AMA Chapter #3798

Chino Valley Model Aviators, Inc.
Official News Letter

IMAA Chapter 705

January 20, 2013 Volume 16 Issue 1 www.chinovalleymodelaviators.com

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

Inside this issue...

MULTIPLE TAKEOFFS EXPOSURE

Some photographic magic using multiple exposures showing multiple takeoffs at the Hanover, Germany airport during one busy morning.

A thought for guidance in 2013:

"Church is a hospital for sinners, not a club for saints!"

THE ULTIMATE RC AIRPLANE: THE RQ-4 GLOBAL HAWK BLOCK 40

A Northrop Grumman RQ-4 Global Hawk Block 40 remotely piloted aircraft in flight. The Block 40 is one of three variants of the high-flying, long-endurance Global Hawk that the Air Force currently operates. It carries the advanced synthetic aperture radar imaging and tracking for moving ground targets.

From the Desk of CVMA President Jay Riddle

Another year is upon us. Let's all shoot for another memorable year of flying at our field.

Clubs can fail in a variety of ways. The membership can slowly lose interest. Many in our club don't want to take on the challenges of being a club officer to make things happen and this over time can have a negative effect. However, our club has a great attitude among its members, sharing and helping each other, we just need to work on better membership involvement. We are indeed quite fortunate in many areas. The primary culprit of any club failure, however, is the loss of the flying site. We have a secure field at this point In time.

To preserve our club, we all need to pay attention to some very specific items. Again, being proactive for the club increases our chances of keeping a strong club. We have done well in Chino Valley playing an active role in community affairs to increase the club visibility to the public as needed. We also have invited local government officials to the field for our fun fly and Warbird Races. Having our Secretary/ Treasurer, *Rick Nichols* as a member of the Chino Valley Chamber has made a big difference.

We do emphasize to the club membership the importance of volunteering to be a club officer, however, our club is small and interest in this area has not be particularly strong. Most members just want a good place to fly and have fun. They must realize, however, that things do not just happen on their own. We are all very fortunate to be a part of the most satisfying hobby in the world. With some creative effort and a little bit of work, you can keep your club postured for a healthy 2013.

Let's all do a better job of getting involved this year.

MARK YOUR CALENDARS

Check AMA Journal

Jan 18-20 Warbird Meet Phoenix

Jan 24-27 Electric Festival Superstition Air Park , Mesa

CVMA MEETINGS

Third Wed. of every month at 7pm.

Prescott Airport

EAA Meeting

Our own *Randy Meathrell* will talk about his roll in the development of the F-117 on February 12th at 7:00 PM in

CVMA MEMBERS Kick In Your Afterburner...

BUILD SOMETHING, BRING IT TO OUR NEXT MEETING!

CAN YOU NAMETHIS PLANE?

Answer on page 8

CVMA NEWSLETTER

Published Once a Month

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IMAA Chapter #705

President — Jay Riddle

Vice President — Bob Noulin

Sect. /Treas. — Rick Nichols

Flight Instructor — Randy Meathrell

Safety Officer — John Stewart

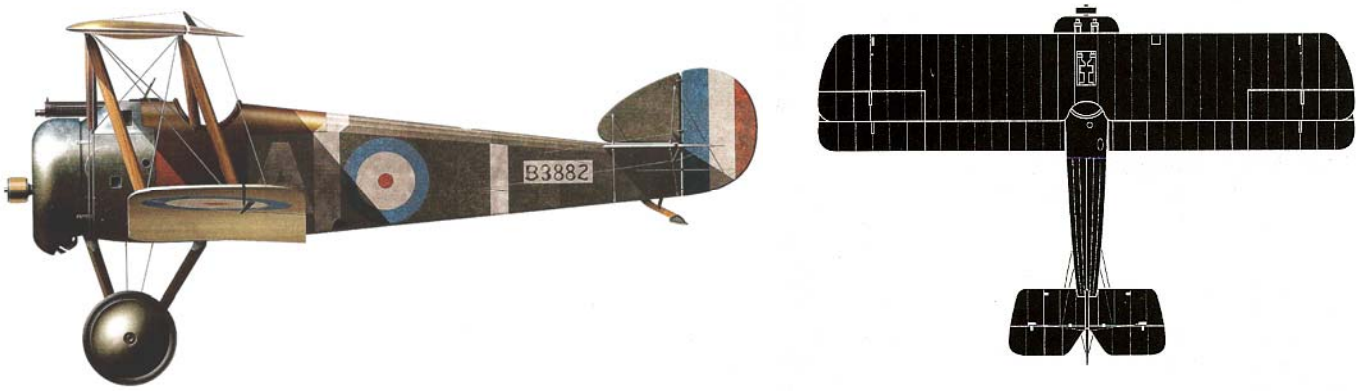
Board Member — Allan Collins

Board Member – Steve Shephard

Newsletter Editor — Bob Shanks

A few random shots from last year's flying...

