



AMA Chapter #3798

Chino Valley Model Aviators

Official News



September 28, 2018

Volume 21 Issue 9

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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Aviation Fact:

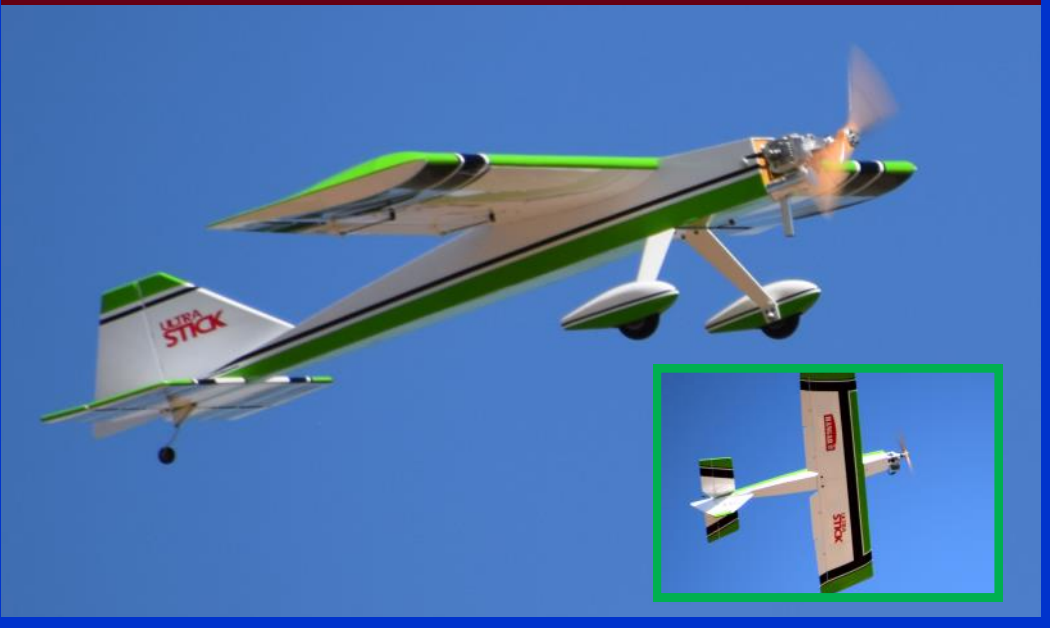
The U-2 spy plane first became operational in 1956 under the aegis of the Central Intelligence Agency (CIA).



Jerry Calvert and His Gas Powered Edge 540



Dick Bjork's Ultra Stick





The Steve Crowe Memorial Fun-Fly held on the 22nd was an outstanding success. Though we didn't keep a count of people coming and going, we estimate 500-800 came through our gate.

Money wise, we did well. \$703 was added to our coffers, \$133 from the 50/50 raffle and \$570 from the prize raffle. Our only expense was an additional porta-potty for \$111. We also collected \$124 in donations for the *Chino Valley Food Bank*.

There are a lot of people to thank that made this happen. First and foremost was *Marc Robbins* who

organized nearly everything. *Rick Nichols* used his dulcet tones luring people out during an interview with the local radio.

Some club members' wives lent a hand, *Teri Shepherd, Ara Robbins and April Gilbert* took care of the raffle for us.

Randy Meathrell kept everyone informed with the PA system. *Dan Avila, Dane O'Brien and Andrew Grant* made sure everyone stayed entertained with their flying skills. The flying they did for the crowd kept everyone there glued to the sky. Check out the photos on page six of this issue, the crowd is transfixed staring

at the sky during their performances.

Finally we had a group of people show up the day before at eight in the morning to clean up the field and take care of a lot of weeds. Thanks to all those folks who drug themselves out of bed early that day and got the field looking so good. On behalf of the entire board, we thank you for your effort.

There was a lot of interest from prospective members and a few have already signed up. We had a lot of great ideas how to make the next fun-fly even better and

we look forward to putting it on once again.

Keep Flying,
Don



What Planes Cockpit is This?

See Page 8

CVMA NEWSLETTER
AMA Chapter #3789

President — Don Crowe	
Vice President — Larry Parker	
Treasurer — Marc Robbins	
Secretary — Bob Steffensen	
Safety Officer — Jerry English	
At Large Member — Randy Meathrell	
Newsletter Editor — Bob Shanks	
Flight Instructor — Marc Robbins	



MARK YOUR CALENDARS

2018 Club Events

- Sept 22, 2018 – Annual Steve Crowe Memorial Fun Fly
- Oct 27, 2018 - Second Annual 2018 Build & Fly Challenge.
- Dec 8, 2018 – Christmas Banquet Prescott Centennial Center



Club Meetings:

Third Wednesday of Each Month—7 PM
Prescott Airport Executive Building.



