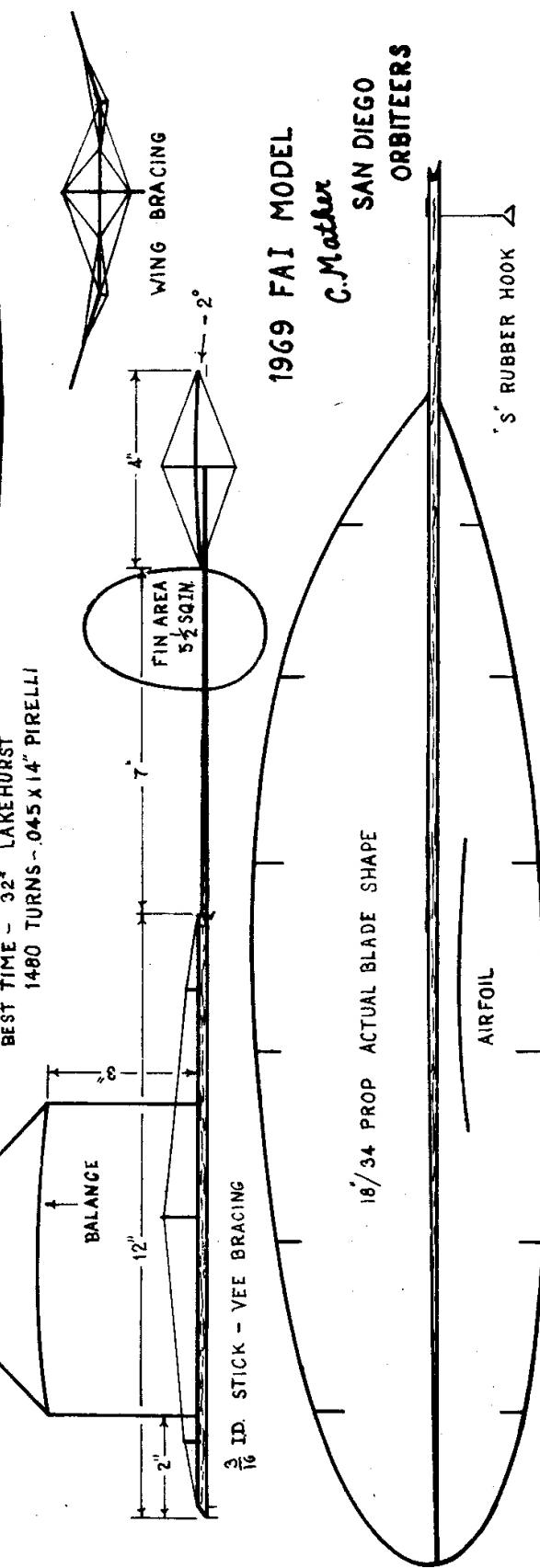
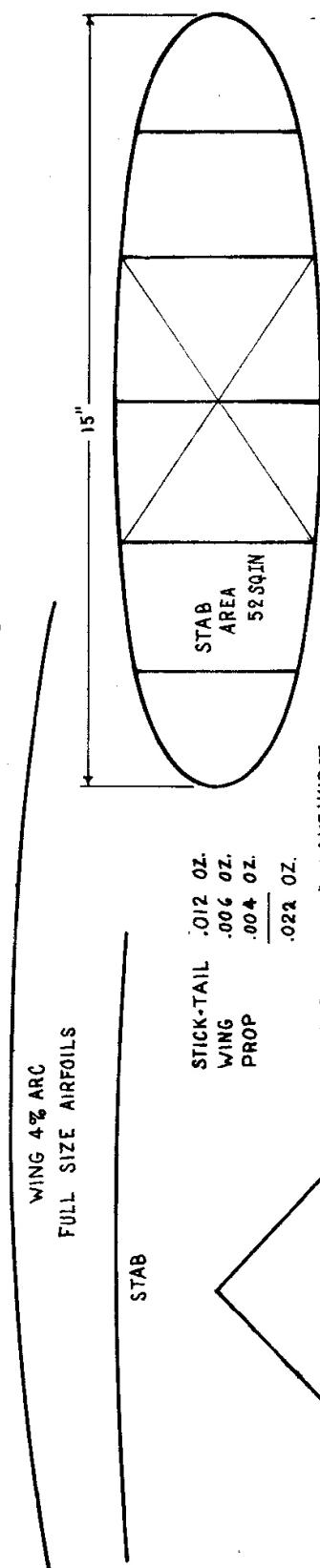
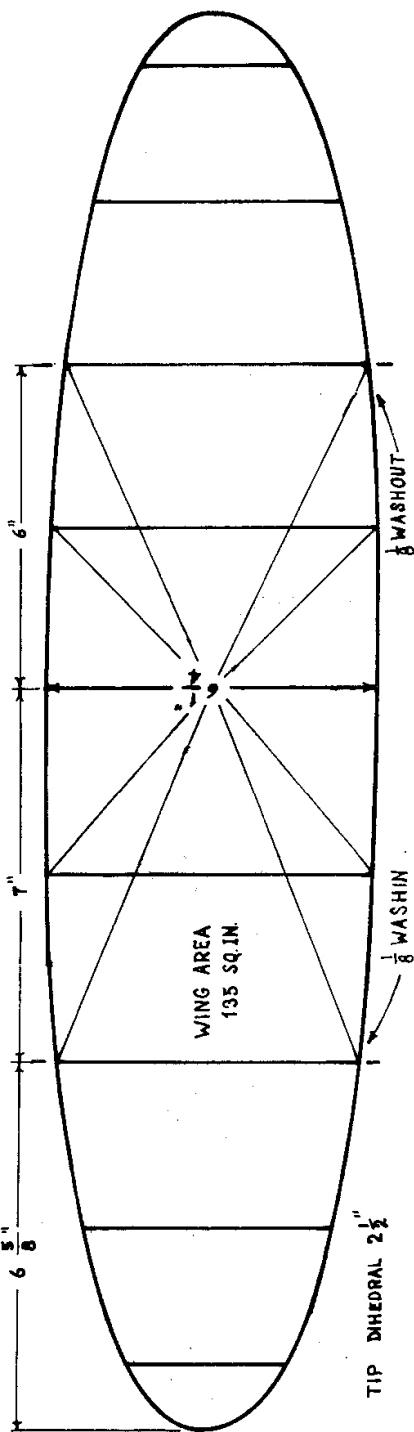
This introduction to indoor flying was followed a few days latter by a school announcement that a model airplane club was forming with Clarence as the factuality support member. I talked my slot car racing buddies to come to the initial meeting of the model club at school. What followed was the patient guidance of Clarence building EZB models. Of my buddies who started their EZB's, only Neil finished his along side mine for initial flights in the Madison High School gym. My high time was almost four minutes in that first flying session, using rubber supplied by Clarence. All the materials to get to that point of flying, had been supplied by Clarence for the good of the order. This was so typical of Clarence to help people along the path that he shared with them.

