Chino Valley Flyers Difficial Club Newsletter

September 30, 2022

Volume 25 Issue 8

www. chinovalleyflyers.org

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

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Quote For the Month:

Two possibilities exist: Either we are alone in the Universe or we are not. Both are equally

terrifying!

ARTHUR C. CLARKE

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They support Us



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Adam Sanders Corsair is a Flying Dutchman 1/8 scale 63" wingspan with a custom silver color scheme made by Flightline. Adam says the power system is a 6S 5055-340KV brushless outrunner motor and uses a 6 cell 5200 Lipo battery. The plane has a three bladed 18x12 prop. The Corsair weighs 6.2 pounds . A superb flyer.

Mark Lipp's WWI German Albatross D.V.



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Bill Gilbert: CVMA President's Message

This year's Annual Steve Crowe to date! We look Fun Fly was a big hit! Great weather, great spectators, and great club pilots put on a great demonstration of what our club does. A big round of thanks is due to all the volunteers that made this happen! Over 20 folks were directly involved to put on the event: thank you!

The cabana construction is basically complete. There are still a handful of smaller projects remaining to complete the "landscape" portion of the overall project; gravel, rip-rap and a fence relocation. As our funds have been nearly depleted for the year, we are asking members to sponsor some of these

smaller projects if they wish, so that we can complete them more quickly. The entire club has done a tremendous job with their generosity in

funding this very ambitious project

forward to a last push to complete the details.

With our expansion nearly complete, and the field in the best of shape, it's time to enjoy our flying! Our expansion end coincidentally comes at a good time; with the increased membership growth we have seen this year (past 150 members now), we will comfortably be able to accommodate a good turnout of members on a busy day. A slight increase in parking and better accommodation for trailers has also been added

With fall now here, the weather should be the best. The October Build n Fly event is coming up-should be a lot fun! Then the November Swap Meet and Fun Fly. See you at the field!

WHAT AIRCRAFT COCKPIT IS THIS?

Bill

Fall is Here Along with Halloween



Flight Instructors

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

NEWSLETTER

AMA Chapter #3789 Published Monthly



President — Bill Gilbert

Vice President — Mark Lipp



Treasurer — Don Crowe



Secretary — Bob Steffensen



Safety Officer — Rick

Nichols

Chief Flight Instructor — Al Marello



At Large Member — Dan Avilla

O'Connor

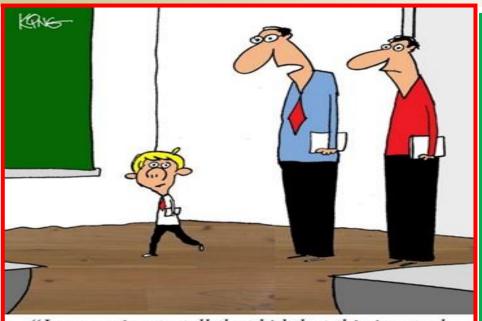


Newsletter Editor — Bob Shanks



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CVF Official Newsletter



"I was going to tell that kid that this is a tech class for adults. Then I was told he's the teacher.

MARK YOUR CALENDARS

Remaining Events for 2022

- Oct. 15 Fourth Annual Build & Fly Challenge
- Fall Swap Meet & Fun Fly Nov. 12 -
- Dec. 2 - Annual Christmas Banquet





CRITICAL RC FLYING SAFETY ISSUES

Rick Nichols Club Safety Officer

It looks like the monsoons are about over and we will be having a change of Li-Po fire. weather The grasses are already starting to dry out and it again becomes very important for the first people to arrive at the field to bring out container to administer the baking the safety cart. The last people to leave should remember to return the cart to the hangar and lock up. Please spin the lock combinations and tug on the locks to insure that they are securely locked.

Regarding the safety carts use for putting out fires we had a Li-Po fire incident a week or so ago and the weeds also caught fire. The weeds are over knee high now and we have water and shovels on the cart for them.

Water however is not good at all for a

I have added a container of Baking Soda to the cart for tending to Li-Po fires. There is a scoop in the soda to the fire.

