



Chino Valley Flyers

Chino Valley, Arizona — August 2026



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

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Quote of the Month

Everything's science fiction until someone makes it science fact.

Marie Lu
Warcross

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Club Jet Meet: 17 Pilots Registered



See pages 4 & 5.

Club Streamer Combat Event

Photos by Al Weikart



The combat event had 11 club members Participating as pictured above.

The main winner at right is **Gerald Meux**, a new member from Phoenix, pictured with **Mark Lipp** our Special Events Coordinator.

More on page 6.





President's Column

By Brian Sutton



Well, here we are in the dog days of August, the weather is hot, the air is dry, except when there are monsoons. It also means that patience can run short. So this month I need to remind everyone to remember common courtesy at the field. I'm getting reports of discourteous behavior. It is important that we all communicate our intentions on the runway and while flying. I have noticed that quite a few times we have had near misses on the runway due to a lack of communication. Always call out loud and clear when getting ready to take off, and land and get a response! If necessary, call out again. Be sure to give student pilots plenty of room and patience when flying. They are probably nervous enough without having to dodge other aircraft.

If you or a group need to use the whole sky, check with all the other pilots first. This would be fast jets, pattern practice, 3D flying etc. We all like watching you fly, but let us know, and take turns. Finally, don't take up the prep tables and arming tables. These tables are not for storage. If you are not working on your aircraft, put it on the ground or back in the car.

We've had a couple of safety incidents lately. It's in the nature of the hobby that airplanes will occasionally crash, but we need to mitigate the hazards. Once again, a critical factor is communication. The words "HEADS UP!" should be called anytime an aircraft has departed controlled flight anywhere near

the runway, pits, or cabana. If your aircraft is in trouble, an "OH! S—T!" Will do, and everyone near by can call out the HEADS UP! and POINT at the aircraft in trouble so everyone else can see and take appropriate action. Finally, if your aircraft has departed controlled flight, throttle back or off, this will reduce damage to the aircraft and anything it may land on. Another important factor is making sure your equipment is in good working order. ALWAYS preflight your aircraft, that is make sure the radio is working properly, and range checked. Check hinges, control linkages and cables, unrepaired damage etc. New or repaired aircraft should always be announced as maiden.

On the lighter note, we have some exciting events coming up, August 28-30 will see the IMAC contest come back. These expert pilots can be exciting to watch. The Steve Crowe Fun Fly September 19 is the highlight of our flying year. It's a great opportunity to show off to the whole community. This year we will be hosting an AMA F3A Pattern competition October 10-11. The Fall swap meet is October 17 and the winter potluck is scheduled on November 7. Remember, the purpose for all of us is to have fun and camaraderie. Let's keep it that way.