WWI Sopwith Camel: A Terrific Subject to Model



This Aircraft , number B3882 from the Royal Air Force as it looked in 1917 when it was assigned to the RNAS 10 Naval Squadron in France.

Photo by *Chris Myhre*

This is member *Sparky Thornton's* 1/3 scale Sopwith Camel. His rendition is a beautiful flyer and model that commemorates this famous aircraft very well.

The Camel F.1, the most famous British fighter of WWI, acquired its vaunted reputation as a result of 2,790 victories, including 1,543 aircraft destroyed and 1,086 shot up or driven out of control. The Camel was a descendent of the Sopwith Aviation Company's successful Triplane and "Pup'. The nickname "Camel" came about as a result of the pronounced hump in the fuselage.

The Camel was an inherently unstable aircraft, but that feature only added to its maneuverability and deadly combat prowess. Its short wingspan and concentration of pilot, fuel, engine, and guns in one compact area made the Camel extremely agile. This, combined with strong gyroscopic effects of the rotary engine, also made the Camel susceptible to vicious spins. The immediate need to adjust the delicate fuel control after takeoff led to many training accidents. Nearly 1,800 Camel pilots died in combat and another 365 in accidents.

Once mastered, the Camel was a supreme dogfighter. It was far superior to German types in 1917, when it w as introduced on the Western Front, and held its own throughout the war. It served in many missions: air superiority, close air support, and night fighting and home defense. It was featured in many famous battles, including the dogfight that claimed the life of the renowned German pilot *Manfred von Richthofen,* the "Red Baron."

Aces:

William Barker, Raymond Collishaw, Field Kindley, Donald MacLaren, Clifford McEwen. Elliott Springs, George Vaugh, and H.W. Wollett.

Interesting Facts

- Known originally as the "Big Pup"
- Piloted by fictional twins John and Bayard Sartoris in William Faulkner's novel *"Flags in the Dust"*
- Executed 270-degree turns to the right more swiftly than 90-degree turns to the left (engine torque)
- Modified as a night fighter called the ""Sopwith Comic"
- Featured in recent films "*The Great Waldo Pepper "*(1975) and the "The Red Baron" (2008)
- Flown by 10 other countries
- Suffered heavy casualties when strafing German Positions
- Mentioned regularly in Charles Schulz comic, "Peanuts."

Sopwith Camel of the Royal Air Force

My First T-38 Flight

By Randy Meathrell

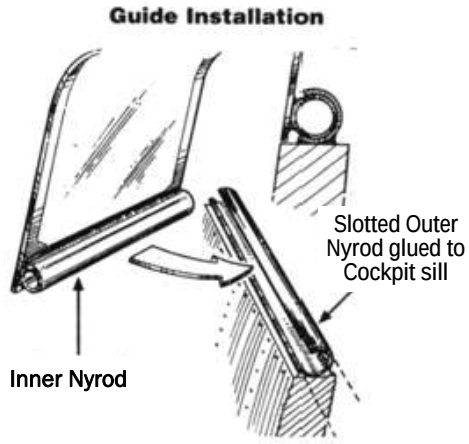
I was one of the fortunate Lockheed avionics flight test engineers to be granted flight status on the F-117A test program, I was responsible for testing the Infra-Red system on the aircraft. I am a private pilot and I had flown some interesting aircraft, including in Viet Nam, but nothing prepared me for the first flight in the supersonic Northrop T-38 trainer. My flight was with Lockheed Test Pilot Bob Riedenauer, the only test pilot to fly all the Lockheed "Black" airplanes (U-2, SR-71 and F-117A). After attending ejection seat and altitude (Fart) chamber training and passing all the verbal tests, it was finally time to take my ride.

On take off I was disappointed in the amount of kick I received from the afterburner light-off. BUT, even though the airplane was relatively quiet with the helmet and oxygen mask on, the T-38 just kept accelerating. Bob retracted the landing gear at 200 mph, which is the cruise speed of most of the light aircraft I have flown. We continued to accelerate to 450 Knots at 50 feet, at which time Bob pulled the airplane into a 90 degree climb. We climbed like this until reaching 22,000 feet, and then Bob pulled the airplane onto its back. It was fun looking at the airfield out of the top of the canopy.

