



AMA Chapter #3798

**Chino Valley
Model Aviators, Inc**

Official News Letter



IMAA Chapter 705

March 25, 2012

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www.chinovalleymodelaviators.com

"To create an interest in, further the image of, and promote the hobby/sport of radio controlled aircraft"

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YOU HAVE TODAY

I have no yesterdays;
Time took them away.
Tomorrow may not be,
But I have today.
Build that RC Project!

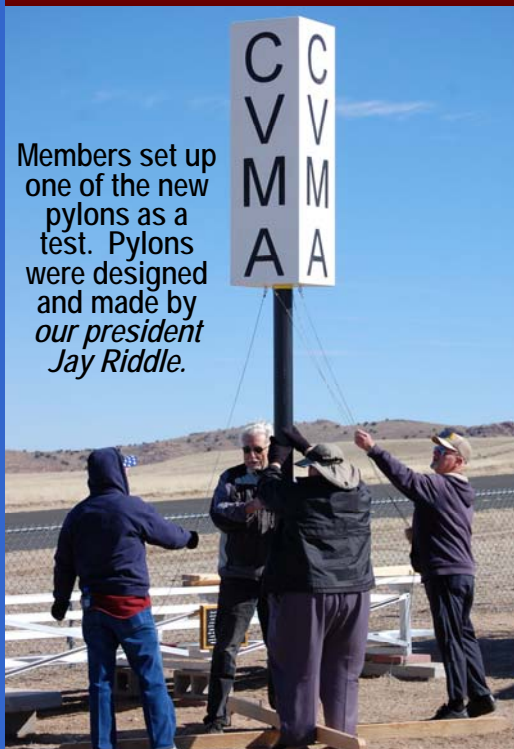
Support Our Local Hobby Shop

**VALLEY
HOBBY**

The Safeway Center
Prescott Valley, AZ
MAX & CINNIMON BANDY
THEY SUPPORT OUR CLUB

NEW RACING PYLONS FOR CVMA

Members set up one of the new pylons as a test. Pylons were designed and made by our president Jay Riddle.



Old Pylon with a T-28 coming around.

The new pylons are higher and more visible.

INSTRUCTOR RANDY MEATHRELL CHECKS OUT MARK TURNER'S GAS MENTOR



Our flight instructor Randy Meathrell has a 40 mile round trip to our field from Prescott Valley but shows up sometimes three times a week to help our new members learn to fly. Kudos to Randy! Above Glenn Hiethold looks on as Randy and Mark check out the Mentor on landing downhill.



From the Desk of CVMA President Jay Riddle

A lot of hard work has been completed on our new runway. On Friday March 16 we had 10 members show up to help spray for spring weeds on our main asphalt runway as well as our new runway. We owe a big thanks to these members and to *Al Collins* for buying for getting the club three big sprayers along with some weed killer.

We had everyone bring about two gallons of water to mix up the spray and several brought their own sprayers

too. The new road to our runway was being graded and covered with a road type gravel. We had a water truck spraying too so we had additional access to water.

A big heart felt thank you goes out to the following members: *Dick Mastin, Tom Jeffrey, Bob Shanks, Bud Mellor, Randy Meathrell, Rick Nichols, Glenn Hiethold, Joe Kinchen, and Bob Noulin*. If I missed any one my apologies. This was a hastily called work party due to the sudden explosion

of weeds. We do need to continue to maintain our chip sealed runway too so that was sprayed as well but with all the new moisture we are sure to have more green weeds popping up.

We need to plan for using a quad or motorized sprayer. *Bud Mellor* is busy working on the big southwest War Bird Race again, this large event brings out a lot of pilots from the southwest and area. Be ready to help him as we plan for this event in August. Let's go flying!

