

Chino Valley Flyers

Official Club Newsletter



March 25, 2022

Volume 25 Issue 3

www. chinovalleyflyers.org

"To create an interest in. further the image of, and promote the hobby/sport of model aviation"

Inside This Issue

- ⇒ President's Message
- ⇒ Name the Plane Cockpit
- ⇒ Safety Column
- ⇒ Field Flying
- 4 & 5 ⇒ Fastest Electric Vehicle
- ⇒ Flak Bait B-26 Marauder 7
- ⇒ Air Bus Hydrogen Aircraft 8
- ⇒ Cockpit Quiz Answer 9
- ⇒ March Club Meeting

Quote of the Month:



Support our Local Hobby Shop



They support Us.

Clint Manchester's Nice Electric Powered B-25



HAROLD ELLIS' CONTROL LINE NOBLER





Bill Gilbert: CVMA President's Message



Spring weather is finally upon us again, and the flying season the Chino Valley Educational is off to a start with some truly nice weather. Let's dust off those winter cobwebs and get flying again!

This year should be an inflection point for the club in terms of the expanded facility: we are on track again with the additional cabana. A contract has been signed with a new supplier and engineering calculations are in process. A building permit application is the next step before we pour the concrete slab.

We will be getting more involved with the town's **Recreation Department by** putting up a tent at the upcoming Wind Days event. We have put in a great effort over will show off some our planes and hand out tossing gliders to the kids.

This year we will also target Foundation as a charity with some proceeds from the Steve Crowe Event. In addition to our December Food Bank drive, All in an effort to continue to be a contributing organization to the Town of Chino Valley that has been so good to us with the land lease.

We are in the maintenance season, with planned crack sealing and crash fence replacement. We will advise runway closures when those maintenance tasks are scheduled.

I want to highlight the great work by, and thank the members of our Board of Directors. They the winter to keep our club working smoothly and moving forward to keep pace with our

growth over the past few vears.

These members work tirelessly behind the scenes and put in a lot of time to accomplish our administrative duties. We've had a lot of activity in this area with the new incorporation, name change, logo, and website update.

Hopefully all this hard work pays off going forward. Thank you! See you at the field!

CVMA Flight Instructors

- > Al Marello Chief Flight Instructor
- > Randy Meathrell -**Control Line Flying**
- > Marc Nelissen-Basics
- > Jack Potter-Gliders

Bill

CVMA NEWSLETTER

AMA Chapter #3789 **Published Monthly**



President - Bill Gilbert



Vice President — Mark Lipp



Treasurer — Don Crowe



Secretary — Bob Steffensen



Safety Officer — Rick



At Large Member — Dan



At Large Member — Dennis O'Connor



Newsletter Editor — Bob **Shanks**







MARK YOUR CALENDARS

Events for 2022

- May 14 Spring Fling fun fly and swap meet
- ♦ June 18 E-warbird races
- July 4 Pot luck Fun Fly & Chino Valley Town fireworks
- ♦ July 16 Glider Endurance Event
- ◆ Aug. 19-21 IMAC Shootout
- ◆ Sept. 17 Steve Crowe Fun Fly
- Oct. 15 Fourth Annual Build & Fly Challenge
- Nov. 12 Fall Swap Meet & Fun Fly
- Dec. 2 Annual Christmas Banquet



WERE YOU BORN IN A BARN?

IF YOU ARE THE LAST ONE TO LEAVE THE FIELD CLOSE & LOCK THE GATE.



CRITICAL RC FLYING SAFETY ISSUES

Rick Nichols Club Safety Officer

Sometimes the subjects I write about for the newsletter touch upon the things that I bring up at our monthly meetings. I do this because only about 40% of our members attend the meetings.

A safety tip that I mentioned in my column a year or so ago concerned Hobby Knife safety. Hobby Knives have the tendency to roll off our benches and could penetrate your shoe or your foot. A solution is to wrap a small zip tie around the handle and cut it off leaving a small tip.



