



AMA Chapter #3798

Chino Valley Model Aviators

Official News Letter



January 25, 2015

Volume 18 Issue 1

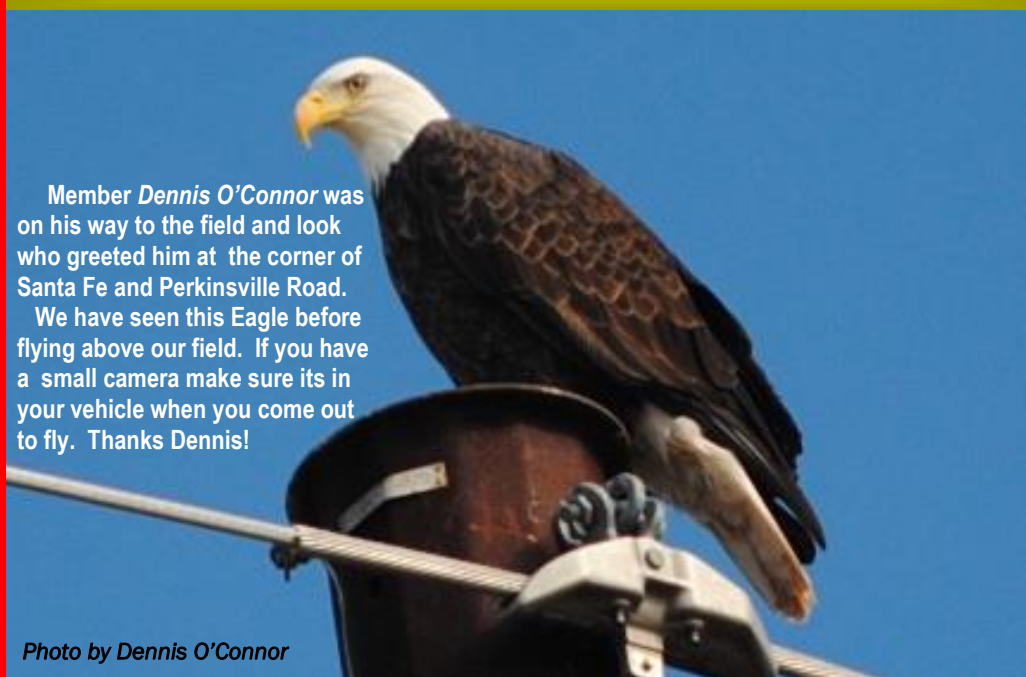
www.chinovalleymodelaviators.org

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

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We Have Other Flyers at Our Field!



Member *Dennis O'Connor* was on his way to the field and look who greeted him at the corner of Santa Fe and Perkinsville Road.

We have seen this Eagle before flying above our field. If you have a small camera make sure its in your vehicle when you come out to fly. Thanks Dennis!

