Chino Valley Flyers

Official Club Newsletter

June 30, 2024 | Volume 27 Issue 6 | www. chinovalleyflyers.org

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

Inside This Issue

Quote For this Month:

"If I had more time I would have written a shorter letter."

Mark Twain

Build Your Dream Machine For Our Club's Annual

Build & Fly Contest

Scheduled for

October 19th, 2024

T-28 Pylon Race Winners from Saturday June 15th Races

More on Pages 4 & 5

Left to right: *Dave Domzalski, Mark Cotter, Mike Benner* and *John Meyers with their custom beer mug awards crafted by Rick Nichols.*

Bob Vaught's Blade Helicopter

Bob Vaught's very nice electric powered Blade 230 Sv2 helicopter.

Bill Gilbert: CVMA President's Message

What does the RC Airplane hobby mean to you? Do you enjoy the challenges of flight, or does the building give you satisfaction? Maybe it is the combination of building a creation capable of flight and then the thrill of actually seeing if perform in the air?

There are so many facets to this hobby that it's hard to fathom exploring all the corners of it, or getting bored with it. From researching airplane subjects, building or acquiring a kit or an ARF, outfitting the equipment, programming the radio, setting up the travel and rates, etc.

Perhaps even acquiring a side hobby that increases the enjoyment of our main hobby, such as CAD, 3-D printing or Laser Cutting.

We are very lucky to be able to participate in such an expansive and satisfying hobby, and to have such a great group of members to share it with. Not to mention the fantastic field we have to be able to fly our creations. We have members experienced in many different areas of the hobby. Don't be shy in seeking out the local "experts" if you are delving into a new area for you. The wealth of knowledge accumulated amongst our members in one of the big advantages of being in a club.

It's unfortunate that in recent years we have been lumped in with drones into the UAS category. And now the regulations we have to abide by have become a minor 'burden; FAA registration, Trust Test, and marking our registration number on each of our aircraft.

Remote ID or flying in a FRIA such as our club; has to have altitude limits. It's the price we have to pay to be able to play. We also need to continue thinking about any potential risks and liabilities that could affect our club, and doing everything we can to avoid them.

We can only hope that the AMA continues to advocate on the behalf of all the modelers across the nation, and they prevail to have some of these bureaucratic burdens alleviated. Please continue to support the AMA, the safety rules, and keep an eye on their communications as they continue to do their work on our behalf. In the meantime, enjoy our great club and enjoy your flying!

Bill

Flight Instructors

Randy Meathrell:
Control Line Flying

Bill Gilbert:
Helicopters

Jeff Moser
Gliders, Multi Rotors

Our Club really needs good overall flight Instructors so members if you have that skill please step up, we have many new members.

President — *Bill Gilbert*

Vice President — *Jeff Moser*

Treasurer — Don Crowe

Secretary — *Bob Steffensen*

Safety Officer — Rick Nichols

At Large Member — *Dan Avilla*

At Large Member— Gary Cosentino

Newsletter Editor — *Bob* Shanks

WHAT AIRCRAFT HAS THIS COCKPIT?

See Page Eight

MARK YOUR CALENDARS

Chino Valley Flyers Events for 2024

July 20	Glider Endurance Event
August 17	STOL Races
August 31	Combat Event
September 21	Steve Crowe Fun Fly
October 19	Annual Build & Fly Challenge
November 16	Fall Swap Meet Fun Fly
December 3	Annual Christmas Party

SAFETY SHOULD ALWAYS COME FIRST

Your editor found this interesting article on developing a proper safety attitude written for businesses but applies quite well to our RC and control line flying hobby. These have been slightly modified by your editor for our hobby.

A positive safety attitude can help create an accident-free environment, which can lead to higher morale within our model flying club.

