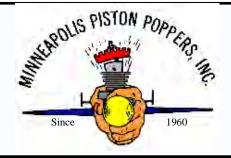
Prop





February 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

January Meeting

Because of the very cold weather and some club officers being either ill or out of town, there was no business meeting. About 6 people braved the cold to talk about model planes.

The February meeting on the 28th is the annual swap meet, and club membership dues are due.

Jim Gevay

Building Sessions

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

Sunday January 13th

Sunday February 10th

Saturday March 9th

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 sent the dates out to the club, I would appreciate it.

Thank You, Tony

Click on Photo to go to the website



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.

FLYING DAYS 1/1/2019

HAPPY NEW YEAR. Today the poppers held their annual frozen fun fly and it was frozen. Thank god for the great hot chili from the kitchen of Tony and Karen she does a great job that we all appreciate.

Cold 5 above zero and calm winds kind of a balmy day for New Years. But as promised, a great frozen fly to start the year. We had twelve people show up to help usher in the New Year with nine making flights. No mishaps all motors ran except one, the only electric in the bunch Jerry's Brodak Ringmaster.

Dave came up with a very unique way to preheat his motor, come to the next meeting he will show us how.



Rachel and the Ringmaster



Ringmaster



The electric that would not run



1/13/2019

Today the 1st building session of the year got off to a great start. The ten or so club members in this session welcomed a new builder to our group. Jim Perry.

Jim is a recently retired modeler from the past, he brought with him a Super Chipmunk model that was built but never flown been hanging in his garage for the last 37 years. With a little refreshing and some help from us we should see him flying later this spring.

Today we got to see some projects getting started or underway, even a few from last year's build sessions.

Jeff's Fury (from last year) was worked on to change tank position, next will be covering and motor installation. Ivars started by removing the covering from a Ringmaster ARF fuselage, and working on the wing to another Trophy Trainer this one to be electric powered.

The ARF Ringmaster was also Dave's project and he started by reading the instructions and preparing the wing for installing.

Keith and Rachel were doing some modifications to the stab and elevators of the Blue Angels project from last year.

Tony what can we say this being the 3rd year in the repair of the Mo' Best stunt ship. Will there be a 4th?

It was all good fun at place to learn new things, see new projects and enjoy each other's company. For those who have never made it to a winter build session why don't you join us, you don't have to build, just lend a hand, offer some advice or take some ideas home with you.



Jeff with the Fury



Tony and the 3rd year repair



Ivars working hard



Keith and Rachel working together



Dave removing covering for good glue joints



Jim Perry doing hangar damage repair after 37 years hanging in the garage 1/23/2019

Ouch! Sorry people I missed the January newsletter deadline so this is month old newsletter rambles. But I did want to get my take on the frozen fun fly and the first build session of the year.

1/31/2019

Got a call from a sick Tony asking if I could fill in for him tonight, tough job but sure I'll do it. Keith, John and Tom were also not going to be there.

For the six of us that were there we did a bunch of hangar talk, brought up the few items Tony mentioned to me which was:

We are approved for this next year at the Westwood School including the next frozen fun fly in January 2020. Also the next building session was confirmed for the 10th of February. Another happening in February will be the swap meet/sale on the meeting night.

Now it was back to hangar talking during the evening Glen was introduced to Jim Perry our newest member when John collects club dues from him and the rest of us. We discussed hinges the plus's and minus's of the different ways to hinge our movable surfaces.

Dave brought in his preheater he used at the frozen fun fly (*ice cream bucket*, *bubble* wrap, hand warmer and good old fashion Duck tape) a neat gimmick that works.







Asking Dave about this he told me that the power source is a Big Blue 10,000 mAh hand warmer. He got this from Amazon for about \$28.00. It can also be used to charge your phone and comes with a built in flashlight.

The story he tells is that for the Frozen Fun Fly he put fuel in the tank and turned it on when he put the plane in the car. Engine fired up on the second flip. He had it turned on all the time we were at the field. It does have a high and low setting but he used the high setting as it was a cold day. Would last longer on the lower setting but with cold days warmer is better.

Dave also mentioned that most hand warmers are 5,000 mAh so it is probably worth the few extra bucks for the higher mAh unit.



Thanks Dave for a great idea

2/10/2019

Today was building session number two snowing hard so not much happened.

Jeff and I tied up some lead-outs and did a little minor work to the Fury while Tony added some filler to the Mo'Best repair.

Jim Perry brought in the Shoestring model he started during the last session then completed to bare bones at home. Looking good Jim.

Steve F. stopped by along with Jim G. for some hangar talk, Keith and Rachel showed up with the same ambition that the rest of us had, which was none. So hangar prevailed and we were on our way home by noon. Bob



New picture of an old airplane kit I just built - Shoestring airplane back from the 60's. Have not built kits like this for 45 years. Nice to get back into the hobby again.

The plane in the 2nd picture is a Super Chipmunk kit that I built back when I was 18 year old.