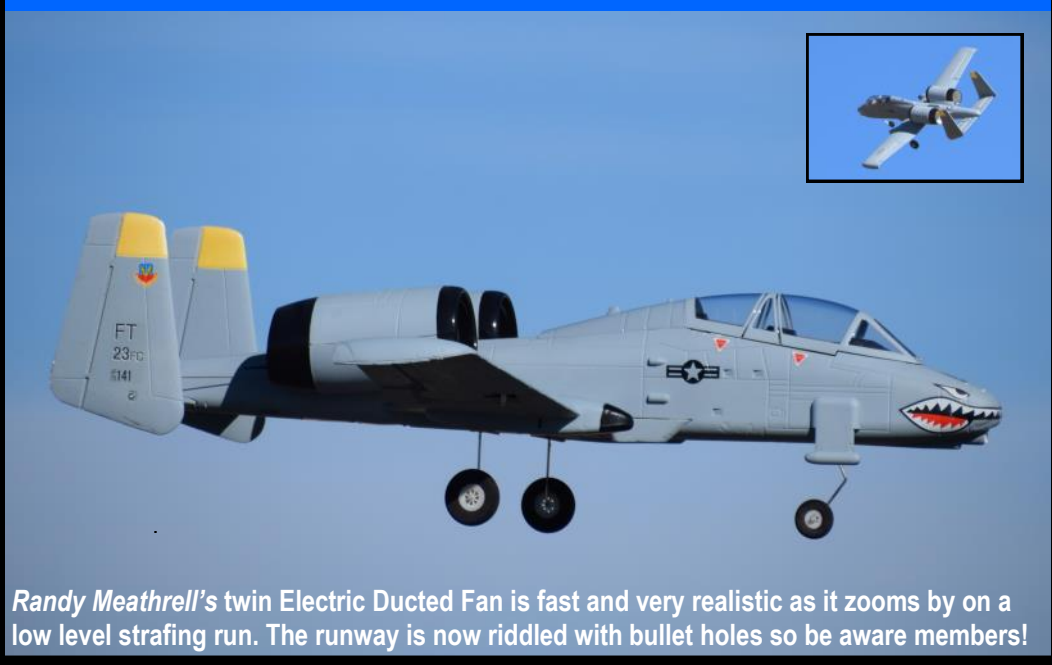
Photo by Dennis O'Connor

Think About This:

"A lie flies, the truth is on foot."

Unknown

An A-10 Prowls the Sky Above Our Field



Randy Meathrell's twin Electric Ducted Fan is fast and very realistic as it zooms by on a low level strafing run. The runway is now riddled with bullet holes so be aware members!

Support Our Local Hobby Shop



The Safeway Center
Prescott Valley, AZ

MAX & CINNAMON BANDY

THEY SUPPORT OUR CLUB

Please support them as well.



Mike's Blue Baby

Field Chatter from CVMA President, Michael Kidd: No Kidding!

Hello fellow flyers. I hope everyone had a great Holiday Season and Santa brought you what you asked for.

This year looks to be a promising one. We have a lot of fun events coming up, with the usual cleanup sessions prior to the event. We have had a

number of new members join, some seasoned pilots and some new pilots. The club is in full swing to have fun this year and I hope you will make an effort to come out and join the awesome flying field this club is lucky to have.

Oiling the runway

as well as re-striping it and general maintenance is our next major project.

Getting quote on re-paving the old east end so we have an idea what we need to shoot for money-wise to accomplish this.

We will be slowly re-carpeting the tables so

we need to stop re-fueling on the tables under the old cabana.

The club is still looking for flight instructors.

As always, fly safe and happy landings in 2015.

A winter RC Flyer.



TAKE YOUR TRASH HOME

If you bring it you take it home!

We have one of the best RC fields in the western U.S. let's keep it that way.

CVMA MEMBERS Kick In Your Afterburner...



BUILD SOMETHING, BRING IT TO OUR NEXT MEETING!

CAN YOU NAME THIS PLANE?



Answer on page 7

CVMA NEWSLETTER

Published Monthly

AMA Chapter # 3798



- President — *Mike Kidd*
- Vice President — *Steve Shephard*
- Treasurer — *Don Crowe*
- Secretary — *Jerry English*
- Safety Officer — *Charlie Gates*
- At Large Members — — *Bob Noulin*
Randy Meathrell,
Bob Steffensen,
Wait Findley,
Ken Shephard
- Newsletter Editor — *Bob Shanks*
- Activities Director—*Don Ferguson*
- Flight Instructors—*J. Stewart, M. Kidd*