Another solution is to stick the blade into the side of a cork. Thanks to my wonderful wife Jolyne and with her permission I have invaded her cork collection. I brought a box of corks to the March 2022 club meeting and made

them available to anyone that needed this important safety device. If you were not at the meeting, I always carry some corks in my flight box.

This may seem trivial to some members, but we have had a couple of members in the past that have been injured by falling knives.

Our great club is growing and with this progress there is expanded interests in all types of model aviation being pursued by members.

The latest fast growing interest has been the addition of the control line circle that is at the west end of our field by the entry gate. Some of us are re-living our memories of the childhood that originally got us interested in model aviation. We are having fun doing so and will help any member that would like to try it. We now have about 8 regular flyers.

On several occasions R/C pilots have made landing approaches to the runway swinging out south in their approach and flying over the control line circle. This wide approach is way south of the approved flying

zone as depicted on the map posted in our display case. Please be considerate and be aware of our pilots flying in the Control Line Circle and make approaches to land keeping this in mind.

One last note. If you do not have complete control of your aircraft and you know it will probably crash. So, crash it deliberately before you fly into areas where persons or aircraft are in the way. I personally had this experience with one of my airplanes recently and I put it in the ground before I could cause harm to others. It is much better to put your airplane into the ground then have to apologize to a fellow pilot for a mishap that many have been injurious to him or his airplane.

You are all safety officers in our club and are encouraged to advise other members (diplomatically) of anything that may make their flying safer.

RICK

Club Flying Activities at the Field



Randy Meathrell's C/L Platter

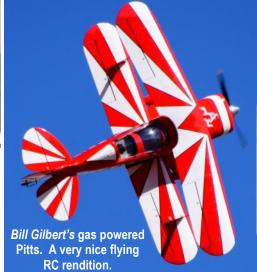






Harold Ellis' very nice profile electric powered control line PT-19.











Until one gets used to flying control line a little dizziness has to be overcome.

This is Rick Nichols phone at left when calling Randy Meathrell. Randy got a little dizzy at the C/L circle one day and down he went!





Bob DeNoyelles big gas Stick.

Ray Landry takes his glider back to the pit area after a successful flight.





Member's RL Models at The Flying Field

Steve Zingali's Geo Bat UFO



John Stewart's French 1/3 scale Morane Saulnier. it features a Zenoah 74 cc magneto twin. It has a wing span of 103 inches covered with Oratex fabric. It is a Balsa USA kit. John says it weighs 16.8 pounds.

The Teddy Bear pilot is a nice touch John.







Don Crowe's little electric Edge 540 is highly maneuverable. Don is really a talented RC pilot. A perfect match.







New fencing to replace old safety fence material. This will last longer and also be easier on aircraft that collide with it.



Dave Domzalski and his control line Nobler.



Rolls Royce Claims "Spirit of Innovation" World's Fastest All Electric Airplane*

Rolls Royce says its all-electric 'Spirit of Innovation' aircraft is the world's fastest all-electric aircraft, setting three new world records. We have submitted data to the Fédération Aéronautique Internationale (FAI) – the World Air Sports Federation who control and certify world aeronautical and astronautical records – that at 15:45 (GMT) on 16 November 2021, the aircraft reached a top speed of 555.9 km/h (345.4 mph) over 3 kilometers, smashing the existing record by 213.04 km/h (132mph).

In further runs at the UK Ministry of Defense's Boscombe Down experimental aircraft testing site, the aircraft achieved 532.1km/h (330 mph) over 15 kilometers – 292.8km/h (182mph) faster than the previous record – and broke the fastest time to climb to 3000 meters by 60 seconds with a time of 202 seconds, according to our da-



ta. We hope that the FAI will certify and officially confirm the achievements of the team in the near future.

During its record-breaking runs, the aircraft clocked up a maximum speed of 623 km/h (387.4 mph) which we believe makes the 'Spirit of Innovation' the world's fastest all-electric vehicle. Warren East, CEO, Rolls-Royce, said: "Staking the claim for the all-electric world-speed record is a fantastic achievement for the ACCEL team and Rolls-Royce. I would like to thank our partners and especially Electro flight for their collaboration in achieving this pioneering breakthrough. The advanced battery and propulsion technology developed for this program has exciting applications for the Advanced Air Mobility market. Following the world's focus on the need for action at COP26, this is another milestone that will help make 'jet zero' a reality and supports our ambitions to deliver the technology breakthroughs society needs to decarbonize transport across air, land and sea."