We had an excellent Steve Crowe Fun Fly on September 17. Lots of all types of airplanes were in the air and the public enjoyed every minute of the day. We sold out of the food and had a great raffle and 50/50 drawing. We will be able to make a nice donation to the Chino Valley High School STEM (Science, Technology,

Engineering & Mathematics) program.

I wish to thank all of the pilots for observing the safety rules for the event. There were no incidents

during the event. It has been a long time since we have had to open up the First Aid Box. This is due to each of you watching out for yourselves and for each other.







An Outstanding Scratch Build by Member Mark Lipp

Mark indicates this is a 1/4 scale Albatross D.V with the color scheme used by WWI pilot German Victor Schobinger. He flew it in August 1917.

The plane was constructed from an old set of Jim Pepino drawings (not a kit). Member Steve Zingali cut out the ribs and fuselage formers for Mark.

The engine is a DLA 64CC in-line twin 2 cycle. The covering is Ceconite Lite and Randolph nitrate and butyrate dope. Approximately 10-12 coats of dope.

The Maltese crosses were made by Tom's Print and Sign Shop in Chino Valley. The spinner and the false Mercedes engine are from Arizona Models in Phoenix. Mark also indicates the rigging wires are functional. Mark says the current weight is 21lbs 80z.





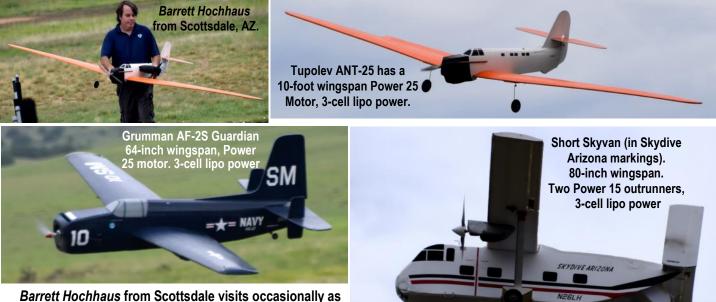
CVF OFFICIAL NEWSLETTER

Our Club Member's Wild Flying Machines!

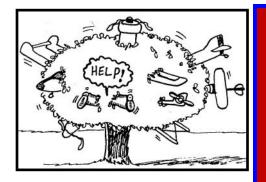
Editor Bob Shanks' UFO



Gene LaFaille at right prepares to launch Bryan Jones electric twin powered delta plane, a superb flying model.



Barrett Hochhaus from Scottsdale visits occasionally as his mother lives here in the Prescott area. He builds and flies some very unique planes.



Weight vs Power Requirements

	GLOW	ELECTRIC
Aircraft Weight	Engine Displacement	Watts
24 oz.	.09	300
40 oz.	.25	450
64 oz.	.40	600
75 oz.	.75	750

High Fares, Rising Economic Worries May Impact Airline Recovery

https://www.reuters.com/business/aerospace-defense/global-airlines-narrow-losses-2022-outlook-improves-2022-06-20/

Pent-up demand from the pandemic means consumers are weathering high airfares, but as summer ends and inflation and interest rate rises begin to bite, there are growing questions over whether the appetite for travel is even at all sustainable in the near future.

Global airlines are now expected to post a \$9.7 billion loss in 2022, a sharp improvement from a revised



\$42.1 billion loss in 2021, the International Air Transport Association (IATA) said on Monday. Airlines hope to claw their way back to profit in 2023.

But earnings remain well short of pre-pandemic levels as highly indebted carriers grapple with fresh challenges from rising fuel costs and high wages-bills that they are attempting to pass on to consumers in the form of higher fares.

"We have a certain degree of insensitivity to prices this year," IATA Chief Economist Marie Owens Thomsen said, citing high household savings rates during the pandemic and pent-up travel demand. "That could fade into next year."

Industry leaders gathering at IATA's annual meeting in Doha said bookings generally looked very strong for the next few months, but there was less certainty beyond that.

"The demand is pent up. It is revenge travel," Malaysia Airlines Chief Executive Izham Ismail said. "Airfares have gone up tremendously. It is not only in Malaysia or Malaysia Airlines – it is throughout the industry globally. If the price continues to be high the demand will taper off."