CVF Flight Instructors

Randy Meathrell:
Control Line Flying

Bill Gilbert:
Helicopters

Jeff Moser:
Gliders, Multi Rotors

General Flight Instructors

Steve Shephard
Al Marelo
John Ward
Shel Liebach
Mark Nelissen

Club's Board of Officers

President — Brian Sutton



Interim Vice President - Jack Burgaren



Treasurer — Don Crowe



Secretary — Jean Greear



Safety Officer — Adam Sanders



Special Events Coordinator — Mark Lipp



At Large Member — Jack Bugaren



At Large Member — Robert Fish



At Large Member — Jeff Moser



At Large Member - Rick Nichols



Chief Flight Instructor— Steve Shephard



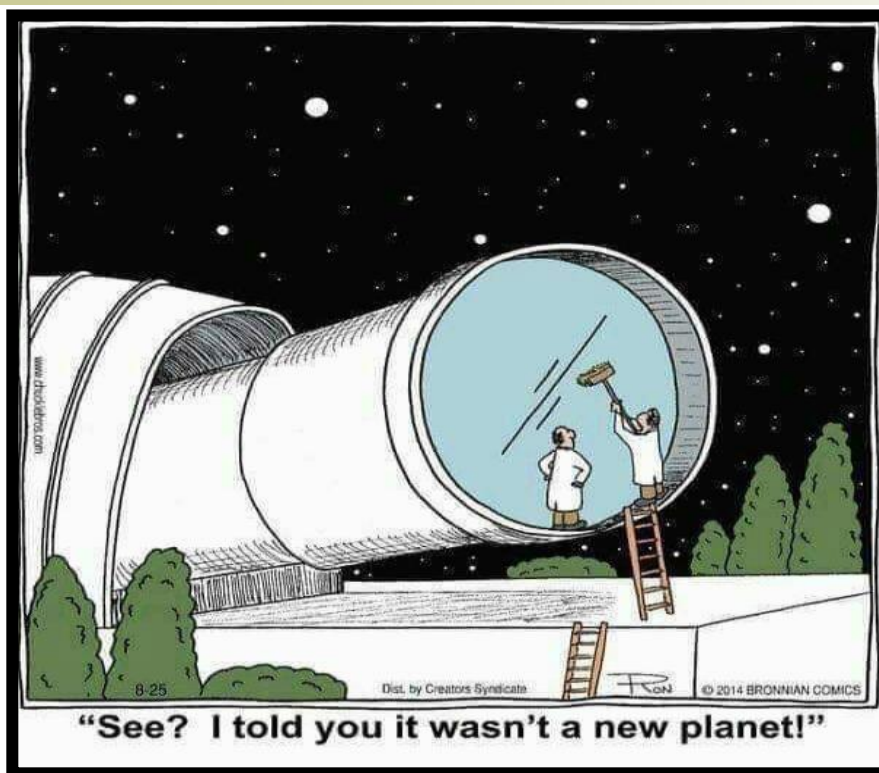
Newsletter Editor — Bob Shanks
Also at Large member



WHAT AIRCRAFT COCKPIT IS THIS?



See
Page
Seven



MARK YOUR CALENDARS

Chino Valley Flyers Events for 2026

- Fall IMAC Contest August 28-30
- Steve Crowe Fun Fly Sept 19
- Ringmaster C/L Event Oct. 3-4
- F3A Pattern Event October 10-11
- Fall Swap Meet Fun Fly October 17
- Fall Pot Luck November 7



SAFETY SHOULD ALWAYS BE OUR NUMBER ONE PRIORITY

Adam Sanders, Safety Officer

Hello everyone, this safety column is going to be a bit longer than usual, as there is a few things I want to touch base on and remind everyone about regarding R.C safety.

The first thing I wanted to talk about is the hard hats that are used during certain events, such as the Air Race or Combat. *Many members have not been wearing them properly, placing them on top of hats or wearing them very loosely. When wearing one of the helmets when they are required, ensure they are snug and don't readily move. Loose helmets will not protect anything and are a hazard in themselves. Please remember to ensure the helmets are properly secured when events require them.*

Another large issue that I have been informed about recently is an incident involving a plane being armed under the cabanas and nearly hitting another member. Aircraft should only be armed

out on the work tables and secured by either the stands or the bars for larger planes.

The only time an aircraft is authorized to be armed under the cabana is when the prop has been completely removed. *Remember, these aircraft are still dangerous machines that can malfunction when you least expect it. In this case, an aircraft flying off the table at full throttle is extremely dangerous, even an indirect impact from a prop can cause severe damage.* As I said in a previous column, electric planes with their props are like flying blenders, gas powered are like giant battering rams.

Please ensure you are taking precautions and following the safety instructions for arming aircraft at the field.

The last thing I wanted to remind everyone about is communication.

When in the air, pilots can only afford quick glances nearby to assess what's going on, we cannot be looking everywhere to see what everyone is doing. Calling out takeoffs, landings, touch and goes etc. is not just a courtesy, it's mandatory. Like with everything, communication goes both ways, when someone has a call out, please respond to them so the pilot knows they were heard. We've had a few incidents where someone called crossing the runway and went, but the flightline didn't hear them, which could end very badly. So please remember to not only communicate loudly your intentions, but please also respond to other pilots so they have confirmation they were heard.

Thank you for keeping the field a fun and safe place to fly RC.

Adam



2026 Club Jet Meet



We had 17 pilots register, from 5 different clubs.....In counting the aircraft for both days total, I came up with 22 jets. The landing fee donations totaled \$260.

Overall, I was pretty happy with the turn out, although, I had a number of the guys say there were going to come but changed their minds due to the hot weather. We had one from Yuma, one from Florence, the rest were from Phoenix.

The one really disappointment I had was the small turn out of towns people before it got hot around 10am, I would say there were 35-40 spectatorsJust too hot for many I guess!

Thanks to everyone for helping out.

Shel Liebach



Mark Lipp and son our noon time grillers.





More 2026 Jet Meet Photos



"I think I'm ready!"



