Prop Wash

March 2019

Prop Wash is a publication of the Piston Poppers Inc., an AMA U-control club

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Any articles for the newsletter are greatly appreciated and will be published as soon as possible. Send to seanemery2@mac.com

Club web address is www.pistonpoppers.com

February Meeting

There were no minutes taken at the meeting. I hope that everyone had a good meeting and a great swap meet.
My original work schedule on that day should have gotten me home in time for the meeting. But due to changes beyond my control, I got home too late to attend. I did get a chance to enjoy the sun and warmth for a whole hour in Phoenix and I'm suffering from a slight sunburn on the top of my noggin, if that's any consolation.
I do have news about DAD at Anoka County airport for 2019. It will be postponed for 2019 and they do plan on being back in 2020.

Jim Gevay

Building Sessions

Awaiting final approval from EAA 236, The dates for the Building Sessions are,

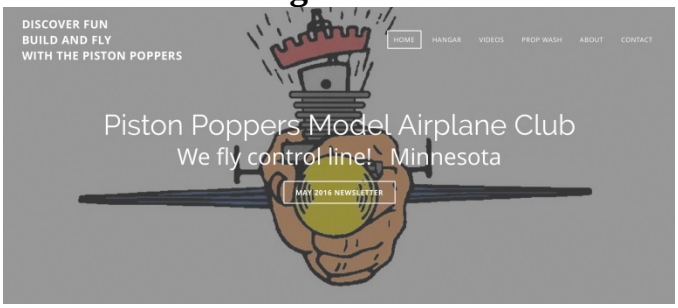
Saturday April 13th

We had talked about making all the sessions on Saturdays, but due to scheduling conflicts at the EAA, These are the dates that will work for both of us.

If you could send the dates out to the club, I would appreciate it.

Thank You, Tony

Click on Photo to go to the website



New Club Members

AJim Ehlen and Steve Wilk have returned back to the club. Jim Perry is a new member.
John