BORN IN A BARN?

IF YOU ARE THE LAST ONE TO LEAVE THE FIELD:
PLEASE REMEMBER TO LOCK THE GATE.



SAFETY: ALWAYS A CRITICAL ISSUE

Hopefully all club members read the safety column in the *AMA Model Aviation* magazine. It always has some good safety points to consider many of them have included at different times here in this column.

This month's AMA safety column (October issue) has an incident that has probably happened to many members at times. Adjusting a model's flight characteristics before flying is often done. However, all modelers should take the prop off their plane when doing this especially if the plane is under the cabana or even if in the pit area, working with throttle settings can be quite interesting if adjustments there are servo reversing issues.

This was the case in the *Dave Gee's* safety column, the model came to life at full throttle even though the throttle was set at the low setting. The servo had been inadvertently reversed the plane came to full throttle but thankfully no

one was injured as someone knew what had happened and put the throttle at the full setting shutting down a dangerous situation.

ALWAYS, ALWAYS, take the prop off when working on various radio settings and adjustments. It's just a good idea period.

A club members flying buddies when he lived in Alabama was adjusting his plane in his workshop and the throttle came to life imbedding his plane into his shop wall. Yes he had the prop on the electric motor! He was not injured but certainly learned a valuable lesson the hard way.

Many club members flying various large gas models and even smaller glow models use gloves to protect fingers in case of an accidental prop strike. A great idea. Keep those fingers out of the prop arc. Always stay behind the plane as well when adjusting the throttle.

We all, your editor included, often lets

his shop get a bit too cluttered when working on several projects or just one massive build. Keep the shop as clean and vacuumed as possible. Keep tools where they are readily accessible and occasionally put things in order while working on a project.

A messy shop is also not often a safe place to be working. We all have experienced some type of shop mishap, a cut finger, too much clutter etc.

We all try to work at safety and think safety most of the time so it was disconcerting to see a car dealer use a drone crash to advertise his cars, unfortunate as described in *Dave Gee's* safety column. These kinds of activities certainly don't help the image of RC and can cause future laws to be written that aren't really needed.

So in closing, make sure you read the monthly *Model Aviation* safety column by *Dave Gee*.

CLUB PILOTS AND THEIR FLYING MACHINES



Shel Liebach's P-51



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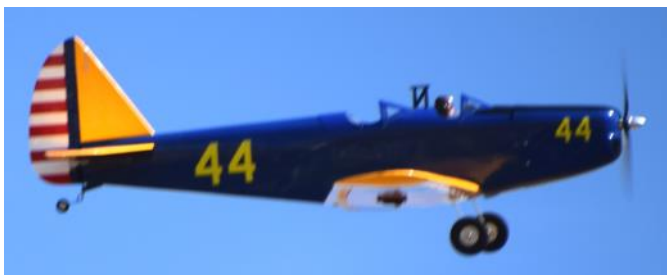
Chris Corbett puts his helicopter through some wild aerobatics, what a cool RC chopper pilot!!



Editor Bob's ARF, he made it an electric PT-19. He won it at a club monthly meeting.



Shel Liebach test taxied his new turbine, not quite ready to fly yet this time but soon.



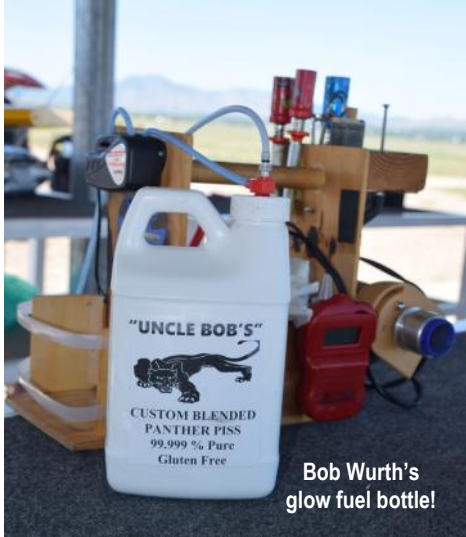
The two photos below are missing the owners names, your editor didn't write them down as he usually does!!