Economists Forecast Airfares to Rise by 5.6% Globally

Air New Zealand (<u>AIR.NZ</u>) Chief Executive Greg Foran said fares at his airline were now running 20% to 25% above pre-COVID levels, in part to cover fuel prices that have more than doubled.

"We are communicating to our customers and letting them know ... what they're seeing in ticket prices is not Air New Zealand trying to recover money that it lost over the last 800-plus days. It's about dealing with cost pressures that we have in front of us today," he said.

Consumers in many countries are now facing higher prices for everyday items such as groceries and gasoline that are rising faster than wages.

To date, that has not hit the appetite for travel, with many having saved up during the pandemic when many borders were closed and holidays were postponed.

Hawaiian Airlines Chief Executive Peter Ingram said demand from the U.S. mainland and Canada was "incredibly robust", with capacity running around 15% above pre-pandemic levels.

"It's impossible not to be aware of the fact that we're seeing a lot of inflation in the United States. But as we look at the demand right now, we aren't really seeing any effects," he said. "That's not to say we won't see some as the year goes on. But right now, all the demand indicators are very strong." IATA Director General Willie Walsh also played down concerns of a so-called "demand cliff" that would spell a short-lived recovery.

"I don't think it's a flash in the pan," he said. "I think there is some pent-up demand being fulfilled at the moment, but you've got to remember we're still well below where we were in 2019."

"So I think there's still a lot of ground to make up before we can get into the debate as to whether we'll see that taper off." But in India, where airlines are entering a traditionally lower travel period in July to September during monsoon season, there are rising concerns about the sustainability of demand given airfares have not fully covered the impact of rising fuel prices, Vistara Chief Executive Vinod Kannan said. "We have to cross our fingers, wish, pray and see what happens," he said of the low season fares. "Fare increases can help you to a certain extent. But if your demand drops off, you're back to square one."

If travel is on your agenda consider carefully the cost and impact on your future budget in these high inflation times. If possible and practical, driving instead of flying may be the better option or not considering \$4 dollar a gallon gas prices.

CVF Official Newsletter

What is a Battery? Many Can't Adequately Answer This Question *

A battery is an Energy Storage System, that's important. <u>Batteries do</u> not make electricity they store electricity produced elsewhere, primarily by coal, uranium, natural gas-powered plants, diesel-fueled generators or minerals. So, to say an Electric Vehicle (EV) is a zero-emission vehicle is not at all valid.

Also, since forty percent of the electricity generated in the U.S. is from coal-fired plants, it follows that forty percent of the EVs on the road are coal-powered, do you see? If not, read on.

Einstein's formula, E=MC2, tells us it takes the same amount of energy to move a five-thousand-pound gasoline-driven automobile a mile as it does an electric one. The only question again is what produces the power? To reiterate, it does not come from the battery; the battery is only the storage device, like a gas tank in a car. There are two orders of batteries, rechargeable, and single-use. The most common single-use batteries are A, AA, AAA, C, D. 9V, and lantern types.



The dry-cell species use zinc, manganese, lithium, silver oxide, or zinc and carbon to store electricity chemically. Please note they all contain toxic, heavy metals. Rechargeable batteries only differ in their internal materials, usually lithium-ion, nickel-metal oxide, and nickel-cadmium. The United States uses three billion of these two battery types a year, and most are not recycled; they end up in land-fills. California is the only state which requires all batteries be recycled. If you throw your small, used batteries in the trash, here is what happens to them.

All batteries are self-discharging. That means even when not in use, they leak tiny amounts of energy. You have likely ruined a flashlight or two from an old, ruptured battery. When a battery runs down and can no longer power a toy or light, you think of it as dead; well, it is not. It continues to leak small amounts of electricity. As the chemicals inside it run out, pressure builds inside the battery's metal casing, and eventually, it cracks. The metals left inside then ooze out. The ooze in your ruined flashlight is toxic, and so is the ooze that will inevitably leak from every battery in a landfill. All batteries eventually rupture; it just takes rechargeable batteries longer to end up in the landfill.