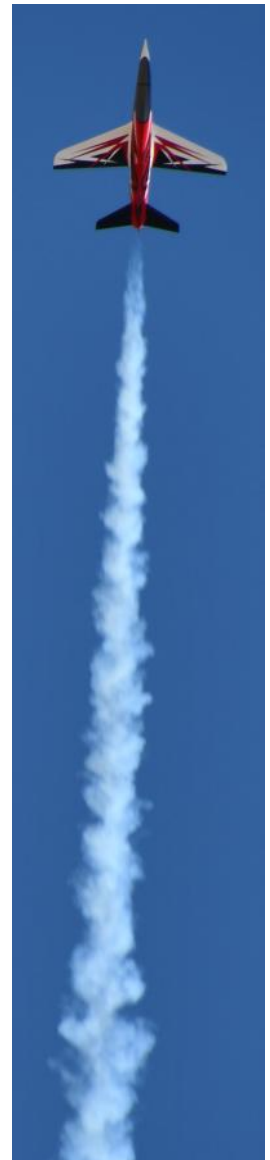
Spectators trying to stay cool!



Member Shel Liebach



High jet speeds require Intense concentration.



August 15th Club Streamer Combat Event

Event Photos by Al Weikart



The Second Place winners for this event are pictured above left to right: **Dale Roberts**, **Mike Benner** and **John Meyers**.



Name This Plane's Cockpit: **Grumman G-21**

Grover Loening founded the Loening Aeronautical Engineering Corporation in 1917. A graduate of Columbia University in New York City, Loening had been awarded the first-ever American master's degree in aeronautics during 1910 and set to designing a number of innovative aircraft including the 1921 Loening Model 23 'Flying Yacht' or 'Air Yacht' of unconventional configuration. It won the 1921 Collier Trophy and set a number of records, including height and speed in class. Of the 21 built, nine were sold to the US Army as the S-1, and three were used by the New York-Newport Air Service, as well as private owners. The 1923 Loening OA family of pioneering military amphibians was the next step. VIA ROGER DAVIES



These were more conventional but had an integral single large float below the fuselage with, in most cases, a retractable wheeled undercarriage on the sides. From the military examples was derived the new C-1-W Air Yacht, the first being exhibited at the Detroit Aircraft Show in 1928. In 1928 the Loening company merged with Keystone Aircraft, and moved from Long Island, New York to Bristol, Pennsylvania.

Loening's agreement with Keystone prohibited him from setting up a new, competing business, but three Loening employees — Leroy Grumman, William T. Schwendler and Jake Swirbul — decided they would form a new aircraft firm and stay on Long Island. Their newly founded Grumman Aircraft Engineering Corporation was named after the majority shareholder and led by a triumvirate which worked in harmony for decades.

Leroy 'Roy' Randle Grumman was an extremely reserved but highly intelligent and capable designer, described by Fortune magazine as "shy and imaginative". Training as a pilot with the US Navy in 1917, a tour as an instructor followed, after which Grumman was sent to the Massachusetts Institute of Technology for a course in aeronautical engineering. Graduating around the end of the Great War, he was placed at the Naval Aircraft Factory as a test pilot.

Grover and his brother Albert Loening took an interest — and shares — in the Grumman Corporation, which opened its doors in January 1930. Grover acted as a consultant to Grumman, bringing his design patents to the business. Although it was looking for military contracts, when Loening was approached by a group of Wall Street financiers in the mid-1930s to build a new 'air yacht' for their commute to work from Long Island, he referred them to Grumman. It seized the opportunity, coming up with a design which was both 'right' from the start in practical terms and looked elegant. Ultimately the result was to prove a workhorse for more than three quarters of a century.

Design 21 was started in 1936 in response to the request from the businessmen's syndicate. Leroy Grumman and Bill Schwendler were joined by naval architect and hydrodynamicist Ralston Stalb, formerly chief engineer for Loening, who developed the two-step planning hull. Despite its being the company's largest, most modern design to date, G-21 Goose number 1001 was hand-built by the skilled Grumman employees as the first of three from an order of 12, with clients lined up for options on even more. This strong initial order book was vital, as payment only came in on completion and delivery. In the depression, such deals were much less secure than contracted government work.

That first G-21 started flight trials on 29 May 1937, the maiden take-off being made from grass in front of the new Grumman factory at Bethpage. After 65 minutes, the test crew, comprising vice-president of flight operations Bud Gillies and assistant chief engineer Robert L. Hall, alighted on Manhasset Bay and picked up Roy Grumman for a further trip lasting a quarter of-an-hour. By 31 May, the amphibian had clocked up six hours 10 minutes' flying time, and the only significant design change, on Roy's advice, was to move the planning hull step 4.5in (11.5cm) aft. Temporary wooden blocks were used to test the alteration on 3 June.

