



AMA Chapter #3798

**Chino Valley
Model Aviators, Inc.**

Official News Letter



IMAA Chapter 705

July 25, 2012

Volume 15 Issue 7 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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DENNIS O'CONNOR'S P-51B RACER



Dennis says the engine is a Thunder Tiger .46 Pro. Weight is 5.8 pounds, dry. This P-51B is an E-Flight ARF Dennis modified to glow. The retracts are E-Flite electric. The airplane is fast and very stable and he says the only issue is the color it's not easy to see. The plane is easy to fly and performs well at 50% throttle. Dennis plans to race it our warbird race Aug. 25 here. Dennis spent about 50 hours modifying this Mustang but he says it was worth it.

UPS Pilot Maintenance Complaints (P) with Response in (S)

(P) Noise under the instrument panel sounds like a midget pounding on something with a hammer.

(S) Took hammer away from the midget.

Support Our Local Hobby Shop

**VALLEY
HOBBY**

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

CVMA CLUB HELPS CHINO VALLEY LIBRARY KIDS BUILD AMA FOAM PLATE PLANES



See page 7



From the Desk of CVMA President Jay Riddle

Our intrepid instructor, **Randy Meathrell** tirelessly drives in from Prescott Valley during the week doing a superb job of getting new RC pilots trained as new active members for our club.

As is always the case, when we have individuals in the "student" world, are some are very active with their training and some are hit and miss due to work and family needs. Randy is

great at letting our students know via e-mail his availability and training schedule. He just went through his student list with the impressive results as follows:

Congratulations to the six club members who have soloed thus far and we see frequently at the field now flying;

- [Vic Block](#), [Ken Shephard](#)
[Harvey Hunter](#), [Mark Turner](#), [Joe Kinchen](#) and [Richard Wright](#).

Randy has an additional eight current students in training using our great electric club **Sig Seniorita** trainer. The new trainees are:

- [Jerry English](#), [Steve Rezek](#), [Charley Gates](#), [John Walker](#), [Dustin Jones](#), [Del Webb](#), [Bill Mills](#) and [Forrest Wells](#).

Tell Randy thanks, he drives over 40 miles round trip 3 times a week or more to train our new RC pilots!

MARK YOUR CALENDARS
 Check AMA Journal Too

- Aug 25 CVMA Second annual regional warbird race.
Sept 8 Second CVMA Fun Fly.
Oct 6 Second CVMA combat meet.



CVMA MEETINGS

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

ENGINE FUMES

By Bob Shanks



Rick's Frankenstein Ship

The plane above is quite a **Rick Nichols'** creation made up from about four airplanes. His first attempt flew quite well but this one was a tad nose heavy and didn't want to fly. The pilot is one of Rick's hand carved guys. He has two landing gears

in case the main gear collapses!

So members, go through all your scrap parts, extra wheels, landing gear, wings, tails, and whatever you have and design your own "Rube Goldberg" special.

Very creative



CVMA MEMBERS Kick In Your Afterburner...



BUILD SOMETHING, BRING IT TO OUR NEXT MEETING!

CA ACCELERATOR

Ever noticed that when you use CA accelerator, the spray nozzles becomes a "stream" nozzle after a few uses, use acetone or alcohol to clean them.

That strange smelling stuff has a habit of evaporating right through the bottle too.

One modeler found an easy solution to this problem. His wife uses a fingernail polish dryer called **RapidDry**.

This is in a two-ounce spray bottle. The pump and composition of the bottle work great with CA accelerator.

Perhaps that **RapidDry** would work as an accelerator. The modeler only gets his wife's empty bottles so he doesn't know if it works.

CVMA NEWSLETTER

Published Once a Month

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President — Jay Riddle

Vice President — Bob Noulin

Sect. /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



Randy Meathrell's "Sequence"

Randy Meathrell's Pronto: Model Air Plane News Pilot Project of the Month

Pilot Projects

SHOWCASING WHAT YOU BUILD & FLY | Email entries to: MAN@airage.com



Hawker Hurricane

Dennis Mitchell, Williams Lake, British Columbia
Dennis writes that he has been working on this 1/5-scale Valley Aviation warbird for more years than he cares to mention. It's outfitted with Robart retractors, an electric power system (so he didn't have to cut up the cowling) and a Best Pilots pilot figure. Whether Dennis spent one year or 10, we think the result is magnificent.



Pronto Randy Meathrell, Prescott Valley, AZ
Randy's first powered plane was a 50/60s Pronto, and he liked it so much that he decided to build an electric version from Model Airplane News plans. He writes, "This scratch-built version will loop, roll, spin, snap and fly inverted all on three channels. I finished this model the same as my original model. The Pronto is simple, easy to build and flies great."