In addition to dry cell batteries, there are also wet cell ones used in automobiles, boats, and motorcycles. The good thing about those is, ninety percent of them are recycled. Unfortunately, we do not yet know how to recycle single-use batteries properly.

But that is not half of it. For those excited about electric cars and a green revolution, take a closer look at batteries and also windmills and solar panels. These three technologies share what is called <u>environmentally destructive embedded costs</u>. Everything manufactured has two costs associated with it, embedded costs, and operating costs. Finally, add in the cost of the gasoline for your car.

A typical EV battery weighs one thousand pounds, about the size of a travel trunk. It contains twenty-five pounds of lithium, sixty pounds of nickel, 44 pounds of manganese, 30 pounds cobalt, 200 pounds of copper, and 400 pounds of aluminum, steel, and plastic. Inside are over 6,000 individual lithium-ion cells. It should concern you that all those toxic components come from mining. For instance, to manufacture each EV auto battery, you must process 25,000 pounds of brine for the lithium, 30,000 pounds of ore for the cobalt, 5,000 pounds of ore for the nickel, and 25,000 pounds of ore for copper. All told, over 500,000 pounds of the earth's crust for just one battery."

California is building the largest battery in the world near San Francisco, and they intend to power it from solar panels and windmills. They claim this is the ultimate in being 'green,' but it is not! This construction project is creating an environmental disaster. The main problem with solar arrays is the chemicals needed to process silicate into the silicon used in the panels. To make pure enough silicon requires processing it with hydrochloric acid, sulfuric acid, nitric acid, hydrogen fluoride, trichloroethane, and acetone. Silicone dust is a hazard to the workers, and the panels cannot be recycled.

Windmills are the ultimate in embedded costs and environmental destruction. Each weigh 1688 tons (the equivalent of 23 houses) and contains 1300 tons of concrete, 295 tons of steel, 48 tons of iron, 24 tons of fiberglass, and the hard to extract rare earths neodymium, praseodymium, and dysprosium. Each blade weighs 81,000 pounds and will last 15 to 20 years, at which time it must be replaced. We cannot recycle used blades. Sadly, both solar arrays and windmills kill birds, bats, sea life, and migratory insects.

"Going Green" may sound like the Utopian ideal and are easily espoused, catchy buzzwords, but when you look at the hidden and embedded costs realistically and with an open mind, you can see that Going Green is more destructive to the Earth's environment than meets the eye. It is not very practical in the long run even with high energy prices.

* Source: <u>https://www.yellowbullet.com/threads/the-embedded-costs-of-going</u> green.2672148/#:~:text=What%20is%20a%20battery%3F%27%20l% 20think%20Nicholas%20Tesla,coal%2C%20uranium%2C%20natural%20gas-powered%20plants%2C%20or%20diesel-fueled%20generators.



This was one of our largest and best attended Steve Crowe Fun Fly events our club has had with a wide variety of airplanes. For our newer members *Steve Crowe* flew with the Royal Air Force in Britain in WWII flying Hurricanes and Spitfires. He shot down four enemy planes and had tea with the Queen of England. Sadly, Steve died in 2009. He lived in Chino Valley and was a past long time member and supporter of our club. At right is Steve holding *Randy Meathrell's* Spitfire Randy built with Steve's insignia.





Member John Meyers flew in his ultra light he hangers it in Paulden, AZ.











At right is a sampling of the wide variety of planes flown for this year's Steve Crowe fun fly.





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Name the Plane: Russian Tupolev Tu-160s Blackjack Bomber

https://search.yahoo.com/yhs/search?hspart=domaindev&hsimp=yhs-directions&p=tu-160s%

Tu-160 supersonic strategic bomber (NATO reporting name of Blackjack) is a variablesweep wing supersonic strategic missile carrier manufactured by the Tupolev aircraft research and engineering complex joint stock company of Moscow and the Kazan-Gorbunov Aircraft.

The maiden flight of the bomber was completed in December 1981, and it entered service with Ukrainian Long-Range Aviation in April 1987. Production has since restarted and a Tu-160 was delivered to the Russian Air Force in May 2000. A total of 36 aircraft were built, with only 17 currently in service in Russia.

