

Chino Valley Flyers

Club Newsletter



October 30, 2024

Volume 27 Issue 10

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 this Month:

Imagination was given to man to compensate him for what he is not, and a sense of humor was provided for what he really is. Unknown

Fall Swap Meet and Fun Fly



Chino Valley Flyers October Glider Endurance Contest

Ringmaster C/L Fly-A-Thon 2024





President's Column By Brian Sutton



Flight Instructors

Randv Meathrell:

Bill Gilbert:

eff Moser:

Helicopters

Control Line Flying

Gliders, Multi Rotors

General Flight Instructors

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Greetings Members,

I am Brian Sutton, newly elected president of the Chino Valley Flyers. Here's a little about my background: I am a retired teacher.

In my role as a teacher, I brought many of my hobbies and interests into the classroom, such as modeling, model rocketry, and other activities that support the Science Technology, Engineering, Arts, and Mathematics (S TE AM) principals.

I would like to thank the senior members of our club for their trust in asking me to be your president.

My Priorities

I recognize that all of us have chosen to be in this club to have fun, however in order to insure the future of our club, we need to be as safe as possible.

So safety is and always be our highest priority. We also need to be financially responsible, and continue to promote our great community relationships we have established in the past.

As we move forward, I hope to continue improving our relationship with the community of Chino Valley, expanding responsible growth in the club, and maintaining our safety culture. Happy Flying,

Brian





Brian at left with his control line plane at the circle and above with his rocket.

Al Marello

Steve Shephard

Club's Board of Officers

President Brian Sutton



Vice President Al Marello

Treasurer — Don Crowe

Secretary — Bob Steffensen

Safety Officer — Lee Boekhout



At Large Member — Dan Avilla



At Large Member— Gary Cosentino

At Large Member— Rick Nichols



At Large Member— Jeff Moser

Newsletter Editor — Bob

Shanks



WHAT MODERN PLANES GLASS COCKPIT IS THIS?



SAFETY SHOULD ALWAYS COME FIRST LEE BOEKHOUT, SAFETY OFFICER

I would like to mention some safety issues that I feel need to be mentioned for the safety of all members and guests. I understand that these issues have been addressed by my predecessors but seem to be forgotten or otherwise not followed by all. <u>Remember that the very existence of our field is dependent on all</u> <u>members' vigilance in maintaining a safe environment</u>. Please consider these issues:

1. When making a low pass in front of the pilots, please keep the aircraft on the far side of the runway, providing a little extra time and space for others should something untoward occur.

2. Some pilots have the need to use the entire length of the runway on taking off. Most aircraft have more than enough acceleration to start the takeoff run from inside the center lines, that is in front of the pilot's station. (The area inside the broad white crosslines on the runway). Starting the takeoff run at extended length can cause the aircraft to reach maximum speed prior to reaching the pilots station, and on occasions has been seen to cause the aircraft to become unstable. Unless otherwise required, please start the takeoff run at the middle of the runway, accelerating away from the other pilots.

3. It has been observed that, on some occasions, pilots are not announcing their intentions loudly and clearly when taking off, landing, low passes, etc. Also let others know from which direction you are taking off or landing so other pilots do not have to divert their attention from their own aircraft..

Lee Boekhout

Editor's Note:

As you can see we now have a new board of officers and now a new safety officer. However, you are still stuck with your editor, he's like a bad penny, just keeps hanging around. As you can also see we ran a whole page this issue written by our former safety officer *Rick Nichols* who gave our overall club safety some grades but didn't get included in last month's issue. Read <u>page eight</u> if you haven't already read that page. Another reminder is to always read the safety column in our AMA monthly magazine.

The new AMA issue has an interesting article about a propellor issue. We all can learn from other modelers mistakes and incidents. We have had enough prop incidents at our field. Your editor was one of those who had some nasty finger cuts last year. Thank goodness I was transported to the emergency room located at the Prescott hospital by *Rick Nichols.*

So when working on your plane in your shop or even at the field, take off the prop.