F4U Corsair John Cavelti, Victoria, British Columbia
A 20-year reader of Model Airplane News, John outfitted his GWS Corsair with an E-flite 370 outrunner and is impressed by its power. He notes, "The markings are from a restored plane it as it flew in the late 1970s and 1980. The original markings were used by the French Navy during the Suez conflict. The plane now resides (with U.S. markings) at the Tillamook Air Museum in Oregon."



T-28 Trojan Jeff Westley, Tulare, CA
Jeff writes, "Sometimes the fun in our hobby is seeing how we can transition a simple ARF into something more interesting." He stripped his ParkZone T-28 completely down, filled all the dents and scratches and added Testor's spray paint and new decals. Then it was time to make struts for some hobbyZone floats. He adds, "It was fun reading about how to set up an aircraft on floats. I must have gotten it right because the airplane handled great on the water and flew like a bird."

SEND IN YOUR PICTURES! Model Airplane News is your magazine, and we encourage reader participation. In "Pilot Projects," we feature pictures from you - our readers. Email your high-resolution JPEG images to MAN@airage.com, or send color prints and a description to "Pilot Projects," Model Airplane News, Air Age Inc., 88 Discovery Blvd., Wilton, CT 06097 USA. Be sure to write your name, address and phone number on the back of each photo and on your letter. Submissions will not be returned. Every pilot whose project we feature will win a Model Airplane News baseball cap.



Our own **Randy Meathrell** had his 1970's Pronto selected as Pilot Project of the month for Sept. 2012 by *Model Airplane News* magazine. (p. 22)

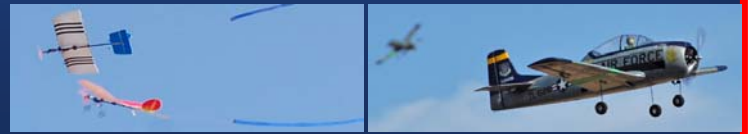
What an honor, a big congratulations to Randy for this distinctive selection. Randy has also distinguished himself and our club by serving as president for two years and our Activities Director for two years. This is his last year as our Activities Director.



Graham Johnson and his Hanger 9 ARF.

2012 Chino Valley Planned Activities

- 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



CVMA PILOTS AND THEIR AIRCRAFT



Tom Jeffrey's EP Corsair



Randy's F-22 EP



Rick Nichols B-2



Don Ferguson launches the B-2.



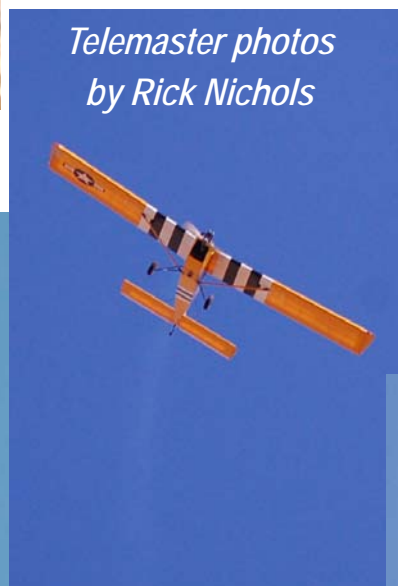
Bob concentrating on his Telemaster.



Bob Shanks 95" Telemaster with a 4 stroke .91 Thunder Tiger engine.



Bob' Shanks' Perpy, needs more control surfaces, foam model is serving as a prototype for a future balsa rendition.



Telemaster photos by Rick Nichols



Dennis gets his P-51 ready (P. 1)



