

Chino Valley Flyers Official Club Newsletter



January 30, 2023

Volume 26 Issue 1

www. chinovalleyflyers.org

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

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Dear New Year:

Regarding 2023 resolutions: well, it was fun while it lasted!

<u>Dated January 2nd</u>

Support our Local Hobby Shop

They support Us

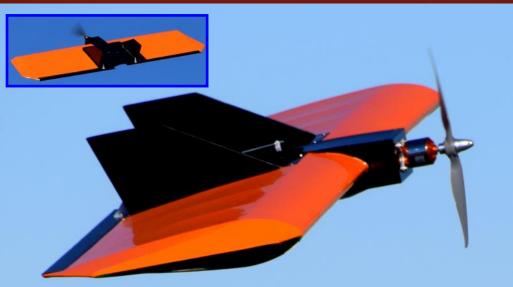


Also, Check out: RCBATTERY.COM

Harold Ellis' Electric C/L PT-19



Terry Steiner's Old School Flying Wing "Bat"



Old School Model Works "Bat" has a 37" wing span, 360 sq in wing area, 22-28 oz weight - 1500kv-480 size brushless motor, 30 amp ESC and a 8x4 prop. He uses a 3 cell 1300mah 35c Lipo battery for power. Terry built this for our club's 2022 Build and Fly challenge contest, great model Terry.

LYERS

Bill Gilbert: CVMA President's Message

As we experience an active winter season in the Quad Cities area, our flying is being curtailed. know many of us have the "itch" to get out and fly something!

Well, our expanded indoor flying opportunities come at a most welcome time. We now have access to the Findlav Tovota Center in Prescott Valley, along with the PHS Gym in Prescott. There are now 3 opportunities per month to fly indoors. Still, we hope for warmer, calmer conditions to fly our larger models soon!

It has been a great time to tune up, upgrade, or just flat out build new models as the weather has been inclement. Work in the shop can be just as enjoyable as flying, knowing that good weather will soon be upon us again. One can organize, upgrade, or learn new building techniques to further perfect our building and setup skills. Keep those RC embers glowing.... better weather is just around the

corner.

It is also a good time to think about modeling goals in this coming year; do you wish to improve in certain areas of your flying or building? Do you have a plan for that? Perhaps you can buddy up with a friend that can help you in those areas? That's one of the big benefits of a club; sharing of ideas, finding a mentor... Learning new skills with some help. Our upcoming workshops will be a good opportunity to do that.

We have high hopes that with the AMA's involvement we will continue to prosper as club in a couple of areas. We have submitted for a Site Improvement Grant for last year's Field Improvements. Also, we have submitted for a FRIA (FAA-**Recognized Identification Area).** The first one hopefully will return some funds to our coffers, the second one will exempt us from needing Remote ID modules on our aircraft.

With the bevy of improvements we accomplished last year, we have just a few minor things that need attention this year. We should be able to mostly just enjoy flying at the field that we have all worked so hard for and contributed to, last year. Happy Flying!





Introductory Pilot Mentors

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



President — Bill Gilbert



Vice President — Mark Lipp



Treasurer — Don Crowe



Secretary — Bob Steffensen

Safety Officer — Rick Nichols

Chief Flight Instructor — Al

Marello

Avilla

Shanks





At Large Member— Gary Cosentino









MARK YOUR CALENDARS Events for 2023: May 20, 2023 — Spring Fling Fun Fly & Swap Meet June 17, 2023 — E-Warbird Races July 4, 2023 — Pot Luck & Town of Chino Vallev Fire works (watch from the field) July 22, 2023 — Glider Endurance Contest Aug 12, 2023 — STOL Races August 18~20, 2023 - IMAC SW Region **Shootout at Chino Valley** September 16, 2023 — Annual Steve Crowe

Memorial Fun Fly October 21, 2023 - Seventh Annual Build

and Fly Contest

- November 11, 2023 Fall Swap Meet and **Fun Fly**
- December 8, 2023 (TBD) Christmas Banquet

SAFETY FIRST

Rick Nichols Club Safety Officer

We are in the midst of winter and the cold will be here for a bit longer and also occasional winter rains. A couple of notes to alert you to regarding the safety cart controls. When starting the cart in the cold weather please use the choke to start it. The choke pull button is located on the wall between your legs. Also, when starting, position the forward to reverse lever in the vertical position (neutral) to start. That way the cart will not jump forward or backward when the engine starts. (See photo at right)

In wet or muddy conditions please do not cross the runway with mud on the tires. Drive around the end of the runway. Leaving tracks and mud on the runway is not easy to clean up.