I just finished getting it ready to fly. Painting, getting the engine installed, new canopy, and repairing some rips in the wing area. This only took me 37 years to complete. I hope to fly it this spring with the snow stops flying.

Jim Perry







"Dyna-Jet on Berkeley Super Squirt"

The Dyna-Jet Red Head is an engine that strikes amazement and sometimes trepidation into the heart of model airplane enthusiasts. When mounted to a worthy airframe, such as the Berkeley Super Squirt, it can achieve speeds in excess of 150 miles per hour.

Even our resident speed champions, including Bob and Jeff, might find the Super Squirt to be fast.



This beautiful example is presented with a huge thank you to Marylyn Lutz and her late husband Don. Control Lines are set for clockwise, left handed operation. Should the

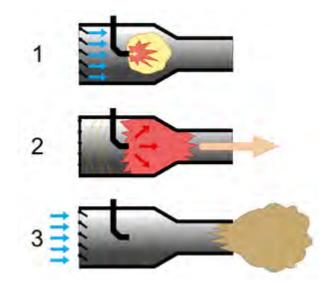
urge ever take me to light this baby up, Sean will have to pilot her.

The Dyna-Jet:

The first working pulsejet was patented by V. V. Karavodin, a Russian inventor who completed a working model in 1907. Robert Goddard, the famous American rocket scientist, invented a pulsejet engine in 1931 and demonstrated it on a jet-propelled bicycle in 1931.

All I would say to Mr. Goddard is, "No thank you, Mr. Goddard. I'll wait for the next ride."

The pulsejet is a model of simplicity. It has only one moving part, the reed valve. In some designs it has no moving parts (valve less design). It is constructed of an air intake, fuel port, a plate with holes, a daisy shaped reed valve to cover the holes, a combustion chamber with spark plug, and an acoustically resonant exhaust pipe.



The exhaust pipe is specifically designed to smooth the combustion pulses. This augments the thrust of the jet by up to 100%, without increasing fuel consumption. To my

eyes, the long exhaust also allows hot exhaust to clear the airplane without burning off its tail.

Quoting the website of Curtis Dyna-Fog of Dayton, OH: "One of the first pulse-jet products they produced was the Dyna-Jet "Red Head" miniature engine for use in model rocketry. Initially developed in 1945 by a long time associate of Russell Curtis, William Tenney of Aeromarine Company, the Dyna-Jet once held the American Modelers Association land speed record at 179+ MPH! A speed amazing at the time, especially when only standard grade gasoline was available." (http://www.dynafog.com/about-us-2/).

According to the 1948 Edition of <u>Piloting</u>, <u>Seamanship and Small Boat Handling</u>, Bill Tenney, the designer of the Red Head, was one of the best known Outboard drivers, and recently had turned his attention to pulsejets for model boats, bicycles, and racing boats.



The Berkeley Super Squirt:

Berkeley Models, Inc. was an American company started in his garage by aerospace engineer Bill Effinger. It manufactured model-airplane kits that pioneered such firsts as the nation's first gas model plane kit, and which became one of the industry's leading companies.

Duke Fox purchased the firm in 1959, and continued to make kits under the Berkeley name until 1962. Some kits were picked up by Sig. (The AMA History Program Presents: Biography of William (Bill) L. Effinger).

The Super Squirt was designed for the Dyna-Jet. The fuel tank is located in the long nose, and the upper surfaces of the body near the fuselage are covered with asbestos to protect the airplane from the heat of the Dyna-Jet. The wings appear to be of solid balsa construction, and the bottom is fitted with a metal skid plate. If you lift the airplane by the wings, it balances nicely just ahead of the quarter chord, making it a stable flying machine.



Flight:

The Super Squirt rests on a detachable carriage during startup and takeoff. The pilot stands by the post at the center of the circle, clutching the handle. The assistant holds the wings with his legs wide apart, safely away from the exhaust, or to the outside of the circle. The starter rapidly pumps a bicycle pump, pulsing fuel/air mixture into the

combustion chamber, where the spark plug ignites the mixture.

The powerful Red Head pops off puffs of flame through the resonant exhaust pipe, then breaths a few long pulses. Suddenly she bursts to full life, and the race is on. The engine glows red with heat. The handler "releases" the dragon, and gets the heck out of the way.

Accelerating at break neck speed and lifting off the ground, the Super Squirt leaves the carriage to an anonymous stop, nearly unnoticed by spectators ogling the Dyna-Jet and its streaking craft.

She increases speed with succeeding laps, until at last the pilot is spinning as fast as his legs will function. Even video cameras seem to have a difficult time capturing the passing airplane, until at last the fuel empties, the jet turns quiet, and the Super Squirt skids to a stop on its metal belly band.

If ever you have a chance to witness the flight of a Dyna-Jet and Super Squirt, please do. Plug your ears, but do watch. It is astonishing.

Tom Sontag

Interesting CL Article From Pete Martin

https://digilander.libero.it/ucontrol2000/U-Control-2000/paperindex.htm



MEETING NOTICE: February 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