Lockheed Test Pilot Dave (Fergie) Ferguson was out practicing some maneuvers he would be performing on the F-117A in an F-4 Phantom and we joined on him. Dave was practicing a maneuver called a Roller Coaster, which places the aircraft in a +6, -4 G nose movement up and down. This was my first introduction to this type of G loading and it got my total attention. Next Dave started doing a maneuver called an aileron reversal and Bob handed the airplane controls over to me as we matched all the movements of the F-4. After separating from the F-4, I heard Bob say "Look he wants to play" and looking out I spied an F-4 coming head-on at us. After some vigorous maneuvers the nimble T-38 was firmly planted on the tail of the F-4. Try as he might, the F-4 could not shake the lighter and smaller T-38. After "playing" for several minutes Fergie called "Bingo" fuel which means it is time to go home.

We followed Ferg back to home base, but since we had fuel left in the tank Bob took the aircraft supersonic (YAWN) and then I got to see the world turned upside down at 50 feet and 450 Knots (WOW!). All this time I could feel my stomach boiling and I had a cold sweat, but I was determined not to loose my cookies in the airplane. My brother, Dick Meathrell was waiting for me when I stepped out of the airplane to give me a ride back to work. As I approached the rear of the car I was hit with a wall of cold water, which is the way first flights are celebrated. It actually felt good. I was proud of myself for not getting the inside of the airplane messy, then my brother turned a corner with the car and I lost my lunch.

HOW TO: A SLIDING CANOPY IDEA

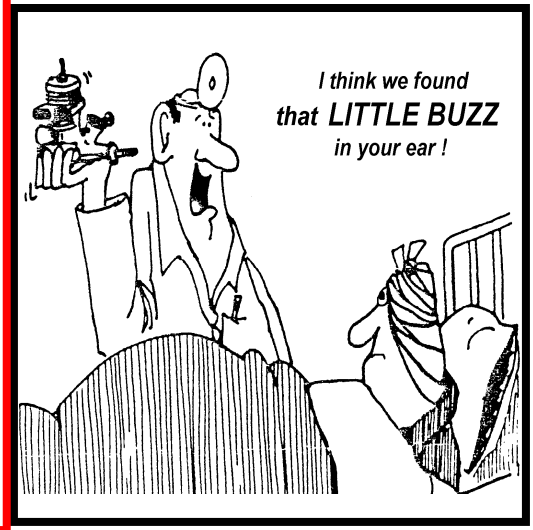


BUILDING TIP

Pinned hinges move with much less resistance and are more durable than other hinges. Cover the hinge with lip balm before installing it with 5-minute epoxy. When the epoxy dries, the excess can easily be removed from around the hinge.

The Great Planes Slot Machine is a good investment, and it makes hinge installation much easier.

Finally, after you have a control surface that moves easily and permits adequate throw, don't forget to seal the gap. It is amazing how much difference this will make in the performance of your aircraft. A roll of clear MonoKote will seal the control surfaces of all the aircraft you have. It also keeps the hinges secure and helps prevent control surface flutter.



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

January General Membership Meeting

The meeting was called to order at 7:00 PM by Past President *Randy Meathrell*. The salute to the flag was led by Bob Shanks. There were 39 members were in attendance.

New member *Javier Valenzula* was introduced.

Acting President Randy explained that the President *Jay Riddle is* AWOL with family in Texas and hoped to return the end of this month.

Randy thanked Max Bandy and Valley Hobby for the generous donations of airplanes and radios that were donated for tonight's and next months raffle.

Randy asked Rick to purchase some Hotties hand warmers to have on hand at the field.

Vic Block Thanked the club for the Get Well card and *Jerry English* thanked the members for the Sympathy Card. A Get well card was passed around for *Chuck Colwell* and the members present signed it.

Randy will be speaking at an *EAA* meeting at the airport on Feb. 12 at 7:00 pm. This will be at our meeting room and the subject will be the F-117 Stealth fighter.

Tom Wells will be putting together a couple of Blue Baby kits that the club will purchase for our raffles.

The members were asked if they would support a Pylon Race in March as the racing assn. lost their field at *Speedworld* in Phoenix. Enough members raised their hands to offer help on race day to make the function work. Randy will be talking with Bud Mellor about going forward with plans.

Rick Nichols gave the Treasurers report, a motion to approve was made and seconded to accept the report.