MARK YOUR CALENDARS

- Apr. 14 Club's first T-28 race.
- May 12 Club's first combat contest.
- June 23 Club's Second T-28 race.
- July 7 Fun Fly & Swap

CVMA MEETINGS



Third Wed. of every month at 7pm.
Prescott Airport

ENGINE FUMES

By Bob Shanks

We have a contest in process and hope to have a few more members enter. At our last meeting *Randy Meathrell* suggested a contest where we build a plane out of foam board that's one dollar for a 20" x 30" sheet, 3/16" thick. We had a total of 7 of about 25 at the meeting say they were interested in entering. There's a host of free plans available at www.parkjets.com and at www.mikeysrc.com/Scratch-Built-Aircraft.html.

This is an inexpensive way to have some electric fun. Lots of inexpensive 9 gram servos out there as well as small electric motors. So come on folks

design something or go to the Internet sites just mentioned and find something to build. The nice thing about these sites is they also provide some build threads for you as a guide.

If you have been in the hobby for a while you most likely have extra servos and speed controls or perhaps you want to try your hand at designing a plane.

The economy has been down so this is a nice inexpensive way to do something fun.

Notice we have been running our schedule for the year as a reminder of warming flying days that are on the way.

Fly Safe Members.

CVMA MEMBERS Kick In Your Afterburner...



BUILD SOMETHING, BRING IT TO OUR NEXT MEETING!

CONSTRUCTION TIP

Did you ever have a problem where your wire landing gear seems to get weaker and weaker?

A possible solution is to remove the gear from the airframe and remove all the hardware from the gear wire (i.e. the wheels, collars, pants, and all extraneous parts.

Preheat your kitchen oven to 450°F. Place the wire on a cookie sheet in the oven for one hour.

Turn off the oven and toss the wire into cold water to cool it off quickly. What you have just done is to re-temper the music wire.

There should be new life in that old landing gear wire. Note that soldered joints will be OK as solder doesn't melt until about 700°F. This is better than building a new landing gear.

CVMA NEWSLETTER

Published Once a Month

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President — Jay Riddle

Vice President — Bob Noulin

Sec't./Treas. — Rick Nichols

Flight Instructor — Randy Meathrell

Safety Officer — Bob Shanks

Board Member — Allan Collins

Board Member — Dennis O'Connor

Newsletter Editor — Bob Shanks

CVMA PILOTS AND THEIR AIRCRAFT



Rick Nichols Little Pitts

Editor Bob's Great Planes Hotliner glider with a carbon fiber fuselage, the thin wing makes for fast passes and aerobatics. It has a 12x10 folding prop with a park Turnigy brushless park 480 to keep the speed down and reasonable.



Glider Photos by Rick Nichols



Prop is folded back to cut drag while looking for thermals.



Electric foam DC-3 complete with retracts was Jay Riddle's but now belongs to Randy Meathrell, it is crying for some scale paint and details! She flies great!

2012 Chino Valley Planned Activities

- April 1st T-28 Pylon Race (April 14)
- May 1st Combat Contest (May 12)
- June 2nd T-28 Pylon Race (June 23)
- July Fun Fly & Swap Meet (July 7)
- August 2nd War Bird Race (Aug 25)
- September Fun Fly (Sept 8)
- October 2nd Combat Contest (Oct 6)
- December Christmas Party (Dec 1)
- As Needed - Embry Riddle Student Project Support
- As Requested - School and Library Programs



Jay taxis out the DC-3.

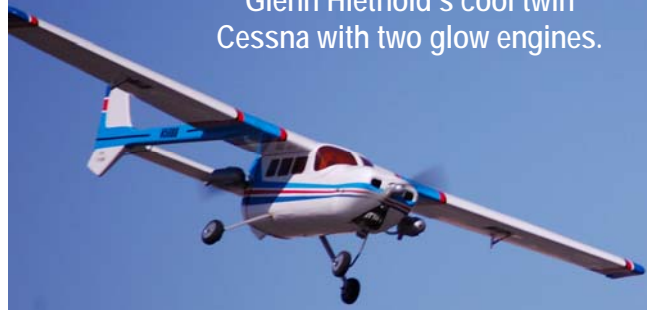
CVMA PILOTS AND THEIR AIRCRAFT



Graham Johnson's Fantasy Racer



Graham Johnson's foam biplane.



