<u>Next WingNuts Chapter Meeting:</u> Sat. Sept 10, 2022 12:00 PM – Hunter International Air-Field

Next VMC Club Meeting: Tues. Sept 20, 2022 6:00 PM - Hunter International Air-Field



Chapter 1321 / South Middle Tennessee

Our Chapter Home Page: https://chapters.eaa.org/eaa1321

Message From Your Editor:

It appears that the "Big Sky Theory" continues to be challenged!!!

Midair's at the North Las Vegas Airport in July and just this past, August 19th, another one in California, are seemingly unexplainable.

On July 17, 2022, a Midair Collision occurred at the North Las Vegas airport between a Piper PA-46 Malibu and a Cessna 172 Skyhawk.



Both aircraft were in contact with the Tower

Both aircraft <mark>had acknowledged their</mark> landing instructions

Yet the two planes collided while on short final to the same runway<mark>, despite having been cleared to land on separate,</mark> parallel runways.

AOPA and Avweb have provided a pretty good analysis of this accident. But, were unable to explain what caused the pilot of the Malibu to line up on the wrong runway The midair on August 19th, involved a single-engine Cessna 152 with one person aboard and a twin-engine Cessna 340 with two people aboard. They collided as both planes were on their final approaches to the Watsonville Municipal Airport in California.

Unlike North Las Vegas, the Watsonville airport does not have a control tower.



Area pilots, interviewed by the news, stated that the pilots of the two airplanes were in communication with each other on the common traffic advisory frequency -- or CTAF -- just before the crash.

Transcripts of the Radio Communication were taken from the analysis below: The Cessna 340's first call, reported he was 10 miles to the east for a straight in for Runway 20

The 152 doing Touch and Goes for Runway 20 called Crosswind, then Downwind for 20

The Cessna 340 reported he was 3 miles final for Runway 20

The 152 called Base for 20

The Cessna 340 reporting he was on a 1 mile final for Runway 20 and looking for traffic on Base

Editor Note: IF, the 340 Pilot had correctly interpreted the situation at this point or before I.E (That he had not seen the 152 by now and at his airspeed), he may have taken action sooner to prevent the collision!!!

The 152 replied Ya, I see you. You're Behind me

Editor Note: IF, the 152 Pilot had correctly interpreted the situation at this point or before, he may have taken action sooner to prevent the collision!!!

The Next transmission was from the 152 stating - he was going around, cause you're coming at me pretty quick, man

Approximately 15 seconds later someone on the frequency announced the collision

Click the link for an analysis by Juan Brown on Blancolirio You Tube site <u>https://www.youtube.com/watch?v=R8ZcdyuSvGA</u>

It would appear that both pilot's in Watsonville were doing their best to communicate their location, intentions, etc. Yet, they still ended up sharing the same airspace! So, why weren't they able to avoid each other??

Listening to the analysis, we discover the piece of the puzzle that was not readily apparent (until someone looked at the Twins ADSB readout). Unknown to the 152 Pilot, was the excess speed that the Twin was traveling. One would have to wonder why he was entering the airport environment so fast??? The NTSB will eventually provide their thoughts.

In the meantime, what can we take away from these two incidents? **Primarily, you MUST be vigilant for other aircraft when flying, especially** when approaching an airport, entering the pattern, and especially when turning Final and once you are on Final

The FAA States there is an 84% Chance of an accident occurring on Final, Short Final, or on the Runway compared to anywhere else in the pattern

Sadly, whether driving or flying You cannot Trust the other Guy!! You can't trust he isn't flying an airliner size pattern! You can't trust he is where he says he is! You can't trust he is even where he should be in the pattern!!! You can't trust he will follow accepted procedures!!! You can't trust he isn't distracted!!! You can't trust he isn't going to "Bully" his way to the Runway!!!!

SO, Don't take your understanding of the situation in the pattern for granted, IT MAY BE INCORRECT !!! Always be ALERT and when you sense an issue make your decisions early !!!!!

As, the Police Sargent in an old Cop TV Show would say "BE SAFE OUT THERE"

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GAMI Unleaded Avgas Approved For GA Piston Fleet



https://www.avweb.com/ownership/fuel-news/gamiunleaded-avgas-stcs-approved-for-ga-piston-fleet/

In a first for the aviation industry, the FAA has approved supplemental type certificates (STCs) for the use of General Aviation Modifications Inc.'s G100UL 100-octane unleaded avgas in all general aviation piston aircraft.

PRESIDENTS CORNER:

First, I would like to thank everyone for coming to last month's picnic I hope you all had as an enjoyable time as I did. I would like to especially thank everyone that helped with the set up and clean up afterwards. Also, the food was great and thanks to those that brought something. Paul did an excellent job cooking burgers and I want to thank Tim for stepping in and helping Paul. That's what makes things like this a success. Thanks again.

This month's meeting will be the 10th of September at noon and will be an important meeting that will change how this chapter will be led. What am I talking about?

Well, this is the month when we elect our chapter officers.

Craig Bixby will be running for President

Scott LaVeque, the current VP, has let it be known he is willing to let someone else take that position if they would like.

The Treasurer and Secretary positions are held by Jim Tjossem and Paul Redding respectively. They are doing a great job but anyone can put their name in for any of these positions.

If you feel you want to serve in any capacity, please don't be shy and come to the meeting and speak up. Regardless of serving please attend this meeting and show your support for those that are willing to take on the responsibilities to lead this EAA Chapter.

After our elections, I will be going over what the remainder of this year will entail. The October meeting will be a Chili cook off at my hanger, November will be a regular meeting, and of course December will be the Christmas Banquet you'll have input about all these upcoming events at the meeting

Glen Smith

President

Secretary's 8/13/22 Chapter Meeting Minutes

Instead of our normal meeting for August we held a Summer Picnic in Glen's Hangar.

A Big Thanks to Glen and to those that helped set up and tear down!!!