Don Ferguson's foam board Fokker DR-1

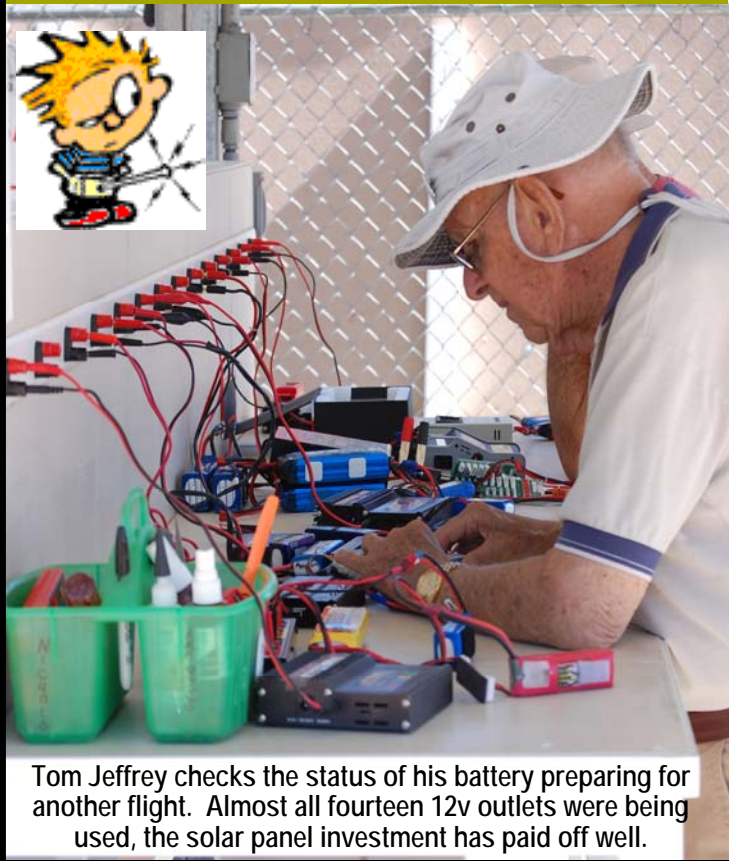


Bob's F-22 on its maiden flight.



The Red Baron visited our field.

**CHARGING TABLE GETS HEAVY USE
GREAT USE OF OUR SOLAR PANELS**



Tom Jeffrey checks the status of his battery preparing for another flight. Almost all fourteen 12v outlets were being used, the solar panel investment has paid off well.

DO YOUR OWN ARF SCALE MAKEOVERS

For many RC flyers the ARF is becoming the primary model to buy due to jobs, time and whatever other demands are out there that conflict with the hobby. There is nothing wrong with these quick build models. Check all glue joints, etc. for safety and then modify according to your tastes. Check out the July 2012 Issue of *Model Airplane News* for some really great ideas for modifying your next ARF.

This article was written by well known modeler *Rich Uravich* and has many easy techniques to change your ARF into something quite outstanding. In this article, he takes a blue Corsair (like everyone has seen at the field) and makes it over into a Canadian style ARF that probably never existed but does it ever look cool.

He collected pictures of cool aircraft, uses some readily available paint some soft lead pencils, with the results looking quite good. Put down a drop cloth in your workshop or use an airbrush and abracadabra you have turned an ordinary ARF into a stand out RC model. Check out this article.



.....And then the prop flew off of the 4-stroke and would you believe that ol' Lightning Larry here actually caught the sucker ?!"

MEMBER'S FOAM BOARD F-22 RAPTORS

Rick Nichols' F-22



Bob Shanks' F-22

Members *Rick Nichols* and *Bob Shanks* constructed Air Force F-22 Raptors from *Hobby Lobby* foam board. Our Activities Director, *Randy Meathrell*, found these 24" wingspan plans online and sent them out to all members. He also sent out flying and construction video. These will make great combat ships.



Randy Meathrell's scratch built Pronto: Featured in September 2012 Issue of Model Airplane News.

July Meeting Highlights

The meeting was called to order at 7:00 PM by President Jay Riddle. The salute to the flag was led by **Bob Shanks**.

There were 32 members in attendance. New member **Chad Collins** was introduced. Rick Nichols gave the Treasurers report, a motion to approve was made by **Tom Wells**, seconded by **Randy Meathrell** and approved.

President **Jay Riddle** thanked **Ruth and Allan Collins, Bob Noulin, Vic Block, Dennis O'Connor** and **Forest "Frosty" Wells** for all of their help in building the new driveway. The 43 club members present gave them a nice applause and also a big applause to Jay for his contributions and work with the project. **Bob Noulin** reported that no mud had washed into our assembly area as usually happens when it rains due to the new gravel drive-

way.

Bud Mellor, CD of our Warbird Race reported on the upcoming Warbird races scheduled for August 25. There are still some jobs left to fill and he went over the roster of duties and updated his volunteer list. We need all members possible at the field that day to help. This is a great fundraiser for our own **Max Bandy** told of the night flying that will occur on Saturday July 21, 8:30 PM at our field. **Chris Corbitt, Matt Henshaw** and **Craig Pitcock** brought a helicopter and 2 airplanes to demonstrate the lighting systems. They are BRIGHT and really look great.

Bob Noulin brought a trainer plane that needs work to give away. It was quickly claimed by **Jerry English**. Thanks Bob. **Ruth Collins** made a donation Jar that will now be used to collect donations at each meeting for runway repair. Thanks Ruth for

making the donation jar to display at each monthly meeting. Our runway donations at the meeting totaled \$82.40. Every penny helps with building up our runway funds.