Here are some ways to develop a good overall safety attitude when flying:

- Be willing to learn: Don't assume you know everything and be open to listening and asking questions.
- Put safety first: Prioritize safety over rushing to get out to fly your model.
- Follow safety rules: Review them often if you haven't flown for a long time. Learn why the rules are in place and how to follow them to protect yourself and your flying members and friends.
- Attend all club meetings and training.
- Participate and ask questions about anything you don't understand.
- Dress properly, use a spotter if the flying field is busy.
- Take care of your health and correct minor pains and distractions that can interfere with how you concentration on flying safely.
- Develop a common safety culture that raises awareness of everyone's responsibility and the importance of personal behaviors at the flying field.
- implement an efficient reporting process so safety issues get attention quickly.
- Establish good policies and 'procedures. These can help new members, be willing to share ideas with new members.
- Talk about safety by discussing safety with club members.
- Conduct regular inspections of your models.
- Develop a process to identify operational hazards you may have developed. Observe good flying procedures and flying mind-set.
- Periodic inspections at the field can also help gauge the effectiveness of safety efforts.

A lot of these procedures are just simply common sense members but we all know how human nature works. We can easily assume a safety attitude will always exist at the field.

So having said all of this, be constantly observant, pay attention to what you are doing and what others are doing as well.

The old cliché applies here: If you assume too much you make an "ass" out of you and me!

If you have any thoughts about safety don't hesitate to contact any of our club officers and especially our Safety Officer *Rick Nichols*.

We have often stated in this column if you see safety violations make sure you use some diplomacy when approaching members about what you have observed as being unsafe procedures.

Our club has really grown a lot the last few years with scores of new members, some are experienced some not experienced so be helpful and *always wear your name tag on your hat and/or around neck* so our new members will get to know everyone.

CLUB T-28 WARBIRD PYLON RACES JUNE 15, 2024

We were blessed with fantastic weather for the Chino Valley Flyers June T-28 race. The racecourse was set up early on Saturday with the help of numerous club members. (Thanks) Pylon Judges and Lap Counters were selected from the non-racing members of the club.

Registration and model preparations were all performed smoothly so the racing was able to start early.

Nine club members signed up to race:

Jeremy Beck Mike Benner Dave Bates Rick Nichols
Dave Domzalski John Meyers Dennis O Conner
Mike Cotter and Dale Roberts.

Three rounds were flown with three planes assigned to each race heat. A total of 3 heats were flown per round. The races were interesting. Several new pilots who had never raced before made for some fun flights.

Unfortunately, both John Meyers and Rick Nichols T-28s died in separate spectacular crashes.

After all the electrons were spent, the race winners were announced. There was a tie for second place between Mark Cotter and Dave Domzalski. Rather than duel it out in the sky they opted for a coin toss. Mark Cotter won.

Race winners:

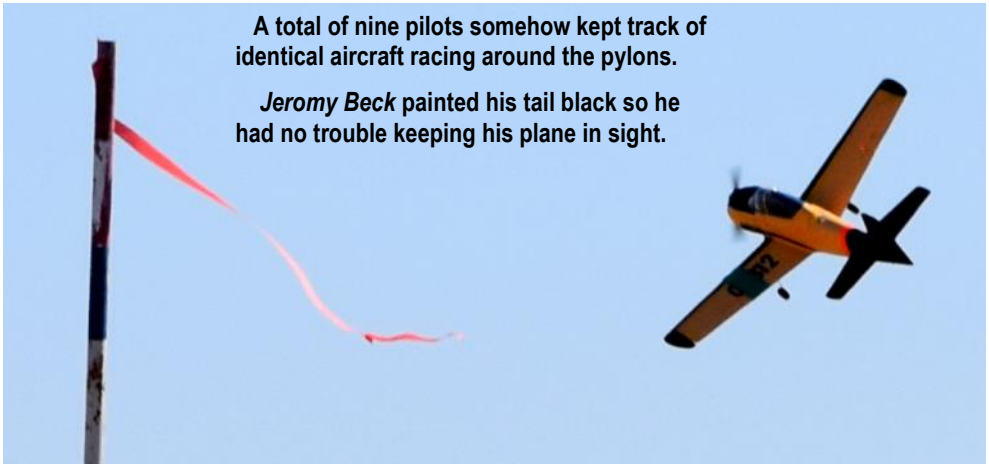
FIRST PLACE	*Mike Benner*
SECOND PLACE	*Mark Cotter*
THIRD PLACE	*Dave Domzalski*
BEST CRASH	*John Meyers.*