28 members and their families enjoyed the afternoon get together





Mr. McDonald and Tom Scott in their C-172's along with Tom Tesar in his R22 took advantage of the great weather to fly in







Editor's Question: If, your IA or A & P mechanic finds a mechanical issue on your aircraft...Can he refuse to sign off the Inspection or the work he performed on your aircraft in order to "force" you to use his services to correct those issues?

Below are the highlights of an article by Mike Bush with the answer!!!!!

SIGN HERE BY MIKE BUSCH



Any A&P who withholds his signature from an aircraft's maintenance records (or even threatens to do so) is acting improperly and in contravention of the federal aviation regulations.

The regs do not permit any mechanic or shop to ground an aircraft or hold it hostage.

This is a confusing issue for a lot of people, pilots and mechanics alike. But the FARs are clear and unambiguous on this point: If a mechanic works on your aircraft, he is required to make and sign a logbook entry documenting his work.

That's true whether or not the mechanic believes your aircraft is airworthy.

Two rules govern maintenance records and sign-offs.

FAR 43.11 deals with records of inspections (such as annual inspections)

FAR 43.9 deals with records of all other kinds of maintenance (such as preventive maintenance, repairs, alterations, and overhauls).

The meaning of a mechanic's signature in a 43.11 inspection logbook entry is entirely different from the meaning of a mechanic's signature in a 43.9 non-inspection logbook entry.

Both mechanics and aircraft owners need to understand this difference clearly.

SIGNING OFF INSPECTIONS

If you put your aircraft in the shop for a required inspection (say, an annual), then 43.11 applies.

The inspecting mechanic is required to examine the entire aircraft from wing tip to wing tip and spinner to tailcone and must verify that it meets "all applicable airworthiness requirements."

He must verify that the aircraft complies with its type design, is in condition for safe operation, and complies with all applicable ADs.

If it's a piston aircraft, he must run up the engine and verify that critical engine operating parameters fall within prescribed limits.

Then, if no unairworthy items have been found, he must make and sign a logbook entry that says, "I certify that this aircraft has been inspected in accordance with an annual inspection and was determined to be in airworthy condition."

But what if the inspection uncovers one or more discrepancies that make the aircraft unairworthy? And what if the owner is unwilling to have those discrepancies repaired?

Can the inspecting mechanic simply refuse to sign the maintenance record entry and hold the aircraft hostage until the owner cries "uncle"? No, he can't.

FAR 43.11 provides guidance to the mechanic who finds himself in this situation. It requires the mechanic to "sign off the inspection with discrepancies" as follows: "I certify that this aircraft has been inspected in accordance with an annual inspection and a list of discrepancies and unairworthy items dated [date] has been provided for the aircraft owner or operator."

The mechanic then hands the owner a signed-and-dated list of airworthiness discrepancies found during the inspection. At that point, the annual inspection is complete and the inspecting mechanic's job is done.

His signature disapproving the aircraft for return to service attests (at least in theory) that every atom and molecule of the aircraft is airworthy except for the items on the discrepancy list he handed the owner.

The owner must correct those discrepancies before the aircraft may flown. He is **free to have them corrected by any mechanic he chooses.**

SIGNING OFF OTHER MAINTENANCE

FAR 43.9 requires the mechanic to make a maintenance record entry that includes A description of the work performed on the aircraft

The date it was completed

The name of the person who performed the work

The signature, certificate number, and kind of certificate held by the person approving the work. His signature:

Indicates that work performed on the aircraft was IAW with the FAR's and Maintenance Manuals and that it was performed satisfactorily

Constitutes the **approval for return to service** only for the work **performed!'**

NOTE, that a mechanic's signature on a 43.9 logbook entry **does not signify anything about the airworthiness of the aircraft**. It signifies only that the work the mechanic completed was performed satisfactorily.

In fact, the only basis on which a mechanic could legitimately withhold his signature from a 43.9 logbook entry would be if he took the position that his work was performed unsatisfactorily- in which case, presumably, he would be obligated to redo it in a satisfactory fashion.

The second sentence makes it clear that the **mechanic's signature** does not constitute an approval for return to service for the entire aircraft (the way an annual inspection signoff does). It **constitutes approval only for the work the mechanic performed.**

So, if an A&P works on your aircraft and makes noises about "not signing off the aircraft" unless you consent to letting him do work that you don't want done, print out a copy of FAR 43.9 and walk him through it.

The reg is clear: If a mechanic performs work, he is obligated to make-and sign-a logbook entry describing that work

Editor Note: Saw this post on the "Taildragger Group's" Facebook Page

In my early days of flying for the Red Cross in rural Midwest U.S., I also learned that cows face downwind. Usually around 10 knots will make them turn. The windsocks I saw were often badly tattered, they only indicated direction, not speed, so the cows helped...

It Made me think about the reference to Cows when we discussed judging height. And I got to wondering?

Are there other known animal traits that could provide useful information to pilot's and are they Fact or Fiction????? Here are few comments made to the above Facebook post



After looking for legitimate answer, the only sure thing is.....it is still hard to sort out Fact from Fiction

Cows are supposed to face off <u>wind</u> in breezes. So a guy went driving around the hills trying to find some cows to try to validate whether it is fact or fantasy?

What kind of cows are better indicators than others? Do Hereford's "heave to" at 20 kts or 10 kts? Are Holsteins more reliable than Ayrshires in rainy conditions? **He Found no definitive answer**

"an animal grazes with its tail to the <u>wind</u>". This is a natural instinct, so the animal may face and see an invader; and invader from the opposite side would carry out its scent to the cow, in the wind.

Submitted on 2012/04/13 at 11:17 am As a reformed cowboy, I fear you've made a small error. You assume the cows are facing downwind because they don't like the wind in their faces ... but horses always stand the other way, facing the wind. It has to do with which way the hair runs on their bodies. Horses hair runs from the bow to the stern, and on cows it runs the other way. They both stand so their hair sheds the rain ...

