

Chino Valley Flyers



January Club Newsletter

March 31, 2025

Volume 28 Issue 3

www. chinovalleyflyers.org

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

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The Power of Aviation

Quote For this Month:

"Belief is a poor substitute for experience."

Unknown

Lose Something?



We have a "Lost and Found" area in the main hanger so if you left something at the field check that box It's probably there.

Shel Liebach's T-33 Thunderbird



John Stewart's OV-10





President's Column

By Brian Sutton



Flight Instructors

Randv Meathrell:

Bill Gilbert:

eff Moser:

Al Marello

Steve Shephard

Helicopters

Control Line Flying

Gliders, Multi Rotors

General Flight Instructors

Spring has finally sprung, and great flying weather is upon us. It's a great time to dust off the older aircraft and do a careful "Spring inspection" to sort out any hangar rash or other issues or damage that may have occurred during the last vear. Bring out those winter build projects and have a great time sweating out those maiden flight jitters.

We have a few new flyers at the field, make sure to introduce yourselves to them, and be sure to support them as needed. I have been amazed by how friendly all of you have been to me when I was relearning to fly.

Now that the air is warming up, I expect to see some club member buzzards flving in circles down by the west end of the field, I would like to encourage all of you to go down and say hi to them. If you

have not experienced control line flying, it can be quite a bit of fun and a challenge. Several buzzards have control line trainers, perhaps you can put in a flight and see if you want to learn more.

We have several events coming up, the Spring Fling fun fly, Pylon races, sailplane events and others. Keep an eve on the calendar for dates and details.

See you at the field! Brian





Way to Go USA

Club's Board of Officers

President — Brian Sutton



Vice President - Al Marello



Treasurer — Don Crowe



Secretary — Bob Steffensen



Safety Officer — Rick Nichols



At Large Member — Dan



At Large Member— Gary Cosentino



At Large Member— Lee **Boekhout**



At Large Member— Jeff Moser



Newsletter Editor — Bob **Shanks**







MARK YOUR CALENDARS

Chino Valley Flyers Events for 2025

- May 17..."Hamburger" Fun Fly
- June 14...Pylon Races
- July 12...Glider Endurance Contest
 - > IMAC August 15-17 Casey Buggein will be CD for this event.
- August 23...Combat Event
 - > September 20...Steve Crow Event
- October 4...Ringmaster Control Line
- October 18... Build and Fly Contest
- November 15...Pancake Breakfast/Swap Meet

SAFETY SHOULD ALWAYS COME FIRST

By Rick Nichols Chino Valley Flyers Safety Officer

I received a safety tip from fellow pilot, *Dan Avilla*, about a Smoke Alarm that can be mounted anywhere and alerts your telephone via Wi-Fi if it detects smoke.

As I store my batteries in my garage, and it is remote from my house I would not know if a fire has started in my garage. With this device I would be notified by my phone if there was a fire. I found the device on Amazon for charging station and is also not only \$20.00 and ordered one.

I installed it two days later and it tested perfectly. Hopefully it will never have to be used for real. It is called X-sense. Thanks for the tip Dan.

This tip is to help keep your equipment safe. Be sure that all your transmitters and battery chargers are marked with your name and phone number. Many times, equipment is left at the field with no markings.

There is also a Lost and Found box in the hangar where found items can be placed. When you leave the field make a checklist in your mind of what

you brought with you and make sure you have it all. It only takes a minute to stop and look around to be sure you have all your belongings.

A reminder to all, the pilot plane holding devices on the tables at the flight line are not to be used as trash receptacles.

There is a bucket under the main there to be used as a trash container. It is for the sole purpose of disposing of batteries that may be damaged.

We intentionally do not have trash containers for the use of the pilots. Whatever you bring onto the property you are expected to leave with it. So members, if you Pack it in. Pack it out!

I would like to thank the club members that expressed their thoughts to me regarding the passing of my wife Jolyne. Also I wish to thank the club for the nice card I received and for cancelling the March meeting so those that

wanted to could attend the Memorial Service for my wife Jolyne.