Glenn Hiethold's cool twin Cessna with two glow engines.



Al Collins BIG Extra.



Randy helps John Walker with his Apprentice trainer.



Bob Noulin gets his plane back to the pits.



Rick Nichols Fun Cub.

Um, command...I can't deliver the payload.
I only have a listing for a P.O. Box!



The Pentagon tries low-cost strategic bombing strategy!

A new publication, cover at right, is all about promoting Chino Valley, AZ. Notice the club logo at the bottom of the cover. Inside is a very nice article (below) about our club.

We can thank *Rick Nichols* our secretary/treasurer for his follow through and involvement in Chino Valley town activities. Rick, besides having his own engraving business, is involved in the town's Chamber of Commerce promoting Chino Valley. Thank you Rick for bringing a quality credibility to our club. Without the support of the town we would not have a flying field. Rick is instrumental in keeping us a valued supporter and member of the Chino Valley community.

Our Club is Featured in Chino Valley Publication

CHINO VALLEY CARES
GET INVOLVED!



Chino Valley Model Aviators



25 plus years ago, a group of guys with a great passion for flying model planes got together and would find any open field with air space possible to fly their model air planes. They would get permission from land owners to gather and fly their planes. These sky-warriors were nomads and needed a place to call home. The town of Chino Valley was the perfect place to finally call home and thus, Chino Valley Model Aviators, Inc. was born. Nestled away, approximately 3 miles off of Perkinsville Rd, is The Chino Valley Model Aviators flying field.

Chino Valley Model Aviators is club Chapter # 3798 of the parent organization, The Academy of Model Aeronautics (AMA). The purpose of this organization is to create interest in and promote the sport of radio-controlled model aircraft. You must be a current member of the AMA to apply to become a member. With any sport, Safety is the key to success.

Early mornings, when the wind is calm and the weather is beautiful, you can see these members out flying their air craft. What a beautiful sight to see! The club has a genuine compassion to share the passion for flying. This group is a non-profit 501-C. The Pilots spend a lot of time with the children here in Chino Valley and our surrounding communities.

Right here at Del Rio elementary after school program. The kids have a fantastic time when the Pilots share their enthusiasm for flying. Spending quality time with our children is something that both the Pilots and the kids benefit from! How awesome is it that our community members take time out to teach our children the passion for flying. The kids get to make paper air planes and foam gliders. These are memories; our children will have and share for a life time.

Listed below will give you some great information in becoming a member or become a spectator. The Chino Valley Model Aviators have some amazing events coming up. Come enjoy the fun and get involved in our community activities.

- Come be a spectator!**
 April 14 1st- T-28 Pylon Race
 May 12 1st Combat Contest
 June 23 2nd T-28 Pylon Race
- Interested in becoming a member?**
 3rd Wednesday of each month
 7-9pm Prescott Love Airport
- ** All events held at the Chino Valley Model Aviators Flying Field**



January Meeting Highlights



The meeting was called to order at 7:02 PM by President *Jay Riddle*. The salute to the flag was led by *Bob Shanks*.

Rick Nichols gave the Treasurers report, a motion to approve was made by *Randy Meathrell*, seconded by *Tom Wells* and approved.

Our guest speaker, representing *The Flyboys Aero Club*, was *Ron Anderson* and his wife *Barbara*. *Ron* informed our club of the new Aviation History Club forming known as the *Flyboys Aero Group*. They will be meeting the first Wed. of each month in this meeting room at the airport at 7:00 PM. Our members were encouraged to join them. More information at: flyboysaz@yahoo.com.

President *Jay Riddle* reported on the progress of the new runway and road work. We ask that none

of these new areas be driven on while wet, during or after rains and snow.

Jay also thanked *Carol Meathrell* for the great refreshments she brought for the members tonight.

It was *Dollar Tree* Foam Board night with 5 airplanes made of Foam Board. *Rick Nichols* brought his NASA Double Delta bi-plane. *Bob Shanks* showed the silver "Perpy" model made of foam board that was patterned from a control line airplane he built back in 1957. *Mark Turner* showed his foam board VTOL aircraft. *Randy Meathrell's* foam board planes were a B-52 and his Albacorde, an SST type model.