Safety Officer *John Stewart* was ill and there was no safety report. Randy reported that he has 8 students that he is teaching at this time.

Bob Shanks showed his "Real Thing" "Steam Powered" electric ARF. *Chris Myhre* brought his Hexicoptor with a 3 axis gyro, a GPS and a camera platform. He also demonstrated his mini Quad Copter. *Jerry English* brought his foam RC Groups J-Bug, patterned from an old free flight style plane. Jerry also brought his Snoopy Flying Race Car called the "SkyCart"

Larry Parker brought his AT-6 and *Charlie Gates* showed his Foam Nightmare Trainer. *Tom Wells* gave a dissertation on the construction of his famous Blue Baby, *Don Ferguson* showed his Lighted *Zingali UFO* and also his magnificent Convair 240, or Martin 404 that he built from scratch using blue foam.

John Walker won the $50.00 Gift Certificate, *Bill Lindenthaler* won a new Piper Cub complete with Radio donated by *Valley Hobby, Tom Wells* won a package of many servo extensions, *Don Ferguson* won a Bi-Plane donated by *Valley Hobby*, *Randy Meathrell* won a magnetic parts holder, Rick Nichols won Indian Artwork, *Jerry English* won a Foam Cessna fuselage and wing and *Bob Shanks* won "THE GLUE"

Chris' Hexicopter

Jerry's "J 'Bug"

Jerry's flying "Snoopy Car"

Bob's "The Real Thing"

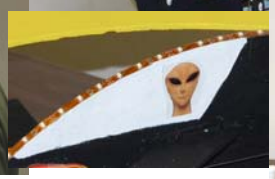
Chris' mini quad chopper flies well.

Larry's T-6

Charlie's foam trainer

Tom's "Blue Baby"

Don's Zingali UFO



Don's alien UFO pilot

Don's Foam Convair

Some Goals to Consider for 2013

We are starting a new year and perhaps it is time to do a "reset" to some old habits and start out fresh in 2013. Perhaps we all have read of a few new ideas but never really followed up on them. It was just too easy to sit them in the corner of our mind to gather dust. Dust off a few goals sent to me in the AMA Insider publication recently. We need to have more members consider these great AMA goals.

1. Make it a point to attend more club meetings. New ideas pop up and you may meet some new friends.

2. Get out to the flying field a little more often. You may also want to volunteer to join a work group to keep the place in tip-top shape.

3. Be more active in our club flight training program. Randy Meathrell and John Stewart do a great job but perhaps you can assist.

4. Club social events strengthen the bond between club members and their spouses.

5. Support our one and only Hobby Store *Valley Hobby*. it is the hobby shops best interest to see your club thrive and its our only one folks.

6. Make your club known to local officials. It can pay dividends down the road. We do pretty good job of this with our fun fly and racing programs.

7. Be visible to the public. Put on a simple mall show. Put a float together and march in a local parade. Hand out flyers, maps, and do presentations at schools (our club has done this in the past). Smiles, warm handshakes, and model airplanes are a great mix for public relations.

Remember, these ideas are just a dusting off, of great club support ideas sent out by AMA. Pick a task or two that you feel comfortable with and go make it happen. It's fun to be proactive and see something positive happen in our club because of your input.

MAY DAY DISTRESS CALL

This is the story of a poor blonde flying in a two-seater airplane when the pilot has a heart attack and dies. The blonde frantically makes a May Day distress call.

"May Day! Help! My pilot had a heart attack and is dead," she says. "I don't know how to fly a plane. Please help!"

She then hears a voice on the radio saying, "This is the tower. I will walk you through it. I've done this before. Now, just relax. Everything will be fine. Now give me your height and position."

The blonde replies, "I'm five foot four and I'm in the front seat."

"Okay," says the voice from the tower. "Repeat after me: Our Father, who art in Heaven ..."

SAFETY IS ALWAYS AN ISSUE

We tend to take our LiPo batteries for granted but remember they can be quite dangerous, like a fire bomb in some cases. Here's a clip of a RC helicopter model that crashed:

http://www.youtube.com/watch?v=3xBb4SGxNtI.

You can see from the fire just how easily they can erupt in flames if the conditions are right. Get a used ammo box or a very heavy small metal tool box to store your batteries in when in your workshop or garage or being transported to the flying field.

Several members purchased ammo boxes that were on sale at one of the hobby stores in the Phoenix area. If you are going to the Electric Festival again this year you might be able to buy one there.