MORE CLUB PILOT'S FLYING MACHINES



Bob Wurth's Sig Four Star decorated with his custom graphics



Bob Wurth's glow fuel bottle!



Chris Perry's big T-28, his maiden flight went well.



Shel Liebach's very nice electric Decathlon.



A natural flyer sited high over our field.



Pilots Bevis & Butt Head!



Occasionally and regrettably a member loses radio contact as happened here with *Shel Liebach*. It's a long, lonely walk back to the pits.



Jerry English's cartoon Bevis & Butt Head Pt-19. He was taxi testing it for a future flight.



Bill Gilbert & Bob Shanks check the balance on his PT-19.



Frosty Wells gets his trainer set up to go.

Annual Steve Crowe Fun Fly Hits Record Local Attendance!

Drone photos by *Charlie Gates*



Parking was at a premium.



What a nice crowd of community observers.



Member Andrew Grant put on a great flying display.



Marc Robbins and Rick Nichols on KQNA radio.



Member John Meyers flew in his ultralight Quicksilver and had it on display.



Event photos by *Marc Robbins*

Dan Avila brought his big turbine powered Rebel for an exciting flight.



A tremendous array of planes were on display.



Shel Liebach's big EDF A-10

BOOM SST TECHNOLOGY*

Article by Lloyd Alter



This year at the Farnborough Airshow where all the big announcements are made, Boom Supersonic announced that it is building a supersonic jet that will cut trip times in half. Blake Scholl, Boom founder, touts the concept while at a museum housing a Concorde: "Today... the world is more linked than it's ever been before and the need for improved human connection has never been greater," Scholl said...."Our vision is to build a faster airplane that is accessible to more and more people, to anybody who flies."

The company is backed with investments from Richard Branson and Japan Airlines, and hopes to be flying by the mid 2020s. Boom (perhaps an unfortunate choice of name, given how booms were one of the big problems with the Concorde) has designed a plane with 55 seats, much smaller than the Concorde because the ultra-rich market can only fill so many of the big luxurious seats. And as far as the boom goes, they plan on being "30 times quieter than the Concorde."

Boom also claims that their planes will have a fuel efficiency per seat comparable to current business class flights in subsonic planes. Fuel efficiency and operating costs go hand in hand. Since our aircraft has the same fuel burn as subsonic business class, it also has the same fuel consumption and emissions profile. We are relentlessly innovating toward lower fares—which will mean further reductions in fuel consumption and emissions. They also try to make the point that, hey, travel is good for the planet.

While it is important to preserve mankind's ability to flourish on our planet, it is also important to extend that ability. A key part of this flourishing, in our view, is supersonic travel. We look forward to working with innovators and scientists around the world to ensure that the future is both green and supersonic.

In the Boom blog, Blake Scholl actually claims that "the pursuit of ever-faster travel speed is really a moral imperative. Supersonic flight offers the world a deeper form of human connection, just as earlier airplanes and trains and steamships once did." He also makes the claim that it won't increase carbon emissions.

Crucially, the supersonic renaissance we are spearheading will happen with no net increase in carbon emissions. For one, lavish and wasteful premium subsonic features like first-class suites will become unnecessary when flights take half the time. Removing these extravagances saves weight and floor space and therefore reduces fuel. Others are not impressed, and have made their own calculations of SST (Supersonic Transport) fuel consumption as being far greater than business class.

The International Council on Clean Transportation writes: On average, the modeled SST was estimated to burn 5 to 7 times as much fuel per passenger as subsonic aircraft on representative routes. Results varied by seating class, configuration, and route. In the best-case scenario, the modeled SST burned 3 times as much fuel per business-class passenger relative to recently certificated subsonic aircraft; in the worst case, it burned 9 times as much fuel compared to an economy-class passenger on a subsonic flight.

It's hard to have a discussion about this with such wildly divergent scenarios. But even if we take Boom at its word about fuel efficiency, flying business class or even economy is problematic even as planes get more efficient. Besides, think of the benefits to everyone. Boom tells such a heart-warming story about the benefits of supersonic travel: At subsonic speeds, there are some destinations that are too far away for regular travel. But at Mach 2.2, an entrepreneur in Sydney can enjoy a much wider, more global audience for his innovations.

The despair of long distance won't weigh as heavily on a Parisian who finds the love of his life in Montreal. And an American completing her residency in London can see her parents in Chicago more than once or twice each year.