Bob Noulin brought his Pilot Extra 3-D gas model. *Randy Meathrell* showed his AXN Glider. *Randy* also showed paste on aircraft patterns that are available for a wide variety of planes. *Tom Wells*

brought his Blue Baby Foamie along with a 20+ year old radio that he has converted to 2.4 mhz. *Glenn* Heithold brought his Cessna Skymaster to show, it flies great. *Jerry Calvert* showed his P-51 racer that he will race this weekend at *Speedworld* in Wickenburg, AZ.

Randy Meathrell reported on the many events that we have on the calendar for your enjoyment this year. *Randy* also offered to give away a number of plans. He also said we could use a few members to help us with our paper airplane build event held for children at the *Chino Valley Public Library* on Wed. May 9.

The door prize went to *John Walker*, a screwdriver set donated by *Valley Hobby*. Other raffle prizes won

were, Shrink Tubing, *Len Brown*; Mustang Book, *Roger Calvert*; a covering iron, *John Walker*; glue, *Jerry English*; foam rubber, *Len Brown*; a fighter book, *Jerry Calvert*; *Bob Nabors*, the hobby E-poxy; and *John Conrad* won the ME-109 book.

A collection was taken to aid with runway improvements. Thanks to all of you attending that contributed \$182.00. Every bit helps and we will continue to find ways to raise money to keep our little airport the best R/C field in Northern Arizona.

A motion was made to close the meeting and seconded. Meeting closed at 8:28 pm

Rick Nichols, Secretary/Treasurer



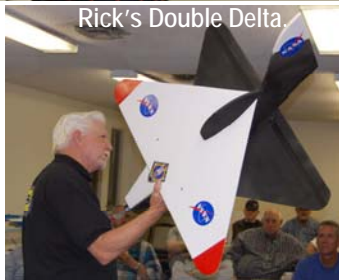
Bob's Foam Board silver "Perpy".



Glenn's twin Cessna.



Randy had 5 items at our "Show and Tell", a glider, a SST, plans and his foam board B-52.



Rick's Double Delta



Mark's VTO



Jerry's P-51



Bob's Big Extra.



Tom's Blue Baby.

Above, Tom's 20+ old "new" radio now a 2.4.

SHOP VALLEY HOBBY

Bob Noulin, our raffle master, presented John Walker with the Valley Hobby donated screw driver set.

MAX AND CINNIMON BANDY: NEW VALLEY HOBBY OWNERS



Chino Valley Model Aviator members *Max and Cinnimon Bandy* own two businesses in the *Prescott Valley Safeway Center*. Of course we all know they now run *Valley Hobby* as we all have probably been in there to get parts, kits, etc. Cinnimon also runs the *Jarz of Clay* shop in the opposite end of the *Safeway Center*.

For your next scratch built project see Max and Cinnimon for all your parts. Help keep scratch building alive and at the same time support your local hobby shop.

Randy Meathrell's scratch build Pronto.



SCRATCH BUILD YOUR NEXT PROJECT

SAFETY IS ALWAYS AN ISSUE

Our Secretary/Treasurer recently sent out the new updated roster in February to all paid up members. When discarding your old rosters please shred them as they do contain a lot of personally identifiable information.

Identity thieves would love to get a hold of one of our old rosters so please discard in a permanent manner, shredding is the best way. With the economy the way it is there are countless scams and schemes to get at what little money one has these days so be aware

members.

Winter and cold came back so again we must remind everyone about workshop safety. Clean up your workshop make it safe. Also this time of year it's a good idea to recycle batteries and double check all flight batteries. One should write down the dates of batteries as a reminder of how old they are getting. We know that NICAD batteries, NMHI and LIPO batteries all last a long time if properly taken care of and maintained.

A little research revealed that LIPO batteries will proba-

bly last longer if stored at about 50% or about 3.8 volts per cell in a 3 cell battery as an example.

