



AMA Chapter #3798

Chino Valley Model Aviators

Official News Letter



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Volume 19 Issue 10

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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Dan Avilla's Turbine Powered F-104 Flight Test - Kingman Dry Lake Bed



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"Chicks dig guys with single bladed props"

Don Crowe

LONG TIME MEMBER WALT FINDLAY TURNS 90



See Page 6

Support Our Local Hobby Shop



The Safeway Center
Prescott Valley, AZ

MAX & CINNIMON BANDY

THEY SUPPORT OUR CLUB

Please support them as well.



Field Chatter from CVMA President Michael Kidd: No Kidding!

Greetings Fellow Pilots, Season Greetings to everyone and have an awesome New Year.

Looks like you are stuck with me as President for 2016. It was a tough race considering my competition :-). I am proud to be the clubs President and will do my best to better the club, thanks.

If you did not sign up to attend the Christmas Banquet, you will be missing a really great time. I bet Rick

Nichols will be doing his usual emceeing to perfection.

Another year has come and gone. Membership grew to 130 members, 10 less than last year still awesome. We also seem to lose a few in January but regain by years end.

There were an lot of fun events this year. Some new and some our regulars. I want to thank everyone that made these events a great success. That said, next year we are going to have two

events, War Bird Races and the Steve Crowe Fun Fly. We might even have a club members only Gymkhana fun fly. Watch your calendars.

I expect next year to be another a banner year for the club. I would like to see this club attend other club events in 2016. Remember we need to make a showing if we expect a showing from them.

I believe that this club can do anything. So, if you did not attended

any of this years events or help with an event, give it a go. You will become a true believer of being a part of this club called Chino Valley Model Aviators. Yes, it can be 'work' but I learned a long time ago that if it is something you enjoy doing it really is not work. Contact any of the Board members if you are interested in participating or, her is that word again, working. Remember this is your club.

Our next regular meeting will be January 18, 2017 hope to see you there.

Well, that is all for now, safe flying members!



**LIGHT YOUR AFTERBURNERS MEMBERS
BRING A PROJECT TO OUR NEXT MEETING**

CAN YOU NAME THIS PLANE?



See Page 10



Swainson's Hawk Sited Flying Over Our Field on Migration

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*
- Chief Flight Instructor — *Steve Shephard, & Marc Robbins*

Why Safety is So Important!



MARK YOUR CALENDARS CVMA 2016 FLYING EVENTS

Dec 3 CVMA Christmas Party



Club meetings:
Third Wednesday of Each Month
Time: 7pm.
Prescott Airport Executive Building

BORN IN A BARN?



IF YOU ARE THE LAST ONE TO LEAVE THE FIELD:

PLEASE REMEMBER TO LOCK THE GATE.

SPIN THE LOCK A FEW TIMES AFTER FASTENING TO INSURE IT IS FASTENED, AND NOT ON THE OPENING NUMBER.

SAFETY: ALWAYS A CRITICAL ISSUE

We have spoken many times in this column about taking off your prop when working on your electric plane in your shop. Even just simple check minor adjustments, i.e., are the controls set up properly or to test a replacement servo.

One modeler was just attaching a new servo while his plane was armed and suddenly the engine started up full bore. Had the prop been on the engine the individual could've received a serve cut as the plane was just sitting on his work bench. Why did the plane's power come on? He wasn't sure but was quite thankful he had removed the prop as a matter of his own safety routine.

We all should develop our own person safety routines in the shop and when flying.

Many modelers double check control surfaces each time before they fly as a matter of habit even though they have flown the plane frequently. This is a nice safety habit. When thinking about safety one should not take anything for granted.

The October issue of *Model Aviation's* regular safety column by [Dave Gee](#) discusses the issue of propeller strikes, seems some think it is too heavily covered in his column and others say it doesn't get discussed enough. Statistically prop strikes are rare but as he points out every prop strike is completely avoidable.

So I guess I will be a broken record and keep discussing it as well because we have had two prop strikes recently in our club.

Another key point in [Dave Gee's](#) October article is the use of using the failsafe setting on your radio. This programmable failsafe is available on most radios and has saved many planes from destruction.