Plus, it seems that cows may not only indicate wind direction, they also may indicate Magnetic North and South

A study of satellite images of more than 8,000 cows showed that cows face the same direction when eating. This suggests that cows sense the Earth's magnetic field and use it to line up their bodies so they face either north or south when grazing or resting.



What Controllers Say Pilots Do That Makes Their Jobs Tougher

Robert Mark July 18, 2022 <u>https://aviationweek.com/business-aviation/safety-ops-regulation/what-controllers-</u> <u>say-pilots-do-makes-their-jobs-tougher</u>

Air traffic controllers job is to ensure "No two airplanes should ever occupy the same airspace at the same moment in time." To make that work, controllers need pilots to follow ATC instructions closely.

The Pilot's only guide to communicating with ATC is found in just eight pages of the Aeronautical Information Manual. Plus, it is not even regulatory in nature.

At the same time, controllers use the Air Traffic Control manual, 7110.65Z, as their operational guide because it details nearly every single air traffic control procedure, as well as the phraseology that most efficiently communicates the intended message.

Making the ATC system work smoothly lies somewhere between these two books, and of course how pilots interpret them.

We asked several air traffic controllers at a couple of the most popular pilot/controller online forums to share examples of the radio communications that make their jobs tougher and slow the entire ATC system, especially when there's a considerable amount of traffic. The responses were evenly split among control tower, en route center and TRACON controllers.

Listen First

One of the top problems relates to those pilots who switch from a previous frequency and **immediately key the microphone and begin talking**. This makes it nearly impossible for other pilots already on the frequency to acknowledge an ATC instruction they had just been given.

It also often completely blocks other aircraft waiting their turn. Always, always, listen on the frequency for 5-10 sec. before punching the transmit button.

Think Before Talking

Pilots can often be heard trying to figure out what they want to say to a controller after they've keyed the microphone rather than before. This translates into a pilot taking up 30-sec. of precious radio airtime to say what other pilots might say in only five. **Please figure out the words before you begin speaking to ATC.**

Tell The Truth

Controllers often speak quickly when they're busy and that intimidates some pilots into simply acknowledging an instruction before they realize they don't completely understand what's being asked of them.

Controllers ask pilots to, "Please Speak Up," if they don't really understand the instructions.. "Confirming is better than guessing any day."

'Immediate' Means Get Moving

When a tower controller says "Falcon 123, cleared for immediate takeoff," or, "Gulfstream 788 turn right immediately. Traffic 12 o'clock and less than a mile." the **crew is expected comply smartly.**

A failure to comply can be disastrous.

Acknowledging Traffic

Controllers say they become annoyed when they call traffic only to hear a response like, "We're looking for him on the fish finder," or "We see him on TCAS,"

That doesn't work for ATC. The best response is either "King Air 766 looking for traffic," "King Air 766 has traffic in sight," or 'King Air 766 negative contact."

It's important that pilots tell ATC when they lose sight of traffic they previously reported in sight.

Stick To The Speed Assigned

ATC assigns a speed of 160 kts, for example, they expect pilots to fly that speed precisely, right up to the outer marker. Don't ever slow the aircraft early without asking first.

If ATC ever asks a pilot for something the aviator can't handle, for whatever reason, a simple "Unable," works best. Controllers will quickly create an alternate plan.

'Blocked '

Using this phrase often makes everyone on a frequency crazy because no one knows for sure who should speak next. Three or four pilots jumping on to tell ATC an unknown transmission was **"blocked," simply makes a difficult situation worse.** Give the person on the ground a few seconds to sort things out.

Checking In

The AIM offers a few non-regulatory examples of how pilots can check in between ATC facilities while en route, **but controllers mentioned one that isn't helpful at all: "Malibu 788, 6,000 climbing 9.**"

Instead, this is preferred: "Cleveland Center, Falcon 915RB, leaving Flight Level Two Zero Seven, climbing to Flight Level 350."



Its All in the Mag Timing

By estaff -

When sending the high-energy burst of electricity to the spark plugs, the Magento breaker points must open when the magnetic field induced in the coil by the rotor is at its maximum—to create the hottest spark.

This must occur at the right split second—every time. Which requires that the mag be timed internally and externally.

Setting the internal timing requires that the mag be removed from the engine and opened up. It should be performed every 500 hours of operation.

External timing is done with the mags on the engine and should be done every 100 hours or at the annual inspection.

Internal timing involves setting the point gap and "E-gap" ("E" is short for efficiency).



The point gap is set first—and involves rotating the drive shaft to the position where the breaker points are opened as far as they will go. The gap is measured with a feeler gauge and adjusted to the distance called for by the manufacturer.

The E-gap is the number of degrees of rotation between the magnetic neutral position of the rotor and when the points begin to open. It is prescribed by the manufacturer and the mag is set to that value. **External timing** of the magnetos involves pulling a spark plug in the number-one cylinder and rotating the crankshaft until the number-one piston is at the firing position specified for that type engine—typically 20 to 24 degrees before TDC. (**Top Dead Center**)



External mag timing should be within one to two degrees of the published spec for the engine.



The technician then uses an ignition timing light connected to the mag's P-lead terminal while adjusting each mag by loosening its base clamps and rotating the mag on the mounting pad until the timing light indicates that the points are just beginning to open. The technician then tightens the clamps and checks the timing again—the mag may have moved. Click the Link to a video illustrating Timing the Magnetos https://www.bing.com/videos/search?q=bendix+magneto+installation+instructions &qs=RI&pq=magneto+installation+instructions&sk=RI1&sc=2-33&cvid=CED810C775F3472C8D79241DA07427E0&sp=2&first=11&ru=%2fse arch%3fq%3dbendix%2bmagneto%2binstallation%2binstructions%26qs%3dRI%2 6pq%3dmagneto%2binstallation%2binstructions%26sk%3dRI1%26sc%3d2-33%26cvid%3dCED810C775F3472C8D79241DA07427E0%26sp%3d2%26first% 3d11%26FORM%3dPERE&view=detail&mmscn=vwrc&mid=A9F2DE838BDF5 CFD8F62A9F2DE838BDF5CFD8F62&FORM=WRVORC

Click the Link to an article about Timing the Magnetos

https://www.kitplanes.com/magneto-timing-made-simple/

We have seen serious engine damage caused by mistiming magnetos. Advancing the timing—even a few degrees more before TDC than called for by the manufacturer—will cause the engine to run hotter, reducing the detonation margin.

