



AMA Chapter #3798

# Chino Valley Model Aviators

## Official News Letter



August 25, 2017

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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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**The Wright brothers flew through the smoke screen of impossibility.**

Dorothea Brande

### Little Known Aviation Fact:

More than 80% of the U.S. population is afraid of flying.

## John Stewart's Balsa USA Gas Powered Ercoupe



John's maiden flight of his awesome gas powered scale Ercoupe went like clock work. The full scale two-seat *Engineering and Research Corporation* Ercoupe 415 went on sale in 1940. Only 112 units were delivered before World War II intervened. Production of the model 415-C resumed in 1945, and in 1946 alone 4,311 aircraft were produced and sold at a cost of \$2,665 each. Life Magazine described the airplane as almost fool proof.

## GRAHAM JOHNSON'S AIRMASTER



Graham's AirMaster EP 40 is from Air Borne Models by Wings Maker, wingspan is 52 inches. It's powered by a 3 cell 4400 mAh; motor and servos included. A great flyer!



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

### Greetings Fellow Pilots,

We had a great turn out at the general this weeks general meeting. If you missed it maybe next month.

Weather has been great for flying. Winds have been low to none at all.

If you have not been out lately you have missed some awesome flying conditions. The flying field has been a busy place this past week, it is good to see so many club members come out to fly and shoot the breeze.

As a side note it was brought up at the meeting Wednesday, by [Charlie Gates](#), our safety officer, that if you have a new plane or just want a bit of help flying or trimming, by all means ask someone to give you a hand. As most of you know there are a lot of proficient pilots at the field that are more than willing

to give you a hand. All you have to do is ask.

As a reminder we are having a work party August 25th at 7:00am. Not a lot to do but weed abatement. If you have a weed eater we could use it on the weeds in the cracks in the old section of the runway East end.

Also, weeds in the rocks that need to be removed. So, show up and give your support for this cleanup, as this cleanup is for the War Birds the next day, Aug 26th. I will send out an email mid week as a reminder as well.

Thursday I received a call from [Steve Shephard](#) that [Gary and Becky Russell](#) offered to fill our water tank, I called Gary and Becky and left them a message. Friday, Gary and Becky were at the field and we talked and they told me they would take care of it Saturday or Sunday.

Well, I was at the field this morning, Saturday, and low and behold up comes a car with a trailer with a water tank. It was Gary and Becky. Well, we proceeded to fill the 250 gallon tank to the brim with their awesome setup for hauling water. I want to thank the Russell's for their generosity. If you are unaware they live in Ashfork, a bit of a drive for them. If you see them give the two of them a big thank

you. We now have our water tank full. Gary told me any time we need it filled they would be happy to take care of this chore.

Elections are in October, wow where does the time go.. If you are interested in running, contact [Chuck Colwell](#) or [Steve Shephard](#) as they are our election committee.

Well that's about it, Safe Flying and Lock the Gate!

*Mike Kidd*



## What Plane is this Cockpit Photo From?



See Page 8

## CVMA NEWSLETTER

Published Monthly



AMA Chapter # 3798

President — [Mike Kidd](#)

Vice President — [Terry Steiner](#)

Treasurer — [Don Crowe](#)

Secretary — [Bob Steffensen](#)

Safety Officer — [Charlie Gates](#)

At Large Members — [Randy Meathrell](#),  
[Jerry English](#),  
[Larry Parker](#),  
[Marc Robbins](#)

Newsletter Editor — [Bob Shanks](#)

Flight Instructor — [Marc Robbins](#)





## MARK YOUR CALENDARS

### CVMA 2017 CLUB SCHEDULE

Aug 26th, 2017 War Bird Races

Sept 23, 2017 Steve Crowe Fun Fly

Dec 1, 2017 Christmas Banquet



#### **Club Meetings:**

Third Wednesday of Each Month.  
Time: 7pm.

Prescott Airport Executive Building

We have a complaint that somebody keeps flying over the nude sun worshipers colony!



## 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

How are you doing with balancing your work and this hobby of RC? The next question that may arise is what is your definition of work?

Many of our members are retired but even if retired there are so many demands on life these days that finding the time, or should I say, taking the time to build and fly can take a back seat. So the word "work" might include a number of things depending on you and your life style.

So try to set aside a part of each week or day to spend in your shop. Many have shops in their garage so early times may be better since this is summer, most likely your shop is coolest in the morning. Of course flying always seems better early in the day when our northern Arizona wind is still quiet.