Business Secretary Kwasi Kwarteng said:

"Rolls-Royce's revolutionary Spirit of Innovation aircraft is yet more proof of the UK's enviable credentials when it comes to innovation. This record will show the potential of electric flight and help to unlock the technologies that could make it part of everyday life. The government is proud to back projects like this to leverage the private investment necessary to unlock cleaner, greener aircraft which will allow people to fly as they do now, but in a way that cuts emissions."





Aircraft Fact Sheet:

Thermal Protection: Portuguese Cork

Battery has 6,480 cells enough to power 7,500 phones 345 MPH — 3 Kilometers 331 MPH — 15 Kilometers System Voltage — 750 Volts Prop Rotation—2200 RPM

Motor Power — 400 Kilowatts same as 545 BHP Supercar (BPH = brake horsepower a British term for kilowatt, in

terms of cars, is used most commonly in Europe for electric car power out puts. 1kW is the equivalent to about 1.3hp.)

"FLAK BAIT" B-26 MARAUDER SURVIVES 206 MISSIONS

https://airandspace.si.edu/collection-objects/martin-b-26b-25-ma-marauder-flak-bait/nasm_A19600297000

Project engineer Peyton M. Magruder designed the Glenn L. Martin Company's B-26 Marauder in response to an Army Air Corps specification issued in January 1939. This specification also caught the attention of North American Aviation Inc. and that firm responded with the B-25. War fever caused the Air Corps to forego a prototype test stage and both bombers went from the drawing board straight into production. The consequences were deadly for crews that flew the Martin airplane. To meet the maximum speed targeted in the proposal (520 kph or 323 mph), Martin's design pushed the wing loading to a higher level than that of any other Air Corps airplane. The design



looked great on paper and the Air Corps ordered 201 aircraft in September. The first production example flew on November 25, 1940. However, the high wing loading dramatically increased landing and take off speeds. The airplane also suffered from many engine and propeller malfunctions. All these factors combined to cause many accidents in training. Intimidating epithets such as the "Widow Maker" and "One-a-Day-in-Tampa-Bay" served only to add to the bomber's already tarnished reputation, and during the war production was in danger of being halted on several occasions.

The 22nd Bombardment Group (BG) at Langley Field, Virginia, received the first Marauders in February 1941. Many nosewheel strut failures delayed the transition to full operational status but the first airplanes flew combat missions in the Pacific not long after the American entry into World War II. The Mitchell became the preferred type in the Pacific.

The 319th BG became the first Marauder outfit sent to England. Early Marauders were particularly vulnerable after damage to the hydraulic system. When enemy fire holed the system, pressure dropped, gravity and airflow forced the bomb bay doors open, and the resulting drag slowed the bomber down and made it easy prey for fighters.

May 14, 1943, saw B-26s fly the first bombing mission against German forces in Europe. However, three days later the second mission took a disastrous turn. Eleven Marauders flew to Ijmuiden, Holland, to knock out a power station that they had failed to hit three days earlier. Flying the same route, in one of the costliest missions of the war, ten bombers were lost and one aborted. But as time went on, the Marauders were to redeem themselves and achieve a record of successes that more than compensated for earlier shortcomings. In June military planners ordered a halt to low-altitude bombing. Henceforth, all medium bombers would fly at medium altitudes, about 3,000 m (10,000 ft). The first Marauder to reach 100 missions, "Hell's Belle II," flew with the 319th BG and completed this milestone during May 1944. Despite its initial problems, the AAF lost fewer Marauders than any Allied bomber it flew--less than one-half of one percent.