CLUB PILOTS FLYING THEIR AIRCRAFT



Roger Calvert's Big Gas Corsair

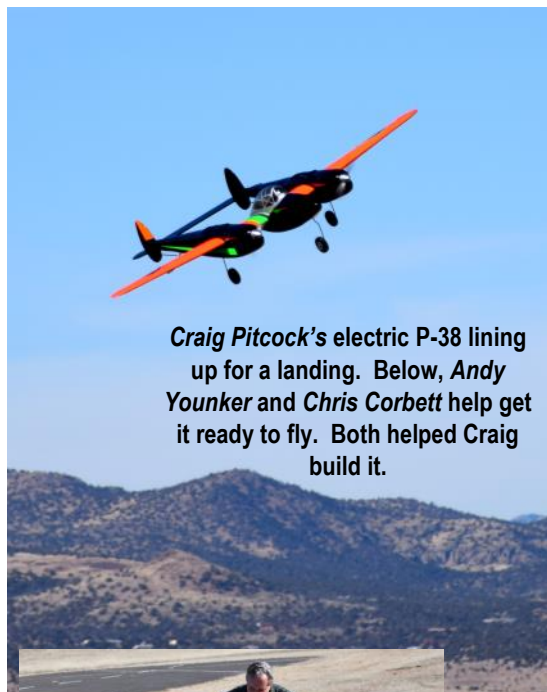
Sparky Thornton's Eindecker



Photo by Cinnamon Bandy



Craig Hale's electric Mig-29 pusher. Plans are from RCPowers.com.



Craig Pitcock's electric P-38 lining up for a landing. Below, Andy Younker and Chris Corbett help get it ready to fly. Both helped Craig build it.



Dennis O'Connor's 35 gas powered Breitling has a wing span of 75", weighs 11.5lbs and is from Skyline-RC.com, cost is a reasonable \$229 and comes with a pilot.



Don Ferguson's EDF creation. She flies very well.



Can You Name This Plane? Who flies it?



Randy Meathrell's A-10 (page one)

January 2015: First Meeting of the Year!

These minutes will be officially approved at the February General Meeting.



Don Crowe 's Aero Sky

Pledge to the Flag led by Treasurer Don Crowe. President Mike Kidd called on Flight Instructor Randy Meathrell to present *Frosty Wells* with his solo certificate.

Vice President *Steve Shephard* reviewed the "old business" item of splitting the Secretary/Treasurer position. He presented the nominees, *Jerry English - Larry Parker & Bob Steffensen*. The nominees left the room while a vote was taken. *Jerry English* was elected.

Mike reviewed the successful Christmas party, congratulated *Rick Nichols* for a great job as MC and as a recipient of the Carl Goldberg Vital People Award.

Also noted there was an AMA article in the February AMA Journal about our club that specifically mentioned our 'State of the Art' charging station.

Also discussed was the need to oil and re-stripe the runway followed by some lively discussion.

Other items Reviewed:

- The status of repayment of *Jay Riddle's* loan in light of the need for oiling the runway.
- Current developments in the national discussion of UAVs.
- The status of re-carpeting the flight line tables
- The status of membership renewals.
- The status of the meeting 'goodies' sign up. Filled the remaining months for this year.
- The status of the canceled November work party to remove the accumulated trash from the field, followed by a discussion of work parties in general.
- The acquisition of the ladder

and pump. Thanks to the anonymous donors of the ladder!

Vice President Steve Shephard:

- Reported on the status of the by-laws committee with a short discussion of the process.
- Requested for more volunteers as flight instructors, noted that there were transmitters available in the shed at the field for Apprentice aircraft. Randy Meathrell recommended getting 5 copies of the book "One Week to Solo" for general use for students. Steve responded that they had been anonymously donated.
- Ruth Collins* had a question about the Colorado legislation to ban RC aircraft followed by a short discussion of RC bans in the National Parks
- Treasurer *Don Crowe* gave his Treasurers Report, it was seconded and passed.
- A lively discussion of "guest pi-

lots, " Park Flyer AMA holders, and AMA visitors. The Secretary was assigned the task of obtaining clarification of the AMA rules for guests, visitors and Park Flyers.

Charlie Gates, Safety Officer, reviewed Safety issues noting that the Flight Log he keeps of flying activities is on vacation for the winter and discussed the Safety practices for the Pro-Warbird race, especially that the plane must go to a throttle-off condition on loss of signal. He also reminded everyone to call out intentions when at the flight line.