* <https://www.treehugger.com/aviation/boom-supersonic-passenger-planes-may-return-skies.html>



Page Two Historic Cockpit Plane: *Panavia Tornado**



The Tornado was the Royal Air Force's only variable geometry (swing wing) aircraft. The wings could move forward to provide extra lift at low speeds, and then backwards for supersonic flight. The F.3 version was the RAF's main jet fighter between 1986 and 2011.

The Panavia Tornado is a family of twin-engine, variable-sweep wing multirole combat aircraft, which was jointly developed and manufactured by Italy, the United Kingdom, and West Germany.

There are three primary Tornado variants: the Tornado IDS (interdictor/strike) fighter-bomber, the suppression of enemy air defenses Tornado ECR (electronic combat/reconnaissance) and the Tornado ADV (air defense variant) interceptor aircraft.

The Tornado was developed and built by Panavia Aircraft GmbH, a tri-national consortium consisting of British Aerospace (previously British Aircraft Corporation), MBB of West Germany, and Aeritalia of Italy. It first flew on 14 August 1974 and was introduced into service in 1979–1980. Due to its multirole design, it was able to replace several different fleets of aircraft in the adopting air forces. The Royal Saudi Air Force (RSAF) became the only export operator of the Tornado in addition to the three original partner nations. A tri-nation training and evaluation unit operating from RAF Cottesmore, the Tri-National Tornado Training Establishment, maintained a level of international co-operation beyond the production stage.

The Tornado was operated by the Royal Air Force (RAF), Italian Air Force, and RSAF during the Gulf War of 1991, in which the Tornado conducted many low-altitude penetrating strike missions. The Tornados of various services were also used in conflicts in the former Yugoslavia during the Bosnian War and Kosovo War, the Iraq War, Libya during the Libyan civil war, as well as smaller roles in Afghanistan, Yemen, and Syria. Including all variants, 992 aircraft were built.

During the 1960s, aeronautical designers looked to variable-geometry wing designs to gain the maneuverability and efficient cruise of straight wings with the speed of swept wing designs. The United Kingdom had cancelled the procurement of the TSR-2 and subsequent F-111K aircraft, and was still looking for a replacement for its Avro Vulcan and Blackburn Buccaneer strike aircraft. Britain and France had initiated the AFVG (Anglo French Variable Geometry) project in 1965, but this had ended with French withdrawal in 1967. Britain continued to develop a variable-geometry aircraft similar to the proposed AFVG, and sought new partners to achieve this.

In 1968, West Germany, the Netherlands, Belgium, Italy and Canada formed a working group to examine replacements for the Lockheed F-104 Starfighter, initially called the Multi Role Aircraft (MRA), later renamed as the Multi Role Combat Aircraft (MRCA). The participating nations all had ageing fleets that required replacing; but, as the requirements were so diverse, it was decided to develop a single aircraft that could perform a variety of missions that were previously undertaken by a fleet of different aircraft. Britain joined the MRCA group in 1968, represented by Air Vice-Marshal Michael Giddings, and a memorandum of agreement was drafted between Britain, West Germany, and Italy in May 1969.

By the end of 1968, the prospective purchases from the six countries amounted to 1,500 aircraft. Canada and Belgium had departed before any long-term commitments had been made to the program; Canada had found the project politically unpalatable; there was a perception in political circles that much of the manufacturing and specifications were focused on Western Europe.

On 26 March 1969, four partner nations – United Kingdom, Germany, Italy and the Netherlands, agreed to form a multinational company, Panavia Aircraft GmbH, to develop and manufacture the MRCA. The project's aim was to produce an aircraft capable of undertaking missions in the tactical strike, reconnaissance, air defense, and maritime roles; thus allowing the MRCA to replace several different aircraft then in use by the partner nations. Various concepts, including alternative fixed-wing and single-engine designs, were studied while defining the aircraft. The Netherlands pulled out of the project in 1970, citing that the aircraft was too complicated and technical for the RNLAf's preferences, which had sought a simpler aircraft with outstanding maneuverability. An additional blow was struck by the German requirement reduced from an initial 600 aircraft to 324 in 1972. It has been suggested that Germany deliberately placed an unrealistically high initial order to secure the company headquarters and initial test flight in Germany rather than the UK, so as to have a bigger design influence.

