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

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"Man must fly above the Earth to the top of the atmosphere and beyond.

For only then will he fully understand the world in which he lives. " Socrates

Support Our Local Hobby Shop



The Safeway Center Prescott Valley, AZ MAX & CINNIMON BANDY THEY SUPPORT OUR CLUB Please support them as well.



Shel's plane is a Cessna 421C is made by *Hero Models* sporting a 72" wing span. It has air retracts and weighs 14.5 lbs. The twin power comes from two KMS Quantum size 32 motors powered by 2 4cell 4000 milliamp batteries.

### **Charlie Gates Ninety Inch 3D Pilot ARF**



Charlie's 90" 3D Pilot ARF model is powered by a RCGF 26cc gasoline engine.



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

Greetings Fellow RC Pilots, Seems we have someone who flies in the afternoon and still leaves the gate open.

We have a great facility and don't want anything we have worked so hard at setting in place and using stolen because the gate was left open. I know, if a bunch of thieves want to get in they will but why make it easy for them. <u>CLOSE THE</u> <u>GATE</u> members if you are the last one leaving. This is turning into a serious epidemic this year for some reason.

Member *Randy Meathrell* sent out a link about the FAA court case. They overstepped their bounds according to the court. Member *Bob Shanks* also sent out the entire article inserted into an email; nice breath of fresh air for our great hobby. The registration rule has been debunked, void. What the FAA does in the future remains to be seen. The AMA and our club will keep you abreast.

We have a great bunch of members; if you haven't been out to the field recently it looks superb after our May 6 clean up and weed patrol. Thanks you to all who came out and expended some energy for the field we all appreciate your efforts.

Club Treasurer *Don Crowe* came up with a great idea for a club wide "Build and Fly Challenge". The rules have all been sent out to everyone so break out that kit or set of plans and enter. Flying and judging will be done Saturday October 28 so you have plenty of time to break out the balsa and ply or that kit you have always wanted to build but have been putting off for one reason or another. I won't rehash the rules as they are at the field as well as being emailed to everyone.

We have a new Chief Flight Instructor: *Marc Robbins*. Marc is a superb pilot and active member. Thank you Marc.





LIGHT YOUR AFTERBURNERS MEMBERS BRING A PROJECT TO OUR NEXT MEETING

# CAN YOU NAME THIS PLANE?





**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 Englis Larry Parko Marc Robbi Newsletter Editor — Bob Shanks

Chief Flight Instructor— Steve Shephard, & Marc Robbins



# SAFETY: ALWAYS A CRITICAL ISSUE

Pre-flight checks can be a critical safety issue and should be done by all members before they "come out" and take off. Unfortunately some pre-flights are done too hurriedly with the assumption that the plane flew alright last week or yesterday.

As the plane is being assembled at the field is the best time to do as much pre-flight checking as possible. Are the servos and linkages secure? Are all screws and glue joints checked? If the plane is electric make sure the batteries are fully charged and ready to go. Double check all fuel lines if gas or glow fueled. What about the engine or motor? Is it in place with all screws and bolts securely tight.

A good method for anti vibration is to use blue locker on bolts, nuts and screws subject to vibration. A little heat will release blue locker. <u>Don't use the</u> <u>red locker, it is quite permanent.</u> Make sure the trims are set and the correct model has been selected if using a computer radio. We do occasionally have folks flying on 72 MHz so make sure the antenna is fully extended something we don't have to do with 2.4 GHz radio systems.

Also hard landings or landings off the runway while not appearing to look like any damage occurred double check everything the next flight or right in the pit area as you defuel or unhook batteries. The cliché about assuming something applies to safety.

After a plane has flown many times or has been in storage for a lengthy time an aggressive pre-flight check is a mandatory activity.

Sometimes what appears to be just a hard landing or a minor crash can have hidden damage that can result in the loss of the model on later flights. So a good procedure is to always double check your entire model each flying session for hidden problems that can come back to haunt you or cause more problems.

We again remind everyone to make sure everyone knows your intentions as the winds are often fickle blowing down the runway one way and then suddenly shifting almost 180 degrees or becoming suddenly a cross wind.

Always practice landing both ways down hill and up hill. Be careful of long approaches as one can lose the plane in the clutter of Chino Valley when landing up hill. A long approach the other way can also be difficult due to the hills on the other side of the runway. We had a former member making a long approach for a down hill landing when he suddenly lost power and the model landed on the other side of the hills. Use a spotter if you need to, we have a very collegial club with lots of help and assistance available.