A lot of activity took place at this first meeting of the year. So, the Show & Tell and Raffle along with other discussions have been eliminated due to space limitations here.

Respectfully Submitted
Gerald English, 2015 Secretary



Frosty gets his solo certificate.



Great crowd for our first meeting of the year.

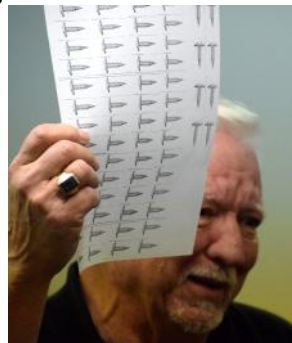
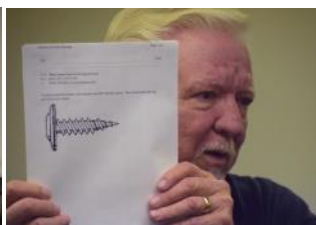


Raffle prizes table.



Larry Parker's twin electric.

Rick explains his "screw" dilemma building his Decathlon.



SHOP VALLEY HOBBY

Please shop at our only local hobby store, Valley Hobby, they support our club so well.
Cinnamon and Max Bandy go all out for our CVMA members and local RC fans.

Preparing To land Can Be Exciting!

By Jason Benson Adapted from Model Airplane News

Landing is the only maneuver that we fly that is absolutely mandatory. If you think about it, this makes complete sense. We don't have to take off, but once we do, the only thing that we must do is land! So, once you have takeoff down, it's a good idea to make sure you are 100% competent in landing.

The tricky part about landing is the fact that you will be flying so close to stall. Unlike full-scale pilots, we do not have an airspeed indicator and the connection to the plane that allows us to feel the stall. However, to me, landing a model aircraft is still very much a "by feel" thing. We just feel the stall in a different sense. The way we feel it is in our thumb that is on the stick that controls the elevator. As our model flies slower, the wing will need a higher angle of attack to maintain altitude. Therefore, while you are setting up for landing, if you suddenly have a need to add more and more elevator to maintain your altitude, it is time to add throttle to avoid the impending stall.

Now, let's talk about the hardest concept to grasp. When flying a model airplane, especially during landing, the concept is this: elevator controls speed, while throttle controls rate of descent/ascent. Most people believe the opposite to be true. This is painfully obvious when you are flying close to the ground and you run out of up-elevator and your plane comes crashing to the ground. The biggest mistake people make is using elevator alone to try to maintain their descent to landing. Instead you want to use throttle to slow your descent and avoid contact with the ground and elevator to slow the plane down, as it gets closer to touchdown.

MAKING LIFE EASIER

With a tricycle gear you can afford to bring the nose a little higher without worrying about losing control of the model once on the ground. We will try to cover this in a future article.

Landing at different fields can add to the complexity of landing a "difficult" model. When you are landing a model that you need to focus on flying, you will want to lighten the load wherever you can. Here are a few things that you can use to make things easier on your brain. First try to utilize are landmarks. When first arriving at a new field take a few minutes to scan the area and look for visual landmarks. Look for peaks of hills or mountains in the background, power poles, trees, or other things that stand out to the eye. Next is knowing the stall characteristics of the model that you are flying. When flying a new model take her up to altitude once you know everything is working as it should and pull the throttle back. Then apply more and more elevator until reaching stall and see what the plane's response is. This will remove any surprises when on final and altitude is at a premium. These two pointers can help save a number of models if you take the time to utilize them anytime you are at a new field or flying a new model.

DIFFICULT-TO-LAND MODELS

Although it's not a warbird, you can use the steps discussed here to help increase your success rate when landing aerobatic biplanes. The increased airspeed helps to maintain rudder authority on touchdown.

Of the different configurations of models, the tail-dragger plane is definitely more difficult to land well. Of course, we have to count out the "floaty" 3D models and aerobatic planes such as the Extras and Edges that are so popular.