Thanks for stepping up for this job Lee our membership appreciates member volunteers. (Editor comment)

Have You Read the U.S. Constitution Lately? By Col. Bob Shanks USAFR (Ret)

Talk to just about anyone who is a citizen or who came to our country as a legal immigrant or even those who came illegally but want a better life personally or for family fully understand our countries rich history; the good, the bad and even the ugly. Many immigrants have a better understanding of our Constitution than our citizens. All immigrants are striving for the American Dream and know we are indeed a unique country in the history of the world. That is why so many immigrate to our country. And at the heart of all of our freedoms too often taken for granted is our United States Constitution. <u>When was the</u> <u>last time you picked up a pocket sized copy and read it over</u>?

When stationed in the country of Albania when serving in the USAF, a former communist run country, I was assigned to work out of the U.S. Embassy and the Albanian Military Ministry of Defense, I noticed each day our U.S. Embassy was open for local business there was always a long line of people waiting to apply for a visa to come here. Some days the line stretched for several blocks. We are indeed very fortunate to live here. Unfortunately some of our educational public schools, colleges and universities don't do a very good job of teaching civics and our Constitution, if even it is taught at all anymore.

Turning Point USA's Charlie Kirk, who spoke here in Prescott recently, has developed a very easy to read Constitution booklet. Each section of Our Constitution has a list of terms with definitions and terms explained since our English language now is not the same as when the Constitution was framed and written by our founding fathers. If you would like a copy go on-line to Turning Point USA and get a

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copy, read it members, check out the terms as explained. When teaching at the university level I always had a copy of the U.S. Constitution in my brief case, especially when teaching International Relations and working with students who were attending from sometimes as many as over 40 countries from around the world.

For those of you who have attended some of the parades held in downtown Prescott, one will always see historically dressed individuals. The fact we have this newsletter that can cover a whole host of topics due to the First Amendment, without any governmental interference, is such a blessings. Check out the page on our First Amendment. Here's some photos below from past downtown Prescott patriotic parades.









Annual Build and Fly Challenge Contest

The 2024 Build-n-Fly was a fun time witnessed by a large group of members. Seven members had planes for the event, but only five were ready to fly.

Darren Brooks had a scratch-built glow powered Cosmic Coyote that had a fantastic painted finish.

Gary Cosentino brought 70's era Bridi Super Kaos with one of his patented beautiful covering schemes.

Todd Mollerup had a scratch-built classic RCM Funster.

Dale Nolen flew a nice Balsa USA Smoothie. **Rick Nichols submitted an Old School Model Works** Howard-Pete, it flew but he crashed.

Don Ferguson brought a B-25 built from plans, a beauty but it didn't get airborne and crashed on the runway.

Finally Dave Domzalski had a unique Fairey Gannet built from foam, but wasn't ready to fly.

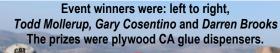
Two planes suffered mishaps, Rick Nichols plane crashed as did Don Ferguson's, but everyone else had a successful maiden flight.

The 9th annual Build-n-Fly will return in 2025 during the AMA 'Build Month' with only two rules; no ARFs, and it must be the panes' maiden flight. **Don Crowe Event Coordinator**



At left is Dave Domzalski, he didn't fly his plane. Below Dave is Dale Nolan's yellow and black Smoothie. At right is Todd Mollerup's cool all black Funster. Bottom row is **Rick Nichols and** Don Ferguson with

their planes.

























Gary Cosentino's Bridi Super Kaos.





CHINO VALLEY FLYERS' GLIDER ENDURANCE EVENT

We had nine member pilots flying for this October glider event: Jeb Wang, Jeff Moser, John Dora, Rick Nichols, Bobby Burson, Robert DeNoyelles, John Meyers, Dave Bates, and Lee Boekhout.

The gliders were a mixture of sizes and types with everyone flying Four Rounds in the Two Meter and Open Class.

The winners as seen on page one were Dave Bates, John Dora, Bobby Burson and Jeff Moser..

How the rounds were flown and scored

- 1. Each pilot had a 15sec motor run time to get up to altitude.
- 2. We had 4 rounds: two 5 minute rounds and two 7 minute rounds.

The flight time starts when the plane leaves your hand and stops when the plane touches the ground

All Pilots start with 950 points and for each sec over or under flight times they lose points each pilot had a helper doing the timing.