Rick



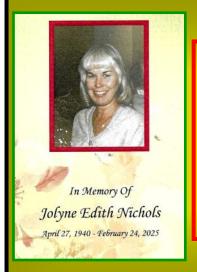
Rick Nichol's little electric icon on the side of his airplane.





More Exciting Activity at Our flying field





IN MEMORIAM

Rick Nichols, CVF Club Safety Officer, lost the love of his life February 24, 2025. A Memorial Service in her honor was held March 22, 2025 at the Chino Valley Funeral Home and the Chino Valley Community Center celebrating her life. It was great to see many members there supporting Rick. Rick has been an active club member and flyer as well as a past officer of our club for many years. He also serves as the CVF Laison to the Chino Valley City Council we lease our field from.









John Ward's twin
pusher and puller. A
big thank you to Al for
these outstanding
Photos. Your editor
has not been able to
get out to the field
much the last month.



Jack Bugaren with his Howard DGA-12 powered by a Saito R33 gas radial engine





Shel Liebach's newest Jet a right is a is a L-39. He has some outstanding turbine models in his hanger.





More Flying Activity at Our Field







Frank Sanders C/L.

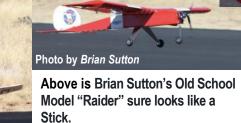




Jack Bugaren's Saito radial engine in his Howard DGA-12 also on page four. A great looking scale model.











Space X brought back the stranded Astronauts this month. The Russian Ivan Vagner greeted the crew in an Alien mask. A great sense of humor.

China is Developing a New Combat Aircraft *

Imagery of two new, tailless Chinese military aircraft are being developed and imagery has been detected indicating they are similar to the Air Force FB-22 medium stealth bomber considered by the Air Force but not adopted in the early 2000s.

The larger aircraft has been dubbed the J H-36 by experts in the aviation press. It is believed it is likely a medium bomber according to the Pentagon's annual report on China's military power released in mid-December of last year. Since 2019 the annual Pentagon report has only mentioned a "JH-XX" medium bomber under development.

China's Liberation Army Air Force is developing new medium and along range bombers to strike regional and global targets in the recent Pentagon report. They are reported to have extremely low-observable characteristics. China is known to be developing a flying-wing



similar to the Air Force B-2 bomber. The report went on to indicate "This development is consistent with the Air Force understanding of China's strategic objectives and long-term force planning. The annual report also indicated that this development is consistent with what is to be understood as China's strategic and long-term force planning objectives. The complexity of their new weapons systems is introducing additional complexity which requires highly skilled personnel.

The "JH-36" as seen in videos and still imagery is not censored nor has been commented on by China. This appears to be a larger than the 70-foot J-20S two seater "Mighty Dragon" apparently fling chase in the images. The new flying delta wing has no vertical control surfaces but has five flaperons on each side of the trailing edge of the wing is heavily deflected to near-vertical in some images and moves independently.

Pentagon officials in the report suggest the engine industry is unlikely to have matched the technology in the American Adaptive Engine Technology for thrust vectoring. The aircraft has three engines and according to the aerospace technologist the third engine is "either this is a brilliant solution to have both power and stealthiness" or "dumb, flying around with the dead weight of the third unused propulsion mass."

Poor topside views seem to indicate the cockpit is for one or two crew members in tandem or side by side. The use of a two-seat J20S as a chase plane the back seater might have been controlling the JH-36. It appears to have a two-engine exhaust system suggesting that China is exploring a number of ways to reduce the heat signature and possible thrust vectoring of future engines.

Apparently smaller than the JH-36. the second fighter-sized aircraft had tricycle landing gear. That aircraft was being cheed by a J-16, a SU-27 variant made by Shenyang Aircraft Corporation. The report also indicated it seems unlikely the two new aircraft area competitor, given the apparent difference in the sizes.

No other images have been found at this time about either aircraft. The imagery of the second aircraft is not clear enough to determine if it has a cockpit or is to be an unmanned aircraft. China is forging ahead with its war fighting equipment designs trying to catch up to the U.S. superior military equipment and future designs.