Nice Mugs engraved by *Rick Nichols* were awarded to the winners along with beautiful ribbons from the club. This was the first race done with the new, faster, T-28s, and we hope more members will join the fun next year

Randy Meathrell, Contest Director

L to right: *Mark Cotter, Jeremy Beck, Dave Domzalski, Mike Benner, Rick Nichols, John Meyers, Dave Bates, Dennis O'Connor*, and *Dale Roberts.*

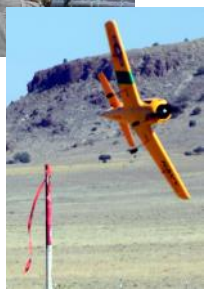
Winners left to right: *Dave Domzalski, Mark Cotter, Mike Benner* and *John Meyers.*



A total of nine pilots somehow kept track of identical aircraft racing around the pylons.

Jeromy Beck painted his tail black so he had no trouble keeping his plane in sight.

More T-28 Warbird Pylon Race Action



The scoring team, *Carol Meathrell*, *Jane* and *Mark Lipp*. *Randy Meathrell* did the announcing.

Randy at right, checking to see if any pylons cut using 2-way radio.

Rick Nichols was awarded a Gift Certificate to take his wife out to dinner for the excellent Beer Mug awards engraving.

MEMBER RANDY MEATHRELL, A RETIRED LOCKHEED MARTIN AERONAUTICAL ENGINEER'S SUPPORT OF DESERT STORM

Randy has been a active club member for a number of years and has served in various club positions as well as in support of many club flying events.

While you may know Randy, and have seen him flying at the field, you may not be aware of his background as an aeronautical engineer, patriot and U.S. Army veteran.

The letter at right is from the USAF on this page and chronicles Randy's work with Lockheed Martin and the F-177A during 'Desert Storm'.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SACRAMENTO AIR LOGISTICS CENTER (AFLC)
McCLELLAN AIR FORCE BASE, CALIFORNIA 95652

RECEIVED
JUN 24 1991
S. N. MULLIN

S. N. Mullin
President, LADC
Lockheed Advanced Development Company
D/72-89 B/311 P/B6
P.O. Box 250 Sunland CA 91041

Mr. Mullin

I would like to extend the deep gratitude of the F-117A System Program Management (SPM) Office to LADC for the superb support provided by Engineering, Field Service, Repair, and Supply activities during Operation Desert Storm. In particular, I would like to recognize the Operations Analysis Department for their role in supporting the F-117A.

During the tense days immediately before and after the start of the conflict, LADC was tasked to provide threat analysis for the deployed F-117A squadrons. Randy Meathrell and his staff of analysts quickly mobilized to support the last-minute requirements, often making personal sacrifices and working long hours to get the job done. The fruits of their labors became apparent almost immediately, in the F-117A's high level of mission success and absence of aircraft battle damage.

Our "thank you" is just a formal recognition for the efforts your people performed ... but each individual in LADC, and particularly in the Operations Analysis Department, can derive personal pride from the direct results their work had on the F-117A's success in the Persian Gulf. Well done!