Any member that would like me or any officer to check you out on the operation of the about and how they may apply. cart or answer any questions, please ask. Hopefully you have used some of your down time this winter to do a little building or maintenance on your airplanes. It is always a

good idea to inspect all your airplanes thoroughly. Checking for loose motors, servos hinges, electrical connections, fuel lines and basically anything the can go wrong is a good idea.

Sometimes when we store a plane and know that the next time it will need attention with something and then we forget about it. I know that you have all heard the old adage "A stitch in time saves nine"

After all the building you have done in your work areas this winter, it is a good idea to clean all of your mess up, put your tools back where they belong and just tidy up

a bit. You will probably find several things that you laid down over the winter and they just magically disappeared.

A few other old Adages to think "Don't learn safety by accident". "Tomorrow: Your reward for working safely today" " Safety is a mission, not an intermission", "Safety is 30%

Common sense; 80% Compliance and the rest is good luck'. "Its easier to ask a dumb question than it is to fix a dumb mistake" 2022 was a safe year with no notable mishaps as far as pilots go. There were a few mishaps with airplanes though. I know we can have a safe 2023. I like the cartoon of a sign posted on the wall of a factory states,

"No accidents in 2022 since Norm left". Rick



Chino Valley Flyers Models: The P-39

Your editor was really surprised at the Christmas banquet for our club's annual get together in December. Apparently, a number of members were involved in giving me this very nice control line foam rendition of the P-39 used in WWII in the Aleutian Islands, cut out by *Steve Zingali* using his CNC. This was a very heartfelt gift and a total surprise for me.

My dad, Robert Shanks senior was drafted in WWII and served in the U.S. Army and was stationed on the very cold wind-swept Islands of Attu and Adak in that chain of small Aleutian Islands where the Army flew the P-39 Airacobra. My dad was a fireman I believe, at any rate he served there and at Adak until 1943 and like most conscripts during those fateful WWII years went where needed and did whatever job the Army needed done.



From September to November 1942 pilots of the 57th Fighter Squadron flew P-39s and P-38s from an airfield built on land bulldozed into Kuluk Bay on the barren island of Adak in Alaska's Aleutian Islands. They attacked the Japanese forces which had invaded Attu and Kiska islands in the Aleutians in June 1942. The number one foe that claimed the most lives, however, <u>was not the Japanese but</u> <u>the weather</u>. The low clouds, mist, fog, driving rain, snow and high winds made flying dangerous and lives miserable. The 57th Fighter Group flew from the islands and remained in Alaska until November 1942 and then returned to the United States. *My dad once told family a tall story about the Aleutian Islands, he said one day the incessant winds suddenly stopped and three buildings where he was stationed collapsed!* Even today the Aleutian Islands are not inhabited due to the weather but only visited by native fishermen.



This particular model is set up using a RC car receiver so after taking off I can land the plane when dizziness starts to take over.

Bob Shanks — Newsletter Editor



At left is the adapted car transmitter complete with flying lines for take off and landing. Land whenever dizziness is an issue.

Bell P-39 Often Described as Least-Loved American Fighter of WWII *

The Bell P-39 Airacobra may have been the least-loved American fighter of World War II. Most Americans piloted the P-39 only during training and were almost universally unimpressed. A handful flew the P-39 in combat in North Africa, the Aleutians and the South Pacific. Retired Air Force Col. Evans G. Stephens was one of them.