Our research indicated that most mistiming occurs during an annual inspection. We recommend the pilot/owner keep track of EGTs and CHTs and check that the after-annual readings are consistent with those prior to the annual.

If the CHTs are higher and EGTs lower, the timing is advanced. Get the airplane straight back into the shop.

We recommend that your technician keep a record of the direction and number of degrees he or she "bumps" each mag at each annual. If the cumulative bump exceeds three degrees in one direction before the next 500-hour IRAN, it's an indication that there's a problem with the internal timing and the mag should be pulled, opened up and inspected.

Laughs For the Day!!!!



Bet you don't have a proper set of Screwdrivers



What Would You Do???



boldmethod

How To Fly A No-Flap Landing

Partial-flap and no-flap landings aren't particularly difficult or dangerous in light airplanes, but they do require a few specific procedures that you should be aware of. Here's what you need to know...

First, Let's Talk Aerodynamics

When you extend the flaps on your plane, you lower your aircraft's stall speed, and at the same time, increase drag. This all happens because extending flaps *increases the camber*, or curvature, of your wing. When your wing has a higher camber, it also has a *higher lift coefficient*, meaning it can produce more lift at a given angle-of-attack.



Extending flaps reduces your aircraft's stall speed for a fairly simple reason. Because your wing creates more lift with the flaps down, you don't need to as much angle-of-attack to balance the four forces of flight. And because you can fly at a lower angle-of-attack with flaps extended, your stall speed will be lower as well.

When you produce more lift, you produce more induced drag. This gives you two distinct advantages: 1) you have a slower stall speed, which means you can land slower, and 2) you produce more drag, which allows you to fly a steeper descent angle to the runway.



Without flaps, you'll lose all of these benefits. You'll have to fly a more shallow approach, at a faster speed, with more ground-roll.

When You'll Fly No-Flap Landings

A variety of electrical and mechanical failures could require you to perform a noflap or partial-flap landing. Most airplanes have specific procedures and speeds prescribed for this. In large airplanes, no-flap landings are sometimes considered an emergency and you'll find the airport rolling emergency trucks to meet the arrival.

You may also find a no-flap landing helpful in a few non-emergency situations. If you're flying a light airplane into an airport with a long runway, you don't have to worry as much about stopping distance. Choosing to fly a no-flap landing could help you in extremely windy conditions, especially when you need to maintain positive control of the aircraft in a maximum crosswind situation. And if you're flying into a busy airport, no-flap landings could allow you to fly a much faster final approach to landing, making ATCs job a lot easier for faster jets behind you. Approach and landing in icing conditions might necessitate a no-flap landing as well.



Adjusting Your Traffic Pattern

If you're flying a traffic pattern without flaps, you'll find yourself with a relatively nose-high attitude, as compared to flaps extended. Losing altitude will be more difficult without the benefit of increased drag, which means you'll typically need less power. To make things work, you might need to fly a slightly wider, traffic pattern.

This will ensure you don't "rush" the approach and build up excessive airspeed during your final descent.



Your Sight Picture

Since you'll be flying with a more nose-up pitch attitude, it might make it difficult to see the runway.

Judging height and distance is more difficult with a nose-up attitude, and you'll need to use peripheral vision to tell your height-above-runway. Don't forget that as long as you fly the prescribed speed, you're well above stall speed. This nose-up attitude has resulted in many pilots abruptly forcing the nose over to prevent a stall, even with plenty of airspeed, leading to a risk of a prop-strike or nosewheel landing.



Flare, Touchdown, Rollout

In light airplanes, no-flap landings aren't exceptionally difficult or dangerous. No-flap landings may require up to 50% more runway distance for stopping. With flaps retracted and power reduced, the airplane will be slightly less stable around the pitch and roll axes.

Since you don't have the benefit of increased drag, the airplane will have a tendency to float considerably. While you should avoid the temptation to "force" the airplane onto the runway, you also shouldn't flare excessively, which might result in a tail strike. The best thing you can do is focus on a solid, firm landing without too much concern for greasing the wheels on. No-flap landings aren't usually the time for a soft-field technique. On rollout, you'll find yourself having to use more braking to slow down without the added drag of flaps

Quiz: Do You Know These 6 Rules-of-Thumb? https://www.boldmethod.com/blog/quizzes/2022/07/do-you-know-these-6-flying-

rules-of-thumb/

Aviation Legend/s

Editor Note: I came across this R.A. Bob Hoover Documentary. It is one that I hadn't seen and it is one of the most in depth of the ones I have. So, I decided to share it.

The Gift | Bob Hoover |

"The Gift is the true story of Bob Hoover's flight into history.



https://www.youtube.com/watch?v=wWF OOJv0M4c



Did You Know there is a whole selection of "Special Fasteners" for use in the event someone miss drills a hole!!!

Tex Johnston: The Pilot that Rolled the Prototype of the Boeing 707



On August 7, 1955, Alvin M. "Tex" Johnston stuns the crowd and the Boeing Execs by barrel (or aileron) rolling the prototype of a Boeing 707 over a hydroplane race on Lake Washington

Boeing test pilot Alvin M. "Tex" Johnston in the cockpit of the 367–80. (LIFE Magazine)

Click for actual Footage https://www.youtube.com/watch?v=3IV9PZW1N9U

https://www.youtube.com/watch?v=AaA7kPfC5Hk&t=59s

Johnston was flying high in the direction of Lake Washington and the 1955 Gold Cup hydro race, when he told co-pilot Jim Gannett: "Hey Jim, I'm going to roll this airplane over the Gold Cup."

"Jeez, they're liable to fire you," Gannett replied. "Well, yeah, but I don't think so," said Tex as he took the plane down.