- A. Landing points are bonus points of 5, 25 or 50 points depending on where the nose of the plane is pointed on landing.
- B. The computer program does the calculating for points.
- C. For a 5 minute flight each second is worth 3.17 points and for a 7 minute flight each second is worth 2.26 points.

John Dora's wife Annette below helped with scoring and computer entry. At right is John the event leader announcing and keeping gliders in the air.





Jeb Wang prepares to launch his glider.







The weather for the glider event was outstanding.



The U.S. Constitution's First Amendment

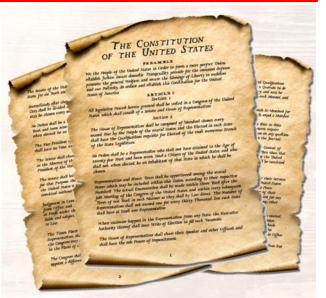
By Col. Bob Shanks USAFR (Ret.)

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

Even just publishing this little general newsletter in many countries would not be at all permitted or under severe restrictions. Our right of free speech and press as well as religious freedom are bedrocks of our special form of Democracy in our very unique Republic.

Unfortunately, it often seems when checking the news these days, many citizens in our country don't fully realize the many freedoms we have and take for granted our special way of life or have been denied being taught American history or have totally Forgotten whatever American history they did learn.

<u>As we end this month and move into November, let's not forget to</u> <u>vote, it's that time of year again</u>. Being able to vote is a product of



our Constitution, it's the bedrock of our freedoms. When was the last time you read or scanned the Constitution? Or perhaps the last time you even paid any attention to that document was years ago when in school. Take a few minutes and review it.

Currently in this crazy election period we live in a strange political world of possible censorship and/or some of our freedoms. <u>With all of this in mind, this is a great time to review our First Amendment as something we should not ever take for granted</u>. For those of you who have been fortunate enough to visit other countries where freedoms are only a dream or have been taken away, put that into your mind in bold face type and remember to vote.

This is not a political statement or article about politics, or telling you how you should vote, your editor stays away from those hot button topics, we are a club of aviation "nuts" who build airplane models for a hobby. However, we are all Americans and need to cherish our very unique way of life and not take our Constitution and Bil of Rights for granted so don't forget to <u>vote</u>.

Bare with me members as I get up on my "soap box" and wave the U.S. flag. Let's never forget our rich American history and all that has been done for us in countless challenges of Civil War, world wars and out of control dictators in other countries who would like to take away our freedoms.

Put on your calendars in bold face to vote November 5 or as many have already done, voted early and/or mailed in their ballots. I have always had a high degree of suspicion of having anyone or any group handling my ballot other than those who are charged with the job of counting them so I don't mail in my ballot, I vote in person and then watch the ballot drop into the large safeguarded box ready for counting. Could it still be tampered with? That's a remote possibility but voting in person is my way of hopefully preventing any illegal shenanigans.





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Chino Valley Flyers Safety Report Card By Rick Nichols, Former Safety Officer

Editor's Note:

This article was edited and appeared in our September Safety Column last month. The edited version was shorter and the grades were not used. Since this is about safety your editor felt it needed to be rerun as it was originally written by our temporary Safety Officer Rick Nichols. As you can see the grades overall are excellent. Let's keep up the great attention to safety for the rest of the year and into next year when we have a new safety officer in place. Lots of "A's" and no failing grades, only one "D"!

Members,

Over the past 5 years or so I have spoken at the club meetings, and I also have had conversations with individuals regarding safety concerns. My monthly column has also addressed many safety subjects. This is my report card with grades on how members are doing with following our basic safety guidelines.

GRADES are in a Standard Format - (A, B, C, D, F):

A. Pilots have been very attentive not to arm their electric airplanes in the cabana area.

A. The first members to arrive have been getting the Fire/Rescue vehicle out of the hangar and ready for service.

A. The pilots have been flying clear of the hill and gun range area at the east end of the runway. Also have been avoiding flying over the control line area.

A. Pilots have been making their flight intentions clear at the flight line. RE: "Taking off", "Landing", "On the runway", "Clear" etc.