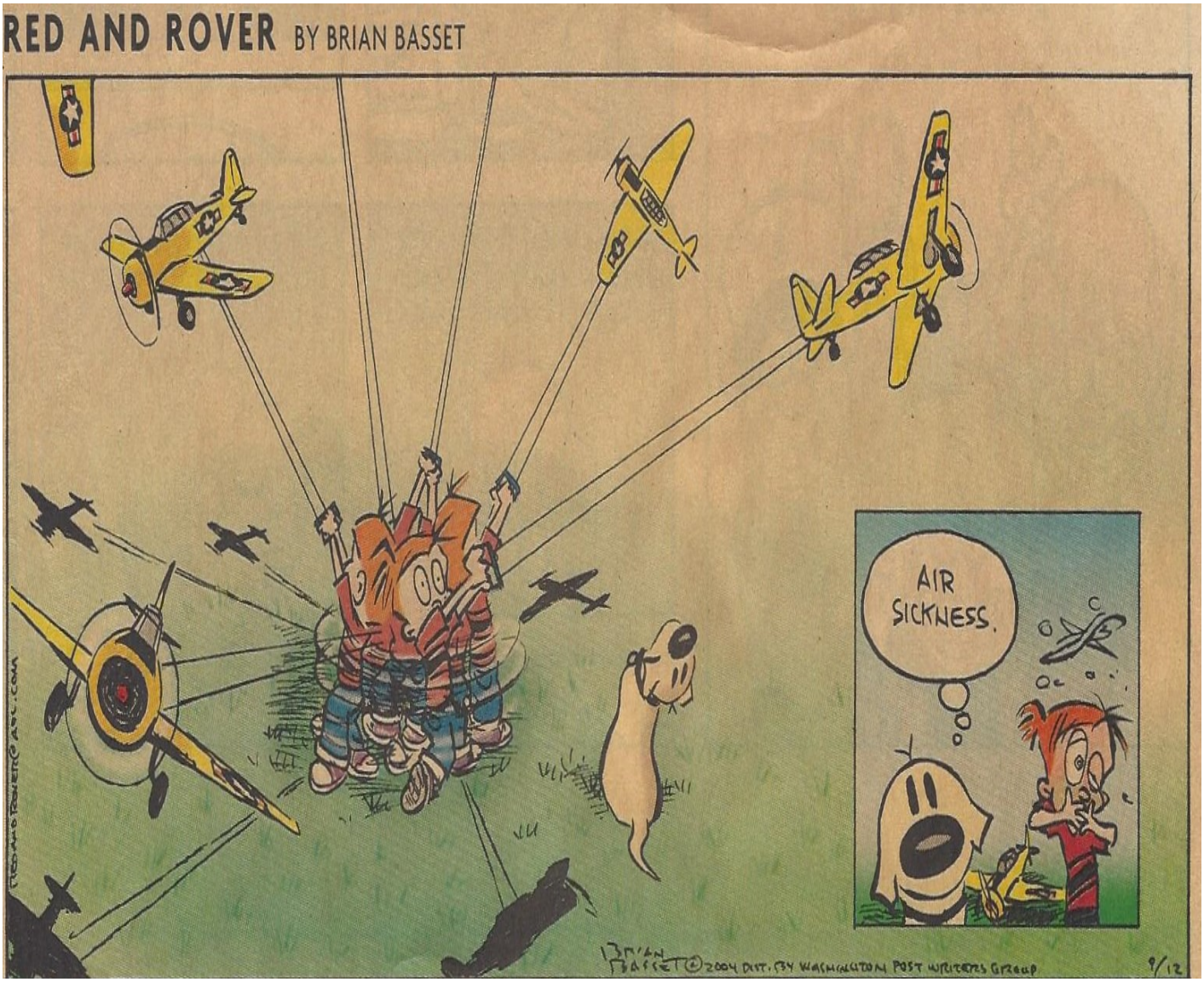
From Jim Perry

Attached are two more pictures of the airplane's I have ready to fly this spring.

My latest completed airplane is a PT-19 ARF. Not sure how this will fly, this is my first ARF that I have done.

See you on the field. When ever winter decides to stop snowing.
Jim Perry

From Steve Scott



Hi Bob,

Discover Aviation Days Cancelled

Our DAD team has decided to Postpone DAD for this year. We have site logistics and team member needs to work out in order to put on a successful event again. Please plan on DAD coming back June 6 & 7 2020.

Craig Schiller
DAD Planning Team
763-568-6072
www.DiscoverAviationDays.org

Discover Aviation Days

As I'm writing this we're all still in the depths of winter with no end in sight.
This might be a good time to look back at the fun we've had in past DAD's. Over the years we've had rainy chilly and or windy, especially when it was in May, and some wonderfully warm and sunny weather too.
DAD has always been a chance for the club to get together and have some fun, and to show our pastime to the outside world.
So look back and remember all the good times, and some of our friends that are gone from our group.
Remember, as I write this in early March, there will be no DAD this year.
Jim Gevay

MPP New Flying Site

Piston Popper members: I recently got the yearly package from the AMA for our club charter and flying field insurance.
Looking at the paperwork I have from Tom and Tony and their contacts with MAC and Lynx for the new flying site at the airport. I see that both MAC and Lynx each want to be insured through the AMA.
I called the AMA to get clarification on policies and if we could get both insured on one policy, and have both listed on the one. The AMA needs to insure each with their own separate but identical policies.
What that means for us is that it will cost us $80.00 for each policy, one for MAC, one for Lynx and one for the school, for a total of 240.00 for all the insurance.
On top of that is the yearly club charter of $40.00, and the dated event insurance of $25.00 for DAD.
Our total costs for the AMA this year comes to $305.00 for the year. This is due before mid March so it can be in effect by 3-31-2019.
I will wait a bit before I send it in to the AMA in case there are any changes either Tom or Tony come up with.
Tom, I have the addresses for MAC and Lynx that you gave to me last fall. When completed, the AMA e-mails out the insurance policy to each, and I make hard copies of all of them for us too.
I have all the other paperwork nearly ready to send in, and I want to mail it in before the next meeting on the 28th.
I've also thought about the flying rules that are specific to the new field at the airport. I've made a list of our club rules and AMA general rules as they apply to us. I thought it might be handy to have them listed for our members, and for MAC and Lynx if they want a copy too.
Please look this rules list over and let me know if there should be any changes, additions or deletions that need to be made.
Should I list that to fly at the airport you have to be a current Piston Poppers member?
I don't remember if that's a requirement at the school.
Jim Gevay

The Minneapolis Piston Poppers will comply with these club and AMA, Academy of Model Aeronautics rules while flying at the Anoka County Airport site.