The NASM B-26B-25-MA nicknamed "Flak-Bait" (AAF serial number 41-31773) survived 206 operational missions over Europe, more than any other American aircraft during World War II (A de Havilland Mosquito B. Mk. IX bomber completed 213 missions but this aircraft was destroyed in a crash at Calgary Airport in Canada, two days after V-E Day, see NASM D. H. 98 Mosquito). Lt. James J. Farrell of Greenwich, Connecticut, flew more missions in "Flak-Bait" than any other pilot. He named the bomber after "Flea Bait," his brother's nickname for the family dog.

This Marauder earned its nickname after just a few missions. Other bombers returned unscathed but "Flak-Bait" invariably returned full of holes. "It was hit plenty of times, hit all the time," recalls Farrell. "I guess it was hit more than any other plane in the group." "Flak-Bait" completed 100 missions by June 1, 1944, making it the third Marauder based in Britain to hit the century-mission mark. The bomber soaked up 700 metal splinters on mission 180 in March 1945. On September 10, 1943, during a mission to Amiens, France, a Messerschmitt Bf 109 approached unseen with the sun at its back. The German pilot attacked "Flak-Bait" and a 20-mm cannon shell penetrated the Plexiglas nose, wounding the bombardier, and exploded against the back of the instrument panel. Despite having his instruments knocked out, and a metal fragment lodged in his leg, Farrell brought "Flak-Bait" back to England. "It was the best landing I ever saw the boss make," commented Sgt. Don Tyler, tail gunner. During other missions, "Flak-Bait" gunners downed at least three German aircraft but only one was officially credited to the bomber.

"Flak-Bait's" hour of glory came on April 17, 1945, when it completed its 200th mission, leading the entire 322nd BG to Magdeburg and back. In its career, this bomber flew from four airfields-two of them on the continent after D-Day-and logged 725 hours of combat



time. The 322nd was the first American bombardment group in the European Theater to bomb in force at night. "Flak-Bait" flew three night bombing missions and a black bomb symbol painted on the left fuselage below the cockpit represents one of these night missions.

Few Marauders survive today. One is preserved at the Air Force Museum, Dayton, Ohio and one is in a museum in France. Because it has a special history, General Henry H. "Hap" Arnold selected "Flak-Bait" to include in a collection of World War II aircraft from different countries that the general set aside for the National Aeronautical Collection. The Air Force transferred the bomber to the National Air Museum in May 1949 but it was not moved to the suburbs of Washington, D. C., until 1960. More than a thousand patched flak holes bear witness to the fact that this famous Marauder was indeed appropriately named "Flak Bait".

Air Bus Plans to Go Hydrogen in 2035 Just the Opposite of the Electric Movement*

Toulouse, France 21 September 2020 - Airbus has revealed three concepts for the world's first zero-emission commercial aircraft which could enter service by 2035. These concepts each represent a different approach to achieving zero-emission flight, exploring various technology pathways and aerodynamic configurations in order to support the company's ambition of leading the way in the decarbonization of the entire aviation industry.

All of these concepts rely on hydrogen as a primary power source – an option which Airbus believes holds exceptional promise as a clean aviation fuel and is likely to be a solution for aerospace and many other industries to meet their climate-neutral targets.



"This is a historic moment for the commercial aviation sector as a whole and we intend to play a leading role in the most important transition this industry has ever seen. The concepts we unveil today offer the world a glimpse of our ambition to drive a bold vision for the future of zero-emission flight," said Guillaume Faury, Airbus CEO. "I strongly believe that the use of hydrogen – both in synthetic fuels and as a primary power source for commercial aircraft – has the potential to significantly reduce aviation's climate impact." The three concepts – all codenamed "ZEROe" – for a first climate neutral zero-emission commercial aircraft include:

A turbofan design (120-200 passengers) with a range of 2,000+ nautical miles, capable of operating trans continentally and powered by a modified gas-turbine engine running on hydrogen, rather than jet fuel, through combustion. The liquid hydrogen will be stored and distributed via tanks located behind the rear pressure bulkhead.

A turboprop design (up to 100 passengers) using a turboprop engine instead of a turbofan and also powered by hydrogen combustion in modified gas-turbine engines, which would be capable of traveling more than 1,000 nautical miles, making it a perfect option for short-haul trips.