# CVMA CLUB PILOTS AND THEIR FLYING MACHINES



Dan Avilla's F-104

Bob Shanks Fun Master.





Jack Allen's foam C-47.



Al Marello discusses Shel Liebach's Cessna.



Clint Manchester checks his Stinson Gullwing.



Clint's Stinson Gullwing landing.



John Stewart walks back to the pits his big 1/4 scale Sig Spacewalker with a G22 gas engine.





Larry Parker worked on his C-47, did some taxi tests and adjustments. Both electric engines needed some work so back to the workshop to take off the two cowlings and open up the fuselage for modifications. Nice looking bird Larry.



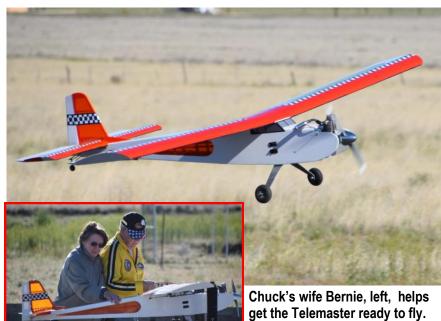
Charlie Gates Pilot ARF overhead. Nice 90" W.S. gas powered bird, from page one. Good job Charlie! At right is his churning and burning 26cc gasser as it flies over the runway.



# *TWO OUTSTANDING MEMBER PROJECTS BY CHUCK COLWELL AND RICHARD GUNDER*

Two of our members are flying some outstanding models. *Richard Gunder's* foam A-6 Intruder is a ducted fan made be *Freewing*. He says the six cell 4000 mAh battery provides plenty of power for scale flying but adding the additional ordinance on the wing causes too much drag making it difficult to fly. Richard says the 12 bladed fan sounds great but he may switch to a larger 90mm fan in the future. He says it is a great first EDF project for those wishing to get into EDF's.

*Chuck Colwell's* 91.5" wing span Telemaster is from a laser cut kit by *Hobby Express*. Power for the Telemaster is from a 4 stroke 120 OS Max Surpass and can really slow down with the flaps he has installed. It took Chuck a month and a half to construct and is immaculately covered in Monokote. Not many folks build from kits in these days of ARF's. Chuck did an outstanding job with this kit. It's a balsa overcast!





The four Telemaster wing servos for ailerons and flaps are visible in the colorful clear Monokote as she passes overhead.



## Glenn Heithold and Randy Meathrell Featuring the Flying Cub Brothers



### **AMA PLANS SERVICE**

In this age of ARF's don't forget or neglect AMA's plans service. If you haven't built from scratch and want to try your hand check out the available plans offered by AMA.

In the AMA May issue you can find the information on page 136. For \$2 you can get a list of all plans published in the magazine.

If this is your first venture into scratch building pick a straight forward fairly simple model first. Save the complicated scale interest for later.

Our Valley Hobby has the balsa. Try converting a simple control line model to RC or build a profile model.

### Limited or No Workshop and Flying Time? How are You Using Your Time?

Some modelers say they are too busy to build from scratch or kits or they say they only prefer ARF's. Almost Ready to Fly kits are quicker since most of the hard work has been premanufactured for the modeler. Of course there are kits out there too that are ready to fly, just pop in your receiver and some fuel, electric, glow or gas and go fly. But what other reasons may be lurking in the shadows that can steal a modeler's time from building and flying?

The big one may be social media. So you say what really is social media? The dictionary definition: "On-line websites and 'applications that enable users to create and share content or to participate in social networking." Not only can one spend far too much time on the desk top and lap top computers but now social media access is available from cell phones as well. We all have seen folks all staring at their phones during social gatherings or other events or using the cell phone at often inappropriate times.



So you may be asking yourself, just what are some of the specific social media sites? Well here just a brief list of some of the social media "time wasters" if not used appropriately. We have a host of detractors vying for time: *Twitter, email, Messenger, Face Book, Snap Chat, Google, Wikepedia, Linkedin, Reddit and Pinterest.* Besides these we also have *video games* and movie previews on the app *Flixter*. What about television viewing? The "Boob Tube" takes considerable time too! We all must budget our time carefully to make sure we have building and flying time. This is easier said than done.