When did you last read or skim over the AMA Safety Code? You can find it in [the July issue of Model Aviation on page 148.](#)

Point 6 under the heading of Radio Control (RC) states in part: *"...no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flightline."*

This is an interesting one and really underscores why we don't want pilots taxing into or out of the pits. Keeping the planes horizontal to the pits on shut down also insures no one in the pit area is in a direct line of the plane.

All of these safety code ideas are based on common sense. I would recommend every member at least review these occasionally just as a refresher for your flying mind set. A good idea if one hasn't flown for a long time to get the mind in proper safety perspective for flying.

Another safety issue not often talked about is driving to the field. Many of you live in the Prescott Valley area and two of our folks live in Ash Fork. We

have members from Paulden, Williams, as well and members from Dewey-Humboldt. So a number of members drive from areas quite a drive to the field. So keeping ones mind on a safe drive to the field is a good idea.

When living in Tucson, your editor, in order to fly at an AMA club sanctioned field, had a 45 minute drive one way to fly. In Alabama he had a 20 mile one way drive to the flying field. We have great field and a great club. Of all the five clubs your editor has belonged to over the years, this has been the best. We have a safe and very friendly club and we all try to help each other, all a part of flying RC safely.

One final safety issue, don't forget to take your propellor off your electric plane if working under the cabana. **Never arm your electric plane under the cabana with the prop on, test it out in the pit area with the prop.**

FLY SAFE MEMBERS!

# CVMA CLUB PILOTS AND THEIR FLYING MACHINES



Dan Avilla's Turbine Powered F-104

Don Crowe's 48" SBach 342 powered by Sunnysky EP motor.



Marc Robbins British Viper EDF.



Bob Shanks 95" WS Telemaster with his 17" WS Pitts S-1.



Marc Robbins is test flying Charlie Gates' gas powered Pilot model above, it had a few engine hiccups, it just needed a new spark plug.



Graham Johnson taxis out his AirMaster.



Shel Liebach's Beech Bonanza left is a VQ model and has .46 motor on 5 cell 5000. Shel's Great Planes Cirrus T22 at right has a 3600 mAh battery for power.



Shel Liebach also flew his T-28 above with a repainted camo scheme. It has retracts and has .25 motor with power from a 4 cell 5000 lipo battery.





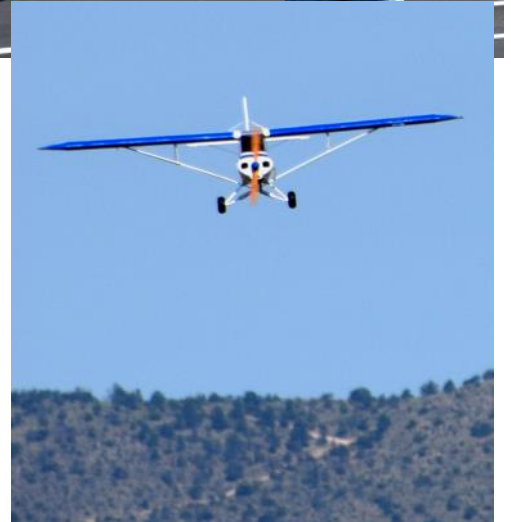
# CVMA CLUB PILOTS AND THEIR FLYING MACHINES

Bob Shanks Twin Delta

Charlie Gates practicing touch and go landings with Richard Vonner as his spotter.



Dane O'Brien taxis his very nice gas powered Cub, inset shows it overhead.



At right his cub is lined up for a landing. The picture below shows the Cub just as it was about to touch down. This was Dane's maiden flight on the Cub.



Jeremy Beck's glow powered P-51.



## John Stewart's Scale Rendition of the Famous Ercoupe!



There's a lot of detail on the Ercoupe at many Internet sites. John did an outstanding job making his as scale as he wanted it. John says some he has seen have stitching and rivets. John covered the Ercoupe with Monokote. Great scale version John!



Maiden flight at touchdown!



Superb cockpit detail.



John made a brief case and sleeping bag.



Brief case has a miniature set of plans.