A "blended-wing body" design (up to 200 passengers) concept in which the wings merge with the main body of the aircraft with a range similar to that of the turbofan concept. The exceptionally wide fuselage opens up multiple options for hydrogen storage and distribution, and for cabin layout.

"These concepts will help us explore and mature the design and layout of the world's first climate-neutral, zero-emission commercial aircraft, which we aim to put into service by 2035," said Guillaume Faury. "The transition to hydrogen, as the primary power source for these concept planes, will require decisive action from the entire aviation ecosystem. Together with the support from government and industrial partners we can rise up to this challenge to scale-up renewable energy and hydrogen for the sustainable future of the aviation industry."

In order to tackle these challenges, airports will require significant hydrogen transport and refueling infrastructure to meet the needs of day-to-day operations. Support from governments will be key to meet these ambitious objectives with increased funding for research and technology, digitalization, and mechanisms that encourage the use of sustainable fuels and the renewal of aircraft fleets to allow airlines to retire older, less environmentally friendly aircraft earlier.

To evaluate and validate these new concept aircraft and assess whether they could be matured into viable future products, Airbus will be focusing its efforts on a number of technological pathways.

Editor's Note: All of these concepts are just the opposite of the electrical trend and worth noting.

While we need more zero emission developments we need to not discard our fossil fuels but seek a balance, evaluate and improve old sources of energy and intelligently plan for new future energy developments and use both appropriately.

Guess the Cockpit: The Stunning Republic XF-12

https://www.historynet.com/republics-fleeting-masterpiece/

In real estate, it's location, location, location. In aircraft, it's timing, timing, timing. Some examples proving this aphorism include the Messerschmitt Me-262, Martin-Baker MB-5, Dornier Do-335, de Havilland Comet, General Aviation GA-43 and Republic XF-12 Rainbow. Later designated the XR-12, the Rainbow is widely regarded as perhaps the most beautiful and certainly the fastest four-piston-engine airplane of all time.



Different circumstances dictated the timing failures of these aircraft. Inadequate engine development held the Me-262 back, while a dithering bureaucracy did the same for the Do-335. The Comet's timing was fantastically good until the sad discovery of its fatal structural flaws. The far less well-known GA-43 encountered two roadblocks. First, it arrived just as the Great Depression got into full swing. Then the Civil Aviation Administration ruled adversely against single-engine passenger-carrying aircraft. The MB-5, a very handsome high-performance fighter, would have been produced in quantity had it not been preempted by the arrival of the jet age. The XF-12's fate was affected by both the promise of the jet engine and by the imminent end of World War II.

Of all these aircraft, the Rainbow's story is the saddest. If the talented team at Republic had been tasked with developing it just two years earlier, it almost certainly would have entered service in the U.S. Army Air Forces. Then, as with the Lockheed Constellation, it probably would have been phased over to civilian use at the end of the war. Had this occurred, Republic might have been able to create a new line of commercial aircraft to sustain it when the military's demand for its rugged fighters at last expired.

Yet in the fall and early winter of 1943, the end of the war did not seem imminent. There had been victories at Midway and El Alamein to be sure, and the fight at Stalingrad was clearly going against Germany. Nonetheless, both Japan and Nazi Germany still loomed as powerful enemies.

Thus prospects seemed bright as the Republic engineers, led by the inimitable Alexander Kartveli, worked on a government Request for Proposal (RFP) for a new specialized photoreconnaissance aircraft. Despite the far-seeing efforts of pioneers such as Brig. Gen. George W. Goddard, the United States had totally neglected the development of dedicated photoreconnaissance planes. When war came in December 1941, a number of fighters and bombers were converted to photo reconduties, and served as well as their sometimes-limited space permitted. None had been designed for that specialty from the drawing board up, however, and none were able to accommodate the new equipment becoming available for the task.

Born in England, Goddard immigrated to the United States in 1904. He was visually oriented, and worked as a professional cartoonist after attending college classes. In December 1917, he enlisted as a private in the Aviation Section of the Signal Corps, beginning a distinguished military career that would see him gain first his wings and then his commission. During the course of his long service he became as important to aerial reconnaissance as Bernard Schriever would later become to the space program.