Col. Stephens flew the P-39 in pre-war Louisiana military maneuvers and again during fighting in the steamy South Pacific. With its tricycle landing gear, nose-mounted cannon and 1,300-horsepower Allison V-1710 liquid-cooled, 12-cylinder in-line engine mounted behind the



pilot and turning the propeller via a long driveshaft under the pilot area to the prop. The P-39 was better looking than the Curtiss P-40 Warhawk, which used the same engine. But the P-39 also looked better than it flew. "*It lacked a supercharger for high-altitude performance," said Stephens in a 2005 interview. "It was also the only American fighter that didn't have a fan club."*

The most successful and numerous use of the P-39 was by the Russian Red Air Force The Russians received the considerably improved "N" and "Q" models via the Alaska-Siberia ferry route. The tactical environment of the Eastern Front did not demand the highaltitude performance the RAF and AAF did. The comparatively low-speed, low-altitude nature of most air combat on the Eastern Front suited the P-39's strengths: sturdy construction, reliable radio gear, and adequate firepower.

Soviet pilots appreciated the cannon-armed P-39 primarily for its air-to-air capability. A common Western misconception is that the Bell fighters were used as ground attack aircraft. This is because the Soviet term for the mission of the P-39, translated as ground support, but is often^I taken to mean close air support. The Soviets developed successful group aerial fighting tactics for the Bell fighters and scored a surprising number of aerial victories over a variety of German aircraft. Soviets improved P-39 N and Q models had no trouble dispatching Junkers Ju 87 Stukas or German twin-engine bombers and matched, and in some areas surpassed, early and mid-war Messerschmitt Bf 109s. The Russian nickname for the improved Airacobra translated to English is "dear little cobra".

* https://www.defensemedianetwork.com/stories/flying-the-p-39-airacobra-in-the-pacific-posed-challenges/ https://en.wikipedia.org/wiki/Bell P-39 Airacobra

Member Activity at the Field







Early Science, Technology, Engineering & Mathematics (STEM). This was before it was called STEM and many youth because of interest in model aviation, were already a head in science, engineering and math before it was ever labeled STEM.

Notice the small Cox engine, looks to be probably a .049. Many modelers started out this way.

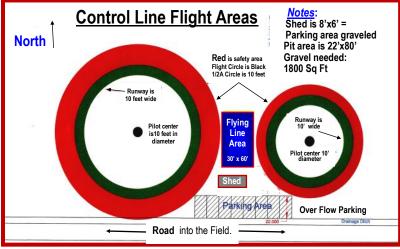


Matt Mrdeza, Steve Zingali and *Rick Nichols* UFOs, all were flying at the same time. The field was invaded by alien UFOs.



The C/L workers Jeff Moser, Harold Ellis, Gene LaFaille, Steve Zingali, Randy Meathrell, Forest Ellis, Dave Domzalski, Terry Steiner, Frank Sanders and Bob Shanks not pictured.







The photos above shows the leveled and smooth control line areas are now ready for flying and some warmer weather.

The graphic at left is a bit busy but it shows both control line circles and the logic for the design. Two control line areas for both the larger and smaller 1/2A planes.

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The Iconic SR-71's J58 Pratt and Whitney Engine

The Pratt & Whitney J58 (P&W designation JT11D) was a jet engine used on the CIA's Lockheed A-12 "Oxcart", and subsequently on the YF-12 and SR-71 "Blackbird" aircraft. The J58 was a variable cycle engine which functioned as both a turbojet and a fan-assisted ramjet. The J58 was a single-spool turbojet engine with an afterburner. Bypass jet engines were rare at the time, but Ben Rich later described the engine as "bypass jet engine by air withdrawal".

The J58 was initially developed for the US Navy to power the planned version of the Martin P6M jet flying boat. Upon cancellation of this aircraft, it was selected by Convair and Lockheed



for their supersonic projects. Other sources link its origin to the USAF's requirement for a powerplant for the WS -110A, the future XB-70 Valkyrie. The J-58 produced 32,000 lbs (142 kN) of thrust. It was the first engine to be able to operate on afterburner for extended periods of time, and the first engine to be flight-qualified by the United States Air Force for Mach 3. A major feature of the J58 was the conical spikes in the variable-geometry inlets, which were automatically moved fore and aft by an Air Inlet Computer. The spike altered the flow of supersonic air, ensuring subsonic airflow at the engine inlet. The conical spikes are locked in forward position below 30,000 feet. Above that altitude they are unlocked. Above Mach 1.6 airspeed they are retracted approximately 1-5/8 inch per Mach 0.1, up to total of about 26 inches.