In general, RC models are not difficult to land. Even most of our "heavy-metal" warbird models are so lightly wing loaded that they really don't qualify as a "difficult" to land aircraft. However, even though they don't have high wing loading, the fact that many of them are tail draggers makes this the "trickiest" class to land so we will focus here.

So, what qualifies as a good landing with a tail-dragging warbird? Usually, it is a nice, 2-point touchdown with no bounces and a controlled rollout. The most common mistake is not carrying enough speed when landing warbirds. Just because the wing will fly down to a walking pace does not mean that is the speed we should land these models. Landing too slow can cause bounces and uncontrolled rollout previously mentioned.

Let's address airspeed. Try to land about 5 to 10mph above stall speed. This keeps enough airflow traveling over the vertical fin and rudder to control yaw on touchdown as well as over the horizontal stab and elevator to keep enough pitch authority to minimize bouncing.

The second point of conversation is the attitude of the model. Unlike the 3D aerobatic planes we want to come in with the nose fairly level. Try to avoid coming in nose high like a jet fighter. This just leads to trouble.

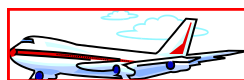
The third bullet point would be the flare. Since we have ample airspeed to keep the plane flying the flare is going to be more of a leveling out. Try to flare about 6 inches above the runway. Level the plane off at this altitude, and pull the throttle back to idle and allow the plane to slow. As the wheels get to the point of contact with the tarmac slowly release the back pressure on the elevator lessening the tendency of the tail to drop which creates a positive angle of attack of the wings, which will ultimately can lead to the model taking to the skies again unintentionally.

Once the main wheels are solidly on the ground, focus on rudder control and be sure to keep the model tracking as close to the centerline as possible.

Finally, once the plane's air speed is below flight speed, slowly add the up-elevator back in to firmly plant the tail wheel on the ground to avoid the undesirable nose over that we have all witnessed at the field.

FINAL WORD

If you take the tips above and focus on improving your skills one at a time, you definitely will see an improvement in your landing skills. All of the above points have proper timing. Additionally, every model you fly will require different timing for each of the points. Be patient and work on each step one at a time with every model you fly. Eventually, everything above will become second nature and you will not hesitate to fly any new model no matter how "scary" it is supposed to be on landing. Now get out there and shoot some landings!





MARK YOUR CALENDARS

CVMA 2015 EVENTS

- April 4: T-28 Pylon Race
 May 9: Gymkhana/Combat/Swap
 June 27: T-28 Pylon Race
 Aug15: War Birds Pylon Race
 Sept 11, 12: Steve Crowe Fun Fly
 Nov 6, 7: Thunder in Chino Valley Jet Rally



Club meetings:
 Third Wed. of
 each month at
 7pm.
Prescott Airport

DON'T FORGET TO LOCK THE GATE

ALL CVMA MEMBERS:

LOCK THE GATE WHEN LEAVING, IF YOU ARE THE LAST ONE OUT.

WE ALL MUST REMEMBER TO LOCK THE GATE.

THIS MEANS SPINNING THE LOCK A FEW TIMES AFTER FASTENING IT
 TAKING IT OFF THE COMBINATION NUMBER.

SAFETY IS ALWAYS A KEY RC ISSUE

During cold spells and when one is away for long periods of time and then wants to fly it is a good idea to double check your plane or planes selected for a flying day.

Do a thorough inspection of not only clue joints as well as your motor mount. Check all electronic hook ups and batteries. Does the battery hold a charge well under load?

Thanks to VP Steve Shephard we have nice "No Taxi" letters in the pit area where we should not taxi. Please insure you stop your plane parallel to the pit area and not pointed into the pit.



What is a Member at Large?

Guest Editorial by

Randy Meathrell

The Chino Valley Model

Aviators has 5 club members that act as Members at Large. Just what is a Member at Large and how do they benefit the club?