Several of our members have traveled to the *Electric Festival* in Phoenix each year. Plan on driving down they often offer some great buys in kits and all sorts of supportive modeling equipment. Also noted there are some LiPo bags for batteries. These bags are fire proof and offer another safety idea for storing and transporting your batteries. Always read the instructions that come with any batteries you purchase.

The weather has been very cold so far this winter so hopefully you are in your workshop repairing and building for the upcoming flying season.

We also remind our members often about workshop safety. Don't get in a hurry and if your workshop is cold make sure if you are using an electric heater that you are careful with flammable fumes some of our modeling products contain. Also remember to use a mask when sanding, the fine balsa sawdust can get into your lungs and cause a lot of problems, especially if you already have some breathing problems. Let's make this another super safe flying year at our field.

FLY SAFE MEMBERS!

Test Flying a New Airplane

by Bob Wilson, Macon Aero Modelers, Frank-

Plane pictured is Glenn Hiethold's

All too often pilots—knees rattling and fingers shaking—taxi a new model out to the runway and begin what turns out to be a disaster. Rather than calmly analyzing feedback from the model, there is a flurry of stick yanking and jerking and a crash. Successfully testing a new model is more of an attitude than anything else. It requires calm analysis by reading what the airplane is trying to tell you and a good dose of planning ahead.

The planning ahead part involves being sure you have taken all the preliminary steps while building or assembling the model to make sure the engine is properly mounted, fuel lines are free of kinks, that the correct CG is there, the engine is tuned in, and myriad other small details that it takes for a model to fly well. A good carpenter will measure three times and it follows that the details of an airplane should be checked three times as well.

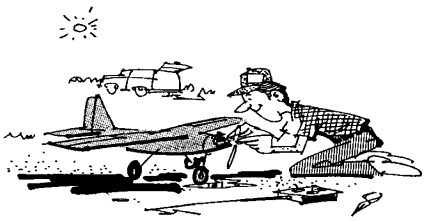
How many times have I seen the fuel line to the engine connected to the vent line instead of the pickup line? How many times have I seen the lack of a screw to hold a servo arm in the servo, or gas engines/mufflers bolted on without using thread lock? It's a good idea, once the model is finished, to go back through the manual and read and check each step of the construction/assembly process. Check and check again. For added comfort, enlist the aid of another builder to critique your work.

Then, when you taxi out for takeoff, you will know that everything is as it should be and that you haven't forgotten some important detail. If you are a pro, you may be able to put the model together in short order because you know what to look for and take care of the details almost automatically. But, if you are a bit less than an expert, take your time and don't worry about how long it takes. Be meticulous.

If you've taken care of the details ahead of time, there really shouldn't be any surprises to catch you off guard and most likely the model is going to fly just fine. The pros refers to the model's first flight as a trim flight. They don't consider it as a "test flight." They know the model is going to fly and it only becomes a matter of trimming it.

If you are flying a model with a low power-to-weight ratio, fly level for a few seconds immediately after takeoff to build up flying speed. If the model climbs, apply a little down elevator, if it turns one way or the other, make the necessary corrections, but by golly don't start yanking sticks around. Chances are the model isn't going to be very far out of trim anyway. When you get to altitude, then begin correcting with the trim buttons on your transmitter.

The first flight is a culmination of your having taken care of all the little details and, if you are confident in your work, there is no need to panic. So taxi out, relax, take a deep breath and line up for takeoff, check your control movement one last time, and after that, "just fly the airplane."



NAME THAT PLANE:
IT'S A THORP T-18

This is a homebuilt. A Thorp T-18 designed by Lockheed engineer John Thorp is an all metal 2 place side-by-side high performance aircraft. Control response is exceptional and control forces are well harmonized. The T-18 is a very capable cross-country airplane.

The T-18 will carry 2 people, 80 lbs. of baggage, and depending on engine and prop, can cruise around 180 mph. Powerplants range from Lycoming O-290 (125hp) to IO-360 (180). The T-18 is a very historic aircraft. It was one of the first all metal homebuilts. It was the first homebuilt to use the stabilator or all -flying-tail.

The stabilator was designed by John Thorp and was later used by Piper on their line of Cherokee aircraft. Today you can see the extensive use of this design on military aircraft. The T-18 was the first homebuilt aircraft to fly around the world. It was also the first homebuilt airplane to fly to both the geographic and magnetic north poles. The legendary ***Don Taylor*** completed all of these feats in the early 1970's. His famous T-18 is now on display in the EAA museum in Oshkosh, Wisconsin.