The J58 was a variable cycle engine which functioned as both a turbojet and a fan-assisted ramjet. Bypass jet engines were rare at the time, but Ben Rich later described the engine as "bypass jet engine by air withdrawal". At Mach 3.2, 80% of the engine's thrust came from the ramjet section, with the turbojet section providing 20%. At lower speeds, the J58 operated as a pure turbojet. The engine was started with an AG330 starter cart, with two Buick "Wildcat" V8 internal combustion engines with a common drive shaft. The cart spun the J58 to 3,200 rpm before the turbojet cycle could start. Later, a conventional pneumatic start cart was used.

<u>The engine's high operating speeds and temperatures required a new jet fuel, JP-7</u>. Its reluctance to be ignited required triethylborane (TEB) to be injected into the engine to ignite it, and to ignite the afterburner in flight, Each engine carried a nitrogen-pressurized sealed tank with 20.7 ounces of TEB, sufficient for at least 16 starts, restarts, or afterburner lights; this number was one of the limiting factors of SR-71 endurance flights, after each air refueling the afterburners had to be re-ignited. When the pilot moved the throttle from cut-off to idle position, fuel flowed into the engine, and shortly afterwards an approximately 1.7 ounces shot of TEB was injected into the combustion chamber, where it spontaneously ignited and lit the fuel with a green flash. Refilling the TEB tank was a perilous task; the maintenance crews wore silver fire suits for their protection.



*Sources: https://www.skytamer.com/Pratt&Whitney_JT11.html

After Early B-17 Crashes Initially Blamed as Pilot Error A Basic Cockpit Design Flaw Discovered the Cause*

After 400 early B-17s crashed on landing, initially blamed on the pilot, when every part of the B-17 seemed to be just perfect, WWII Army Air Force Psychiatric examiners discovered that the controls for the Wing Flaps and Landing Gear looked exactly the same <u>AND</u> were positioned close to each other. (See red boxes in white outline in photo at right.)

Switches for Landing Gear & Wing Flaps, identical and almost next to each other: 400 crashes later the problem was finally discovered.

The switches were so close to each other in fact, that exhausted pilots approached the runway and flipped the switch for what they believed to be the landing gear, but instead flipped the wrong one due to combat and flying fatigue.

"Design Flaw" is not a term normally associated



Iwo very similar and closely located instruments with very different aircraft control results easily confused exhausted pilots when landing.

with the B-17 and in fact in a historic study of this aircraft these words were only associated with this airplane in this very unique case of B-17 crash research studies.

What can be said is that there were a number of improvements made to the B-17 based on combat experience, particularly to the propeller feathering system which was vulnerable to failure if oil supply to the prop was insufficient due to battle damage. A special oil standpipe system corrected this. Another chronic problem concerned this oil system, especially if it was not properly operated - was then a failure of the service brakes.

Two more Design Issues Discovered from Flight Experience

- 1. The empty fuel tanks retained fumes which were very explosive. Late in the war they came up with a system to purge them with nitrogen.
- 2. When they interviewed POWs they found that many had to abandon the aircraft because a damaged engine couldn't have the propeller feathered. That mechanism was run with engine oil. If the oil leaked out too quickly it became impossible to feather the prop. This could cause very bad vibration. Again there was a late war fix of also installing a standpipe that retained some oil so the prop could be feathered. This also helped achieve a more stable bombing platform.

As a reminder, the B-17 was designed in the mid-30's, so it is hardly surprising that it needed a bit of updating. The B-17 really had no "deadly design flaws". However, early versions committed to combat had weak armament against frontal attack. This was exploited by both the Germans and Japanese leading to upgraded armament and eventually a turret under



the nose. This both increased the firepower against frontal attacks and also provided a much wider field of fire than any of the previous hand held nose guns.