B. Pilots seem to be keeping body parts clear of propellers. Only one occurrence has been reported to me this year.

D. This is not necessarily safety but to my knowledge the gate has not been closed and locked securely at least 3 times this year and the hangar once. We have too much investment in our property to allow the gates not to be secured.

B. I have spoken to a couple pilots about avoiding making highspeed low passes down the center of the runway. This is permissible if there are no other pilots on the flight line, otherwise make these passes on the north side of the runway.

A. Also not entirely related to safety, I enjoy watching the members helping other pilots with help or advice with their airplanes and

problems they may have. If a pilot needs a part to get his plane in the air and flying, we seem to be a virtual

hobby store. Needed parts can usually be found.



Thank you members for accepting hints or advice from me when I feel that I need to make a point regarding safety.

Rick Nichals

NAME THE PLANE: USAF B-2 SPIRIT BOMBER

https://nuke.fas.org/guide/usa/bomber/b-2.htm

The B-2 Spirit is a multi-role bomber capable of delivering both conventional and nuclear munitions. Along with the B-52 and B-1B, the B-2 provides the penetrating flexibility and effectiveness inherent in manned bombers.

The B-2's low-observable, or "stealth," characteristics give it the unique ability to penetrate an enemy's most sophisticated defenses and threaten its most valued, and heavily defended, targets. Its capability to penetrate air defenses and threaten effective retaliation provide an effective deterrent and combat force well into the 21st century.

The blending of low-observable technologies with high aerodynamic efficiency and large payload gives the B-2 important advantages over existing bombers. Its low-observability provides it greater freedom of action at high altitudes, thus increasing its range and a better field of view for the aircraft's sensors. Its unrefueled range is approximately 6,000 nautical miles (9,600 kilometers).



The B-2's low observability is derived from a combination of reduced infrared, acoustic, electromagnetic, visual and radar signatures. These signatures make it difficult for the sophisticated defensive systems to detect, track and engage the B-2. Many aspects of the low-observability process remain classified; however, the B-2s composite materials, special coatings and flying-wing design all contribute to its "stealthiness."

The B-2 has a crew of two pilots, an aircraft commander in the left seat and mission commander in the right, compared to the B-1B's crew of four and the B-52's crew of five.

The B-2 is intended to deliver gravity nuclear and conventional weapons, including precision-guided standoff weapons. An interim, precision-guided bomb capability called Global Positioning System (GPS) Aided Targeting System/GPS Aided Munition (GATS/GAM) is being tested and evaluated. Future configurations are planned for the B-2 to be capable of carrying and delivering the Joint Direct Attack Munition (JDAM) and Joint Air-to-Surface Standoff Missile.

B-2s, in a conventional role, staging from Whiteman AFB, MO; Diego Garcia; and Guam can cover the entire world with just one refueling. Six B-2s could execute an operation similar to the 1986 Libya raid but launch from the continental U.S. rather than Europe with a much smaller, more lethal, and more survivable force.

The B-2 development program was initiated in 1981, and the Air Force was granted approval in 1987 to begin procurement of 132 operational B-2 aircraft, principally for strategic bombing missions. With the demise of the Soviet Union, the emphasis of B-2 development was changed to conventional operations and the number was reduced to 20 operational aircraft, plus 1 test aircraft that was not planned to be upgraded to an operational configuration. Production of these aircraft has been concurrent with development and testing.

The first B-2 was publicly displayed on Nov. 22, 1988, when it was rolled out of its hangar at Air Force Plant 42, Palmdale, Calif. Its first flight was July 17, 1989. The B-2 Combined Test Force, Air Force Flight Test Center, Edwards Air Force Base, Calif., is responsible for flight testing the engineering, manufacturing and development aircraft as they are produced. Three of the six developmental aircraft delivered at Edwards are continuing flight testing.

Whiteman AFB, Mo., is the B-2's only operational base. The first aircraft, Spirit of Missouri, was delivered Dec. 17, 1993. Depot maintenance responsibility for the B-2 is performed by Air Force contractor support and is managed at the Oklahoma City Air Logistics Center at Tinker AFB, Okla.