A mere 35 days after the initial flight, on 3 July 1937 the first Goose, registered NX16910, was delivered to its customers, Wilton Lloyd Smith and Marshall Field III. They utilized it, as planned, to commute between their homes on the upper Hudson River to New

York's East River Water Port. The full type certificate was issued on 29 September, and the machine was re-registered NC16910. The book price without extras was \$60,000. It cruised at 175mph, and was a fast, comfortable capable executive machine.

The G-21A run consisted of 30 more examples, with a minor modification to the hull to reduce water spray, and a revised tailwheel. The previous 10 G-21s were all soon brought up to G-21A standard with a permissible gross weight of 8,000lb and SB-2 Wasp Junior engines. Just like Grumman's military types, the Goose adhered to Roy Grumman's credo, *"Build it strong, keep it simple and make it work."*



Traveling at the Speed of Light is Impossible

Information from Encyclopedia Britannica

Traveling at the exact speed of light is impossible for humans and spacecraft because objects with mass require infinite energy to reach it. However, traveling *close* to the speed of light (such as 99% or 99.9% of the speed of light) is physically possible in theory, though we lack the technology to do it today.



The Physics

The Speed Limit: According to [Albert Einstein's theory of special relativity](#), light moves at about 186,282 miles per second (299,792 kilometers per second) in a vacuum.

- **Mass and Energy:** As an object with mass speeds up, it takes more and more energy to go faster. Getting closer to light speed requires massive amounts of energy, and hitting the limit takes infinite energy.

Particle Accelerators: Tiny particles like protons are routinely accelerated in labs to over 99.99% the speed of light, proving near-light speed happens. Scaling this up to move a heavy spaceship carrying humans is a completely different challenge.

What Happens Near Light Speed?

- **Time Dilation:** Time passes much more slowly for a traveler moving near light speed compared to people left behind on Earth. A trip that takes years to an outside observer might feel like months to the traveler.
- **Extreme Hazards:** Normal space dust, gas atoms, or stray particles would hit a fast-moving ship like deadly cosmic bullets, releasing intense radiation capable of tearing molecules and the ship apart. There is also a **Visual Distortion** because starlight shifts due to the Doppler effect, bunching up the light in front of you into blinding brightness while leaving the space behind you is pitch black.



Albert Einstein's famous equation showing that energy and mass are the same thing in different forms:

$$E = mc^2$$

Energy mass squared
 ↑ ↓ ↙
 equals speed of light
 (constant)

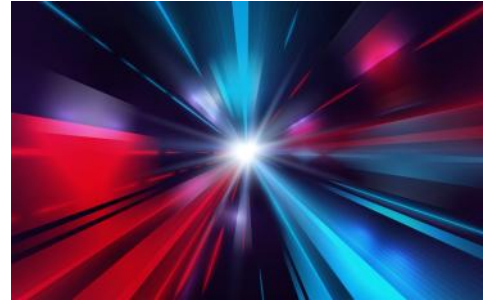
*Three Possible Ways to Fly Near the Speed of Light **

By Katy Mersman, Goddard Digital Media

One hundred years ago today, on May 29, 1919, measurements of a solar eclipse offered verification for Einstein's theory of general relativity. Even before that, Einstein had developed the theory of special relativity, which revolutionized the way we understand light. To this day, it provides guidance on understanding how particles move through space — a key area of research to keep spacecraft and astronauts safe from radiation.

The theory of special relativity showed that particles of light, photons, travel through a vacuum at a constant pace of 670,616,629 miles per hour — a speed that's immensely difficult to achieve and impossible to surpass in that environment. Yet all across space, from black holes to our near-Earth environment, particles are, in fact, being accelerated to incredible speeds, some even reaching 99.9% the speed of light.

One of NASA's jobs is to better understand how these particles are accelerated. Studying these superfast, or relativistic, particles can ultimately help protect missions exploring the solar system, traveling to the Moon, and they can teach us more about our galactic neighborhood: A well-aimed near-light-speed particle can trip onboard electronics and too many at once could have negative radiation effects on space-faring astronauts as they travel to the Moon — or beyond.



Three Possible Ways of Near the Speed of Light Acceleration

1) Electromagnetic Fields

Most of the processes that accelerate particles to relativistic speeds work with electromagnetic fields — the same force that keeps magnets on your fridge. The two components, electric and magnetic fields, like two sides of the same coin, work together to whisk particles at relativistic speeds throughout the universe.

In essence, electromagnetic fields accelerate charged particles because the particles feel a force in an electromagnetic field that pushes them along, similar to how gravity pulls at objects with mass. In the right conditions, electromagnetic fields can accelerate particles at near-light-speed.