While social media has its place and is a valuable communication tool and recreational pause to our hectic days, <u>we must seek a balance</u>. Many of our members are retired but many are still working as well so where do you fit into this picture? Perhaps that is why we don't have as many of our members flying regularly or attending our monthly meetings, besides work and family needs, <u>we must never neglect family and spousal needs</u>. Is social media is cutting into your family, building and flying time? Chart your daily activities for a week and see just how much time you expend on other non-modeling pursuits, you might be surprised or not!



#### CVMA OFFICIAL NEWSLETTER



### Name that Plane: The Bristol 188 "The Flaming Pencil"

The Bristol 188 was a British supersonic research aircraft built by the Bristol Aeroplane Company in the 1950s. Its length, slender cross-section and intended purpose led to its being nicknamed the "Flaming Pencil".

#### **Design Specifications**

The aircraft had its genesis in Operational Requirement 330 for a high speed (Mach 3) reconnaissance aircraft, which eventually developed into the Avro 730. As the 730 was expected to operate at high speeds for extended periods of time, more data was needed on high speed operations, leading to Operational Requirement ER.134T for a testbed capable of speeds greater than Mach 2. The aircraft was expected to run at these speeds for extended periods of time, allowing it to study kinetic heating effects on such an aircraft. The aircraft was expected to spend a considerable amount of time with a skin temperature around 300 Celsius.

defense spending. The 188 project was continued as a high speed research aircraft.



Several firms took interest in this very advanced specification and the eventual contract was awarded to Bristol Aircraft in February 1953. Bristol gave the project the type number 188, of which three aircraft were to be built, one a pure test bed and the other two (constructor numbers 13518 and 13519) for flight testing. To support the development of the Avro 730 Mach 3 reconnaissance bomber, another three aircraft were ordered (Serial Numbers XK429, XK434 and XK436). The follow-up order was cancelled when the Avro 730 program was cancelled in 1957 as part of that year's review of

#### **Bristol 188 Development**

The advanced nature of the aircraft meant that new construction methods had to be developed. Several materials were considered for construction and two specialist grades of steel were selected: titanium-stabilized 18-8 austenitic steel and a 12%-Cr steel used in gas turbines. These had to be manufactured to better tolerances in sufficient quantities for construction to start. The 12% chromium stainless steel with a honeycomb center was used for the construction of the outer skin, to which no paint was applied. Riveting was a potential method for construction but the new arc welding technique using an Argon gas shield known as puddle welding was used. There were long delays with the method, which was less than satisfactory. The W. G. Armstrong Whitworth Company provided substantial technical help and support to Bristol during this period; they produced major sections of the airframe as a subcontractor.

A fused-quartz windscreen and canopy and cockpit refrigeration system were designed and fitted but were never tested in the environment for which they had been designed. The 188 was originally intended to have Avon engines but the Gyron Junior was substituted in June 1957.

The Gyron Junior was then under development for the Saunders-Roe SR.177 supersonic interceptor and incorporated a fully variable reheat, from idle to full power, the first such application used in an aircraft. Unfortunately this choice of power plant resulted in the 188 having a typical endurance of only 25 minutes, not long enough for the high-speed research tests that were required. Chief Test Pilot Godfrey L. Auty reported that while the 188 transitioned smoothly from subsonic to supersonic flight, the Gyron Junior engines were prone to surging beyond that speed, causing the aircraft to pitch and yaw.

In order to solve the aerodynamic and flutter problems, a large number of scale models were tested. Some, mounted on converted rocket boosters, were launched from RAE Aberporth, for free-flight investigation. The only Bristol 188 survivor can be seen at the RAF Museum in Cosford, England.

#### **Operational History**

The first prototype Bristol 188 landing at Farnborough after giving a public display at the 1962 Air Show. The first flight was not until 14 April 1962. In over 51 flights, it managed a top speed of Mach 1.88 (1,440 MPH) at 36,000 ft. The longest subsonic Bristol 188 flight was only 48 minutes in length, requiring 70% of the fuel load to be expended to attain its operational altitude.

Measurements collected during testing were recorded onboard and transmitted to the ground station for recording. The flight information transmitted meant that a "ground pilot" could advise the pilot. The project suffered a number of problems, the main being that the fuel consumption of the engines did not allow the aircraft to fly at high speeds long enough to evaluate the "thermal soaking" of the airframe, which was one of the main research areas it was built to investigate. Combined with fuel leaks, the inability to reach its design speed of Mach 2 and a takeoff speed at nearly 300 mph, the test phase was severely compromised. Nonetheless, although the 188 program was eventually abandoned, the knowledge and technical information gained was put to some use for the future Concorde program. The inconclusive nature of the research into the use of stainless steel led to Concords being constructed from conventional aluminum alloys with a Mach limit of 2.2. Experience gained was used on both Concorde and the BAC TSR-2 aircraft development.