The problem for some is it is a new computer program to learn to use. Dig into your radio's instruction book and learn this system, if you have problems get some help from someone using the system.

Your editor is not practicing what he preaches, I haven't been using this program but plan to dig into my radio's instruction book. If you have a special model this is a must do procedure especially if you have a lot of time and money invested in getting it built and flying. **FLY SAFE MEMBERS!**

CLUB PILOTS AND THIER FLYING MACHINES



November birthday boy **Walt Findlay** checks out his Stik in Army Air Corp colors. He flies the heck out his great looking bird. Top right Walt explains a flying point to **Rick Nichols**.

Marc Robbins flying wing, fuselage is a drain pipe, wing is foam. A great flyer.



Riley Harley's nice scale P-47.



Randy Meathrell's very nice F-117 Stealth fighter.



CLUB PILOTS AND THEIR FLYING MACHINES



Walt Findlay's Stick

Marc Robbins very British de Havilland Vampire.



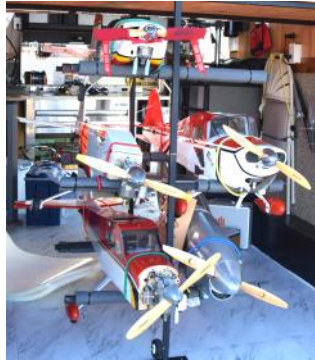
Charlie Gates' DLE powered 4 Star.



Editor Bob Shanks' Maxford scale Jenny.



Randy and Carol Meathrell check out the flying action.



George Grayhek lives in Washington state and flies with us almost every year. He has his own traveling hanger complete with workbench, TV, airplanes and a fan that looks like a P-40 aircraft nose.



Member Walt Findlay Turns 90 A CVMA Founding Member

Happy Birthday Walt



Just about everyone in our club knows Walt, he is one of our club's premiere builders and flyers. Walt has witnessed the growth of our club from its infancy and has served on the board. He still flies very well and can be seen at our field almost every week. He is always willing to help others and is part of the dwindling number of RC modelers in this hobby who researches, draws up his own plans and builds from scratch.

One of his last major projects was his O-46A model pictured on the front page. The O-46A was a two-place US Army Observation plane used from 1935-1942.

Walt's model is a 1/6th scale rendition with a wingspan of 91½ inches, powered by a 3.45hp 2-stroke Moki 1.35 engine. Walt is indeed an incredible builder, his attention to detail is outstanding as is his very scale paint job. He drew up the plans and built this scale model from scratch. His birthday was November 13th. Keep em flyin Walt!



Walt used split wooden dowels on the horizontal stabilizer to simulate corrugation on the full-scale aircraft. Fuselage is all balsa and the wing has scale flaps and ailerons.

Dan Avilla's F-104 Turbine Flight Test

Dan's and Chad alongside the trailer used for transport.



Member **Dan Avilla** and his son **Chad Avilla** travelled to the Kingman, AZ dry lake bed to test out Dan's impressive turbine powered F-104. This legendary jet, often called "A missile with a man in it" was used by air forces all over the free world.

The plane is a bit too big and fast for our field. He built the plane with speed brakes, flaps, ailerons and a full flying horizontal stabilizer. The running lights were machined by our own Jay Riddle. This is one beautiful realistic and true to scale jet. Great job Dan!



Arrival and set up of the F-104.



Dan taxis the bird and checks out steering and throttle response.



Running lights by Jay Riddle.



Nice cockpit detail .



A check of wind direction.



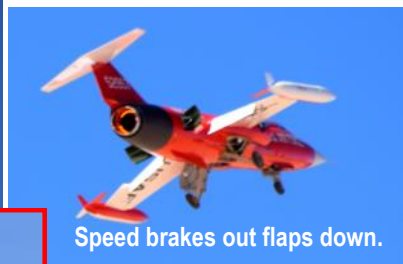
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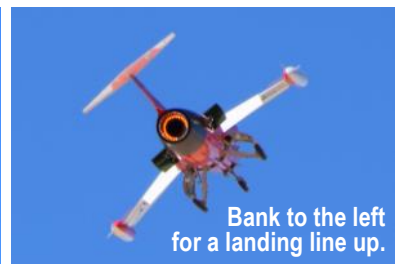
F-104 climbing out smoothly.