1. Everyone from the club will pull test their plane and control system prior to flying it for the first time after newly built or repaired from a previous crash.
2. Only one plane will be allowed to fly within the circle at a time, that means no racing, combat, speed flying, and no free flight or RC.
3. Mufflers are required for all flying, except electric.
4. There is no stopping along the access road for loading or unloading cars.
5. Parking is allowed only in the first two rows nearest to our site.
6. Pickup all trash and debris after flying and take it home with you, do not leave it in Lynx's trash bin.
7. We are welcome to Lynx's rest rooms and lunch area inside the building. Remember, the people inside the lobby will be a mix of professional pilots and high level clients and passengers.

As an AMA member I agree:

- I will not fly a model aircraft in a careless or reckless manner.
- I will not interfere with and will yield the right of way to all human-carrying aircraft.
- I will not operate any model aircraft while I am under the influence of alcohol or any drug that could adversely affect my ability to safely control the model.
- I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- I will fly ControlLine (CL) models in compliance with AMA's safety programming.
- I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's Competition Regulation.

Control Line flying rules

Prior to flying, inspect and pull-test your complete control system, including the safety thong where applicable.
The pull test will be in accordance with the current Competition Regulations for the applicable model aircraft category. Model aircraft that don't fit a specific category will use the Control Line Precision Aerobatics pull-test requirements.
The flying area must be clear of all utility wires or poles. Nonessential participants and spectators must be out of the flying area before any engine is started.
Model aircraft will not be flown closer than 50 feet to any above-ground electric utility lines.

Old Photos From Jim Gevay

FLYING DAYS
2/28/2019

Meeting night and the annual swap shop. Starting off we had a very short meeting so we could get to the goodies being offered for sale.

Jim Perry our new member brought in his newly finished Goldberg Shoestring silk and dope painted finish powered with a McCoy 35 blue head R/C motor. A first build in 37 plus years with good results. A fine looking plane. Now all we need is for the snow and cold to stop because 3 feet of snow on the ground does not make for good flying. Plus 3-5 inches more are coming tomorrow.

As for the swap meet, it was not quite up to past years but there were good buys to be made. I even picked up another new handle which looks kind of neat.

That's it for today hope to see and have more to write about after the next building session.

Special guests tonight were Steve Wilk and Jim Ehlen. They rejoined the club and plan to do some flying with us this year. For carbon fiber props, gear and bell cranks check out Steve Wilk's product line at eliminatorprops.com/index.php. At this site you can learn all about Steve and carbon fiber.

Jim Perry's Shoestring

3/9/2019

Another building session another snow storm coming. Oh! When! Oh! When will it ever get warm again? I hope it is soon as there are some winter builds that need the warm skies to enjoy a flight or two.

Today we had our third build session of the season. Jim Perry brought in the completed Chipmunk and a P-19 ARF both will get to fly this spring. The Chipmunk started its birth 37 years ago and was completed this winter Jim is very proud of this plane and should be. The ARF on the other hand he was not pleased with the assembly though it will be a good flier.

Ivars was doing the sanding to his electric Trophy Trainer fuse and showed us the Ringmaster ARF fuse that he removed the MonoKote covering on. After the covering was removed he was able to remove all

traces of adhesives with some alcohol. Another neat trick I've learned by coming to these building sessions.

Tony was continuing with the Mo' Best repair while Tom was repairing his All American stunter along with making some beat up planes flyable again. Tom is very good at rejuvenating aircraft.

Steve and I were just spectators looking at the others projects and their problem solving.

Keith was problem solving himself with the Blue Angel project while Rachel laid out the plans for her next build a laser cut Jester 11.

Jeff had a self designed combat styled plane talking about the ways and whys of the design.

Jim Perry's Chipmunk

The PT-19 ARF

ARF Ringmaster fuse. The picture does not do it justice. Sometimes I wish that Ivars didn't have to cover the structures so we could all see the great craftsmanship that he puts into building his models.

Tony's MO'BEST repair

Could this be the reason for a 3 year repair?

Jeff's self designed combat plane

Bob Cheney

The Model Airplane Handbook 1943

Here are some excerpts from William Winters classic book about this great hobby. Thank you again to Marilyn Lutz.
Tom Sontag

"Unlike many hobbies, model-airplane building introduces additional elements of interest. First, the fan discovers a challenge to his ingenuity in piecing together simple aerodynamic principles, facts, and experiences in a successful combination to produce a workable miniature airplane."