Flying at more than 400 miles per hour just 400 feet above the water, Johnston commenced a sudden ascent. The jet's swept-back wings spiraled as the 128-foot-long, 160,000 pound plane rolled, flying for a short time upside down. Then, for extra measure, Johnston performed a second barrel-roll.



No one had ever seen a roll executed by an aircraft that large!!!!

Directly below on a yacht were Boeing's President Bill Allen and a bevy of America's leading airline brass. Even William Allen was taken by surprise as he escorts potential customers who are seeing the jet for the first time and were duly impressed.

Tex Johnston was called into the office Monday morning to face the Boeing brass. "What in the hell were you doing yesterday?" he was asked.

The pilot calmly answered "I was selling airplanes" Johnston said "It was not a risk and I would never do anything to risk myself or the company's equipment."

"All right," snapped Allen. "You know that. Now we know that. Just don't do it anymore."

The Boeing boss was still angry when visiting airline executives were due at Allen's home in The Highlands that night for drinks and dinner. It is said that Allen was ready to snub his test pilot Until . . .

Eastern Airlines CEO Eddie Rickenbacker, the legendary World War I pilot, walked up to Tex Johnston, appropriated and put on Tex's Stetson, and said in a loud voice:

"You slow-rolling son-of-a-bitch. Why didn't you let me know you were going to pull that? I would have been riding the jump seat."

Rickenbacker turned to Allen and declared, "Now, that's the way to get attention for a new airplane."

By the time Johnston broke the transcontinental speed record in 1957 by flying from Seattle to Baltimore in three hours, 48 minutes, orders for the new 707 were pouring in.

Allen waited until a 1977 meeting of the Seattle Historical Society to have his say with understated humor.

"It has taken nearly 22 years for me to reach the point where I can discuss the incident with a modicum of humor," he said. "Remember, we had \$20 million and a big chunk of the company's future tied up (in the plane)."

So, Who Was Tex Johnston and what was he career path to Rolling a 707?

He had his first airplane ride in 1925, at 11 years old. On that day a barnstorming pilot landed a World War I Jenny in a cow pasture next to the Johnston family farm in Admire, Kansas and took the youngster on a short hop that left him hooked on flying forever.

At the age of 15, Johnston used his newspaper route money to purchase a wrecked Cessna glider. After repairing the glider, Johnston's father would pull it behind their car and Johnston would release the tow cable and glide to a landing in a nearby field.

After graduating from High School in 1932, Johnston enrolled in the airplane mechanic program at the Spartan School of Aeronautics in Tulsa, Oklahoma.



After graduating from Spartan, Johnston joined the Inman's Flying Circus, working as both a pilot and mechanic.



After a season with Inman's, Johnston bought a Command-Aire biplane and started barnstorming on his own.

When the 1934 barnstorming season ended, Johnston sold his airplane and returned to Emporia, Kansas.

In order to create a stable income for his young family, Johnston operated a movie theater for several years, but soon yearned to continue his aviation career.

He enrolled in Kansas State University's aeronautical engineering program, but dropped out in 1939 to become a civilian instructor for the U.S. Army Air Corp's Civilian Pilot Training Program.

He was teaching at Curtis Field near Brady, Texas, on December 7, 1941, when the Japanese attacked Pearl

As aircraft began to pour out of factories the planes needed pilots to deliver them to their destinations. The air corps created a Ferry Command, using civilian pilots under military control, and Johnston signed on.

The Ferry Command flight schedule was intense. Johnston flew nearly every day and many nights, delivering a variety of aircraft -- small and large, single engine and multi-engine, trainers, cargo planes, fighters, and bombers -- to locations in the U.S. and Canada.

In late 1942 he sent out several applications, including one to Bell Aircraft of Niagara Falls, New York. In December, Bell Aircraft chief test pilot Robert Stanley offered Johnston a position as a production test pilot.



His first assignment was flying **Bell's P-39 Airacobra** fighters, unusual planes that had the engine behind the cockpit and a machine gun that fired through a hollow propeller shaft. The next step for Johnston was to become an experimental test pilot, an altogether riskier business, flying planes during their development phase.



His path to that status was accelerated when he was assigned to fly, analyze, and evaluate a captured German Folke-Wulf 190 fighter, which he found to be a formidable warplane.



Johnston's first assignment as an experimental test pilot was the **Bell XP-63 Kingcobra** a slightly larger, supercharged, high-altitude version of the P-39.



He was the first pilot to fly America's first jet, the **Bell XP-59A**, above 40,000 feet!



In April 1946, Johnston was the first to fly one of only two **Bell L-39s**, modified Kingcobras that were America's first experimental swept-wing airplanes.

After that he again returned to Niagara Fall and was named Bell's chief test pilot, responsible for all testing of the company's fixed-wing aircraft.

Johnston decided to compete for the Thompson Trophy in 1946 at the National Air Races. So he convinced Larry Bell to purchase two war-surplus Airacobras to be modified and entered in the National Air Races as a publicity stunt.



The two P-39's were named Cobra I and II, with Johnston flying Cobra II. The day before the race, Cobra I crashed into Lake Ontario from a suspected canopy failure, killing the pilot.

The Cobra II crew worked all night making safety modifications and won the Thompson Trophy at the 1946 National Air Races.

He set a race speed record of 373 miles per hour, more than 90 mph faster than the 1939 winner. **Click for actual footage**

https://www.youtube.com/watch?v=jEYm_ADoVi8&t=10s



Johnston helped design and later flew the rocket-propelled <u>Bell X-1</u>

He was the first to fly the B-29-launched craft using all four rockets and taking it, he later recalled, to Mach .99, a whisper shy of the sound barrier.

He held off because the Air Force, which owned the plane, had insisted that a military pilot have the honor of being the first to fly at supersonic speed.

After the Air Force took the program over, He stayed on as a design advisor on modifications to the trim controls that he discovered were unusable in their manufactured configuration at high subsonic speeds. Later that year, Chuck Yeager would become famous for breaking the sound barrier in this aircraft.