Nice high speed fly-by.



Speed brakes out flaps down.



Bank to the left for a landing line up.



Gear & flaps down on final approach.



F-104's first landing is smooth and uneventful.

Two Notable Member Projects



These two member planes are some great examples of what are members can do and fly. The P-40 is [Chris Myhre's](#), the big Edge is [Dennis O'Connor's](#).

[Chris Myhre's](#) P-40 is from Durafly, a P-40N obtained from Hobby King; 1100mm wingspan, 4S power lipo system. This nice EP also has very scale retracts. Chris used his air brush and has some very scale gun residue on the wings.

[Dennis O'Connor's](#) Edge 540T is from Extreme Flight with a 88' wing span and a DLE55 gas engine for power. The R2 exhaust pipe is in the fuselage tunnel. He bought it with 56 flights on it from another modeler not from our area. This bird now has 95 flights on it. The power gives it almost unlimited vertical flight. It also has digital H.V servos.

We have some very talented modelers in our club.



November General Meeting Highlights



Ray Stone's Curtiss Pusher

The General Membership meeting began at 7pm and opened with the Pledge of Allegiance lead by President **Mike Kidd**. Club membership stands at 130 fully paid. 41 members were in attendance.

Minutes of previous meeting were approved. There was a call for Secretary to use spell check in the future, but no other corrections or nays were noted.

We recently had a pilot at the field who claimed to be a CVMA Member...he was not...if in doubt about someone ask to see the club badge...if not a member encourage them to join.

Someone did not secure water valve properly...we will need to refill tank in spring for about \$75.

Close the gate! We have had more unlocked gates since the sign was put up to close it! "If you are the last one out...close the gate" sign went up. Someone suggested that the sign may be the problem.

Randy Meathrell reported that Embry Riddle will be out soon to test fly (maybe!) their latest design of the 50 lbs. aircraft. Date TBD.

Warbird Races are back on... rumors that our CD **Bud Mellor** was hanging up his hard hat were not true. Bud will be working to set date for the event in 2017.

Veterans will be out on November 19. Bring your simulators and aircraft we will put on a show for those we owe so much to for our

freedoms.

Christmas Banquet is at the Century Club (Prescott Golf Course) December 3. If you missed the deadline for getting your RSVP in... you are too late...we will celebrate without you! See you next year. If you would like us to display one of your great looking planes please let **Bob Steffensen** know you can provide.

Safety Officer **Charlie Gates** says watch your fingers and stay safe always!

Marc Robbins has stepped up to help **Steve Shephard** with flight instruction.

We broke at 7:45pm for goodies provided by **Rick Nichols**. Thanks Rick.

Show and Tell

Chris Myhre showed his P-40 ARF that he had detailed with his talented air brush; **Don Crowe** brought in his large ZLIN 50 Czech 3D; **Larry Parker** had a very red \$99 WACO biplane; **Mark Robbins** displayed his crash plaque for his recent departed Edge; and **Randy Meathrell** demonstrated his FPV auto pilot software.

Door Prize/Raffle

Anibal Castro won the nice Great Planes Matt Chapman Eagle 580 with ERU colors. Door prize of glue and craft knives was won by **Larry Roberts**. We adjourned about 8:30pm.

Bob Steffensen, Club Secretary



Super attendance for the last meeting of the year.



Don Crowe' and his ZLIN 50 Czech 3D



Chris Myhre's cool P-40!



Larry Parker's Red WACO.



Marc Robbins' Edge 540 wall plaque, she was a great flyer.



Randy Meathrell (L) discusses his First Person Video (FPV) auto pilot software to be used for Search and Rescue.