"Wet-or-dry papers are a recent development. These papers are unusual in that they don't tear when wet and can be applied to the framework either wet or dry. Silkspan is the most popular wet-or-dry paper. . . Dope adheres to the framework despite the moisture, and as the paper dries, it stretches tight as a drum, pulling out all the wrinkles. . . Silk covering is used on gas models, especially the large ones. It too can be applied wet or dry. Silk is practically indestructible and is well worth the extra expense and trouble."

"The first law of covering is to go over the entire construction of the model, sanding down every joint."

"The modern miniature gasoline-powered engine is a tiny powerhouse made with watchlike precision, developing anywhere from one-tenth to one-half horsepower, and spinning a propeller of from eight to eighteen-inch diameter as fast as four thousand to ten thousand revolutions a minute!"

"Two things are required for the operation of the motor: proper ignition and carburation."

"Have you ever imagined what it would be like if you could sit in your own model and control it in flight like a real pilot? Well, you can be your own pilot now, thanks to control-line flying pioneered by Jim Walker of the American Junior Aircraft Company, who developed the 'U-Control' method of actually controlling a gas model in flight, and Victor Stanzel who developed 'G-Line' gas-model flight control."

"Balloon busting, dive-bombing, speed racing, looping, and hedgehopping are just a few of the things you can do with control-line flying of your gas models. Stunting and racing contests are already being held throughout the country. Speeds as high as 90 miles per hour have been reached, all in perfect safety and under complete control."

"U-Control models are flown on two music-wire guide lines. The operator holds the control grip with his left hand. This is done for two reasons. The left hand has been proved capable of more delicate control movements, and when a motor control line is used, the right hand is required for that owing to the fact that the model circles toward the left. Otherwise lines from one hand would cross those from the other."

"The pilot should be ready to step back quickly a few steps to take up the slack on the control lines."

"In connection with stunting of 'U-Control' models, it is interesting to note that a loop develops a force of 4.5 G's. . . This tremendous force on the looping model has one disturbing effect. It forces the gasoline down in the tank to cause a lean mixture which cause 'missing' or even actual motor failure. For looping it is necessary to adjust the needle valve on the motor before flying until the motor is on the point of 'four-cycling' – heavy or rich . . . Thus during a loop, the extraordinary rich mixture counteracts the leaning out due to the centrifugal force."

"Why form a club? The reasons are simple. Club members can learn more and have a great deal more enjoyment through meetings and club contests than they can by working alone."