Flight Instructor **Randy Meathrell** presented **Vic Block** and Ken Shephard with Solo Certificates. **Harvey Hunter**, who lives in Bagdad, AZ also earned a Solo Certificate but was not at the meeting. Randy has had 6 students solo and has 8 more to go.

Chuck Colwell had some questions regarding runway repairs. We are still researching options and will report to the club when we have some viable options to present.

The **Valley Hobby** Gift Certificate was won by **Bob Nabors**. **Bill Lindenthaler** won X-acto blades and a mini blow torch. **Ken Shephard** won a pin driver, **Scott Wemple** won a Prop Balancer, a Battle of Britten book and a "how to" Camouflage

paint book. **Steve Shephard** won a 4 in 1 tool and **Jerry English** won a "how to" Camouflage paint pamphlet.

Ray Stone brought his VSP (very short plane) that he is building from scratch with an OS .40 4 stroke engine. **Randy Meathrell** showed his new Oasis Pattern airplane with a 650 watt electric motor. **Graham Johnson** brought his new Yak 55 great plane 600 watt 3-D flyer. **Charlie Gates** brought his Buz-zard Bombshell. He claims that it is a "No Wind Flyer" **Jerry Calvert** showed his new beautiful Shoestring Racer and **Bill Lindenthaler** brought his 82" wing-span Mystery Plane.

Bob Shanks gave a safety report suggesting that you check the position of your servos on the Slow Stick airplanes as they can shift and affect your flight. A motion was made to close the meeting and seconded.

Meeting closed at 8:42 pm.



Night flyers (L to R) Matt, Craig and Chris.

New pilots (R)

Ken and Vic get solo certificates.



Ray's VSP



Charlie's Old Timer



Graham's Yak



Randy's Oasis



Bill's Unknown fuselage.



Jerry's Shoestring

SHOP VALLEY HOBBY

Bob Nabors won the Valley Hobby Gift certificate tonight.

CHINO VALLEY KIDS TEAR UP THE LIBRARY SKY

Club members *Randy and Carol Meathrell, Bob Shanks, Rick Nichols, and John Walker* helped Chino Valley library elementary and middle school students build the AMA foam plate airplane. They decorated them and got to fly them at the park next to the library. We had several parents helping too. We demonstrated a small indoor RC helicopter and the students took turns flying the Real Flight simulator. We all had a lot of fun. The library furnished the tape and colors, we furnished the penny nose weight and foam plates.



Kids are busy assembling the planes.



Flying their handy work.



The kids loved Randy's helicopter.



Randy & Rick and the helicopter.



Lap top flight simulator.



SAFETY IS ALWAYS AN ISSUE

Our hobby is facing a daunting job of getting the public to understand the difference between UAV's or domestic drones as some call them and our hobby. Some publications are using these terms interchangeably with our sporting planes and helicopters.

We certainly don't want uniformed readers to think our models are UAV's. For some the term UAV sounds dangerous and like "big brother" is spying on the public. **NOT SO!** We need to get the message out that our

RC hobby is just than a hobby we fly at AMA sanctioned airfields just for the hobby. We have to have them at all times in our line of sight with our flights not lasting much over about 15 minutes if that long when flying small electric models.

Large UAV's may soon appear in our national airspace for a number of jobs and they certainly are not like our models. They will also have a different set of rules to follow.

Just announced this month (July 2) the [Association for Unmanned Vehicle Systems International \(AUVSI\)](http://www.ausvi.org) has pub-

lished an industry code of conduct for UAV operations. Central to this code is "safety, professionalism, and respect". The code of conduct can be found at this web site: www.ausvi.org/conduct.

How all of this will be received and discussed within AMA is yet to be seen so look for developments in our monthly magazine. Uninformed editorials around the country could spell a lot of trouble for our great hobby.

In the July AMA issue, there's an item on an accident with a glow engine that had

locked up with fuel. After taking the glow plug out and flipping the prop a couple of times to empty the fuel from the cylinder head the modeler replaced the glow plug and flipped the prop and to his horror it started up backwards and shot off the stand cutting his hand with the prop as it exited backwards. Thankfully he was **NOT ALONE** at the field as he needed lots of assistance to get him to the emergency room. A very rare and potentially disastrous accident. [Fly with someone members!](#)

A GREAT ELECTRIC BRUSHLESS MOTOR GUIDE



Our intrepid *Activities Director*, **Randy Meathrell**, found a great site for building a hand held brushless electric motor calculator. All this information is in the *Diablo Valley Radio Controllers* May 2010 newsletter issue located on page 9, they are located in Pittsburg, CA :

<http://www.dvrc.org/newsletters/2010/0510/0510.pdf>.