The clubs officers are always looking for ideas and feedback from the club members on how to make the club more fun and enjoyable. Member comments and suggestions are always sought. But, the officers can not be at the field all the time, which is where the

Members at Large can help. Some members fly at off hours and some members may be too timid to talk to an officer. The Members at Large are the eyes and ears of the club officers. If you have a suggestion or complaint, voice it with a club officer or Member at Large. We all work to make our club one of the best in Arizona and the most fun.

The Members at Large are Randy Meathrell, Ken Shephard, Bob Steffensen, Walt Findlay and Bob Noulin.

Editors Note: These members are vital to safety as well.

NAME THAT PLANE: *Piper PA-40 Enforcer*

The Piper PA-48 Enforcer is a turboprop powered light close air support/ground-attack aircraft built by Piper Aircraft Corp. Lakeland, Florida. It was the ultimate development of the original World War II North American P-51 Mustang.

The Enforcer concept was originally created and flown as the Cavalier Mustang by David Lindsay, owner of Cavalier Aircraft, in response to the United States Air Force PAVE COIN (Counter Insurgency) program, but Cavalier did not have the political clout or manufacturing abilities to mass-produce the Enforcer, so the program was sold to Piper by Lindsay in 1970.

In 1971, Piper built two Enforcers by heavily modifying two existing Mustang airframes, fitting them with Lycoming YT55-L-9A turboprop engines along with numerous other significant modifications.

One airframe was a single seat (called the PE-1 and FAA registered as N201PE), the other a dual-control aircraft (the PE-2, registered N202PE). Prior to the Pave COIN evaluation, N202PE was lost in a crash off the Florida coast on 12 July 1971 due to flutter caused by a Piper

-modified elevator trim tab.

Although the Enforcer performed well in the 1971–1972 Pave COIN test flown by USAF pilots, Piper failed to secure a USAF contract.

By the time the PA-48s were completed, they shared less than 10 percent of their structure with the P-51, and were longer and larger. Essentially, the PA-48 Enforcer was a completely new aircraft.

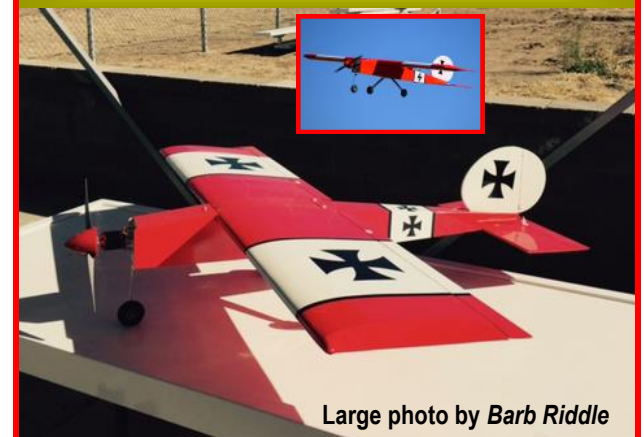
The two PA-48s were tested during 1983 and 1984 at Eglin Air Force Base, Florida and Edwards Air Force Base, California. As in the Pave COIN tests of 1971, the PA-48s were found to perform well in their intended role, but the USAF again decided not to purchase the aircraft.

Of the prototype aircraft produced, three of the four still exist. The original PE-1 is disassembled and in storage. One of the PA-48s, N482PE, awaits restoration at Edwards Air Force Base. N481PE has been fully restored and resides in the 'Prototype Hangar' at the National Museum of the United States Air Force at Wright-Patterson Air Force Base near Dayton, Ohio.



Piper PA-40 Enforcer

Member Projects



Large photo by Barb Riddle

Seems our member *Jay Riddle* was too busy helping get our field into its wonderful shape so *Randy Meathrell* built his Stick for him. Now he has a plane that flies well. If you want a great flying shoulder wing plane nothing flies like a Stik.

Oldest Flying F-86A Built in 1948: Plane was on Display in Europe



According to Cliff Wilewski of *Heritage Aero* (Rockford, IL), "We're going to take a breather for the rest of December and do the reassembly in January and February," He said. "We plan to have her flying by early March. "The goal is to complete assembly and achieve FAA certification in time for EAA Air Venture Oshkosh 2015", which occurs July 20-26.