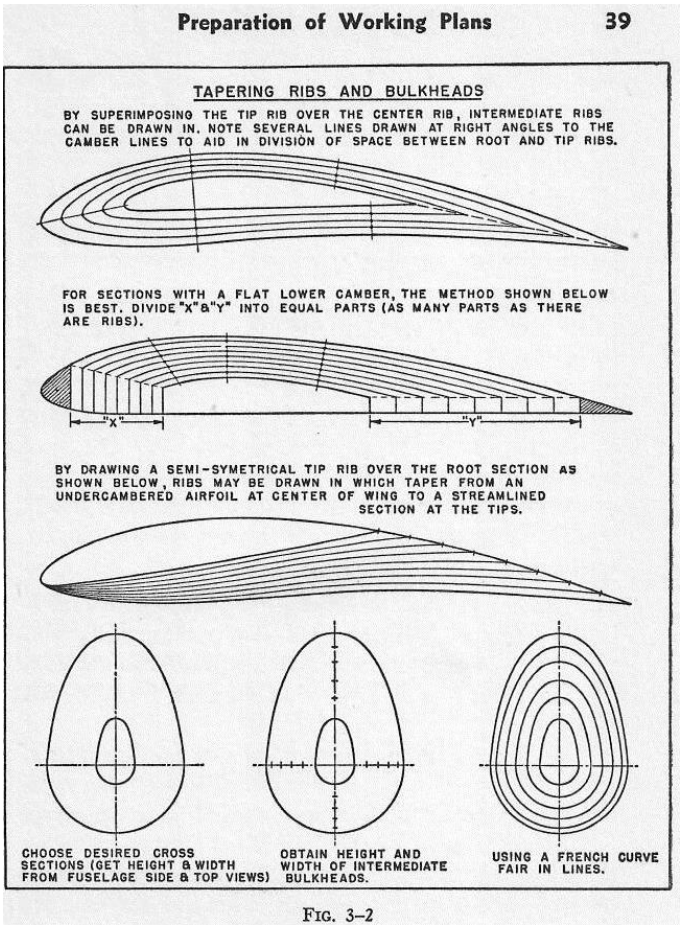


FIG. 3–2

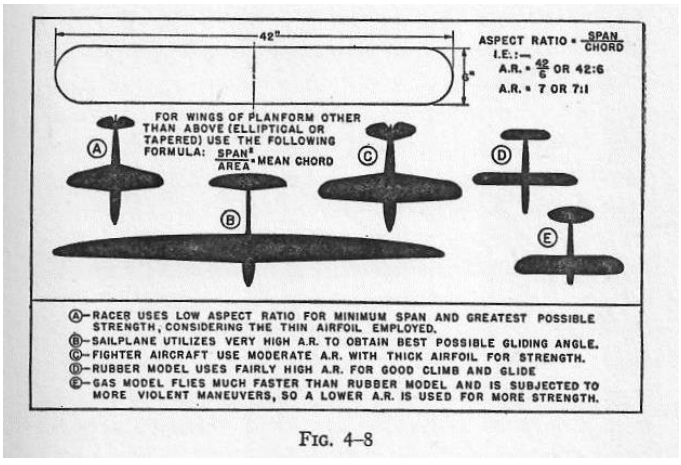


FIG. 4–8

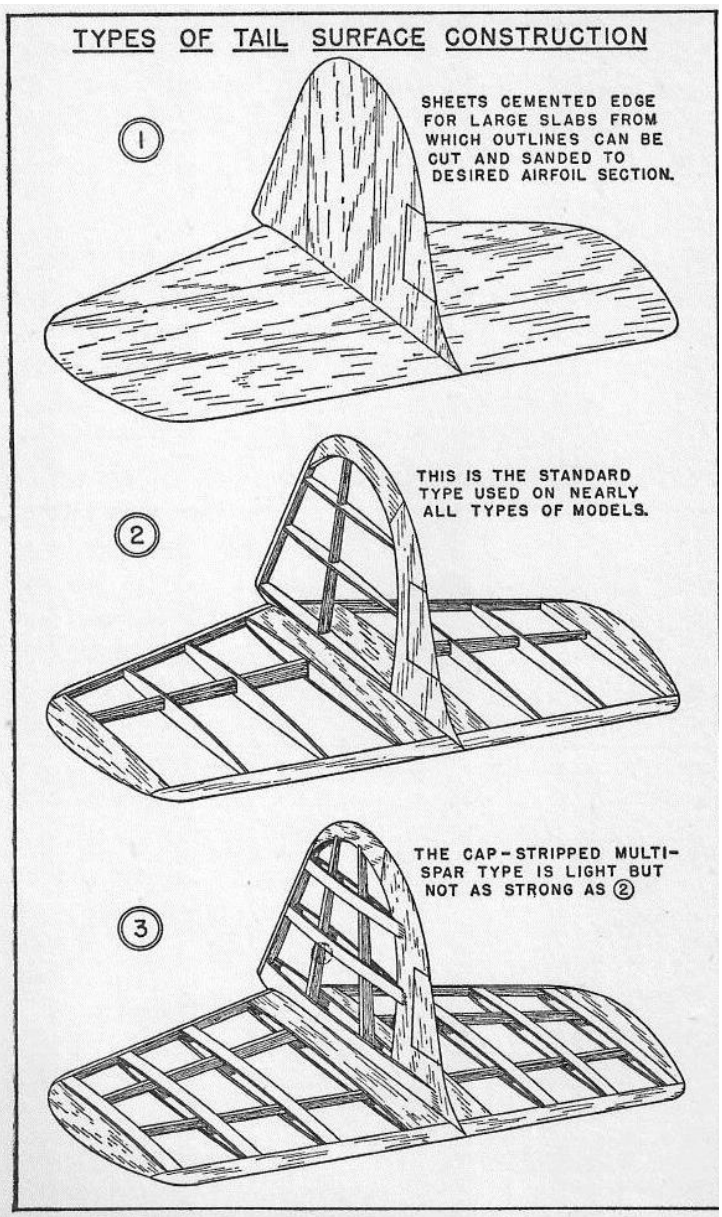


FIG. 5–4

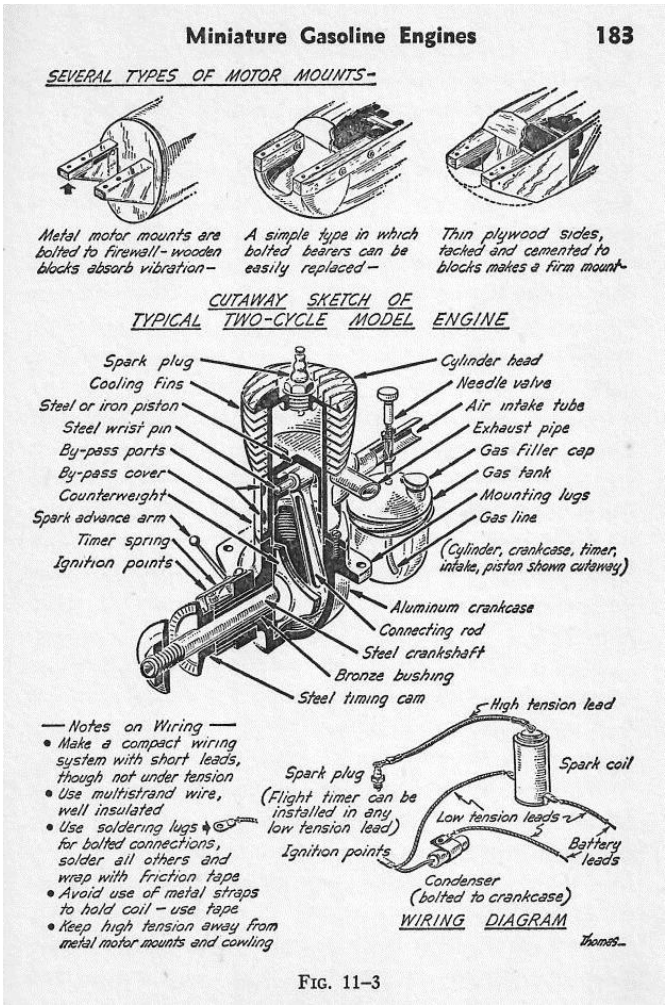


FIG. 11–3

MOTOR DISPLACEMENT CHART

CLASS A

MAKE OF ENGINE	DISPLACEMENT	REQUIRED WEIGHT OF MODEL
Atom	.097 cu. in.	7.76 oz.
Bantam	.199	15.9
Elf Single	.099	10.6
Elf Twin	.198	15.8
Madewell	.148	11.8
Marvin	.140	11.2
Megow	.199	15.9
Perky	.191	15.3
Ohlsson 19	.19	15.2

CLASS B

MAKE OF ENGINE	DISPLACEMENT	REQUIRED WEIGHT OF MODEL
Brownie	.29 cu. in.	23.2 oz.
Forster 29	.29	23.2
Ohlsson 23	.23	18.4
Syncro B-30	.30	24.
Torpedo	.2989	23.9
Bullett	.23	18.4
Rogers 29	.29	23.2

MOTOR DISPLACEMENT CHART (*Continued*)

CLASS C

MAKE OF ENGINE	DISPLACEMENT	REQUIRED WEIGHT OF MODEL
Barker C	.69 cu. in.	55.2 oz.
Brown B & D	.601	48.
Comet 35	.35	28.
Dennymite	.57	45.6
Forster 99	.997	79.8
Gwin Aero	.45	36.
Hurleman	.488	39.1
Mighty Midget	.45	36.
Molnar	.7854 cu. in.	62.7
Ohlsson 60	.60	48.
O.K. 49	.49	39.2
O.K. Standard	.604	48.3
O.K. Twin	1.208	96.6
Elf Four	.396	31.7
Rocket	.50	40.
Sky Chief	.562	42.2
Super Cyclone	.647	51.8
Tiger Aero	.45	36.