On Earth, electric fields are often specifically harnessed on smaller scales to speed up particles in laboratories. Particle accelerators, like the Large Hadron Collider and Fermilab, use pulsed electromagnetic fields to accelerate charged particles up to 99.99999896% the speed of light. At these speeds, the particles can be smashed together to produce collisions with immense amounts of energy. This allows scientists to look for elementary particles and understand what the universe was like in the very first fractions of a second after the Big Bang.

2) Magnetic Explosions

Magnetic fields are everywhere in space, encircling Earth and spanning the solar system. They even guide charged particles moving through space, which spiral around the fields.

When these magnetic fields run into each other, they can become tangled. When the tension between the crossed lines becomes too great, the lines explosively snap and realign in a process known as magnetic reconnection. The rapid change in a region's magnetic field creates electric fields, which causes all the attendant charged particles to be flung away at high speeds. Scientists suspect magnetic reconnection is one way that particles — for example, the solar wind, which is the constant stream of charged particles from the Sun — is accelerated to relativistic speeds.

Those speedy particles also create a variety of side-effects near planets. Magnetic reconnection occurs close to us at points where the Sun's magnetic field pushes against Earth's magnetosphere — its protective magnetic environment. When magnetic reconnection occurs on the side of Earth facing away from the Sun, the particles can be hurled into Earth's upper atmosphere where they spark the auroras. Magnetic reconnection is also thought to be responsible around other planets like Jupiter and Saturn, though in slightly different ways.

NASA's *Magnetospheric Multiscale* spacecraft were designed and built to focus on understanding all aspects of magnetic reconnection. Using four identical spacecraft, the mission flies around Earth to catch magnetic reconnection in action. The results of the analyzed data can help scientists understand particle acceleration at relativistic speeds around Earth and across the universe.

Particles can be accelerated by interactions with electromagnetic waves, called wave-particle interactions. When electromagnetic waves collide, their fields can become compressed. Charged particles bouncing back and forth between the waves can gain energy similar to a ball bouncing between two merging walls.

These types of interactions are constantly occurring in near-Earth space and are responsible for accelerating particles to speeds that can damage electronics on spacecraft and satellites in space. NASA missions, like the *Van Allen Probes*, help scientists understand wave-particle interactions.

Wave-particle interactions are also thought to be responsible for accelerating some cosmic rays that originate outside our solar system. After a supernova explosion, a hot, dense shell of compressed gas called a blast wave is ejected away from the stellar core. Filled with magnetic fields and charged particles, wave-particle interactions in these bubbles can launch high-energy cosmic rays at 99.6% the speed of light. Wave-particle interactions may also be partially responsible for accelerating the solar wind and cosmic rays from the Sun.

✱

Huge, invisible explosions are constantly occurring in the space around Earth. These explosions are the result of twisted magnetic fields that snap and realign, shooting particles across space. (NASA's Goddard Space Flight Center.)



A False Myth About George Washinton



George Washington is the Father of our Country and America's 1st President, so George Washington, stands tall above all others in the history of our Founders. He never did actually chop down that cherry tree though. That story was concocted by a biographer years after his death. He did, however, almost meet an early death on many occasions that would have prevented his ascent. He had bullets graze him and nearly drowned in an icy river after falling off a raft. He also suffered with and survived malaria, smallpox, pleurisy and dysentery.

George Washington was a man destined to lead the birth of what would become the world's greatest nation. And his greatest act? Leaving office peacefully (and joyfully) after his term. America is what it is today because Washington was who he was.

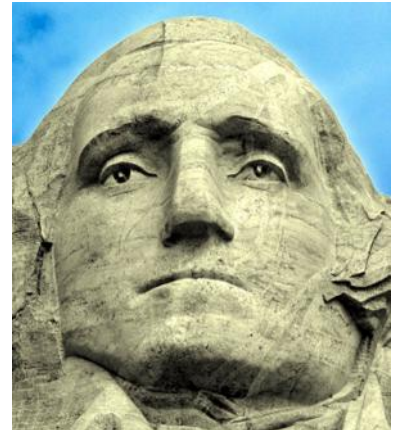
Next to the Cherry Tree legend, the story that George Washington wore wooden dentures arguably remains the most widespread and enduring myth about Washington's personal life. While Washington certainly suffered from dental problems and wore multiple sets of dentures composed of a variety of materials—including tin, gold, lead, and human teeth—wood was never used in Washington's dentures nor was it commonly employed by dentists in his era.