Tu-160 was designated as White Swan due to its maneuverability and anti-flash white finish. The purpose of the aircraft is the delivery of nuclear and conventional weapons deep in continental theatres of operation.



The aircraft has all-weather, day-and-night capability and can operate at all geographical latitudes. The performance of the Russian Tu-160 is often compared with the U.S. B-1B. The Tu-160 strategic bomber holds a total of 44 world records.

Kazan Aircraft Production Organization (KAPO) was awarded a contract to upgrade the Russian Air Force's 15 Tu-160 bombers. The Tupolev upgrade package includes new targeting systems, upgraded cruise missiles and an electronic warfare suite. The first upgraded aircraft was delivered in July 2006. In September 2008, two Tu-160 bombers made the first transatlantic flight for the type, from Murmansk to Venezuela, on a training mission.

In June 2010, two Russian Tu-160 bombers completed a record-breaking 23hr patrol covering 18,000km of flight range. The bombers flew by the borders of Russia over the Arctic and Pacific Oceans and finally landed at Engels base in the Volga region. Tupolev completed bench tests of modernized avionics complex for the Tu-160 bomber in March 2013.

The Ministry of Defence of the Russian Federation announced its decision to refurbish Tu-160 aircraft in 2015. The upgraded variant, designated Tu-160M, was assembled at the Kazan aviation factory named after S.P. Gorbunov.

The first prototype of the Tu-160M2 aircraft was rolled out in November 2017, while its first flight was made in January 2018. The first flight of the Tu-160M aircraft with new NK-32 Series 2 engine developed by United Engine Corporation was conducted in November 2020. The first serial production Tu-160M aircraft made its first flight in January 2022. The modernized strategic missile carrier took off from the aerodrome of Kazan Aviation Plant, a branch of Tupolev.

The bomber's airframe has a distinctive appearance, with the wing and fuselage gradually integrated into a single-piece configuration. The airframe structure is based on a titanium beam, all-welded torsion box. Throughout the entire airframe, all the main airframe members are secured to the titanium beam.

The variable geometry outer tapered wings sweep back from 20° to 65° in order to provide high-performance flight characteristics at supersonic and subsonic speeds. The tail surfaces, horizontal and vertical, are one piece and all-moving.

The Tu-160 uses fly-by-wire controls. The aircraft is equipped with three-strut landing gear, a tail wheel and a brake parachute. It can attack strategic targets with nuclear and conventional weapons in continental theatres of operation. For take-off, the aircraft requires a concrete runway of 3,050m.

Tu-160's crew comprises a pilot, co-pilot, a navigator and an operator. The four crew are equipped with zero / zero ejection seats, which provide the crew with the option of ejecting safely throughout the entire range of altitudes and air speeds, including when the aircraft is parked.

In the cockpit and cabins, all the data is presented on conventional electro-mechanical indicators and monitors, and not head-up displays or cathode ray tube displays.

The Tu-160 has a control stick for flight control, as used in a fighter aircraft, rather than control wheels or yokes, which are usually used in large transporter or bomber aircraft.

The aircraft is highly computerized, and its avionics systems include an integrated aiming, navigation and flight control system, with a navigation and attack radar, an electronic countermeasures system, and automatic controls.



Tu-160 can carry nuclear and conventional weapons including long-range nuclear missiles. The missiles are accommodated on multi-station launchers in each of the two weapons bays.

The aircraft is capable of carrying the strategic cruise missile Kh-55MS, which is known in the West by the NATO designation and codename AS-15 Kent. Up to 12 Kh-55MS missiles can be carried, six in each bay. The Kh-55MS is propelled by a turbofan engine. The maximum range is 3,000km, and it is armed with a 200kt nuclear warhead.



The General Membership meeting on Saturday September 24, 2022 opened at10am with the Pledge of Allegiance. Club membership now stands at 148 paid members. A head count showed about 40 Members present for today's meeting. New Member Al lamacelli joined the club at the meeting today.