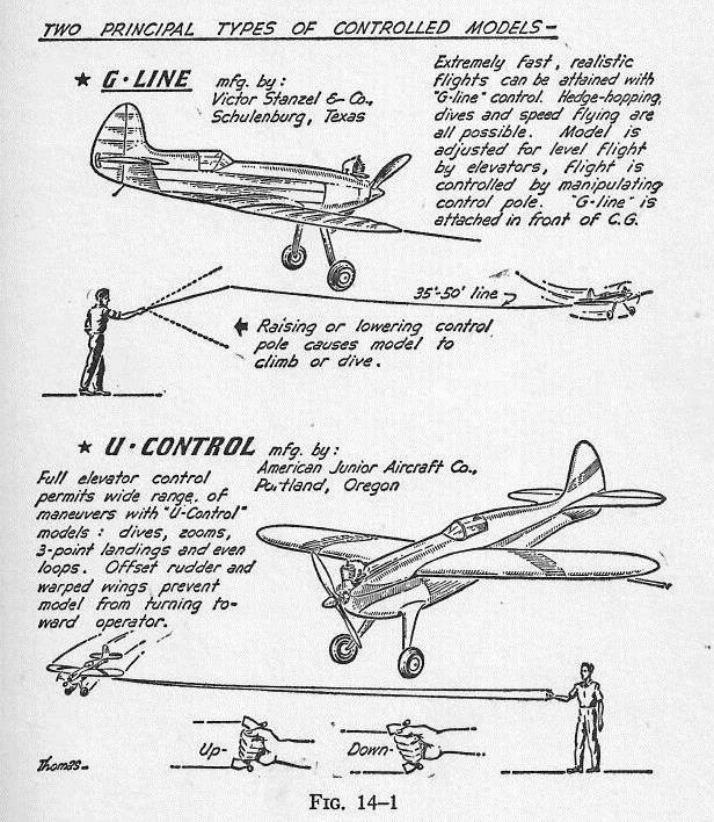


FIG. 14–1

Super Tutor

The weather on Wednesday, August 15th, was perfect. The temperature was nice, the wind was light, and a half dozen or so made it to the flying field to feel the pull.

I hooked up the Super Tutor (Fancherized Tutor) to the same old 0.12/63' lines I've used many times, including the prior weekend at Fargo on the ME-109. I straightened the lines and quickly checked them, not noticing any major kinks or broken strands.

The lines were course, not the super smooth lines of Tom Morris, but they were functional and had never failed.

Mistake #1: just because disaster hasn't struck before doesn't mean it won't strike this time.

In June, I dismounted the Tutor's almost new OS 40FP, and sent it to Randy Smith for reworking. In its place I mounted an OS 40FP previously mounted on the since crashed PT-22 Recruit. You can see both airplanes on this photo, with a 46LA mounted on the Recruit.

The motor hummed steady and happy, and the old 0.12, 63 foot lines were pleasantly tight. The Tutor launched and took off smoothly. All was right and good in the world.

With typical grace and agility, the Tutor responding effortlessly to control input. I'd always marveled at how well balanced and quick she responded, yet sleek and smooth in level flight. Other club members also noted how well it looked in the air, with Ivar's perfect finish of wood tone, orange and deep blue.

I first noticed something was amiss during the second inside loop of the figure eight. For some reason, the up controls turned sluggish, and somehow squishy. The second outside loop went fine, but as I pulled up to level off, there was a twang, like a guitar string gone bad.

From on high, she continued the outside loop, opening up a little, and ignored all further commands to turn. She angled for a nearly perfect 80 degree header into the grass, with that 40FP happily pulling till the final moment.

The engine burrowed deeply, all the way to the cylinder head. The wings, fuselage and tail tried to follow, temporarily impeded by balsa, sheeting, skin, glue, and the sudden loss of speed up front. Eventually all of the resistance gave way, and the Super Tutor shattered to the ground.

For a moment, we stood still, frozen in disbelief. Only a moment before, we admired its graceful lines in flight, but now, only rubble remained. Then we did the slow, head low, walk to the airplane, to find answers, lament, take pictures, and provide words of support.

Post flight analysis by the NTSB found a dangling connector, tightly grasping an eyelet, crimped to a short length of frayed wire. Like most of my crashes, this one ultimately involved pilot error. In this case, my preflight inspection failed to reveal the damaged line.

The Super Tutor was a shattered wreck, but it provided a lesson learned the hard way: always inspect your lines closely. Your airplane depends on it.

Don't hesitate to replace or re-terminate lines found to be weakened by kinks, fraying, or anything dodgy.