The prime contractor, responsible for overall system design and integration, is Northrop Grumman's Military Aircraft Systems Division. Boeing Military Airplanes Co., Hughes Radar Systems Group and General Electric Aircraft Engine Group are key members of the aircraft contractor team. The B-2's signature meets operational requirements against today's threats. As advanced threats proliferate, it will be prudent to investigate advanced signature reduction concepts and determine if it is necessary to improve the B-2's low observable signature.



The photo at right is of your editor Bob Shanks and wife Cindi taken at Davis Monthan AFB in Tucson, AZ two years before Bob's retirement from the Air Force. Of course the aircraft in the background is a B-2 Spirit Bomber.



Just What is a Warp Bubble?

First what is a warp bubble? A warp bubble is a hypothetical space that's contracted in front and expanded in back, allowing a spaceship to travel faster than the speed of light: A hypothetical engine that manipulates space-time compressing space in front of the ship and expanding it behind the ship. The ship rides inside a region of flat space, called a warp bubble, and is carried along as the region moves. This apparently eliminates time dilation, a major problem with faster-than-light travel. World's first real warp bubble was created by accident by DARPA scientists in 2022 — Or at least it was science fiction until the world's first warp bubble was accidentally discovered by DARPA. Your editor had the opportunity to work with DARPA when doing a short tour of duty at the USSPACECOM on Peterson AFB and the Cheyenne Mountain Complex in Colorado.

Defense Advanced Research Projects Agency (DARPA) Accidently Creates a Warp Bubble BY CHRISTOPHER PLAIN

https://thedebrief.org/darpa-funded-researchers-accidentally-create-the-worlds-first-warp-bubble/

"Engage." (A well-known phrase from the "Star Trek" TV series.) For those not totally aware of DARPA, it's *The Defense Advanced* Research Projects Agency (DARPA) a US government agency that develops new technologies for the military.

Warp drive pioneer and former NASA warp drive specialist Dr. Harold G "Sonny" White has reported the discovery of an actual, real-world "Warp Bubble." And, according to White, this first of its kind breakthrough by his Limitless Space Institute (LSI) team sets a new starting point for those trying to manufacture a full-sized, warp-capable spacecraft.

In an interview, White added that "our detailed numerical analysis of our custom Casimir cavities helped us identify a real and manufacturable nano/microstructure that is predicted to generate a negative vacuum energy density such that it would manifest a real nanoscale warp bubble, not an analog, but the real thing." In other words, a warp bubble structure will manifest under these specific conditions. White cautioned that this does not mean we are near building a fully functioning warp drive, as much more science needs to be done.

"To be clear, our finding is not a warp bubble analog, it is a real, albeit humble and tiny, warp bubble," White told *The Debrief*, "hence the significance." In 1994, Mexican Mathematician Miguel Alcubierre proposed the first mathematically valid solution to the warp drive. More specifically, he outlined a spacecraft propulsion system previously only envisioned in science fiction that can traverse the cosmos above the speed of light without violating currently accepted laws of physics. That solution was lauded for its elegant mathematics, yet simultaneously derided for its use of theoretical materials and massive amounts of energy that appeared virtually impossible to engineer in any practical way. Over a decade later, this theory underwent a major shift, when Dr. White, a then NASA-employed warp drive specialist and the founder of the highly respected Eagleworks laboratory, reworked Alcubierre's original metric and put it into canonical form. This change in design dramatically reduced the exotic materials and energy requirements of the original concept, seemingly providing researchers and science fiction fans alike at least a glimmer of hope that a real-world warp drive may one day become a reality. It also resulted in the informal renaming of the original theoretical design, a concept now more commonly referred to as the "Alcubierre/White Warp Drive."

Since then, *The Debrief* has covered a number of physicists and engineers taking their own stabs at designing a viable warp drive, including an entire group of international researchers working on a warp drive that requires no exotic matter. However, like Alcubierre and White before them, the warp concepts of these would-be visionaries all still remain theoretical in nature. Now, it appears the situation has changed. Timing is everything, especially at warp speed.