Storing LIPO batteries at the correct voltage will also help them from becoming puffy.

Member *Randy Meathrell* has sent out some frightening videos of LIPO fires. Remember lithium CANNOT be extinguished with water or a standard fire extinguisher. Keep a small bucket of sand available and always use a charging bunker or LIPO sack when charging LIPO

batteries and don't ever leave a LIPO charging unattended. We know most chargers do cut off when charging is done but as volatile as LIPOS can be they should be monitored and never over charged.

Keeping with electric safety, make sure when setting up your new electric model that you have the very sharp electric propeller removed from the motor just in case the servos are reversed and low throttle is set on high throttle. We don't want any severe prop cuts!

ELECTRIC MOTORS: SOME BASIC KNOWLEDGE

By Randy Meathrell

So how do you figure out what electric motor to use on your latest flying creation? Let's see if I can help you pick the right motor. First I need to define a few things to help in selecting the right motor.

The measure of energy we will use is the WATT. A Watt is a derived unit of power, with 1 horsepower = 746 Watts.

To determine the best motor for your airplane you need to determine what you want the model to do. Study the graphs at right for some general guidelines.

With this information we can determine what type motor to use. For example a 40 size nitro sport engine generates (.40 Cubic Inch X 1250 Watts / Ci = 500 Watts). A typical 40 size trainer weighs 6 pounds. If you do the math it shows a power loading of 83 Watts / Pound ... a Mild Acrobatic airplane. Therefore a 500 Watt electric motor will fly the 40 size trainer the same as a .40 nitro motor. The WATT is the magic way to size a motor to you airplane.

If your motor does not list Watts in its description you can determine it using the following simple equation. (Watt = Voltage X Amperage). These values also help in selecting an Electronic Speed Controller (ESC) and battery for your model.

A Himax specification sheet for a 500 Watt motor shows it drawing 48 Amps using a 12X6 Electric prop on a 6 cell battery. This means you would want an ESC of around 60 Amps for your 40 size trainer.

Most motor dealers now list the needed specifications for their motors, If not perhaps you should choose a dealer who does list motor specifications. If you still need help selecting the proper motor for your model I will be glad to help.



Electric Power

Gentle Rise Off Ground (ROG)	= 50 Watts / Lb of airplane
Mild Acrobatics	= 75 Watts / Lb of airplane
Aggressive Acrobatics	= 100 Watts / Lb of airplane
3D or High Speed	= 150 Watts / Lb + of airplane

Nitro Power

Sport 2 or 4 Cycle nitro engine	= 1250 Watts / Cubic Inch displacement
Ball Bearing 2 Cycle nitro engine	= 1500 Watts / Cubic Inch
High Performance 2 or 4 Cycle	= 1800 Watts / Cubic Inch
Racing / Ducted Fan engine	= 4000 Watts / Cubic Inch

.40 Size Trainer

.40 ci X 1250 W/ci = 500 Watts
Typical 40 Trainer = 6 Lbs
Power Loading = 83 Watts/lb = Mild Aerobatics

HIMAX Brushless Outrunner Motor

.40 Sport ~ 500 Watts (HC3528-1000)
Lipo 3S 2P, 6-cell, 4400 Milliamps
Prop – APC Electric 12x6 Prop
ESC (Speed Control) – 60
Current Draw – 48 amps
Average Flight Time – 10 minutes (weight approximately 21 oz)

Wattage

Motor will run on a 2 or 3 cell Lipo	
The motor recommendations — 10 Amps Continuous	
2 Cell = 7.4 Volts	3 Cell = 11.1 Volts
Volts X Amps = Watts	
7.4 X 10 = 74 Watts	11.1 X 10 = 111Watts

Full Size Aircraft Power Loadings: 1 HP = 746 Watts

Piper Cub	65 HP, 1220lbs - 40W/lb
B-17	4800 HP, 65000lbs - 55W/lb
Pitts Special	260 HP, 1626lbs - 120W/lb
Spitfire	1440 HP, 5000lbs 215W/lb