In July 1948, Johnston accepted a test pilot position with Boeing. Where he became the senior experimental test pilot for the **XB-47**. The secretary and undersecretary of the U.S. Air Force came to Wichita to take a test ride. According to his autobiography, during that ride Johnston performed what he described as two complete inside loops, one at 12,000 and the other at 16,000 feet.

After the XB-47 was accepted by the air force, Johnston become the project pilot for the **YB- and XB-52 Stratofortress**, eight-engine, long-range, heavy bomber. It first flew, with Johnston at the controls, in April 1952

As Boeing's chief of test flights he had reached the pinnacle of his profession, supervising a staff of 600, including 15 other pilots, while continuing his personal achievements, among them flying the first B-47 and the first B-52 on their maiden flights.

He was 84 when he died on Oct. 29, 1998 from Alzheimer's disease.

His book, "Tex Johnston: Jet-Age Test Pilot," should be an interesting read!!!

What happened to the Prototype 707 he rolled??



The pioneering airplane was presented to the Smithsonian Institution and is on display at the National Air and Space Museum, Steven V. Udvar-Hazy Center. The Boeing 367-80 was designated an International Historic Mechanical Engineering Landmark by the American Society of Mechanical Engineers.

PLACES YOU MIGHT LIKE TO ADD TO YOUR AVIATION BUCKET LIST:

Do you have a favorite Aviation place that you haven't visited yet? Or, one you have visited and you think that the rest of us would enjoy? A place you think should be put on our Bucket List of things to do/see? If so, why not share it with the rest of us? Send your Aviation Bucket List Place to me and I will put it in our next Newsletter.

This Month, Let's Visit The -



https://planesoffame.org/

Ed Maloney knew that protecting our aviation history was important, so he began preserving them. Today, his vision is reflected in the extensive collection of the Planes of Fame Air Museum, comprising aircraft and artifacts that might have been lost forever.



The museum is located in Chino, CA a 2 Hour drive from LAX

The Museum is open Wednesdays thru Sundays and on holiday Mondays. We are closed on Thanksgiving and Christmas Day. Hours of operation are 10:00am until 4:00pm. Museum Guides are always available to tell the stories related to the aircraft and their place in history.

Admission Prices	
Museum members	Free
General Admission	\$15.00
Children (ages 5-11)	\$6.00
Children (4 years and under)	Free
Group of 10+	
Adults:	\$12.00
Children:	\$4.00
Veterans	\$10.00
Seniors ages 65+ and AAA members (with current membership card)	\$12.00
Active Duty & Reserve Military, Active Law Enforcement, Active Firefighter; with ID	Free

Flying & Static Aircraft



The Museum is home to close to 160 aircraft, that are maintained in pristine condition and many of these rare warbirds have been restored to flight and fly regularly.

If you are lucky, you might be able experience some flying activity during your visit

The collection spans the earliest days of aviation



Wright 1903 Kitty Hawk Flyer

Aircraft Type: Test/Experimental Aircraft Status: Replica Manufacturer: Wilbur and Orville Wright Location: Chino Year Built: 1953 Remarks: Replica built 1950-53 to honor 50th anniversary of Wright Brothers' first flights. Replica 1903 Kitty Hawk Flyer



To, aircraft of the Great War of 1914-1918, including an actual flying veteran of that war

Hanriot HD.1 'Scout'

Aircraft Type: Fighter Aircraft Status: Static Display Manufacturer: Aeroplanes Hanriot et Cie Location: Chino Year Built: 1918 Remarks: Actual WWI Combat Veteran

At the heart of the collection are the warbirds of the Second World War. These include aircraft from all sides of the battlefield.

Besides the most common warbirds, the museum contains many examples of Rare Warbirds



The museum's collection of Japanese aircraft is the largest of its type in the world. This collection includes the only authentic airworthy example of the Japanese Mitsubishi A6M Zero fighter in the world, with its original Sakae engine and an Aichi D3A featured in the movie *Tora! Tora! Tora!*



Aichi D3A2 'Val'

Aircraft Type: Dive Bomber Aircraft Status: Restoring to Flight Manufacturer: Aichi Kokuki KK Location: Chino Year Built: 1943 Remarks: When complete, it will be only D3A "Val" flying.



Mitsubishi J2M3 'Raiden'

Aircraft Type: Interceptor Aircraft Status: Static Display Manufacturer: Mitsubishi Heavy Industries Location: Chino Year Built: 1944 Remarks: Planes of Fame Air Museum's aircraft is the sole surviving Mitsubishi J2M3 Raiden: Allied code name: Jack



Mitsubishi J8M1 'Shusui'

Aircraft Type: Interceptor Aircraft Status: Static Display Manufacturer: Mitsubishi Heavy Industries Locator: Chino Year Built: 1945 Remarks: Captured at the close of WWII and brought to U.S. for evaluation. It is one of two surviving J8M1 aircraft.



Yakovlev Yak-3U

Aircraft Type: Fighter Aircraft Status: Flying Aircraft Manufacturer: A.S. Yakovlev Design Bureau Location: Chino Year Built: 1956 Remarks: Converted in 1955 from Yak-11 Trainer by Aircraft Industries a.s. (LET n.p.).



Yokosuka D4Y3 Model 33 'Suisei'

Aircraft Type: Dive Bomber Aircraft Status: Static Display Manufacturer: Yokosuka Naval Air Technical Arsenal Location: Chino Year Built: 1944 Remarks: Allied code name: Judy



Mitsubishi A6M5 'Zeke'

Aircraft Type: Fighter Aircraft Status: Flying Aircraft Manufacturer: Mitsubishi Heavy Industries Location: Chino Year Built: 1943 Remarks: The Museum's Zero is the only fully authentic flyable example in the world. Allied code name: Zeke



Yokosuka MXY-7 Model 11 'Ohka'

Aircraft Type: Kamikaze Attack Aircraft Aircraft Status: Static Display Manufacturer: Yokosuka Naval Air Technical Arsenal Location: Chino Year Built: 1944 Remarks: This aircraft was captured in Okinawa in 1945.