Lockheed Martin Working on Research to Reduce Supersonic Booms in Future High Speed Airliners

Adapted from an Article in Aviation Week and Space



Eighty Passenger Concept SST

According to Lockheed Martin new developments would reduce sonic booms 100 fold compared to the old retired Concorde supersonic airliner,

The future of air travel is bright – and fast, according to Lockheed Martin. Since the dawn of the jet age in the 1960s, commercial air travel has remained relatively unchanged. However, today's demand for smarter and faster technologies is driving the next generation of commercial travel with supersonic aircraft, which could potentially cut U.S. coast-to-coast travel time almost in half.

With the commercial air travel industry expected to grow to more than five times its current size, the economic impact and significant time savings of a more efficient supersonic travel system will become increasingly important in our global economy.

One of the major hurdles of commercial supersonic air travel is the noise associated with it. At speeds greater than Mach 1, disturbances of air pressure around the airplane merge to form enormous shock waves resulting in sonic booms. For example, when you hear a car coming, you can hear it before it passes you because you hear increments of that sound continuously over a duration of time. In the case of a supersonic aircraft, you get all that sound over a very short duration of time causing a boom-like effect.

And sonic booms are very loud. Because of this, current air traffic regulations restrict supersonic planes from flying over land. Lockheed Martin says that for more than a decade it has been working to solve that problem. "To achieve revolutionary reductions in supersonic transportation airport noise, a totally new kind of propulsion system is being developed," said Michael Buonanno, Lockheed Martin manager of the NASA N+2 program. "We are also exploring new techniques for low noise jet exhaust, integrated fan noise suppression, airframe noise suppression and computer customized airport noise abatement."

One of their breakthroughs was being able to develop the tools and codes that allow engineers and designers to accurately predict the loudness of a plane's sonic boom. With the availability of these tools, a designer can develop an airplane concept that significantly reduces boom levels. Though it is not practical to completely eliminate noise, these advancements would result in a sonic boom that sounds much more like a distant thump rather than a sharp crack.

Prescott Valley Area Used For RC flying



Your editor was informed by a Prescott Valley CVMA member that the owner of a large area has given his OK for RC flying to take place there. This site, in Prescott Valley, also has some paving for electric car uses as well.

The aerial picture above was provided to show just where it is located. If you live in the Prescott Valley area you might check it out. Keep in mind it is not a sanctioned AMA site and there are some homes near by so if you do decide to fly there, smaller electric airplanes would be a good choice for noise abatement. Your editor's personal approach is always to fly at AMA sanctioned sites if possible.

As always, safety is paramount in this hobby so if you are like your editor, he likes to fly at our field, no homes near by and no worries for sound issues. And yes, I have to drive a bit longer to get there but the security and safety is important.

When your editor lived in the Tucson area he would drive 45 minutes one way twice a week to the *Tucson International Modelplex Park Association* (TIMPA) field to fly it is in an area much like ours, no close-by vertical structures or buildings, a nice safe open area. Our club has members from Dewey, Williams and other areas quite a distance from the field. We have an awesome field members!

With all the negative press the small electric so-called "drone" type quad copters are getting it is always important to consider where one flies and what type of plane is selected.

We all are and must be ambassadors of good will for this great hobby.

FAA UNMANNED FLIGHT GUIDELINES

Member *Rick Nichols* attended the AMA convention recently held in California and brought back some guidelines concerning the use of *Unmanned Aerial Vehicles (UAV)* or also known as *Unmanned Aerial Systems (UAS)*.

On the very first page of the publication the first paragraph really highlights how UAV's and our hobby are different.

"The FAA currently authorizes the use of unmanned aircraft systems (UAS) for commercial or business purposes on a case-by-case

basis. *You may not fly your UAS for commercial purpose without the express permission from the FAA. You should check with the FAA for further determination as to what constitutes a commercial or business use of small UAS.*"

The small quad copter UAV's have been in the news from time to time and often reflect negatively on our RC hobby flying.