## ***ORBITAL DEBRIS – “SPACE JUNK” IS BECOMING A SEVERE PROBLEM FOR FUTURE SPACE FLIGHTS***



All Earth Satellite Orbits

Orbital debris, or “space junk,” is any man-made object in orbit around the Earth that no longer serves a useful purpose. Space junk can be bad news for an orbiting satellite. On February 11, 2009, a U.S. communications satellite owned by a private company called Iridium collided with a non-functioning Russian satellite. The collision destroyed both satellites and created a field of debris that endangers other orbiting satellites.

To minimize the risk of collision between spacecraft and space junk, the U.S. Space Surveillance Network tracks all debris larger than 10 centimeters. These images represent all

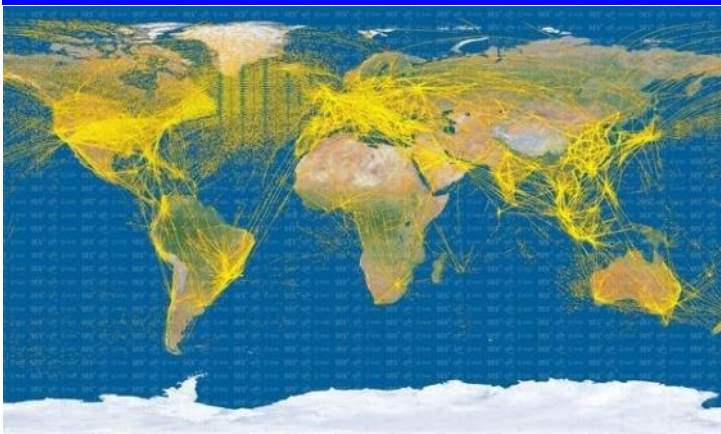
man-made objects, both functioning and useful objects and debris, currently being tracked. The images were made from models used to track debris in Earth orbit. Of the approximately 19,000 manmade objects larger than 10 centimeters in Earth orbit as of July 2009, most orbit close to the Earth, top image. The image shows all items in orbit, both close to and far from the Earth.

A distinctive ring marks the geostationary orbit, a unique place where satellites orbit at the same rate that the Earth turns, allowing them to essentially remain over a single spot on Earth at all times. This orbit is invaluable for weather and communications satellites. When satellites in geostationary orbit are taken out of operation, they are moved to another orbit to keep the geostationary orbit clear. The dots between the geostationary orbit and the low-Earth orbit are in an orbit used by GPS satellites or a highly elliptical orbit, called Molniya, used to monitor the far north or south.

Though the dots that represent objects in space swarm around the Earth, obscuring the surface in this image, the space junk situation is not as dire as it may appear. The dots are not to scale, and space is a very big place. Collisions between large objects are fairly rare. The orbit of each piece is well known. If any debris comes into the path of an operating NASA satellite, flight controllers will maneuver the satellite out of harm’s way. NASA flight engineers are carefully tracking the debris from the Iridium collision, (2009 collision, between Iridium 33 and Kosmos-2251 satellites) since much of it is near the altitude at which Earth Observing Systems (EOS) satellites orbit. NASA’s EOS is a coordinated series of polar-orbiting and low inclination satellites for long-term global observations of the land surface, biosphere, solid Earth, atmosphere, and oceans. The USAF Space Command located in Cheyenne Mountain, Colorado, also tracks all orbital debris. Your editor did a short tour of duty there when on active duty.

<https://orbitaldebris.jsc.nasa.gov/>

## **OUR EARTH’S CROWDED AIR SPACE CAPTURED BY EUROPEAN SPACE AGENCY**



A European Space Agency (ESA) probe has been circling Earth to see how vegetation is growing around our planet. But the *Proba-V Satellite* has also spotted something a little higher in our atmosphere, too; signals from thousands of aircraft. Based on this data, the probe has created an incredible map of 15,000 separate aircraft based on 25 million positions and 22,000 signals worldwide.

The *Proba-V Satellite* has picked up signals from thousands of aircraft. Now, ESA has used these signals to create an incredible flight map showing 15,000 separate aircraft based on 25 million positions.

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positions. The collected data contains flight information such as speed, position and altitude. It reveals how space agencies have better detection in the much more densely trafficked airspace of the US, Western Europe and Southeast Asia, rather than areas such as Africa. ESA says that a constellation of satellites is needed if we’re going to track every plane worldwide. Not only space but our air space is crowded!