Nevertheless, even into the mid-twentieth century scholars published studies of Washington describing his false teeth as being crafted out of wood. Today older adults still remember being taught this tale in school, and the National Museum of Dentistry, the Mount Vernon Estate and Gardens, and the Papers of George Washington project at the 'University of Virginia find these mythical dentures a common subject of interest for visitors. The origin of this myth remains unclear.

The standard, and most likely, explanation given by dental scientists and historians is that the materials employed in the dentures fabricated for Washington by dentist John Greenwood became stained over time, giving them a grained, wooden appearance that misled later observers. Indeed, in a 1798 letter to Washington, Greenwood emphasized the importance of cleaning these dentures regularly after examining ones Washington had used and sent to him for repair: he said, *"the sett you sent me from Philadelphia...was very black...Port wine being Sower takes of all the polish."*

The now discredited story of Washington's wooden teeth does reflect elements of truth, however. For instance, in one version of this myth Washington carved the wooden teeth himself, and it is true that on occasion he made his own repairs to the dentures made by Greenwood. Furthermore, the myth of the wooden teeth remains the only myth associated with a major Founder that calls attention to the individual's physical frailty and thus serves as a reminder of the genuine struggles Washington experienced as he sacrificed his health in public service.

Washington called attention to the "frequent interruptions in my health to the gradual waste committed on it by time," as an example, in his First Inaugural Address in 1789, a speech he delivered when he had only a single remaining natural tooth. The myth of Washington's wooden teeth highlights why such wooden contraptions were understandably painful to wear, this supposedly explains Washington's dour expression in all of his most well-known portraits.



<https://www.mountvernon.org/library/digitalhistory/digital-encyclopedia/article/wooden-teeth-myth>



As part of Our Countries 250th Anniversary,
Our newsletter features One Page in Each Issue
highlighting some of Our Countries Rich history.



Classic Pattern Flying: Frequently Asked Questions

By Member Robert Fish

Classic Pattern FAQ Sheet On October 10th & 11th, 2026, the Chino Valley Flyers will be hosting the first annual (hopefully) Pattern contest. There will be three disciplines of pattern available; F3A, Classic and EDF pattern.

This can be confusing to the newcomer, so here is a breakdown on Classic Pattern: What is "Classic Pattern" and how does it differ from "Regular (F3A)" Pattern? What is "Pattern" Flying anyway? ***"Pattern" is a term that applies to Precision Aerobatics.***

A sequence of aerobatic maneuvers is performed in a predetermined sequence, and the flight is judged (by two judges) for the correctness of the geometry of the maneuvers, positioning, and smoothness. There are different sequences or "patterns" varying in difficulty from easy entry level to "Wow", that's tough. IMAC is pattern flying with "scale" airplanes. Pattern flying is flying with a purpose.

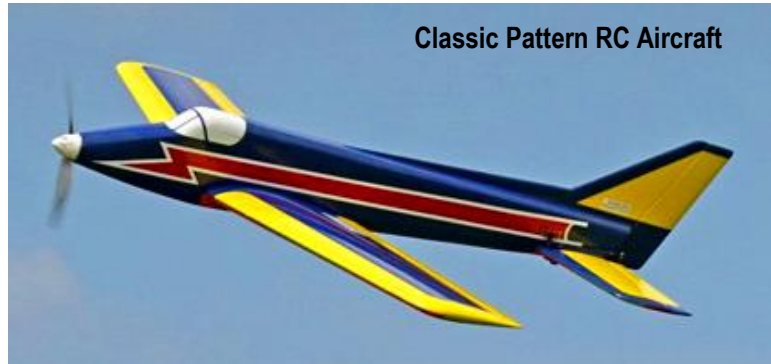
What do you get out of it? Good question. When I was a lad learning to fly (1974), if you wanted to be a good pilot, you would fly pattern. Why? Pattern flyers were the best pilots. They practiced doing something specific and were disciplined. They did not just randomly toss their airplanes about, and it looked good. This still holds true today. Try flying straight and level from one end of the field to another. Not so easy, is it? So, what is "Classic Pattern"? Classic Pattern is often referred to as the "Golden Age" of pattern flying. Unlike today's pattern flying, the schedules did not run together as one continuous sequence. Instead, one maneuver was performed per pass, the aircraft then turned around, and another maneuver was performed.