Reproduced below is the cover of the pamphlet and two pages about the organizations listed in the publication, notice, AMA is part of this

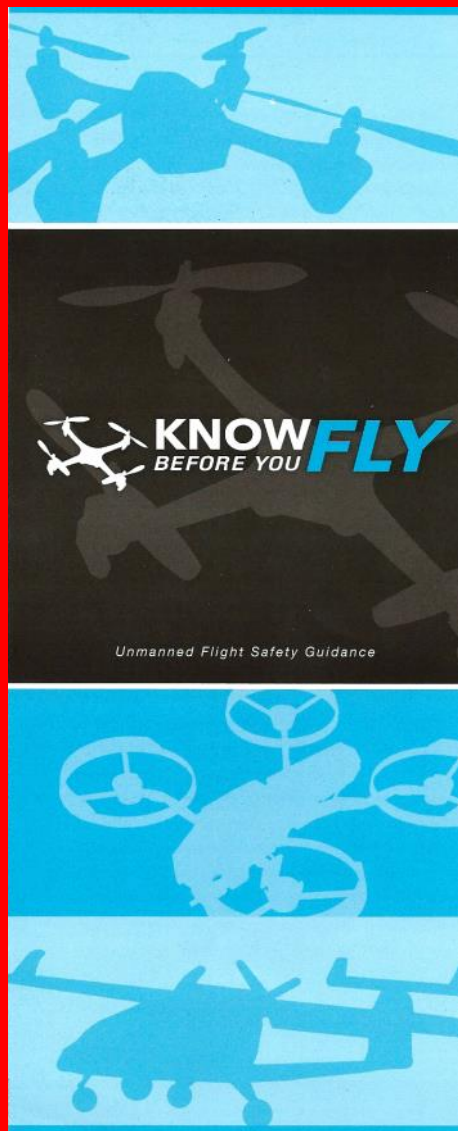
coalition.

We all must be ambassadors for our radio controlled hobby and help inform the public about what we do and our Academy of Model Aeronautics (AMA) organization.

For more information one can visit the FAA website to get a Certificate of Authorization (COA) to for use of Unmanned Aerial Systems (UAS). Only governmental organizations can receive a COA at present.

For more information go to

www.faa.gov/UAS.



About Know Before You Fly

"Know Before You Fly" is an educational campaign that provides prospective unmanned aircraft users with the information and guidance they need to fly safely and responsibly.

About AUVSI

The Association for Unmanned Vehicle Systems International (AUVSI)—the world's largest nonprofit organization dedicated to the advancement of unmanned systems and robotics—represents more than 7,500 members from 60+ allied countries involved in the fields of government, industry and academia. AUVSI members work in the defense, civil and commercial markets.



For more information, go to www.auvsi.org.

About AMA

The Academy of Model Aeronautics (AMA) is the premier community-based organization in the United States for model aviation enthusiasts. With 175,000 members, the AMA is dedicated to the advancement and safeguarding of modeling activities. The Academy provides leadership, organization, competition, protection, representation, education and scientific/technical development to the model aviation community.



For more information, go to www.modelaircraft.org.

About Small UAV Coalition

The Small UAV Coalition advocates for law and policy changes to permit the operation of small unmanned aerial vehicles (UAVs) beyond the line-of-sight, with varying degrees of autonomy, for commercial, civil and philanthropic purposes. Its members include the leading manufacturers, operators, and service providers of small UAVs.



**SMALL UAV
COALITION**
A Partnership for
Safety & Innovation

For more information, go to www.smalluavcoalition.org.

About the FAA

The Federal Aviation Administration is committed to providing the safest, most efficient aerospace system in the world. The agency is executing a plan for safe and staged integration of unmanned aircraft systems into the National Airspace System.



For more information, go to www.faa.gov/UAS.