Goddard almost singlehandedly pioneered night photography, color photography, high-altitude reconnaissance techniques, stereoscopic photography and the strip-film camera for the U.S. Army Air Service and Air Corps. Although he retired in 1953, as a consultant he made important contributions to the photo analysis done during the 1962 Cuban Missile Crisis. Many of his advances were adopted for use in space vehicles.

Thanks to Goddard, the nascent XF-12 became a platform for sensational new reconnaissance equipment and new techniques for using it. Its competitor for that role, the Hughes XF-11, had a more specialized capability.



Chino Valley Flyers: March General Membership Meeting



The General Membership meeting on Saturday March 26, 2022 opened about10am with the Pledge of Allegiance.

Club membership stands at 117. If you have not yet renewed...get your dues in ASAP. Forty Members signed in. There were approximately 44 by head count. Minutes of the January 2022 meeting were unanimously approved by members.

President's Agenda

Don Crowe presented the Treasurer's report for January and February. The Treasurers report was unanimously approved.

President Bill Gilbert updated members on the expansion plans. After changing building vendors for the commercial contractor required and purchasing the building plans, we are awaiting City building permit approval. When approved we will start as with the concrete contractor and followed by the cabana install. Expenditure for expansion was approved at the January meeting.

Bill provided an update on the name change for the club and the reasons for...we need to get right with the IRS. Part of the name change is updating the By-Laws, Constitution and Training Policy with the new name. Members unanimously approved the name and other minor changes for the documents. Four new logos were presented to the members to vote on. The "airlines" logo was determined the winner after a vote by members. The only thing remaining is

the request to the IRS for Tax Exemption as a 501 (c) (7) social club. That will be in the mail on Monday.

Jim Scott was thanked for his great job with the update to the website. It looks very professional.

Maintenance costs are soaring. Weed abatement will be handled by the Club this year. Since the runway remains in pretty good shape will forgo reseal and stripping this year. A motion was made and approved by members for about \$1000 for crack sealing only. A prototype fence has been installed near the West end of the pilot stations. We will proceed with the remaining installation soon.

Marc Nelissen will hold a flying skills improvement class for interested members in the near future.

Secretary **Bob Steffensen** asked for additional members to sign up for meeting goods...that was completed.

Safety Officer *Rick Nichols* stated that we needed to be safe at home work benches and provided wine corks for the tips of craft knives to prevent rolling of the bench and stabbing a toe. Rick will also provide fire cart training for anyone who wants it.

Member Comments

Larry Parker has a new Apprentice for sale.

Bob Shanks asked for members to provide their email changes to him for distribution of the newsletter. He also asked that members take

home their trash at not leave it at the field or in the fire sand bucket. Bill Gilbert announced a Wind Day Event that we will participate in with the City of Chino that will be April 9 at Old Home Manor. Randy Meathrell said the Warbird Foamy event is in June...if you intend to participate and don't have a plane...get your order into Steve Zingali during April...no more after that Steve will be on the road. Gary Cosentino said he is monitoring the battery bank for replacement this year and will stay within the budget previously approved. Lee Boekhout said he was checking to LIPO battery buys we could do as a group and save a few bucks.

We broke about 10:40am for cookies and donuts provided by *Ray Landry*. Thanks Ray! We resumed at 10:50 for Show &Tell.

Show & Tell: Planes and Projects

Randy Meathrell showed a Zingali designed foam warbird converted to CL: Rick Nichols displayed a Dollar Tree foam board combat flyer from yester-year and an addition CL flyer he recently completed. Don Crowe brought his RCM 76" Funster he has under construction. Herb Ross showed his recent CL creations: A Junior, Little Wanderer, Baby Ring Master, and a Pinto.

Door Prize/Raffle

Steve Zingali won a door prize with: zip ties, file set and the proverbial glue. Lee Boekhout won an RTF Cessna 182.

A motion to adjourn the meeting was offered and unanimously approved about 11: 00am Respectfully, *Bob Steffensen* Club Secretary.