German



Focke-Wulf Fw 190A-8/N 'Wurger'

Aircraft Type: Fighter Aircraft Status: Flying Aircraft Manufacturer: Flug+Werk GmbH Location: Chino Year Built: Replica built in 2000 based on 1944 aircraft Remarks: Over 20,000 Fw190 aircraft were built from 1939 until 1945, making this

aircraft one of the mainstays of the German Luftwaffe of WWII.



Messerschmitt Bf 108B-1 'Taifun'

Aircraft Type: Sport Aircraft Aircraft Status: Unrestored Manufacturer: Messerschmitt AG Location: Storage Year Built: 1937 Remarks: Designed as an all purpose recreation aircraft. During WWII, the Taifun (Typhoon) was adopted by the Luftwaffe as a liaison aircraft (photo not of the museum's aircraft).



Heinkel He 100D-1

Aircraft Type: Fighter Aircraft Status: Replica Manufacturer: Heinkel Flugzeugwerke Location: Chino Year Built: Replica based on 1939 aircraft Remarks: One of the fastest fighter aircraft in the world at the time of its first test flight. Yet only 19 prototypes were ever built.



Messerschmitt Bf 109E-7 'Emil'

Aircraft Type: Fighter Aircraft Status: Unrestored Manufacturer: Messerschmitt AG Location: Chino Year Built: 1939 Remarks: Actual WWII combat veteran. In April 1942, German ace Wulf-Dietrich Widowitz was shot down in this Bf 109E-7, which was recovered in 2003 from the bottom of a Russian lake.



Messerschmitt Bf 109G-10/U4 'Gustav'

Aircraft Type: Fighter Aircraft Status: Static Display Manufacturer: Messerschmitt AG Location: Grand Canyon/Valle Year Built: 1943 Remarks: Actual WWII Combat Veteran of the Luftwaffe's II./JG 51 fighter group.

Pond Moro .

The museum includes examples of the early jet age from USA, Britain, and Russia



Bell YP-59A 'Airacomet'

Aircraft Type: Test/Experimental Aircraft Status: Restoring to Flight Manufacturer: Bell Aircraft Company Location: Chino Year Built: 1942 Remarks: When complete, it will be the only flyable P-59 "Airacomet" in the world.

Deside the second



Republic RF-84K 'Thunderflash'

Aircraft Type: Reconnaissance/Liaison Aircraft Status: Static Display Manufacturer: Republic Aviation Location: Chino Year Built: 1952 Remarks: The 'Thunderflash' was the photo reconnaissance version of the F-84F fighter. This aircraft was one of 25 modified for aerial hook-up to B-36 bombers.



Republic F-84F 'Thunderstreak'

Aircraft Type: Fighter Aircraft Status: Unrestored Manufacturer: Republic Aviation Location: Chino Year Built: 1951 Remarks: The F-84F 'Thunderstreak' was a swept-wing design of the earlier straightwing 'Thunderjet.' The swept wing provided better aerodynamics and performance.

British



Gloster F.4 'Meteor'

Aircraft Type: Fighter Aircraft Status: Static Display Manufacturer: Gloster Aircraft Company Ltd Location: Chino Year Built: 1948 Remarks: This aircraft served with the Royal Air Force Air Defense System from 1948 to 1954.



Gloster Meteor T7

Aircraft Type: Fighter Aircraft Status: Flying Aircraft Manufacturer: Gloster Aircraft Company LTD Location: Chino Year Built: 1949 Remarks: This is the only flying Meteor in the United States and one of only five airworthy in the world. It is currently the oldest flying jet aircraft in the world.

Russian



Mikoyan-Gurevich MiG-15 'Fagot'

Aircraft Type: Fighter Aircraft Status: Static Display Manufacturer: PZL Mielec Aviation Location: Offsite: Palm Springs Air Museum Year Built: 1955 Remarks: Built under license in Poland as LIM-2. On Ioan to the Palm Springs Air Museum.

Read More »



Mikoyan-Gurevich MiG-15bis <u>'Fagot'</u>

Aircraft Type: Fighter Aircraft Status: Flying Aircraft Manufacturer: Mikoyan-Gurevich Design Bureau Location: Chino Year Built: 1951 Remarks: Served with the People's Liberation Army Air Force (China) during the Korean War.



Mikoyan-Gurevich MiG-15UTI <u>'Midget'</u>

Aircraft Type: Trainer Aircraft Status: Flying Aircraft Manufacturer: Mikoyan-Gurevich Design Bureau Location: Chino Year Built: 1953 Remarks: The UTI is a two-seat, dual-control trainer of the MIG-15 fighter. Many of these trainers remained in service until the 1990s.



Mikoyan-Gurevich MiG-17F <u>'Fresco'</u>

Aircraft Type: Fighter Aircraft Status: Static Display Manufacturer: WSK-Mielec Aviation Location: Offsite: Palm Springs Air Museum Year Built: 1958 Remarks: Built under license in Poland as LIM-5. On Ioan to the Palm Springs Air Museum.



<u>Mikoyan-Gurevich MiG-21R</u> <u>'Fishbed'</u>

Aircraft Type: Interceptor Aircraft Status: Static Display Manufacturer: Mikoyan-Gurevich Design Bureau Location: Chino Year Built: 1970 Remarks: Flown by Czech Republic Air Force.

You can also check out examples of Air Racing aircraft from 1925 through 2000's

Air Racing



Rider R-4 'Firecracker'

Aircraft Type: Air Racer Aircraft Status: Static Display Manufacturer: Keith Rider Location: Chino Year Built: 1936 Remarks: This aircraft was the 1938 Greve Trophy Winner.

Read More »



Miss Cosmic Wind Midget Racer

Aircraft Type: Air Racer Aircraft Status: Static Display Manufacturer: Van Nuys Consortium Location: Chino Year Built: 1949 Remarks: One of a family of racers developed by Lockheed engineers in the late 1940s, 'Miss Cosmic Wind' was flown in races until 1972, unfortunately with little success.