Various proposals to further develop the 188 were considered including incorporating ramjets and rocket engines as well as considering fighter and reconnaissance variants. One serious proposal involved the fitting of "wedge" type intakes.

The announcement that all development was terminated was made in 1964, the last flight of XF926 taking place on 12 January 1964. In total the project cost £20 million. By the end of the program, considered the most expensive to date for a research aircraft in Great Britain, each aircraft had to be "cannibalized" in order to keep the designated airframe ready for flight.

#### <u>Survivors</u>

In April 1966, both 188 fuselages were transported to the Proof and Experimental Establishment at Shoeburyness, Essex to act as targets for gunnery trials, but during 1972, XF926 was dismantled and moved to RAF Cosford (without its engines) to act as instructional airframe 8368M, and is preserved at the Royal Air Force Museum Cosford near Wolverhampton. The second airframe, XF923 was subsequently scrapped. Data Source: Wikipedia

#### Ray Stone's 1911 Curtiss

General Membership meeting of May 17, 2017 opened by President *Mike Kidd* at 7:00pm sharp and began with Pledge of Allegiance lead by everybody.

The Club membership stands at 121 fully paid. Head count and sign in roster showed 30 members were in attendance tonight including guest *David Biegen* who is considering membership.

Minutes of previous meeting were approved with corrections and one nay from you know who. President's agenda:

Weed spraying has been completed at a cost of \$400. The crew sprayed a 3ft strip around the perimeter of the field as well. After discussion consensus was that we should get on their annual schedule for which each spraying will be \$350. Many thanks to the bunch of members that worked the work day May 6. We cleared weeds and the old wooden tables too. Gate was left open Monday... photo taken by *Al Marello* at daylight Tuesday. Protect our field...CLOSE THE GATE...when

you are last to depart. After discussion concerning our annual dues year based on membership renewal date and the problem with gate codes changing 1 January we tabled the issue for further discussion and recommendations by the Board.

Also tabled was a proposal to raise annual dues by \$25 and put the \$25 in "runway" fund. Discussion around what should be done: pave or chip seal the remaining 300ft. Maintain it or lose it...Board will discuss further.

Chino Valley Chamber annual dues paid were \$100.

**Photos** by

Marc Robbins

# May General Meeting Highlights

Sweets for June meeting will be provided by *Mike Kidd*. *Reports:* 

Treasurer Don Crowe

presented his report which was approved unanimously. Don also proposed a "Build and Fly" event which was greeted by some enthusiastic pilots. Don will put together a proposal. Former Chief Flight Instructor Steve Shepherd presented solo certificates to Ron Arrigoni and Fred Giles. New Chief Flight Instructor Marc Robbins acknowledged his new title with surprise.

Safety Officer Charlie Gates stated that the snakes are out some friendly some not. Be careful of the one who are not... they can hurt you.

Event info included reason for cancelling Gymkhana (weather) and the next event which is a 4<sup>th</sup> of July Fun Fly,





Fred gets his solo certificate!



Steve awards Ron his solo certificate. Right, *Tom Wells* won the door prize.



potluck and fireworks watching.

Randy Meathrell talked about the new quad racing site set up by Valley Hobby. Sounds interesting. Try it...you might like it. We broke at 7:52pm for goodies provided by Mike Kidd on behalf of Bob Gunson who is out of town. Thanks to Pam Kidd for the home made treats! We resumed the meeting at about 8:10pm.

#### Show and Tell:

Jerry English brought in his recently completed Carl Goldberg Senior Skylark with a 77in wing span. Don Crowe showed us his Great Planes "No Can Do" that he bought from Tom Wells.

#### Door Prize/Raffle:

*Tom Wells* won the door prize consisting of a craft knife, glue and insulated coffee mug. *Bud Mellor* won the Sig 4 Star 64 and immediately offered for auction sold it for \$100 and donated the cash back to the club. Thanks Bud! We adjourned at 8:21pm Respectfully, *Bob Steffensen* Club Secretary



Bud Mellor won the Sig 4 Star 64.