The B-17 is one of history's most significant aircraft for its role in the European and Pacific theater during World War II. It's an iconic plane in the Boeing pantheon and has the statistics to prove it: <u>the B-17 dropped more</u> <u>bombs in Europe than any other plane and was a</u> <u>deciding factor in the Allied victory in WWII</u>.

https://www.quora.com/What-are-the-deadly-design-flaws-of-the-B-17-Flying-Fortress https://blog.museumofflight.org/a-short-history-of-the-b17

Mystery Cockpit: "The Irreplaceable and Everlasting Super Guppy"

https://warbirdsnews.com/warbird-articles/the-irreplaceable-and-everlasting-super-guppy.html

On August 10th, NASA's venerable Aero Spacelines *Super Guppy* delivered the Orion Stage Adapter structural test article to the Marshall Space Flight Center in Huntsville, Alabama. It was one of the many missions supported by the *Super Guppy* through its long-lived career. NASA has used the Super Guppy for decades as a means of transporting large cargo that would otherwise be difficult to



move over significant distances. What many readers may not know is that much of this aircraft, NASA 941, first flew in 1953 as part of a U.S. Air Force Boeing C-97G Stratotanker. NASA's Super Guppy aircraft arrives at NASA's Marshall Space Flight Center in Huntsville, Alabama, Aug. 10. The specialized aircraft can carry bulky or heavy cargo that cannot fit on traditional aircraft. (Photo above by NASA/)

As reported on NASA's Aircraft Operations website, the transportation of oversized cargo has always been a major problem for logistics planners in both government and private industry. The physical limitations of railroad tunnels, narrow roads, low bridges, and power lines, etc., can render conventional overland shipment of such cargo virtually impossible. This proved particularly problematic for during the early years of America's 'space race', when large rocketry components destined for Cape Kennedy had to be shipped by barge via the Panama Canal or Gulf of Mexico. Such laborious journeys proved intensely costly, both in dollars and scheduling, during a period when there was such little time to spare.

In 1961, California-based Aero Spaceline Industries (ASI) helped solve this problem when it introduced the first Guppy aircraft. Built from a heavily modified KC-97 Stratotanker, the '*Pregnant Guppy*' featured the largest cargo compartment of any aircraft then built. At just over 19' in diameter, this massive cavity was specifically designed to carry the second stage of a Saturn V rocket for the Apollo program. The new Pregnant Guppy allowed NASA to deliver crucial oversized cargo to the Cape in just eighteen hours instead of the usual 18 to 25 days aboard a barge!

The program was so successful that ASI followed up with an even larger version of the aircraft in 1965. Dubbed the 'Super Guppy', this design featured a 25' diameter cargo bay, more powerful engines, a pressurized cockpit, and a hinged nose for easier loading of cargo. ASI continued to own and operate this aircraft until 1979, when NASA purchased the aircraft from them. During its illustrious 32 years of service, the original Super Guppy flew over three million miles in support of NASA's Apollo, Gemini, Skylab, and the International Space Station programs.

The Super Guppy Turbine (SGT) is the last generation of Guppy aircraft ever produced; only four were built. The most important difference between this variant and its predecessors was its upgrade to more reliable and readily available Allison T-56 turboprops. Operated by Airbus Industries after they purchased them (and the manufacturing rights) from ASI, the SGTs ferried Airbus fuse lage components, and other oversized airliner sections, from the varies subassembly factories across Europe during the '70s, 80's, and 90s. When Airbus retired its fleet in 1997, NASA was able to acquire SGT number 4 to replace their aging Super Guppy under an International Space Station barter agreement with the European Space Alliance. During flight testing conducted in 1965, in a dive the Guppy's large nose collapsed and almost caused the crew to bail out but it was saved after the crew declared a "Mayday" and landed it safely. (see photo below.) The original story of the nose collapse appeared in 1971 in the Air Force Magazine.