^{*}Air & Space Forces Magazine January/February 2025, Pages 24 & 25..

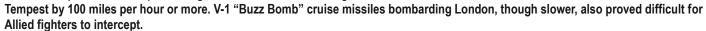
P-47M Largest and Heaviest Fighter Ever Built.

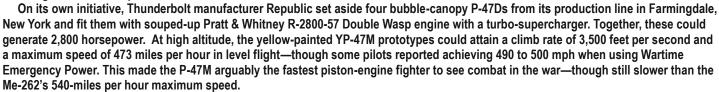
https://nationalinterest.org/blog/buzz/americas-p-47m-fighter-had-one-goal-hunt-down-and-kill-hitlers-jets-41297

Pilots nicknamed early-model P-47 Thunderbolts the "Razorback," a reference to the chunky fighter plane's angular canopy. However, the name was more generally appropriate—like a wild boar, the hulking single-engine "Jug" was tough and hard-charging, and its eight .50 caliber machine guns packed a hell of a punch.

Lugging underwing fuel tanks, Thunderbolts based in Britain could accompany four-engine B-17 and B-24 bombers of the 8th Air Force on d dangerous raids deep over Nazi Germany—and still engage German fighters on roughly even terms, especially while diving.

However, starting mid-1944, the Allied fliers grew concerned about new Nazi turbojet-powered Me-262 fighters and <u>rocket-powered Me-163s</u> that could outrun the speediest Allied piston-engine aircraft like the Mustang or British





The 56th, better known as Zemke's Wolfpack after its legendary first ace commander, was the only unit in the strategic-bombing-focused 8th Air Force not to trade its Thunderbolts for P-51D Mustangs, a sleeker and more agile (though less robust) fighter. The Wolfpack's three squadrons completed conversion to the P-47M by March, each with a unique camouflage scheme: dark black wing-tops for the 61st, green/grey disruptive pattern for the 62nd, and a striking blue/teal pattern for the 63rd.

The 56th also received new experimental T48 .50-caliber incendiary rounds designed to ignite kerosene jet fuel, which has a higher combustion temperature. The 500-grain rounds, manufactured by the Des Moines Ordnance Plant, were stuffed with 5.4 ounces of incendiary composite—twice the quantity in the standard M1 round. However, the juiced-up engines of the P-47Ms were plagued by serious technical problems. After a Thunderbolt crash landed due to engine trouble, a crack ignition harness was discovered. Then, on February 26, a problem with the fuel carburetor diaphragm was identified, causing the P-47Ms to be grounded while a local company built new gaskets.

But these fixes didn't bring an end to the P-47M's woes. On an escort mission on April 4, six out of fourteen Thunderbolts had to abort mission with engine trouble. The breakdowns took a deadly turn between April 11 and 15 as three pilots were killed in engine-related accidents. The P-47Ms were grounded again on April 16 and the Wolfpack pilots reluctantly began training on Mustangs.

Meanwhile, technicians poured over the trouble R2800-57's engines—and discovered rust in the pistons. The super Double Wasp engines had been improperly sealed for transport across the Atlantic, allowing humid ocean air to corrode the pistons.

By March 25, replacement engines had been procured and the 56th was back to operational status. Despite the growing paucity of Luftwaffe targets, the P-47M went on to distinguish itself performing exactly the kind of mission it had been designed for—shooting down Nazi jets. In fact, the P-47M's first two jet kills occurred prior to solving the corrosion problem. On March 14, three P-47s of the 62nd fighter squadron swooped down upon two low-flying Arado 234B jet bombers. The twin-engine jet bombers were likely targeting the battered Ludendorff Bridge in Remagen over which the U.S. 1st Army was pouring into Germany. The P-47Ms, roughly equaling the Arado's in speed, shot down both. Then on March 25, Wisconsinite Major George Bostwick, commander of the 63rd Squadron, and wingman Edwin Crosthwait dispatched two Me-262s as they came in for a landing at Parchim airfield—a time at which jet fighters were notoriously vulnerable.