And so it went, until all ten maneuvers were complete. ***What about the airplanes?*** The airplanes used were considerably different than those flown today. There was a 10cc (.61) limit on engine displacement. (Note: There was no gas power, four strokes, or electrics back then.) The airplanes were sleek and fast, and tracked like arrows. They were manly and had a commanding presence in the air. If you have ever seen the Blue Angels or the Thunderbirds fly at an air show, you will know what I mean. Nowadays, electric power is commonplace, and performance often exceeds the power levels of the strongest glow engines. Do I need to compete? No, you can practice pattern and reap the benefits, applying them to whatever facet of R/C that you enjoy. A majority of top pilots in all R/C disciplines have pattern flying in their background. ***Do I need a fancy/complicated/expensive airplane?*** No. Any aerobatic sport airframe will do. Why the interest today? Pattern evolved just as things have a tendency to do. The airplanes got larger and more expensive.

The pattern became a continuous sequence (called "Turnaround" pattern) just like an IMAC sequence. Lots of guys that flew pattern back in the day moved on to other things (wife, kids career, etc.) and once those commitments ran their course, had time to return to playing with our toy airplanes. When they saw what pattern had become, they thought it was not so great and started looking for what they loved before. Nowadays, there is a resurging interest in what we now call Classic Pattern. Most people give the blank stare when asked about Classic Pattern, likely because they have never seen anything like it before. It is our hope that that will change. I would like to give it a try.

Where do I start? Start here: CVF BEGINNER PATTERN # Dir. Maneuver 1 (U) Take-Off 2 (U) Straight Flight Out 3 Procedure Turn 4 (D) Straight Flight Back 5 (U) Stall Turn 6 (U) Immelman Turn 7 (U) 2 Inside Loops 8 (D) One Horizontal Roll 9 (U) Landing (U)= UPWIND (D)= DOWNWIND 54 SPA Competition Guide Section III – Maneuver Descriptions TAKE-OFF 1978-79 FAI K=1 The model must stand still on the ground with the engine running, without being held, and must then take off. The take-off run should be straight, the model lifts gently from the ground and climb at a gradual angle.

(Continued on next page)



Classic Pattern RC Aircraft

Classic Pattern Flying: Frequently Asked Questions (Continued)

By Member Robert Fish

The take-off is completed when the model is approximately two meters (6½ feet) from the ground **Downgrades:** 1. The model does not stand still when released. 2. Changes heading during take-off and climb. 3. Model jumps from ground. 4. Retouches ground after becoming airborne. 5. Too steep a climb angle. 6. Gallops in elevation during climb. 7. Wings not level at any time. Return to Maneuver Index 52 SPA Competition Guide Section III – Maneuver Descriptions **STRAIGHT FLIGHT OUT, PROCEDURE TURN, STRAIGHT FLIGHT BACK 1978-79 AMA STRAIGHT FLIGHT OUT: (K=1)** The model must be brought exactly over the center of runway and/or landing circle and flown in an absolutely straight path parallel with the flight line for a distance of approximately 300 feet before starting the Procedure Turn. (Distance does not have to be accurate, however, judges may specify start of turn if they wish) **Downgrades:** 1. Does not fly over center of runway and/or landing circle. 2. Plane deviates left or right. 3. Does not hold constant altitude. 4. Turns before permission is given by judge. 5. Gallops in elevation **PROCEDURE TURN: (K=2)** After the straight flight, the model must turn exactly 90 degrees to the left or right, whichever will take the plane away from the spectator line (direction to be specified by the Contest Director) then exactly 270 degrees to the right (or left) and cross over the point where the first turn commenced.

Downgrades: 1. Left (or Right) turn not 90 degrees. 2. Right (or Left) turn not 270 degrees. 3. Change in altitude during turn. 4. Turns not smooth and circular. 5. Does not head back over exact outgoing path **STRAIGHT FLIGHT BACK: (K=1)** The model should fly back toward the circle along the same line as the outgoing path and pass exactly over the circle. **Downgrades:** 1. Turns or wiggles during straight flight. 2. Change in altitude. 3. Gallops in pitch, yaw or roll. 4. Flight not along original path. 5. Does not pass over circle. Return to Maneuver Index 51 SPA Competition Guide Section III – Maneuver Descriptions **STALL TURN 1978-79 AMA K=2** The model starts from straight and level flight and noses up to a vertical position, yaws through 180 degrees, then dives along a parallel path and finishes the maneuver with the plane level at the same altitude as the entry. **Downgrades:** 1. Model not level at start. 2. Does not become exactly vertical. 3. Turns left or right during pull-up. 4. Does not yaw tightly through 180°. 5. Return path more than two wingspans from entry path. 6. Return path not parallel to entry path. 7. Maneuver not finished at same altitude as entry. 8. Plane not level at finish of maneuver 9. Model does not fly straight and level to complete maneuver.