I have the PDF file for the calculator if you want to make your own, just e-mail me for the copy BobShanks@aol.com.

Four brushless electric motor relationships are covered by this circular calculator: Motor Watts = ESC Amps x (times) Battery Volts, Motor Watts = Battery Watt-hours x Flight Time, Battery Watt-hours = Battery Amp-hours x Battery Volts, and Motor RPM = Battery Volts x Motor kV rating. With any two of the three values known, you can determine the third unknown value. A Glow Engine or Plane Pounds to Motor Watts conversion guide is also provided to assist you in starting the selection process.

The outer black ring labeled "Motor Watts", the middle black ring labeled "ESC Amps", and the inner black ring labeled "Battery Voltage" will help determine what combination of those components are needed to make a complete electric power system.

If your motor choice has a rated power of 630 watts and you know you want to use a 4S battery, then first line up the little black arrow for the "Battery Voltage" dial to the "4S" point on the dial for the 14.8 volt value of a 4S battery. Then locate the 630 point on the outer "Motor Watts" dial and look just below it to read that about a

40+ Amp ESC would be needed for the maximum power rating of the brushless motor, equivalent to running your plane at Wide Open Throttle (WOT). A wattmeter is useful to accurately determine the actual watts of a given motor and propeller combination.

If you have a 3S battery and a 60 Amp ESC already handy and want to know what power motor can be used with it, first line up the little black arrow for the "Battery Voltage" dial to the "3S" point on the dial for the 11.1 volt value of a 3S battery. Look at the "ESC Amps" dial at the 60 Amp point and then look up to the outer "Motor Watts" dial to read that this combination will also handle the 630 watt brushless motor.

If you decide on the 630 watt brushless motor, 60 Amp ESC, and 4S battery described in the newsletter article, you can also determine your approximate flight time if you know the battery's current rating. Let's use the 3,600 mA rating of the example and convert it to Amps, 3.6 Amps, and again line up that little black arrow on the 4S mark. Now turn the guide around to look up the 3.6 point on the blue "Battery Amps" middle dial. Follow it up to the outer blue dial and read the value of 54 on the blue "Battery Watts" dial. This will give you the battery's watt hour value, or how much power it has to run the brushless motor.

Next, transfer the 54 watt-hour value to the middle black dial that is also used for this conversion and labeled "ESC Amps or Battery Watts" to guide you there. Line up the 54 value with the outer "Motor Watts" value of 630 for the motor watts chosen and go to the innermost red dial to get the flight time of 5 minutes at 9 WOT. Of course, at less than full throttle, you will get more flight time. This is more of an approximate value than a calculated one.

If you're simply interested in converting a glow engine powered plane or selecting an electric power system by using the glow equivalent, then use the outermost green dial labeled "Glow Engine". Line up the green arrow with the desired glow engine

size and read the electric motor's equivalent watts rating at the green arrow at the "50" value located on the middle black dial pointing to the "Motor Watts" dial. You can also convert a plane's weight to an approximate "Motor Watts" the same way using the innermost green "Plane Pounds" dial and reading the result on the "Motor Watts" dial.

Last, because propeller RPM is important to determine what propeller size to use, a brushless motor KV to rpm dial is also provided. Set the "Battery Voltage" to the desired point, look up the motor's KV on the inner purple "Motor KV" dial, and then look for the result on the outer purple "Motor rpm" dial. For example, using the parameters from the newsletter article, set the "Battery Voltage" dial to "4S", locate the motor's KV of 1250 on the inner purple "Motor KV" dial, and look up to the outer purple "Motor rpm" dial for the result of 18,500 rpm. A "PDF" file for the brushless motor guide can also be found at: www.DVRC.ORG.



PROPER USE OF EPOXY

Epoxy is one of the best modeling materials available. It's useful as an adhesive for wetting out fiberglass cloth, as a filler, and as a finishing material. It can be thinned or thickened for a variety of purposes. Even though it is useful, epoxy can be a pain when it doesn't harden properly.

There are two important issues when dealing with epoxy, proportioning and mixing. Of these two, mixing is the most critical. Lack of proper proportions when mixing can lead to permanently sticky epoxy.

One hundred quick, hard strokes are recommended when mixing any amount of epoxy. Count them to make sure that your mixing is adequate. Always mix your epoxy before putting in any additives. Both thinning and thickening agents can keep epoxy from mixing properly. **Thinning:** Epoxy can be thinned using acetone or denatured alcohol. A mix of up to 50% doesn't seem to have any effect on the final strength of the epoxy.