NASA's Super Guppy Turbine continues to support America's space program today, but with its unique capabilities, it has attracted the attention of other government entities as well. In recent years, the Guppy has been working with the Department of Defense and government contractors to move aircraft and large components around the continent, including T-38s for the Air Force and V-22s for the Navy. Although much of the glory of America's space program may be behind it, <u>the Super Guppy continues to be one of the only practical options for oversized cargo and stands ready to encompass a bigger role in the future</u>.







Stealth Designed Aircraft are Cost Effective

By Randy Meathrell

Editor's Note:

Club member Randy Meathrell is a retired Lockheed Martin aeronautical engineer and was part of the design team for the F-117 stealth aircraft. He prepared an extensive analysis package on stealth for Congressional staff.

Early in the Gulf War, the Iraqi Nuclear facility was attacked by a strike package of 75 non-stealth aircraft consisting of 32 F-16 ground attack aircraft, accompanied by 8 Wild Weasel defense suppression, 4 radar jamming, 16 air superiority and 15 tanker aircraft. The attack against this heavily defended target resulted in 2 of the strike aircraft being shot down and no targets destroyed.

Several nights later an attack package consisting of 8 F-117A Stealth aircraft supported by 2 tankers successfully attacked the targets at this facility. The chart at right shows the costs associated with this Real-World example. Not only was the attack successful but fewer aircrew were at risk. The F-117As are still flying today training the next generation of Stealth pilots. So, the overall take away, Stealth is guite cost effective.



The bravery of the attacking pilots is beyond question, but why should pilots be exposed to this type of mission when stealth technology can provide them with an effective survivable weapons system?

Even today, what is not known widely or shown on this chart above is the actual total cost to obtain *Equal Mission Effectiveness*. What can be often forgotten by mission planners is "how many conventional sorties with the average statistical loss of aircraft and pilots would be required to obtain the same level of target damage and crew survivability? To help answer this we must do a little review of just what stealth means in a general way as part of their cost effectiveness. (Randy Meathrell)

Additional "Stealth" Discussion Added by the Editor

We hear a lot about stealth aircraft as Radar-evading aircraft that require careful design work, extensive testing and exotic materials for their construction. Stealth aircraft are still vulnerable to detection during and immediately after using their weaponry. <u>Since stealth aircraft carry all armaments internally, as soon as weapons bay doors open, the plane's RCS (Radar Cross Section) or electromagnetic signature of an object reflected as a radar signal back to a radar source that determines to what degree the object is detectable. While the aircraft will reacquire its stealth as soon as the bay doors are closed, a fast response defensive weapons system has a brief opportunity to engage the aircraft. The F-22 and F-35 data indicates that they can open their bays, release munitions and return to stealthy flight in very short period. But some weapons require that the weapon's guidance system acquire the target while the weapon is still attached to the aircraft. This forces relatively extended operations with the bay doors open.</u>

While stealth is cost effective one has to realize too that radar-evading <u>warplanes use exotic materials for their construction, features</u> <u>that can triple their cost compared to non-stealthy</u> planes so how is it then they are cost effective?

For some in the stealth world, cost-to-benefit ratio of stealth is a debatable question. If a modern air force wants to attack an adversary with significant anti-aircraft defenses, it needs an effective Suppression of Enemy Air Defenses (SEAD) to avoid losses. A fast jet that is well armed and highly maneuverable, 'electronic attack' aircraft of the class of Boeing EA-18G Growler has ability to jam across the entire spectrum. SEAD overall, may then be much cheaper than stealth.

Technologies are already fast evolving to counter stealth. At \$75 million even a small aircraft like F-35A is not cheap. The F-22 Raptor costs nearly \$150 million a copy. The U.S. Air Force had to shut down the F-22 assembly line after just 187 aircraft. All countries are developing advanced radar systems that will be able to detect these aircraft in the near future. The Russian T-50 is known to be less stealthy and has faced technology and cost issues. The Chinese J-20 and J-31 parallel stealth programs are shrouded in secrecy and China was forced to purchase the expensive Russian Su-35. Stealth aircraft also require high maintenance costs and time according to some research and general data.