Sincerely,

Don M. Needham, Lt Col, USAF
F-117A System Program Manager
Sacramento Air Logistics Center
McClellan Air Force Base, CA

Photo by Denny Lombard

AIR FORCE 'DESERT STORM' THANKS — Principal LADC "quick reaction" contributors supporting the U.S. Air Force F-117A System Program Management Office in Operation Desert Storm receive special "well done" thanks, as noted in above letter from Air Logistics Center HQ. Pictured with a model of the Skunks Works-built F-117A Stealth Fighter in Bldg. 311 are analysts, specialists, and programmers of the LADC System Requirements and Analysis Division and a Security representative. In front (left to right) are Karen Turner, George Noonan, Randy Meathrell (managed the overall effort and acted as the interface with the Air Force), Ted Koscheski, and Walt Maston. In the back row (left to right): Larry Yamada, Tony Harding, Bruce Carnall, and Lynn Rabideau. Not pictured are Dewey Wong (on vacation when photo was taken) and Cindy Cruz (who recently left LADC to become a full-time mother).

What makes JP-7 Aviation Fuel so Special That Only the SR-71 Blackbird Can Use It? *

By Rebecca Williams

JP-7 is a type of jet fuel that was developed in 1955 by Shell Oil for the U.S. Air Force and the CIA, for use in their supersonic spy planes, such as the SR-71 Blackbird and the A-12 Oxcart. It is unusual in that it is not a conventional distillate fuel, but is created from special blending stocks to have very low (<3%) concentrations of highly volatile components like benzene or toluene, and almost no sulfur, oxygen, and nitrogen impurities. It has a low vapor pressure and high thermal oxidation stability.

JP-7 was needed for the SR-71 and other similar aircraft is that they could fly at speeds above Mach 3 and altitudes above 80,000 feet, where the air is very thin and the friction is very high. This means that the aircraft would generate very high temperatures, up to 550 °F (290 °C), due to the rapid compression of the air along the leading edges of the wings and fuselage.

A normal jet fuel would evaporate or ignite at such temperatures, causing a fire or an explosion. A new jet fuel was needed that could withstand the heat, and not affect the performance or safety of the aircraft. It was the solution, as it had a high flash point of 140 °F (60 °C), and a high thermal stability, meaning that it would not break down or deposit coke and varnish in the fuel system passages.

Specifically, JP-7 fuel (referred to as Jet Propellant 7 prior to MIL-DTL-38219) was developed for the Blackbird's Pratt & Whitney J58 (JT11D-20) turbojet engine. During flight, the SR-71 could attain speeds in excess of Mach 3+, which was the most efficient cruising speed for the J58 engines. However, very high skin temperatures were generated at this speed due to friction with the air. A new jet fuel was needed that was not affected by the heat, so JP-7 jet fuel, with a high flash point and high thermal stability, was developed for this purpose. JP-7 fuel production also caused a nationwide shortage of bug spray due to its ingredients.

According to the SR-71A Flight Manual, "The operating envelope of the [J58] JT11D-20 engine requires special fuel. The fuel is not only the source of energy but is also used in the engine hydraulic system. During high Mach flight, the fuel is also a heat sink for the various aircraft and engine accessories which would otherwise overheat at the high temperatures encountered. This requires a fuel having high thermal stability so that it will not break down and deposit coke and varnishes in the fuel system passages. A high luminometer number (brightness of flame index) is required to minimize transfer of heat to the burner parts. Other items are also significant, such as the amount of sulfur impurities tolerated. Specialized and advanced fuels, JP-7 (PWA 535) and PWA 523E, were developed to meet the above requirements.

*

https://www.quora.com/:

https://www.google.com/search?q=jp7+fuel&sca_esv=554853fc2b041d25&sxsrf=ADLYWIKFIw4PQ05GiUpx496OV_7ceDRJHw%3A1716872361977&source=hp&ei=qWRVZpSNOdihkPIP79m04As&iflsig=AL9hbdgAAAAAZlVyuQZ6_UQzXSI_rQ8lbmCZ7g5NoA-j&oq=JP7+&gs_lp=Egdnd3Mtd2l6IgRKUDcgKgIIADIFEAAYgAQyCBAuGIAEGOUEMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIFEAAYgARIyE9Q9iJYtTZwAXgAkAEAmAFcoAGnAqoBATS4AQHIAQD4AQGYAgWgArsCqAIKwgIHECMYJxjqAsICBBAjGCfCAhAQLhiABBjHARgnGIoFGK8BwgIKECMYgAQYJxiKBcICCxAAGIAEGJECGIoFwgIOEC4YgAQYsQMYgwEYigXCAhEQLhiABBixAxjRAxiDARjHAcICCxAAGIAEGLEDGIMBwgILEC4YgAQYsQMYgwHCAhEQLhiABBixAxjRAxjUAhjHAcICBAAGIAEGLEDwgILEAAYgAQYsQMY5QSYAwWSBwE1oAfVKw&sclient=gws-wiz#ip=1

Name the Plane Cockpit: Sweden's Saab 37 Viggen Fighter *

The Saab 37 Viggen, a Swedish fighter jet developed during the Cold War, proved its capabilities despite being less well-known. It even tried to match wits with the SR-71 Blackbird.

Sweden's Saab 37 Viggen Fighter: The Only Jet to Ever Catch an SR-71 Blackbird

by Stavros Atlamazoglou

Summary: The Saab 37 Viggen, a Swedish fighter jet developed during the Cold War, proved its capabilities despite being less well-known. The fighter was introduced in 1971 and retired in 2007, the Viggen came in four versions: fighter, fighter-bomber, reconnaissance, and maritime patrol. It was well known for its speed, Mach 1.7, and impressive armament capacity, it achieved a unique feat by locking onto the elusive SR-71 Blackbird spy plane. The Swedish Air Force, using detailed planning and training, managed to intercept the Blackbird multiple times, even assisting a damaged SR-71 on one occasion. The Viggen was eventually replaced by the JAS 39 Gripen.

The Saab 37 Viggen is probably an aircraft you haven't heard of. And yet, the Swedish fighter jet was an extremely capable aircraft that proved itself during the long years of the Cold War. The Saab 37 Viggen, or "Thunderbolt," was a single-seat, all-weather fighter jet.

The aircraft could carry almost 16,000 pounds of munitions on nine hardpoints, including air-to-air, air-to-air ground, and anti-ship missiles, as well as conventional bombs.

The Viggen fighter could reach speeds of Mach 1.7 (or around 1,300 miles per hour), had an operational ceiling of 60,000 feet, and a combat radius of 620 miles. Saab and the Swedish Air Force began working on the Saab 37 Viggen in the 1950s. Its first flight was in 1967 and entered service in 1971. The last aircraft was retired in 2007. Overall, Saab produced approximately 330 aircraft of all versions. The Swedish Air Force replaced the Saab 37 Viggen with the JAS 39 Gripen.

There were four versions of the aircraft: the Saab 37 fighter jet; the AJ 37 fighter bomber designed for air-to-ground operations, the SF 37 a reconnaissance aircraft; and the SH 37 a maritime patrol jet.

The Saab 37 Viggen has a unique achievement in the history of combat aviation. It is the only known fighter jet to have locked in on an SR-71 Blackbird spy plane. *That was no easy feat.*

Designed for long-range secret flights over the Soviet Union, the SR-71 Blackbird could achieve speeds of approximately Mach 3.2 (or almost 2,500 miles per hour) and could operate at altitudes of 85,000 feet. The Soviet military had nothing to counter such performance.

The MiG-25 Foxbat fighter jet, which was the fastest in the Russian arsenal, could hit speeds of Mach 2.8 (or about 2,150 miles per hour). As such, when conducting its reconnaissance flights over the Soviet Union, an SR-71 Blackbird could simply accelerate to evade any incoming air defense missiles or Russian interceptors.

So, the feat of the Saab 37 Viggen becomes that much more important from a historic point of view. Although having a fast fighter jet, the Swedish aircraft couldn't come close to matching the raw speeds of the spy plane. So how did it do it? Planning and training.