So, the spark had been struck, the pilot light was now burning, and I was blazing a trail of indoor flying with the expert guidance of Clarence, always on the ready, at my side. The progression of indoor projects started with several EZB's leading to Scale, Paper Stick, and F1D. Travel to fly all these indoor creations included ride sharing with Clarence. Often Fudo and Cezar were also sharing the ride to the days flying site. Lots of time to discuss building techniques, new materials, and the problems of the world in general. Some memorable flying was done at the new C-5A hanger at Edwards Air Force Base, and the Blimp hanger at Tustin.

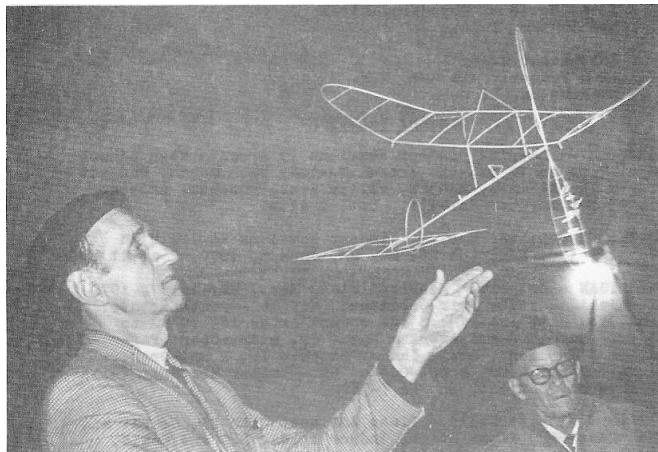
The interests of Clarence extended beyond that of teaching and model airplanes. Did you know that he commuted daily to Madison High School by bicycle? Or, that he was what I would label an 'expert' fisherman? He had a high prow dory style fishing boat for ocean fishing. He enjoyed his annual trip to New Mexico to fish the San Juan River. Did you know that he played guitar, and met with like minded individuals once a week to play and perfect the craft? When it came to donuts, there was not one he did not like. Did you know that he built his canyon hugging house on Ecochee Avenue, and lived there for 16 years before moving to Bishop? He sold that same house to me, when he moved.