Stephen Chapis described the action in Allied Jet Killers of World War II:

"The P-47s jettisoned their tanks and headed down in pursuit. 1st Lt. Phillip Kuhn fired first, before overshooting, after which Fahringer rolled in on the Me-262's tail and let it have several bursts to no effect. However, the German pilot then made the fatal mistake of tightening his turn, which allowed Fahringer to close into lethal range. At 500 yards, he opened up again with this Thunderbolt's eight . 50-cal machine guns, and as the smoke began pouring from the jet Fahringer saw something go down the right side of his P-47. It was the pilot of the Me 262."

The new incendiary ammunition proved especially devastating. After the German surrender, an air force report enthused "...enemy aircraft burned after having been hit only two or three times. . . . One pilot destroyed 10 aircraft on a single mission by firing short bursts." This may be referring to 2nd Lt. Randall Murphy, whose gun camera recorded the destruction of ten aircraft during the Eggebek strike. Zemke's Wolfpack ended the war the top-scoring U.S. fighter group of the 8th Air Force, with 665.5 recognized aerial kills—or one thousand aircraft destroyed, including those strafed on the ground. The P-47Ms, which served after the Luftwaffe was largely defeated, claimed only fifteen of those victories—though that included at least seven jet aircraft. Twelve P-47Ms were lost in accidents, and two shot down by ground fire, but not one fell in air-to-air combat.



Name the Plane Answer: F-101 Voodoo Starfighter

https://www.slashgear.com/1699668/f-101-voodoo-fighter-jet-why-us-retired-replacement/

The United States Air Force has flown all kinds of fighters over the years, and many are well-known. Movies like "Iron Eagle" and "Top Gun" show off impressive examples like the F-14 Tomcat, F-16 Fighting Falcon, the F/A-18 Super Hornet, and many others. But one aircraft the public likely doesn't know much about is the F-101 Voodoo, which started flying all the way back in the 1950s.



Development for the F-101 began in the 1940s, intended to function as a long-range strategic penetration escort for bombers like the B-52 Stratofortress, while working off the XF-88 penetration fighter program. However, that wasn't its only role — it was used for a variety of purposes, including photographic recon and intelligence, surveillance, and reconnaissance (ISR). By the time the F-101 was ready to enter the inventory, the U.S. Air Force needed an interceptor, and the F-101B Voodoo was picked for that purpose. The new jet was finally introduced to the Air Force's inventory in May 1957.

Ultimately, the F-101 served its purpose, but it wasn't as refined as the Air Force wanted. Instead, it served as a sort of evolutionary link between the earliest U.S. jet designs and the F-4 Phantom II, which replaced the F-101 as the Air Force's primary interceptor. The multirole aspect of the F-101's service record ended, but they remained in use for decades, retiring from U.S. service in 1982 and the Royal Canadian Air Force in 1984.

The F-101 Voodoo went through numerous design changes before it rolled off the assembly line. Because it was eyed for multiple roles, finalizing its design took some time, resulting in three primary American variants, the F-101A, B, and C. The aircraft was fitted with two Pratt & Whitney J57-P-55 engines, each capable of delivering 16,900 pounds of thrust with their afterburners engaged. These gave the F-101 a maximum speed of Mach 1.43 (1,095 mph).

The standard cruising speed was considerably slower, though still quite fast at 545 mph. The F-101 had a maximum ceiling of 52,100 feet, and at its maximum weight, it came in at 52,400 pounds. In terms of armament, the Air Force crammed what they could into the fuselage, resulting in the carrying of two AIR-2A rockets and two AIM-4 guided missiles. The jet also carried four 20mm M39 autocannons. Additionally, the F-101C could carry and deploy a Mk. 28 or Mk. 43 thermonuclear bomb.