Since the crash, I contacted Jim Morris for new lines, and carefully placed the Super Tutor in a box for further examination this winter. In the meanwhile, I will examine all my other lines for kinks and broken elements.

As they say, if you ain't crashin', you ain't flyin'.

See Shug's excellent post flight video on Youtube, at the tail end of "Strega Vomit Cam. . . Control Line POV."

Fly on friends,
Tom Sontag

VIDEO by Shug

Strega Vomit Cam
https://youtu.be/JRhqEdsb9Rw

Wisconsin State Control Line Contest

Please consider attending our 2019 contest on June 2nd here in Wisconsin. We have a paved two circle parking lot for stunt and scale and a large grassy area for combat. This is our second year as an AAA sanctioned event and we hope to continue expanding and improving each year.

Hope to see you here!!
Michael Strand

WISCONSIN STATE CONTROL LINE CHAMPIONSHIPS
AMA Triple A Sanctioned Event
June 2nd, 2019
(Check local forecast, Mukwonago, WI 53149, prior to contest. Rain Date - August 4th, 2019)
Presented by the Circle Masters Flying Club

CONTEST DIRECTOR: PETER MICK 262 377-6137 pmick82541@aol.com
WHERE: Mukwonago High School, Mukwonago, WI

• ALL PAMPA CLASSES WILL BE FLOWN ON PAVEMENT
• SCALE JUDGING WILL BEGIN AT 8:30 am. OFFICIAL FLIGHTS WILL BEGIN AT 9am. Static judging will begin at 8:30 am. Please try to register BEFORE then.

OFFICIAL EVENTS
All PAMPA stunt classes, Junior Beginner, Combined Old Time, Classic and Classic 30 event, Sport Scale, Profile Scale, Junior Profile Scale, ½ A Combat.

UNOFFICIAL EVENTS
Half A Scale using Brodak fly-in rules available on the Brodak Fly-in web site (Mufflers are not required) and ½ A Stunt (Junior, Beginner and Expert. Beginner patterns will be used).
Profile Stunt (Expert, Advanced and Beginner) and 75 MPH Combat (4 rounds).

A PRACTICE CIRCLE FOR PAMPA STUNT WILL OPEN AT 8 AM.
OFFICIAL FLIGHTS WILL BEGIN AT 9 AM.
MUFFLERS FOR STUNT AND SCALE (OTHER THAN HALF A) ARE REQUIRED. THE MUFFLERS MUST BE STOCK, TONGUE OR AFTER MARKET MUFFLERS
Registration begins at 8 am.

Events: All Scale Classes
Registration fees:$10.00. Additional $5.00 charge for second or third individual entries.

Events: All PAMPA Stunt Classes
Registration fees: $10.00. Additional $5.00 charge for second or third individual entries.

Events: 75MPH Combat and ½ A Combat
Registration fees:$10.00.

There is no entry fee for Junior contestants.

HWY I-43 to WI State HWY 83

North 2 miles to County HWY NN

West ½ mile to Mukwonago High School

Lutz Mystery Airplane

Here is a puzzle for you.

This full fuselage flapped beauty was built by the late husband of our family friend, Marilyn Lutz. The story goes that Don built the airplane when he was a teenager; that makes it around 1950. It was stored in his parent's house for many decades, and made its way to Minnesota when his parents were clearing out some old things.

The engine a Fox 35 Stunt, without markings, no obvious damage, and with a 3 bolt back plate. After finding a review of 21 different Fox 35 stunt engines on Stuka Stunt, I'm fairly sure this is a Model 13 (1951).

I really like the looks of this airplane. Better yet, its wings and fuselage are straight, it only has a few holes in the covering, and there appears to be no damage or scratches.

Controls are left handed, and appropriately so according to the Model Handbook "The left hand has been proved capable of more delicate control movements . . ."

What airplane is it?

Tom Sontag


Fox Stu
1951-
ECJ 13
1951

MEETING NOTICE: March 28 2019– Anoka County Airport at 7:30 PM

The Piston Poppers Club meetings are held on the last Thursday of each month at the Anoka Co. Airport in Blaine, MN. Enter the airport road from the automatic gates on the West side, turn right and go south past the airport beacon to the 2

hangar. It's the Blue hangar between Thunderbolt Aviation and the Golden Wings Museum, next to the road. Meetings