<http://www.dailymail.co.uk/sciencetech/article-3072343/The-world-s-planes-single-image- Stunning-satellite-map-shows-15-000-aircraft-travel-planet.html>



# Hypersonic Jet Waverider to Fly at Mach 6

By Katia Moskvitch Technology reporter, BBC News



The US military has conducted a test flight of its hypersonic jet Waverider, aiming to reach Mach 6 (3,600mph; 5795km/h) above the Pacific Ocean. At that speed it could travel from London to New York in about an hour. The Pentagon and NASA hope to use the project to develop faster missiles. During a test in June 2011, the Waverider travelled at Mach 5, but failed to reach the target speed.

It is one of several projects currently under way to create a hypersonic aircraft. The research could also be used to build a commercial plane, able to reach much higher speeds than today's jets, after Concorde was decommissioned in 2003.

## A Five-Minute Flight

The USAF used a B-52 bomber to lift the wingless unmanned jet from US Edwards Air Force Base in California to 50,000 ft (15,250m). After being dropped from the B-52, the engine of the X-51A Waverider was supposed to ignite after a free fall of about four seconds.

While it's the prospect of rapid transatlantic flight that has caught the headlines, the technology in the X-51A Waverider could have a potent military application too. If it works, then this engine technology could power the world's first hypersonic cruise missile. The Pentagon's ambitious Prompt Global Strike program has the goal of enabling the US military to strike a target anywhere on Earth within an hour.

The Waverider could make such a goal a reality. The 8m long craft was then expected to climb to 70,000ft (21,300m) and eventually reach Mach 6. The Mach number is the ratio of the speed of an object to the speed of sound. Mach 1 is the speed of sound - approximately 768mph, depending on various factors including temperature and altitude. Mach 6 is six times the speed of sound. Concorde's cruising speed was Mach 2 - it flew from London to New York in just over three hours.

## Concorde's Legacy?

European aerospace and defense giant EADS believes that hypersonic passenger flights are likely to appear in the near future. In 2011, EADS presented its own concept of a commercial high-speed aircraft designed to fly at Mach 4. The Filton Concorde was the last of the fleet to fly when the jet was withdrawn from service

*"The business community who wanted to be in New York in three hours made Concorde highly viable, and now there's interest on both sides of the Atlantic to jump a generation and go from supersonic flight to hypersonic flight,"* EADS' vice-president of business development, Peter Robbie, told the BBC.

*"Such an aircraft will be very expensive, of course, because of the enormous amounts of energy that is required to get to such speeds. But the idea of going from Tokyo to Paris in two-and-a-half hours is very attractive for the business and political community - and I think that by about 2050, there may be a viable commercial aircraft."*

In August 2011, US military scientists attempted to get another unmanned hypersonic experimental aircraft to reach Mach 20 - 20 times the speed of sound. However, they lost contact with the Falcon Hypersonic Test Vehicle 2 (HTV-2) after it had separated from its rocket.

Hypersonic research is continuing, most of it we don't hear much about.

<http://www.bbc.com/news/technology-19257769>

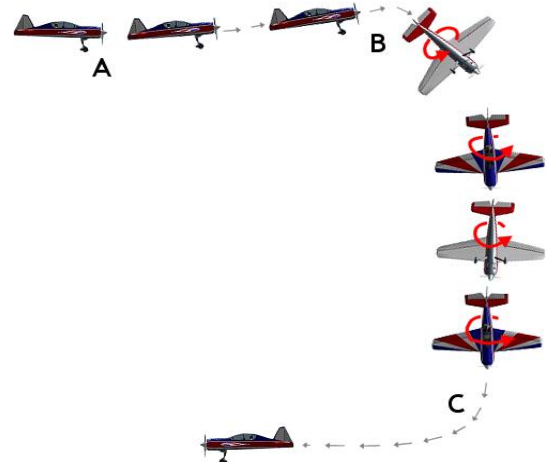
# Flight Maneuver for August: The Spin

Enter the maneuver in to wind, flying straight and level but at a slow speed and with plenty of altitude (point 'A' in the picture above). Slow your airplane further by reducing throttle completely and applying up elevator - not too much, but just enough to initiate a stall. Use ailerons to keep the wings level at this point.

The timing here is quite critical, you need to apply full rudder (\*and full aileron, both in the same direction) just as the airplane stalls, point 'B' in the picture.

If you've got it right, the airplane will continue its stall while entering a spin. Keep both rudder and aileron fully deflected for as long as you want to hold the spin. Recovery is simply a case of returning rudder and aileron to neutral while applying up elevator and throttle to pull the airplane out of the dive (point 'C'). Ideally you should recover from the spin with the plane flying in to wind.