Anibal Castro won the nice Great Planes Matt Chapman Eagle 580



Name That Plane: Leduc 0.10

Rene Leduc in France had worked for many years on the development of a ramjet engine for aircraft propulsion. Known technically as an aero-thermo-dynamic-duct or athodyd, which has no major rotating components, a ramjet relies upon air being forced into an intake which is designed to ensure that the air loses kinetic energy but gains pressure energy as it passes through a diverging duct en route to a combustion chamber. There, burning fuel increases the total energy, causing the expanding gases to accelerate to atmosphere via an outlet venturi.

Leduc's first success had come in 1935 with a small but practical engine developing 4kg of thrust. It was not until after the end of World War II that Leduc was able to continue his experiments, building first the Leduc 0.10 with a tubular double-skinned fuselage in which the inner shell contained the pilot's cockpit, surrounded by an outer shell which formed the inlet duct to the ramjet engine at the rear of the pilot's position.

First tested as a glider in October 1947, the Leduc 0.10 was carried on struts above a Sud-Est SE.161 Languedoc "mother plane" which released it at appropriate altitude. The first powered flight was made on 21 April 1949, the SE.161 accelerating the Leduc 0.10 to a speed of approximately 322km/h to achieve the right pressure conditions for the ramjet to ignite and sustain power. During the first flight, of 12 minutes duration, a speed of 680km/h was attained on half power. Two more examples were built, the first an identical 0.10, the other differing only by having two wingtip-mounted turbojet engines to accelerate the aircraft to the ignition speed of the ramjets. This last aircraft, designated 0.16, was first flown on 8 February 1951, but the turbojet engines were later removed. Development continued with two examples of the larger Leduc 0.21 of improved design, the first making its initial flight on 16 May 1953. (Virtual Aircraft Museum)



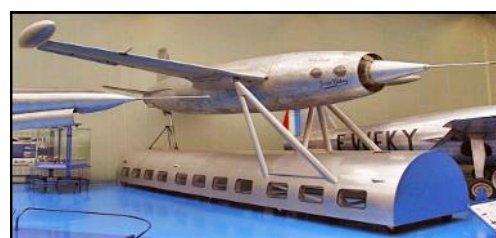
The plane was built at the Breguet Aviation factory after a protracted, semi-secret construction phase kept at arm's length from German occupation authorities, and was finally completed in 1947. The aircraft featured a double-walled fuselage, with the pilot controlling the aircraft from within the inner shell. The circular gap between this and the outer, cylindrical shell provided the inlet for the ramjet.

It could not take off unassisted (ramjets cannot produce thrust at zero airspeed and thus cannot move an aircraft from a standstill) and was therefore intended to be carried aloft by a Sud-Est Languedoc mothership and released at altitude. Following test flights of the Languedoc/0.10 composite, independent unpowered gliding tests began in October 1947. After three such flights, the first powered flight was made on 21 April 1949 over Toulouse. Released in a shallow dive at an altitude of 3,050 m (10,010 ft), the engine was tested at half power for twelve minutes, propelling the aircraft to 680 km/h (420 mph).

In subsequent tests, the 0.10 reached a top speed of Mach 0.85 and demonstrated the viability of the ramjet as an aviation power plant, with a rate of climb of 7,900 ft/min to 36,000 ft exceeding that of the best jet fighters of the time. Of the two 0.10s originally built, one was destroyed in a crash in 1951 and the other severely damaged in another crash the following year. Both pilots survived with serious injuries.

In addition to these, a third aircraft was built, designated 0.11. Generally similar to the 0.10, it featured a Turbomeca Marbore turbojet on each wingtip, to provide better control during landings. This first flew on 8 February 1951, but was converted back to 0.10 standards a few months later after problems including misting of the pilot's windows, power plant synchronization, and wing deflection caused by the turbojets. The engines were replaced by inert mass balances, and this aircraft was preserved at Le Bourget. The larger Leduc 0.21 flew from an air launch on 16 May 1953; and the swept-wing supersonic Leduc 0.22 interceptor began testing on 26 December 1956 with a SNECMA Atar turbojet before the program was terminated in 1958.

(Data from Wikipedia)



RC Sailboats a Big Part of Radio Control Hobby



Member [Graham Johnson](#) builds RC sailboats and has traveled to a variety of competition meets. We have had one boat at one of our past meetings as well by another member. So if you are looking for a change of pace check with Graham.