I keep coming back to the memory of my classroom days with Clarence. He was again what I would label as an 'expert' teacher both in the classroom and in life. With a smile I remember something he had the uncanny ability to do in the classroom. As a teenager one's attention could wander while in class. Clarence had ability to sense when one of his students was slipping into one of life's day dreams, and would ask you a question. Since he had waited for the full song of the day dream to take hold, you as a student were left struggling to know what the question had been, and would need to sheepishly ask for the question to be repeated. Looking back, those moments were priceless.

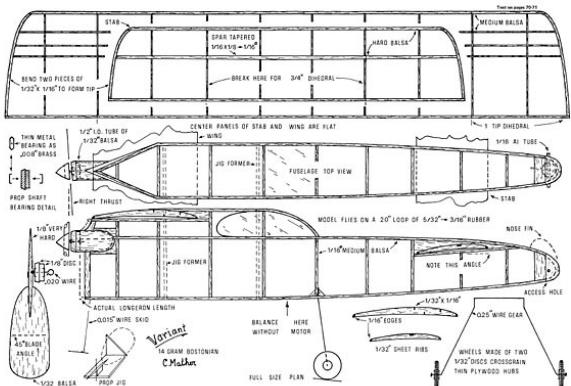
So long, and enjoy your OOS flight!



C.MATHER PLANES AND PLANS



1970 / Romanian Salt Mine
F1D World Championship Contest



Varient 14g Bostonian Mather Plan



P51B Mustang



P-39 Airacobra

Grey Ghost Goodyear Racer,
From original Mather plan.

Clarence and son Kim at 1970 Indoor Nats

2015 ORBITEER FLYING SCHEDULE

- Jan 25 - **P-30**
Power & Glider
(No rain date)
- Feb 15 - **Old Time Nostalgia Rubber**
Power & Glider
(Feb. 22ND rain date)
- Mar 22 - **Coupe**
Power, & Glider
(No rain date)
- Apr 18/19 Scale Staffel FAC Scale Contest*
(1 of 3)
- Apr 26 - **P-30 Oldenkamp Hot Box Contest**
Power & Glider
(No rain date)
- May ??/?? **Dual Club FF Bonanza**, Lost Hills CA
- May Rotation Skipped: (Old Time Nostalgia Rubber)
- June 14 - **Coupe**
Power & Glider
(June 28TH rain date)
- July 4 - Walt Mooney Annual Scale Contest*
- July 19 - **P-30**
Power & Glider
(July 26TH rain date)
- Aug 16 - **Old Time Nostalgia Rubber**
Power & Glider
(Aug. 30TH rain date)
- Aug 22/23 Scale Staffel FAC Scale Contest*
(2 of 3)
- Sept 21 - **Coupe**
Power & Glider
(No rain date)
- Sept US FF Championships, Lost Hills*
- Oct 18 - **P-30**
Power & Glider
(Oct. 25TH rain date)
- Oct 21/25 WESTFAC V, Buckeye Az.*
Scale Staffel FAC Scale Contest*
(3 of 3)
- Oct ??/?? SW FAI Champs, Boulder City, NV*
- Nov 16 - **Old Time Nostalgia Rubber**
Power & Glider
(No rain date)
- Dec 13 - **Coupe**
Power & Glider
(No rain date)
- * Non-Club Points Event**
Otay Field Weather (619) 661-8297

SAN DIEGO ORBITEERS
Howard L. Haupt / Editor
3860 Ecochee Avenue
San Diego, California 92117-4266



WHAT'S HAPPENING - JANUARY 2014

Jan 24 - **Annual Orbiteers Banquet, Giovanni's (Kearny Mesa), 1 to 4 pm.**

Jan 25 - **Orbiteer Outdoor Monthly, Otay Mesa, 8:00 am,**
Feature Event: **P-30** Other Events: **Power & Glider**

FEBRUARY 2015

Feb 1 - **Indoor Flying, Grossmont College (Upper Gym), 7:30 am to 11:30 am.**
Feature Event: **Penny Plane** Other Events: **No-Cal Scale**

Feb 7/8/9 **The Isaacson Winter Classic, Lost Hills CA, Events start at 8:00 am.**
Three special events are being held under the umbrella of the Isaacson Winter Classic.
Special Events: P-30 40TH Anniversary Event, Paul MacCready Glider Contest,
& E-36 World Open.
See enclosed flyers' for all details.

Feb 15 - **Orbiteer Outdoor Monthly, Otay Mesa, 8:00 am,**
Feature Event: **OT Nostalgia Rubber** Other Events: **Power & Glider**