Midget Racer 'Mr. D'

Aircraft Type: Air Racer Aircraft Status: Static Display Manufacturer: Robert Mayer Location: Chino Year Built: 1951 Remarks: Featuring a Continental 85hp horizontally opposed engine, this Midget Racer of the 1950s raced in the Goodyear circuit.



Curtiss R3C-2 Schneider Trophy Winner

Aircraft Type: Air Racer Aircraft Status: Replica Manufacturer: Curtiss Aeroplane and Motor Company Location: Chino Year Built: Based on 1925 aircraft Remarks: Replica of aircraft that Jimmy Doolittle won 1925 Schneider Trophy.



Miles & Atwood 'Special'

Aircraft Type: Air Racer Aircraft Status: Replica Manufacturer: Leland Miles and Leon Atwood Location: Chino Year Built: Replica base on 1932 aircraft Remarks: Set world speed record and won 1933 Greve Trophy. Original destroyed in 1937 crash.



Rider R-6 '8 Ball'

Aircraft Type: Air Racer Aircraft Status: Static Display Manufacturer: Keith Rider Location: Chino Year Built: 1938 Remarks: Last of the plywood-skinned air racers designed by Keith Rider. Raced in 1938 and 1939.



Hanson WH-1 'Sump'n Else' Formula One Racer

Aircraft Type: Air Racer Aircraft Status: Static Display Manufacturer: William Hanson Location: Chino Year Built: 1974 Remarks: This popular Formula 1 Air Racer began its career in 1971 as 'Thunderchicken.' It later achieved marginal success at the Reno Air Races in the 1970s and 1980s as 'Sump 'n Else.'



North American P-51D 'Mustang'

Aircraft Type: Fighter Aircraft Status: Flying Aircraft Manufacturer: North American Aviation Location: Chino Year Built: 1945 Remarks: This P-51D performed all of its military service after WWIL It has the distinction of being the longest privately held P-51 under the same owner.



North American P-51D 'Mustang' Air Racer

Aircraft Type: Air Racer Aircraft Status: Flying Aircraft Manufacturer: North American Aviation Location: Chino Year Built: 1944 Remarks: This aircraft was a Reno Air Races winner and is a World Speed Record Holder.

There are also a couple of Important Test Aircraft



Bell X-2 Supersonic Test Aircraft

Aircraft Type: Test/Experimental Aircraft Status: Replica Manufacturer: Bell Aircraft Company Location: Chino Year Built: 1989 Remarks: Replica built for the premiere episode of TV series 'Quantum Leap.'



Douglas D-558-II 'Skyrocket'

Aircraft Type: Test/Experimental Aircraft Status: Static Display Manufacturer: Douglas Aircraft Company Location: Chino Year Built: 1947 Remarks: One of three Skyrockets built. Aircraft used to study transonic and supersonic flight characteristics.

Finally, there are a few of One of A Kind Aircraft



Pitts S-2B Special 'Double Take'

Aircraft Type: Aerobatic Aircraft Status: Static Display Manufacturer: Pitts Enterprises Location: Chino Year Built: 1986 Remarks: Aerobatic aircraft capable of upside-down take-offs and landings. Developed and flown by Craig Hoskins.



Northrop Alpha 4A

Aircraft Type: Transport Aircraft Status: Restoring to Static Display Manufacturer: Northrop Aircraft Corporation Location: Storage Year Built: 1931 Remarks: Seventeen Northrop Alphas were built. Planes of Fame Air Museum's Alpha is one of only two known to survive (color photo not of the museum's aircraft).



There was a Restored one-of-a-kind 1944 Northrop N–9MB flying-wing

Sadly, the aircraft crashed preparation for museum's airshow a few years ago

The Museum, is well known for its Airshow held every October. But they canceled this year's Airshow due to road construction

As long as you're there, Check Out the......



https://www.yanksair.org/

Yanks Air Museum is also located at the Chino Airport. It boasts one of the most extensive and rarest collections of American aircraft worldwide. The collection began in 1973 with the acquisition of the Beech Staggerwing and from there grew to more than 200 aircraft.

In addition to the usual Warbird Museum Displays, many of the aircraft at Yanks are the only remaining specimens of their kind.





NORTH AMERICAN FJ-1 FURY

PORTERFIELD 35-70 FLYABOUT





TRAVEL AIR 6000A

CURTISS O-52 OWL





KELLET KD-1 (YG-1B)

FLEET 7 (FAWN MK I)



BRUNNER-WINKLE BIRD BK



AMERICAN EAGLE A-101

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Interesting and useful websites on the Internet:

NOTE: You may have to copy and paste the address into your browser if the link doesn't work

I have added a few that I use.

If anyone knows of other interesting websites let me know and I will add them to the list

Our Chapter Home Page: https://chapters.eaa.org/eaa1321

Why We Fly www.whywefly.org

EAA: Home Page http://www.eaa.org/eaa

FAA Safety Team FAAST https://www.faasafety.gov/

FAA Safety Briefing http://www.faa.gov/news/safety_briefing/

Regular links To Check out: <u>www.barnstormers.com</u>

www.groundspeedrecords.com

AVweb News:

http://www.avweb.com/

This site also provides daily Newsletters that you can sign up for

Aero News Network: http://aero-news.net/

Just for Fun Sites: http://tailwheelersjournal.com/

Weather and flight planning sites: https://www.lmfsweb.afss.com/Website/home#!/ http://www.fltplan.com/ www.avweather.com www.skyvector.com www.airnav.com www.runwayfinder.com www.flightaware.com

Travel: http://www.socialflight.com/search.php www.funplacestofly.com www.placestofly.com www.wheretofly.com www.100dollarhamburger.com www.airjourney.com

Little known & Lost airfields: www.airfields-freeman.com/index.htm

Plane Dealing (Want-Ads, Lost & Found & Notices)