Lake Watson is one place you can see these cool scale beauties in action.



Monthly Chino Valley Model Aviators Board Meeting



Photo by Rick Nichols.

Members, every month your Board of Directors meet for about 1 ½ hours one week before the regular Club Membership meeting. The purpose of this meeting is to go over all club business to solve problems and discuss future ideas and projects for the club. A lot of business is handled at these meetings to facilitate and ease the decision making that will be made at the next weeks general meeting. Your officers and also often a variety of other concerned members attend these meetings all working hard to keep our club on an even keel. (Or should I say rudder?)

They are silently behind the scenes each month working for you. [Rick Nichols](#)

P-51B "BERLIN EXPRESS" FLOWN BY AMERICAN ACE BILL OVERSTREET



In 1944, American ace [Bill Overstreet](#) chased a German Messerschmitt Bf-109 through the arches of the Eiffel Tower in his P-51B Mustang, the "Berlin Express."

Overstreet gunned down the German pilot, emerged from the other side of the Eiffel Tower, and soared into history. This P-51 is probably the most awarded WWII Mustang in history.



World War Two Fighter: The "Iron Dog"



The P-39 Airacobra made by Bell Aircraft Corporation was produced from 1939 until 1944. It might be called the most controversial U.S. fighter of the Second World War. Embraced by the Soviet Union, shunned by the Western Allies and hounded by myths and falsehoods that distort history's judgement.

There's no doubt that the XP-39 evoked gasps and ahs when it was unveiled at Wright Field on April 6, 1939. The clean, exotic lines of the Airacobra prototype gave it a futuristic look. Just by looking at it one could see the innovations and peculiarities incorporated into Bell's new plane.

The P-39 was one of the first planes to use a tri-cycle landing gear configuration, which eventually would be standard on all fighters. Another feature that didn't catch on was the car-like door to exit the cockpit instead of a sliding canopy. Most notable was the mid-fuselage placement of the engine. This made way for the Colt M4 37mm cannon protruding out of the nose. The power plant was the Allison V-1710, essentially the same engine as that which powered the XP-38 and XP-40 prototypes. It was equipped with the B-5 turbo-supercharger and rated at 1,150hp. The unarmed and unarmored prototype could reach a stunning speed of over 390mph and could climb to 20,000 feet in five minutes.

Overall, the Airacobra had a high-altitude capability that matched the XP-38. Despite the XP-39's admirable performance the Wright Field engineers felt it had too much drag. To streamline the design the canopy was lowered, the wingspan cut by two feet, and fuselage lengthened by a foot. Most importantly, the turbo-supercharger inlet was reduced in size and moved from the side of the fuselage to a position directly behind the canopy. This meant that the turbo-supercharger had to be replaced by a single stage supercharger. Because of this modification the high-altitude performance dropped dramatically. This, however, wasn't a large concern of the Army Air Corps, whose doctrine of "the bomber always gets through" foresaw no need for high altitude escorts. The first mass-produced model was the P-39D of 1941. All P-39 models from the D forward were really quite similar. The D-1 temporarily replaced the 37mm cannon with a 20mm cannon. The D-2 model introduced a more powerful 1,325 hp. Allison V-1710-63 engine.

Basic specifications for the P-39D were as follows (taken from *The Fighter Aircraft Pocketbook* by Roy Cross): Max speed 360 mph at 15,000 ft; Best climb 2,040 ft/min. at 10,300 ft.; Climb to 20,000 ft. 11.7 min.; Range 600 miles at economical cruise; Armament 1-37mm nose cannon, 2-.50 nose mg., 4-.30 wing mg.; Span 34 ft. 2 in.; Length 30 ft. 2 in.; Height 11 ft. 10 in.; Wing area 213 sq. ft.; Empty weight 6,300 lbs.; Max weight 9,200 lbs. Production models were the D, F, K, L, N and Q. The F model of 1942 differed from the D only in detail. A proposed carrier based version of the P-39, the XFL-1, failed its carrier qualification trials and development was abandoned in 1942. Many of the later models had the newer engine rated at 1,200 hp. It still had the nickname by many pilots that called the P-39 the "Iron Dog".