The F-101 was used by the Republic of China Air Force and the Royal Canadian Air Force, as well as the Air National Guard. Other modifications were made to the aircraft over the years, resulting in numerous variants up to the letter H. Throughout the course of their production, 785 Voodoos rolled off assembly lines, and they had a decent operational history, with only 33 being lost during the Vietnam War, which comes out to a loss of 4.2% to combat operations, making it one of the most powerful American jets to serve during the Vietnam War.

The F-101 Voodoo's strange path to production resulted in several variants designed for different purposes. In many ways, the U.S. had still been trying to work out the role of a multirole fighter and interceptor, as they weren't a big part of World War II air combat, when the invention of jet engines introduced a great deal more capability, speed, and maneuverability to the skies. The F-101 was ready to meet that challenge.

However, even when the F-101 was just getting started, plans were already underway to produce a purpose-built interceptor fighter-bomber. That plan resulted in the creation of the F-4 Phantom II, inarguably a more impressive aircraft. The F-4 carried more ordnance and was much faster, reaching a maximum speed of Mach 2.23 (1,711 mph) and a greater



ceiling of almost 60,000 feet. The F-4 incorporated more advanced technology as well, making it the superior fighter.

Once production was fully underway, the U.S. Air Force adopted the F-4, relegating the F-101 to training and other s imilar missions. The F-101 had served its purpose, Instructing on the various lessons learned in fielding a fighter-bomber interceptor aircraft. This helped with the design of the F-101's replacement, and the F-4 went on to serve for decades in the U.S., Germany, Japan, and South Korea, which finally retired the F-4 in 2024.

THE FIRST U.S. VARIABLE SWEEP WING AIRCRAFT THE BELL X-5

By Peter Suciu

While aircraft are often described as being "fixedwing," the fact is that some aren't quite as fixed as others. Even before World War II some aircraft were designed with wings that could fold, which allowed up to 50 percent more aircraft to be stored aboard aircraft carriers and by the end of the war folding wings were essentially standard equipment on nearly every carrier-based aircraft, and there have been very few exceptions since. More recently, Boeing showed off its 777x, which featured folding wingtips that would allow the commercial airliners to fit at airport gates where existing 777s currently operate but still provide the extra lift from the extended wingspan.

In the case of the World War II carrier-based aircraft and even the 777x, the wings still remained fixed while in flight. The Bell X-5 was the first high-performance airplane that could vary the sweepback of its wings in flight.

The X-5 was actually based on— and even closely resembled—the German-designed Messerschmitt P. 1101, a squat little airframe that was incomplete and never flew. It was captured by the American military at the end of the Second World War and closely evaluated. The P. 1101 was a single-seat, single-engine jet-powered fight aircraft and it was the first to feature variable-sweep wings, but these were altered manually before a flight when the aircraft was on the ground. As the single prototype, which was only 80 percent complete, was never tested it isn't clear how well it would have performed.

The Bell X-5 is displayed at the National Museum of

the Air Force at Wright-Patterson AFB in Dayton, OH.

But the P. 1011 caught the eye of American aircraft engineers who borrowed heavily in terms of the overall design for the X-5 program, which was developed as an American/NATO low-cost tactical fighter. Unlike the P. 1011, in the X-5 the pilot had full control over the sweep of the aircraft's wings while in-flight. The wing sweep ranged from 20 to 60 degrees. This allowed the pilot to adapt the sweep to the action in hand, such as take-off, landing, or cruise and supply more or less drag to the airframe as was required.

Two X-5s were built and the first flight occurred in June 1951. This verified the National Advisory Committee for Aeronautics (NACA) wind-tunnel predictions of reduced drag and improved performance that resulted from increased wing sweep as the aircraft approached Mach 1. As the wings of the aircraft sweep back the center of gravity and center of pressure changed, and to compensate the entire wing assembly simultaneously moved forward on rails within the fuselage. The change from 20 to 60 degrees, which also required that the wings be moved about twenty-seven inches forward from their starting position, took about twenty seconds. While this was handled electronically, the pilot could hand crank the wings back as necessary as the X-5 could not safely land with a sweep angle that was greater than 40 degrees.