The spin is a favorite RC model aerobatic maneuver and spins can go very well or disastrously wrong, depending on how much altitude you have to recover!





## Plane from Page 2: A P-51 Mustang Cockpit



North American Aviation originally designed the Mustang in response to a British specification. They agreed to produce the first prototype only 4 months after signing the contract in April 1940.

By the end of 1941 North American had delivered the first Mustang to England for test flights. These first Mustangs were powered by the Allison V-1710 engine, a good engine, but one which didn't operate well at high altitudes.

### A Better Engine

In April, 1942, a British test pilot, Ronald Harker, flew the Mustang and was very impressed by it. He suggested that the new plane would be a natural fit with the Rolls Royce Merlin 60-series engine, well-suited to high altitudes. At the prodding of Major Thomas Hitchcock, the Americans began working along the same lines (using the Packard

license-built version of the Merlin), and the first Merlin-equipped Mustang, the P-51B, flew in November, 1942. The results were impressive, to say the least. At 30,000 feet, the improved Mustang reached 440 MPH, almost 100 MPH faster than the Allison-equipped Mustang at that altitude.

The Mustang's range and combat capabilities permitted it to escort the heavy USAAF bombers (B-17s mostly) on massive daylight bombing raids over Germany. Some have argued that it was a "war-winning" weapon. It certainly was a decisive factor in the aerial Battle of Germany. After World War Two, the Mustang continued to serve with the USAF, Air National Guard groups and other Western air forces, including distinguished service in the Korean War. \*

### Mustang Chronology

In the Spring of 1940, the British Purchasing Commission, headed by Sir Henry Self, visiting the U.S. asked Dutch Kindelberger, head of North American Aviation, to build Curtiss-designed P-40's for them. While his company had never built a fighter, Kindelberger's designers, led by Edgar Schmued had started design work on a modern fighter. Already, in 1940, the Curtiss P-40 and the Bell P-39 were inferior to aircraft being flown by Germany and Britain. Kindelberger offered to design and build the first prototype of the new fighter in 120 days. They signed the contract for 300 of the aircraft in late May.

The new fighter incorporated many of the latest developments in aeronautics, notably the laminar flow wing, a wing that was relatively symmetrical and offered less drag at high speed. The wings were designed to be easy to manufacture, with only two spars. As specified by the British requirement, the new airplane, designated the NA-73X, employed an in-line engine; the Allison V-1710 fit the bill, although it lacked a turbo-supercharger for high-altitude performance. The main wheels were set twelve feet apart, for good stability on landing.

In the original design, the British required eight machine guns: four .30 caliber and four .50 caliber. Ultimately, most Mustangs would carry the usual American weaponry of six .50 caliber Brownings. It carried twice as much internal fuel as a Spitfire, 180 gallons in self-sealing wing tanks. Over 15,000 P-51's were built.

### A Partial List: Some of the Highest Scoring P-51 Aces in WWII European Theatre

Name	Kills	Medals	Unit	Plane
George Preddy	26.8	DSC	352FG	Cripes A' Mighty
John C. Meyer	24.0	DSC	352FG	Petie 3rd
Dominic Gentile	21.8	DSC	4FG	Shangri-La
Leonard 'Kit' Carson	18.5	-	357FG	Nooky Booky IV
Glenn T. Eagleston	18.5	-	354FG	-
John Godfrey	18.0	DFC	4FG	Reggie's Reply
John B. England	17.5	DFC	357FG	U've Had It
John F. Thornell Jr.	17.3	DSC	352FG	Patty Ann II
Henry W. Brown	17.2	DFC	355FG	Hun Hunter from Texas
Ralph 'Kid' Hofer	16.5	DFC	4FG	Salem Representative
Clarence 'Bud' Anderson	16.3	-	3 57FG	Old Crow
Don Blakeslee	15.5	DFC	4FG	WD-C
Richard A. Peterson	15.5	-	357FG	Hurry Home Honey
William Whisner	15.5	DSC	352FG	Moonbeam McSwine
Glennon T. Moran	13.0	-	352FG	Little Ann
George W. Gleason	12.0	-	479FG	Hot Toddy
Pierce W. McKennon	12.0	-	4FG	Ridge Runner
Chuck Yeager	11.5	DSC	357FG	Glamorous Glen
Louis Norley	11.3	-	4FG	Red Dog XII
Urban Drew	6.0	-	361FG	Detroit Miss

\* While the Korean War is thought of as a jet war, the Mustang, then the F-51, played a key role in ground attack. F-51's flew over 60,000 missions in the Korean War, and were credited with destroying 12 enemy aircraft. One Mustang pilot, **Major Louis Seville**, earned the Medal of Honor.