During the Cold War, Sweden was a neutral country—indeed, the Scandinavian nation only joined NATO very recently after the renewed Russian aggression in Ukraine—and intercepted both Soviet and NATO aircraft overflying its territory.

The U.S. Air Force planned its SR-71 Blackbird missions to overfly Sweden on their way to the neighboring Soviet Union. As such, the Swedish Air Force had data about these flights and started developing ways to intercept the American spy planes. Using specially trained squadrons of Saab 37 Viggens, the Swedish Air Force managed to surprise SR-71 Blackbird pilots a number of times and even lock on to the extremely fast spy planes. But those Interceptions weren't confrontational, and in one instance, Saab 37 Viggen pilots actually escorted a damaged SR-71 Blackbird get to safe airfield.

* *Stavros Atlamazoglou is a seasoned defense journalist specializing in special operations and a Hellenic Army veteran (national service with the 575th Marine Battalion and Army HQ). He holds a BA from Johns Hopkins University and an MA from the Johns Hopkins School of Advanced International Studies (SAIS). His work has been featured in Business Insider and other publications.*

JUST WHAT IN THE WORLD ARE "TIME SLIPS?

By Lisa Broderick, Reviewed by Jessica Schrader

https://www.psychologytoday.com/us/blog/where-physics-meets-psychology/202201/time-slips-the-multiverse-and-you

The editor thought this was an interesting take on the unknow concept of time. Just what is time? Science fiction writers have had a lot of fun with time. This article is more inline with what science knows or doesn't know these days!

The nature of time is one of the biggest mysteries in science. Scientists simply do not understand what time is, at least partially, because it does not behave the same way in all circumstances. For example, did you know that clocks installed on airplanes—or even further away, on satellites—record time at different rates than here on Earth?

We all know that time has a physical component that is measured by clocks. This physical component of time exists because things and people move around in space: the motion of the Earth propels time forward in 24-hour days and 365-day years. We physically experience time because we experience ourselves and things moving around. This is obviously true when you think about different time zones. It isn't the same time in New York as it is in Sydney because the Earth is moving. In fact, we are all traveling in time at about one second per second. ***This physical component of time was explained by Einstein who, more than 100 years ago, revolutionized the idea of how time works. He theorized that time and space are inextricably linked together. He also found that the universe has a speed limit of sorts: the speed of light. So, while time and space are linked, nothing can travel faster than the speed of light (186,000 miles per second).***

But what about otherwise credible reports made by those who claim to have traveled faster than the speed of light? What about reports of actual time travel? The internet is filled with stories about people insisting they experienced jumps in time which are not merely one second per second, but decades or even hundreds of years. These time anomalies, or "time slips," are paranormal episodes during which someone—or a group of people—somehow experience traveling through time without knowing how or why it occurred.

In one account in Oklahoma in the 1970s, three workers were picking up cattle feeder equipment from a farm and noticed a white house on the property. When they came back the next day, however, the house was not there and there was no sign of it ever having been there — yet all three workers saw the same thing the prior day. One possible explanation: the house had existed in a different moment in time, which they collectively experienced as reality.

Whether or not stories like these are to be believed by others, the people who recount them certainly believe them. Given what we know and what we don't know about how time works, how might these happen? One explanation is a credible but controversial scientific theory called the multiverse theory. The multiverse theory supposes that an infinite number of worlds exist along different paths in time which arise out of each passing moment, suggesting that different things happen in each universe.

It sounds not only preposterous but also like a lot of work for the universe. Imagine a new universe traveling along its own, unique timeline created out of every moment of time. This theory suggests there may be an infinite number of universes. It also explains how "time slips" might be real.