President's Agenda

Don Crowe presented the Treasurer's report to date listing many expenditures for completion of recent projects. Treasurer's report was unanimously approved by members.

President Bill Gilbert updated members on projects. The concrete will not be complete until the repair of the sidewalk and starting posts are complete. Tables needed will be purchased as funds allow. The porta potty has been tied down to prevent environmental damage due to turn over...not a pretty sight. *Bob Steffensen* and *Mark Lipp moved* the chain link fence to complete the landscaping between old and new cabanas and the rip rap on the west side of the new cabana during October. An anonymous member provided some new chairs. Whoever you are...thank you!

The workday on September 10 prior to the Steve Crowe Fun Fly on the 17th was well attended. The field looks great. Thank The new maintenance schedule put forth by VP *Mark Lipp* is keeping things on track.

Elections are coming up. The current board has agreed to take on another year of service. However, nominations would be due today to *Rick Nichols* and/or *Bob Shanks...our* nominating committee. *Steve Crow Event*

Steve Crowe Memorial Fun Fly was well attended by both members and the general public...all had a great time. The build and fly are the next event on October 15. Get the build done and come out to maiden your flight. We are working on the STOL event for November...there seems to be lots of interest. The Christmas Party is Friday December 2. *Bob Steffensen* said we will have a flyer out soon with the exact price of your tickets and the menu. We expect the cost of the buffet to be about \$46 this year. Every thing costs more this year! Goods from the Garden, our venue, is a great place in the Mall.

Safety Officer *Rick Nichols* stated that the take off policy is no lift off prior to the last pilot at the pilot stations. On a light note, he also stated that 10% of a member's dues are required for the porta potty. Member comments: Everyone is happy! No input this month.

We broke about 10:21am for doughnuts provided by *Matt Shephard*. Thanks Matt! We resumed about 10:30am.

Planes and Projects

Parking lot was full, a well attended meeting.

Jack Potter displayed his Pietenpol Air Camper he won in the July Raffle and his MOJO 65 he bought for \$30 and completed with salvaged parts from his shop. John Meyers showed his brightly painted F-15 foam jet a Steve Zingali design. Door Prize/Raffle

Rick Nichols won the door prize with a metal ruler, a drink cozy and of course the preverbal glue. *Don Crowe* snagged the Twisted Hobby Air Truck with one the many tickets he purchased. Adjourned at 10:30. *Bob Steffensen CVF Secretary.*





Jack Potter at left brought two planes to show, his Pietenpol and his Mojo 65. John Meyers showed his brightly colored F-15 cut out by Steve Zingali.



Raffle & Door Prize Winners



Don Crowe, left, won the Raffle prize a nice ARF Air Truck by RC Factory and *Rick Nichols* won the "Door Prize" the proverbial glue!



In 1942 the United States Navy realized they need a group of go-anywhere, do-anything folks who could build and maintain the massive number of facilities required by the fast-growing and world-wide US Navy. So, on March 5, 1942, the Seabees were formed. The formal name of the group is the Construction Battalion, or CB, which quickly transformed into the word "Seabee".

Our Chino Valley Flyers club has its very own group of Seabees, who go way above and beyond to keep our great facilities in shape and lookin' good! Mike Benner, Gary Cosentino, Bob Steffensen, and Corky Stone generously dedicate a significant portion of their time to our club.

Mike and Corky are responsible for mowing our never-stops-growing grass, Bob works on rainwater erosion mitigation and landscaping, and Gary monitors and maintains our solar and battery complex.

Without these dynamic Chino Valley RC Flyers brand of "Seabees" our wonderful flying field, a one of a kind in all of Arizona, would not or could not exist as it is today.

We owe a tremendous "Thank You" to these ever vigilant flyers for keep the "pulse" of our flying field beating for all of us whether we fly RC, Control Line or both. Our proverbial "hats off" to these tireless members who continually go above and beyond in keeping us all flying. Mark Lipp, CVF Vice President

A TYPICAL CHINO VALLEY FLYER "SEABEE"



Chino Valley Flyers "Seabees"

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Mike Benner Gary Cosentino, **Bob Steffensen Corky Stone**