It is often said that timing is everything. Therefore, it is not surprising that back when Dr. White began his latest DARPA-funded research into custom Casimir cavities (a unique, micro-scale structure with all types of promising applications), he definitely did *not* expect to stumble upon this potentially historic discovery, particularly one supporting a theoretical concept that has often defined his public persona.

"Some work we've been doing for DARPA Defense Science Office is the study of some custom Casimir cavity geometries," explained White at the American Institute of Aeronautics and Astronautics (AIAA) Propulsion Energy Forum in August of 2021, an event attended by *The Debrief.* "In the process of doing that work, we kind of made an accidental discovery."

Without going into the complicated physics behind Casimir cavities and the tantalizing quantum-scale forces often observed in these unusual structures, it suffices to say that they are in no way related to warp drive theory or mechanics. At least, they never had been before. But, says White, it is work that he and his LSI team are passionate about, and something DARPA believes has a number of possible applications.

It appears that a handful of engineers on the planet who would immediately know what it was he was looking at when conducting his Casimir cavity research was in the exact right place at the exact right time to notice a striking similarity to his warp drive passion project and his current research, an observation that may have otherwise gone unseen. "I think this is a great example of sometimes you are doing work for one reason, and you find something else you really didn't expect to find," said White at the AIAA conference. Therefore, in this particular case at least, it seems that timing was indeed everything.

Simply stated, White said in a recent email to *The Debrief,* "To my knowledge, this is the first paper in the peer-reviewed literature that proposes a realizable nanostructure that is predicted to manifest a real, albeit humble, warp bubble."

Author Christopher Plain is on Twitter or as it is now called "X".

OCTOBER CLUB GENERAL MEMBERSHIP MEETING HELD AT THE FLYING FIELD

The October 26 CVMA monthly meeting was opened at 10:00 AM with the pledge to the flag led by acting president *Randy Meathrell*. Prior to the meeting the annual Build and Fly event was held, and Organizer *Don Crowe* was given a big hand for organizing the event. It was a success with 7 pilots participating with some very beautiful airplanes. There were 2 airplanes that were not successfully flown.

New members present at the meeting were *Jerry Breuer, James Brown,* and *Jerry Landrum*. The minutes of the September meeting were approved with a motion by *Robert Fish* and seconded by *Larry Parker*.

The Christmas party will be held December 3 at the Centennial Room at the Prescott airport. Members have been sent notices of the event and reservations should be submitted along with payment.

There were no officer reports from the board except for *Don Crowe* saying that the rules for the Build and Fly will be modified for the 2025 event.

November 16 will be the swap meet and pancake breakfast. The Casa de Aero RC club will be taking over the operation of the indoor flying program that is held at Findlay Toyota Center in Prescott Valley.

Member Larry Parker made a motion to hold the winter meetings via Zoom. The motion had no second to precede to voting. Don Crowe Made a motion to discuss it at an upcoming board meeting. Motion seconded by Rick Nichols and passed.

Election of officers were held with no further nominations offered at this meeting. The proposed slate of officers was voted on for the 2025 year. <u>Show and Tell Projects</u>.

Jack Potter showed a small "W" shaped airplane that he built and also mentioned an estate sale that has airplanes for sale. Precedes from the sale will be donated to the CVF. *Robert Fish* showed his Blue Angel pattern plane and told about his company's airplane kits and building boards. Embry Riddle students showed their 45-pound project plane called the <u>Eagle Lifter</u> along with its payload <u>The Mallard</u>. The Door Prize was won by John Meyers and the ARF airplane was won by Don Crowe who then donated it to a ERAU student.

Motion to adjourn made by Mark Lipp, seconded by Tom Wells. Meeting adjourned at 10:45 AM Respectfully,

Rick Nichols, Acting Secretary







ERAU's Eagle Lifter above right carrying its payload The Mallard. Apparently this has been successfully flown.

At left above is *Robert Fish* with his Blue Angel pattern plane. At lower left is *Jack Potter* with his flying "W".

Meeting photos by Al Weikart



Raffle Prize Winner

Door Prize & Rffle Winners





John Meyers left won the Door Prize, Don Crowe won the ARF kit at right.