Return to Maneuver Index 33 SPA Competition Guide Section III – Maneuver Descriptions **IMMELMANN TURN 1978-79 AMA K=2** The model starts the Immelmann flying straight and level, pulls up into a half loop followed by a half roll and finishes flying straight and level exactly 180° from the heading at entry. **Downgrades:** 1. Model not level at start. 2. Model deviates left or right during half-loop. 3. Half loop not completed exactly above point of commencement of half-loop. 4. Half roll does not commence immediately after half-loop. 5. Plane deviates from straight line during roll. 6. Model does not finish in level flight. 7. Model heading does not finish exactly opposite the direction of entry. Return to Maneuver Index 13 SPA Competition Guide Section III – Maneuver Descriptions **2 INSIDE LOOPS 1978-79 FAI K=2** Model pulls up and executes TWO (2) consecutive loops; all loops shall be round and superimposed.

Downgrades: 1. Loops not round 2. Loops not Superimposed 3. Wings not level during loops 4. Changes in heading during loops Return to Maneuver Index 46 SPA Competition Guide Section III – Maneuver Descriptions **ONE HORIZONTAL ROLL 1978-79 FAI K=3** Model rolls slowly through one complete revolution, in either direction; maneuver takes approximately TWO seconds. **Downgrades:** 1. Changes in heading. 2. Changes in altitude. 3. Roll rate not constant. 4. Model does not roll exactly 360 degrees. Return to Maneuver Index 38 SPA Competition Guide Section III – Maneuver Descriptions **LANDING PERFECTION NO REFERENCE K=1** **Downgrades:** 1. Approach during landing too steep 2. Gallops in pitch, yaw or roll during approach 3. Model impacts or thuds onto ground due to lack of flare 4. Model bounces on landing 5. Model turns left or right while rolling to a stop. Turns necessary to avoid running off the runway may be excused if wind direction and spot location are adverse. 6. All landings judged only for 50 feet after touchdown.

August General Club Membership Meeting

The meeting was called to order by President Brian Sutton at 10 am, followed by the flag salute. The minutes from the July meeting were approved as published in the newsletter.

The treasurer's report was given by Don Crowe and approved. Jeff Moser stated that there will be a field clean up on September 12th starting at 7 am in preparation for our Steve Crow event.

Upcoming events: IMAC - field will be close on Friday Aug. 28th thru the 30th for general flying. The Steve Crow event will be held September 19th and is an AMA sanctioned event which requires all pilots flying in the event to register the day of the event. This year we will have two air bosses to handle the scheduling time for pilots flying in the event. There will be several demo flights and a couple of combat battles during the day. So, if you are interested in participating in the event, make sure you get signed up when you get to the field.

President Brian Sutton addressed the group on being courteous and safe while flying. Things pilots can do to address these important safety issues is to always call out your intentions while on the flight line. Announce take-offs, landings and other pilots flying should acknowledge by saying clear, OK, or go ahead and land or whatever maneuver was being flown.

Remember to store your planes on the bottom shelf of the starting tables so other pilots can use the stands to prepare their planes. It was also brought up that if a plane is out of control, for one reason or another, the pilot should yell out help, heads up, duck, so as to warn the other pilots of possible danger.

Here are a few things a pilot can do to elevate some safety issues. *Range check your radio: distance from radio to plane. Check control surfaces to make sure everything is secured and in proper working order (right is right, left is left, up is up, down is down). Be familiar with your transmitter, set up a failsafe mode and motor kill switch.*

With our club growing as fast as it is, we need to be considerate and be aware of new pilots in the club and all new members. Remember new members learning to fly usually need more air space also remember new pilots may be a little nervous and have some shaky legs. If you are new to the hobby you need to let other pilots know you will require a little extra air space.

The combat event went over well. *Eric Pulshalski* gave a report of the event, 11 planes started, one mid air, and 5 planes having successful landings. A good time was had by all.

We had one new member attending, Patrick McKenny, welcome to the club. No visitors. Snacks for the meeting were provided by newsletter editor, *Bob Shanks*, thank you Bob. There were no planes for show and tell. Our membership meeting raffle door prize winner was *Rick Nichols*. The Raffle Plane was won by *Don Crowe*: An Escapade .61 by Great Planes. He promptly auctioned it off to *Bob DeNoyelles* with the proceeds (\$150) going to the club.

Meeting was adjourned at 10:40 am.



Door Prize & Raffle Winners

Door Prize



Rick Nichols

Raffle Winner



Don Crowe