The X-5 was not without shortcomings, including the fact that it was not considered a comfortable airplane to fly and was difficult to get out of a spin. Tragically one of the two fighters was destroyed in October 1953 when it failed to recover from a spin at 60 degrees sweepback. Its pilot, Major Raymond Popson was killed in the accident.

01838

NATIONAL MUSEUM

The other aircraft was used in testing until, October 25, 1955, when under the controls of High-Speed Flight Station pilot Neil A. Armstrong, the landing gear door separated. The plane was subsequently grounded—having made 122 NACA flights in total. The aircraft was then sent to the National Museum of the United States Ai Force, where it remains on display today.

The lasting legacy of the Bell X-5 could be seen in the variable-sweep wing aircraft to follow, from the F-111, the F-14 and the B-1 in the United States, as well as Soviet Union's Su-22 and Su-24 and the European Tornado.



The Power of Aviation Thwarts Massive One-Way Attack Drones*

Summarized Version of the Article and Event by Bob Shanks

Since the March club meeting was canceled this page is a departure from our usual membership meeting.

On the night of April 13, 2025, Iran launched a large attack of one-way drones and missiles at Israel. The power and capabilities of Air Power and the USAF was realized in a way that underscores why we need a powerful and well-equipped Air Force. The 494th Squadron, nicknamed the Panthers, is located at RAF Lakenheath Air Base located in England played a pivotal role in thwarting much of this drone attack. The squadron deployed to an undisclosed location in the Middle East in October of 2023.



As some of you may know, your editor retired from the Air Force Reserve. Most of his service was in the Air National Guard and USAF Reserve components. He was called back to active duty spending his last active-duty assignment as a Professor at the USAF Air War College located in Montgomery, AL. I am a member of the Air Force Association and receive the Air & Space Forces Magazine. This news story is from the January/February 2025 issue and is entitled "Airmen and Guardians Take on Iran", page 34. There are two Royal Air Force Bases located near each other in England, RAF Lakenheath and RAF Mildenhall; they are seven miles apart. RAF Lakenheath is the largest U.S. Air Force base in Europe. It was originally built as part of Britain's defenses in World War Two and has hosted the USAF since 1948. Your editor spent two years of active-duty time at RAF Mildenhall, the base at Mildenhall is known as the Gateway to the UK.

On that fateful night in April the Air Force F-15E Eagles at their undisclosed location took to the sky when word reached the squadron that Iran had launched a massive one-way attack at Israel firing missiles and drones. They were not sure of what all was coming toward Israel in this attack.

In one F-15E, pilot Major Benjamin "Irish" Coffey and Weapons Systems Officer Captain Lacie "Sonic" Hester waited for an attack and sure enough, they spotted on radar several "hits". To verify the blips were missiles and not cars, Hester cue the jet's air-to-ground targeting pod for visual confirmation. She recognized that they were missiles as there are no roads in that area.

Coffey and Hester along with other Airmen in F-15s and F-16 fighters helped defeat the attack by downing 80 drones in one of the largest displays of combat air power in decades. The nature of warfare has changed when it comes to one-way UAVs. These types of drones are common in Russia's war in Ukraine.

U.S. Air Forces in Europe's Commander General James B. Hecker decorated 30 airmen at RAF Lakenheath for there contribution to that mission. Pilot Coffey and Weapons Systems Officer Hester received Silver Stars for their heroism. <u>Captain Lacie "Sonic" Hester is the first woman to ever receive the military's Silver Star medal</u>.

Pilot Major Benjamin "Irish" Coffey took that experience and essentially reviewed all the fighters tapes and all known data about drones and wrote a paper, "Here's how you will execute if you find a drone out there."

Much has been written about autonomously Al controlled aircraft and how the future air war is changing. There are also remotely piloted drones and aircraft but this incident in the Mid East underscores the need for pilots flying in combat areas for whatever the mission profile indicates what is needed. Pilots who can evaluate rapidly evolving combat situations and then make real time intelligent decisions based on the combat environment. We need competent pilots in the military now more than ever. (Editor Comment)