The final, and most numerous, production version was the Q, which replaced the 4-.30 caliber wing guns with two under wing .50 caliber machine guns. The Q-21 and Q-25 variants had a four-bladed propeller. A total of 4,905 P-39Qs were built. Before long orders started coming in for Bell's new plane. France needed fighters to help fend off the Luftwaffe, but like many orders for American equipment, not a single plane was delivered before the France fell to the Germans. Britain accepted the French order, but soon regretted doing so. RAF pilots hated the P-39. Their main gripes were the drop in performance above 20,000 feet, a tendency to spin, and the difficulty to recover from a spin. Also on the list was the short range of 430 miles on internal reserves and 690 miles with drop tanks. They also reported that fumes would fill the cockpit after firing the guns. These flaws were often exaggerated to the point that it seemed impossible for the P-39 to effectively serve as a fighter. However, they did concede that it was the equal of the vaunted Bf-109 below 20,000 feet. Still, the British needed a high-altitude fighter and dumped their P-39s on the USAAC; the rest of the order was cancelled.

The Americans fared even worse with their Airacobras. When the United States was plunged into war with Japan, its primary land-based fighters were the P-40 and P-39. P-39 pilots experienced the same difficulties as the British and also complained that the M4 cannon often jammed. The P-39, like every other Allied fighter (including the vaunted Spitfire), could not turn as tight or maneuver as quickly as these nimble Japanese fighters.

Also, the 37mm cannon was not an effective air-to-air weapon. Though it might only take one hit to bring down the fragile Zero, the slow rate of fire and drooping trajectory made that one hit improbable. And not all P-39s had the 37mm cannon; the Airacobras the British handed over to the USAAC had a 20mm cannon in its place. This type was called the P-400. It soon became the joke of the Pacific that a P-400 was a P-39 with a Zero on its tail. But, 37mm or not, the two .50 and four .30 caliber machine guns could still make short work of a Zeke. Perhaps the biggest reasons for the P-39's bad showing in the Pacific were the lack of knowledge about Japanese aircraft, numerical inferiority, and veteran enemy pilots. U.S. pilots found the Airacobra's flaws unforgivable and requested transfers to P-38 units before these problems could be resolved. In the hands of the USAAC the P-39 proved a dismal failure and seemed a perfect candidate for the title "Worst fighter of World War II."

Of the 9,585 examples of the P-39 built before the end of the war, 4,500 (almost half) were given to the USSR. This seems appropriate since Russia was the only country that achieved widespread success with the plane. Most Western writers claim that the Russians utilized the P-39 primarily in the ground attack role. Soviet pilots were introduced to the Airacobra beginning early in 1943. They too reported handling problems, primarily spinning. Also, they had trouble using the radio; for many this was the first aircraft they had flown equipped with a radio! These complaints were relatively minor, and overall the Russians were very satisfied with their new acquisition. They praised its low altitude speed and maneuverability, excellent structural integrity, and heavy armament. It should be noted that difficulties with the 37mm and fume infiltration reported by Western flyers were not experienced by their Russian counterparts. From 1943 'til the end of the war the so-called "Iron Dog" enjoyed much success in the hands of its Russian masters.

In the years since World War Two, a number of myths have emerged that now are accepted as historical fact. Today it is believed that the P-39 could not have been a competitive fighter. However, Soviet pilots regularly mixed it up with and prevailed against German fighters. Aerial warfare over the Eastern Front was particularly suited to the Airacobra. There was no long-range, high-level, strategic bombing, only tactical bombing at intermediate and low altitudes. On this battlefield the P-39 matched, and in some areas surpassed, early and mid-war Bf-109s. And it had no trouble dispatching Ju-87 Stukas or twin-engine bombers. Five out of the ten highest scoring Soviet aces logged the majority of their kills in P-39s. In fact, P-39 jockeys filled the number two, three, and four spots: Aleksandr Pokryshkin (59), Aleksandr Gulaev (57), and Grigoriy Rechkalov (56).

Data: Virtual Aircraft Museum & Wikipedia.