Article edited from :  
[http://acepilots.com/planes/p51d\\_mustang.html](http://acepilots.com/planes/p51d_mustang.html)



# August General Meeting Highlights



John Stewart's Ercoupe

General Membership meeting of August 16, 2017 opened by President **Mike Kidd** at 7:00pm and began with Pledge of Allegiance.

The Club membership now stands at 130 fully paid. Sign in roster showed 38 members were in attendance tonight, including new member **Mark Lipp**. Minutes of previous meeting were approved unanimously... upon minor corrections

President's Agenda:

The water tank will be filled as soon as **Bob Steffensen** provides the pump, **Jerry English** provides the 55 gal container and **Don Crowe** hauls the water.

**Bud Mellor** provided an update for fund raising phone efforts. He is assisted by **Jerry English, Erik van Elburg, Bob Shanks** and **Rick Nichols**. Treasurer **Don Crowe** reported the setting up of a savings account for runway funds. As of tonight \$10,150 is in the kitty, including \$4,000 in excess funds moved from operating account.

A new wind sock was put up...last one in the shed. More will be ordered soon to be on hand when needed. **Max** and **Cinnimon Bandy** and welder **Lee Dudley** thanked us for the gift cards.

**Tom Wells** has replaced the speaker that was broken. We thanked Willie Hermann for his continuous mowing efforts, to include recent pathways to the pylons for the Warbird Races. The Warbird Races are August 26 with a work day on the 25th to clear weeds and put up pylons. CD **Bud Mellor** still needs a couple of volunteers to provide relief at the pylon turn watch cages.

**Chuck Colwell** and **Steve Shephard** will head up the 2018 nominating committee for club officer. Chuck provided some nice comments and encouraged members to volunteer for duty.

Member Comments

**Greg Daebelliehn** asked members and their guests that are out to the field to watch or socialize, to please not park in front of the cabanas. Those spots should be reserved for pilots flying that day.

Sweets for September meeting will be provided by Lou Yanni.

Club Reports

Secretary **Bob Steffensen** told all to mark their calendars for the Club Christmas Party on December 1. The venue is the same as last year at the Antelope Hills golf course banquet facility. Menu and reservation information will be out by the October meeting.

Treasurer **Don Crowe** presented his report which was approved unanimously.

Chief Flight Instructor **Marc Robbins** has trainers and radios available for training for several new students.

Safety Officer **Charley Gates** says to always announce your intentions; have a spotter for maidens; and watch out for snakes!

We broke about 7:40pm for goodies provided by **Steve Shephard**.

Thanks Steve! We resumed the meeting at about 7:55pm.

Show and Tell

**Glenn Heithold** showed us his scratch built YAK 11 in Czech Mate colors; **Larry Parker** told the story of his WACO bi-plane "Phoenix" that he recently smoked when he ran out of air space. **Bob Noulin** brought in his Great Planes Escapade which he says was an easy build and a great flyer; and **Chuck Colwell** had his beautiful Cessna 182 for sale...this plane and many others bought at a garage sale in California and will be for sale at the Steve Crow Fun Fly.

Door Prize/Raffle

**Len Brown** got the door prize consisting of glue, and balsa knife; **Bob Steffensen** snagged the VQ Dornier Do-27 STOL in tonight's raffle. We adjourned about 8:30pm

Respectfully, **Bob Steffensen**  
Club Secretary



**Bob Noulin**, right, brought his Great Planes Escapade.



**Glenn Heithold** showed his 3D printed spinner and his silver scratch build Yak 11.

Above, **Larry Parker** showed his electric Waco he crashed and then rebuilt.

**FOR SALE ITEMS**

**BRAND NEW**

**Katana ARF \$300**  
Plus

All Servos and BEC  
Your Choice between  
300C Brand New Gas Engine  
Or  
Choice Between (2) equivalent  
Electric Motors



**Bob Steffensen** won the raffle DO-27 ARF.



**Len Brown** above, won the door prize of glue and a balsa knife.

**Chuck Colwell's items For Sale.** He brought for our "Show & Tell" meeting segment.