<u>The overall bottom line, yes stealth indeed is cost effective if managed correctly in mission planning and implementation;</u> (Editor's comment)

https://www.sps-aviation.com/story/?id=2735&h=Stealth-Crucial-or-Overrated

Editor's Note: A big thank you to club member Randy Meathrell for his article, it's key aviation history and relevant for today as well.

Chino Valley Flyers Strategic Planning and Accomplishments

The January General Membership was canceled due to cold weather. Please allow me to provide you instead with a briefing on the clubs' direction for 2023 below (sort of an "e-meeting"). We will discuss these items in detail at subsequent club meetings at the field when the weather is better. In the meantime, if you have any questions or input, feel free to reach out to me or any of the officers. Bill Gilbert

Treasurers Report

Our Treasurer *Don Crowe* reported that our bank balance is at very healthy levels with all the membership renewals to date. We have 123 paid members...a very good job by all of you that have been prompt with your dues.

President's Agenda

Field Improvements planned for 2023: Re-gravel the vehicle parking areas-\$2300 (pending member approval); 123 membership renewals to date; additional gravel at trailer parking (3rd parking lane)-\$896, cost sponsored by a club member; drainage ditch in front of shed; remove culvert that continually fills with silt, dig ditch deeper and construct a wooden bridge-\$600 (pending member approval); and control line area improvements as discussed and approved in November 2022(~\$2,000)

AMA Updates

Our FRIA Application has been submitted to AMA. The AMA in turn has submitted our application to the FAA. It will be processed by the FAA-unknown timeline. Our applied-for airspace boundaries are 1500' from the center on the field to the East and West, and to the North. This puts our airspace about 300' beyond the fence north of us, and the same with the fence line at the entry road on Santa Fe. The E fence line is a boundary. The Site Improvement Grant application has been submitted, for our 2022 field improvements. We requested \$3,000 (the max allowed). Grants are announced in May.

2023 Events

Please refer to the 2023 Events Calendar on our website: <u>http://www.chinovalleyflyers.org/?page_id=3733</u>. Our <u>events are also listed</u> <u>on page three of this issue</u>. We will be adding an "Alternate Construction" category to the Build n Fly event in October. A "Crowd Favorite" award will be broken out from the existing scoring. Scoring will emphasize a successful maiden and construction quality. Participants can address the judges for 1 minute to extoll the features of their build. STOL Race event moved to August for more participation. Float Flying-we will assess the conditions at a couple of local lakes earlier in the year. Indoor Flying and Control Line Flying- see "Committees", below.

Workshops

Propose adding Technical Workshops after membership meetings (30 min). on a variety of topics; airplane setup, radio setup, covering techniques, etc. Looking for volunteer presenters...contact me if interested. Prepose holding Skill Workshops-actual flying techniques to improve skills. Looking for advanced, skilled members to participate in coaching. Once per Quarter at the field? Contact me if you are interested in coaching.

Flight Training

Added Helicopter Flight Training to our repertoire. I will volunteer my experience. Please contact me if you are interested in learning to fly helicopters. (*Bill Gilbert*)

Housekeeping

The Crash/Retrieval cart needs to be on the flight line *anytime* flight operations are taking place. If the cart is inoperable, notify VP Mark Lipp or any other officer ASAP. Be ready with tools/extinguishers and high clearance vehicle for crash fire mitigation (do not drive it across the runway). Please do not drive the cart after being in the mud, on the runway or in the pits. Park it at the end of the walkway in the grass/dirt. If you discharge a red fire extinguisher, you are responsible for replacing it. Contact the VP. Cost is \$60 each. Also notify the VP if a water extinguisher has been discharged, so we may recharge it.

Club Committees

Control Line Committee headed by *Rick Nichols* have improvements progressing well; an 8'x8' storage shed is being built by member *Jeff Moser*. Gravel for the parking area will be ordered soon. Indoor Flying: Findlay Toyota Center, by CVF (*Mark Cotter*). PHS Gym, by CdA (*Al Weikart*). Thanks to both Mark and Al in making both these venues accessible to the club!

Lots of material here, I hope this is useful to you in lieu of the meeting! We hope 2023 will be an even better year than last year for flying. Information in these "minutes" provided by President *Bill Gilbert* via email.