Support for the multiverse theory comes from an arcane but scientifically valid Big Bang theory called cosmic inflation Cosmic inflation refers to a faster-than-light expansion of the universe that may be responsible for spawning an unlimited number of disconnected universes that eternally issue from one another. Cosmic inflation may have happened because, during its earliest instants of formation, the universe was expanding outward from a single point into nothingness. Said another way, the universe's faster-than-light expansion could be due to the fact that it was expanding into something that was not itself, where the speed of light wouldn't apply. This may explain just how the universe became so far-flung out of its early chaotic origins.

Whether or not the multiverse, cosmic inflation, and an infinite number of disconnected universes eternally branching off from one another is the way time works remains to be proven by scientists. But the theories are intriguing, and they solve at least one famous problem scientists have with time travel: the grandfather paradox.

The grandfather paradox states that if you were to go back in time and kill your grandfather before your father was born, then you wouldn't exist in the first place to kill him! The multiverse theory solves that paradox in that you could kill a copy of your grandfather in an alternate universe and therefore still have been born in your universe. Of course, it leaves open the question of how you traveled between universes in the first place. Maybe someone experiencing a time slip will one day come back and explain how that works. Maybe you can explain it.

June 2024: Regular Club Meeting Held at the Flying Field

The General Membership meeting, on Saturday June 22, 2024, opened at the flying field at 10am with the Pledge of Allegiance.

There were 35 members signed in for today's meeting. We welcomed new members *Paul Wangenstein*, *Dale Nolen*, and *Robert Fish* who joined us for the first time today. Club membership is now 149 paid members.

Minutes for the May 25 2024 meeting were unanimously approved by members.

President's Agenda

Treasurer *Don Crowe* presented his monthly report. The Treasurer's report was unanimously approved by members.

Maintenance

The board fence has been repaired replacing several wood fence posts with steel post and restringing the wire. September 14th is a scheduled work day to prepare for the Steve Crowe Event. Please be sure to come and help out with weeding and other clean up. We will begin work at 7am. The Control Line crew cleaned up their circle and it looks great.

University Policy Proposal

The Board has decided to not allow testing of experimental project aircraft at the field. Questions about the decision were many and fielded by *Bill Gilbert*. ERAU student and Club member *Will Ryan* provided a detailed counter point to justify use of our field for testing, however, the decision remains: no testing of university project aircraft at our recreational field.

Events

The T-28 Warbird Pylon racing was a success thanks to the hard work of EM *Randy Meathrell* and *Mark Lipp*, as well as many volunteers. July 20th is the Glider Endurance Event. Contact EM *John Dora* with your questions.

The STOL competition is August 17th please join us…if we have only a few participants this year we will cancel next year. The Combat event is August 31st… get your combat aircraft ready.

Proceed with your airplane construction for the Oct 19th Build and Fly. The next Fun Fly and Swap will be November 16th. Our annual Christmas get together will be December 3rd, set the date on your calendar.

House Keeping

Someone left a dead LIPO battery on the assembly bench. Please dispose of your batteries properly! For safety, act responsibly with all batteries especially LIPO batteries.

Safety

Safety Officer *Rick Nichols* announced that he was resigning as the Safety Officer for health reasons. *Thank you for your service to the Club Rick, much appreciated by all members*.

Member Input

Randy Meathrell reported that long time member and past President of the Club…*Jay Riddle* passed away last week. Jay was responsible for many improvements to the Club facilities. No services have been scheduled at this time. When known, the members will be informed.

We broke about 10:45am for cakes provided by *Steve Shephard*. Thanks Steve!

Door Prize and Raffle

Al Weikart won the door prize consisting of a lanyard, ruler and of course the glue. *Rick Nichols* won a nice SU 27 EDF kit in the raffle.

A motion to adjourn the meeting was offered and unanimously approved by members about 11:05am.

Respectfully,
Bob Steffensen Club Secretary.

The club CVF Board under the cabana.

Photos on this page are by Bob Steffensen and Al Weikart.

Door Prize & Raffle Winners

Door Prize Winner
Al Weikart

Raffle Prize Winner
Rick Nichols