When the agreement was finalized, the United Kingdom and West Germany each had a 42.5% stake of the workload, with the remaining 15% going to Italy; this division of the production work was heavily influenced by international political bargaining. The front fuselage and tail assembly was assigned to BAC (now BAE Systems) in the United Kingdom; the center fuselage to MBB (now EADS) in West Germany; and the wings to Aeritalia (now Alenia Aeronautica) in Italy. Similarly, tri-national work-sharing was used for engines, general and avionic equipment. A separate multinational company, Turbo-Union, was formed in June 1970 to develop and build the RB199 engines for the aircraft, with ownership similarly split 40% Rolls-Royce, 40% MTU, and 20% FIAT.





September Club Meeting Highlights



General Membership meeting of September 19, 2018 was opened by President *Don Crowe* at 7:00pm and began with the Pledge of Allegiance.

The Club membership now stands at 143. Head count showed 54 members were here for a record attendance although only 48 signed the roster this evening. New members *Dave Gonzales*, *Dave Domzalski*, *Matt Mrdeza*, and *Matt Petsche* joined us tonight. Also former member and very creative foamy builder *Steve Zingali* is a "new" member for this year. He is moving back to Prescott from California.

Vote to approve August minutes, with corrections, was unanimous after a motion by *Mike Kidd* and a second from *Tom Wells*.

Reports: Treasurer *Marc Robbins* presented his report, which was approved unanimously after a motion by *Rick Nichols* and a second by *Randy Meathrell*. Total club financial assets are \$4318.52.

Marc says to avoid the end of year rush and get your 2019 dues in soon. VP *Larry Parker* discussed the club installing a WIFI enabled weather station at the field. After a brief discussion...group consensus was to not pursue this any further.

President's Agenda

CD *Marc Robbins* updated us on the Steve Crow Fun Fly for September 22. A work day is scheduled for September 21, to spruce up the field for the Fun Fly as well as putting stack, flags and tape for traffic control. There is a plethora of 26 planes and kits that will be raffled off. Bring your stuff for the swap meet and your cool "A" plane for static display or demo flight. Bottom line: come out, fly, and have fun supporting the one event required by the city in our lease agreement with Chino Valley.

Christmas Party: *Bob Steffensen* said that the annual club Christmas Party is December 8...put it on your calendar. *Bob* requested comments

from members on last year's party. Options and pricing will be presented at the October meeting. If you have addition comments on last year or ideas for this year...please contact *Bob* at 928.710.3325 or *steffensen@cableone.net*. Our coffee pot is in need of replacement...let's do it.

The Build and Fly Challenge is looming next month...get your projects completed for this event. Member Comments:

Steve Shepherd proposed that we replace the field safety fences at the flying field. Members present approved proceeding with the replacing of fencing. *Don Crowe* will purchase the required fencing.

The Break: We broke at 7:36pm for goodies and coffee by provided by *Larry Parker*. Thanks *Larry*! We resumed the meeting at 7:52pm

Member Work Shops

Mark Lipp showed us his 19' x 40' workshop with several aircraft in various stages of completion. Will

he have one ready for Fun Fly? **Show and Tell**

Dave Gonzales showed us his *Guillows Beaver* and his Scratch built 3D foamy; *Jerry English* displayed his 1912 1/6th scale *Blackburn* monoplane; *John Riese* brought in his *Grasshopper* pylon racer circa 1973; *Don Crowe* said his nice *Balsa USA Force One* was built by master builder *Riley Harley*; *Randy Meathrell* was outed tonight and admitted he had gone to the dark side...he built a "slimmer"...a great looking gas powered 73" Extra in all American colors; and *Jack Potter* built a Flying W EDF foamy and a pizza box scratch built **Door Prize/Raffle**

Jack Potter won the door prize consisting of glue, glue holder, and pliers and *Don Ferguson* had the winning ticket for the nice FW190 ARF with retract.

Respectfully, *Bob Steffensen* Club Secretary



Jerry English's very nice Blackburn model.



Don gets meeting started with a shot of a Wilga!



Randy's big gas powered Extra. Hard to believe he is now a "slimmer"!



Dave Gonzales and his Guillows Beaver & scratch built 3D foamy



Below Don's Balsa USA Force One.



Jack Potter won the door prize.



John Riese, above with his green and yellow Grasshopper, at left is Jack Potter with his flying wing design that he likes to let hang into a stiff wind.

Don Ferguson Won this evenings raffle prize, the **Phoenix Models Focke Wulf ARF**

This ARF is set up for glow, gas or electric.