

FARM Newsletter

AMA Charter 1654

October 2023

SAFETY OFFICER'S CORNER

Charlie Koustenis



As your safety officer I was trying to come up with things I have noticed over the years how different modelers do things in different ways. Often I come away either amazed or shaking my head in disbelief. With that in mind, I'd like to address some safety procedures that some of us might be overlooking, or we just plain forget about.

For example, do you remember to put a drop of thread locker on the screw that holds the servo arm to the output shaft? (This applies to metal gear servos only). Talking about servos I can't tell you how many times I have seen this, some modelers put the brass eyelet in the mounting grommets from the top of the servo, so the head of the screw won't cut into the rubber grommet. The proper way is to insert the brass eyelet from the bottom. The reason for this is that the wide end is to go against the wood of the mounting rails, to prevent the eyelet from being pressed into the wood over time this will cause the screws to

loosen. If a couple of these loosen and fall out during flight, you could have a reason to buy a new model!! Do you remember to file or grind a flat spot in your landing gear axles before tightening a wheel collar in place? And remember thread locker on that set screw.

Do you remember to place a short length of fuel line over your clevises, so they won't pop open under stress? Or that little nut that goes against the threaded shank of a metal clevis that keeps it in place? It also reduces slop in linkage, and protects the threads from vibration damage. Use 4-40 threaded rod instead of the smaller 2-56 size whenever you think it's appropriate.

And then there's the old trick of putting a smear of epoxy across the face of blind nuts to prevent them from falling out if mounting bolts are removed and replaced often.

Practice treating your models like pieces of fine machinery, and do everything in your power to ensure their longevity. That means doing a pre-flight check every time you fly. You probably can't help but notice that the guys that do this on a regular basis rarely crash due to equipment failure!!

Take care and fly safe.

Charlie K

EDITOR'S NOTES – Upcoming Events

Jeff Killen

- 1. Club Meeting, virtual via zoom, 7:00 PM, 10/24/2023**
- 2. State/Local Election Day, All Day, at local polling places, 11/7/2023**

SECRETARY'S REPORT

Jeff Killen

The September club meeting was held virtually via zoom call on Tuesday, September 26th. Eleven members were on the call. The FARM Club meeting was called to order at 7:00 PM by Treasurer Nic Burhans. The president and vice president were both out of town and unable to attend the meeting.

Officer Reports

Dave Rothbart – no report, absent

Ernie Padgette – no report, absent

Jeff Killen – no report

Ralph Graul – no report

Charlie Koustenis – no report

Dick Sutton – Dick noted that after tonight, the Float Fly is the head line item on the web site.

Nic Burhans – Nic reported on the pattern contest. The club earned \$190 to the good, with 11 flyers competing. This was just enough to break even.

The Float Fly event is coming up on September 30. We have some reusable items from the first float fly.

The club now has 67 members, with \$5549 in the bank. We have a few minor bills to pay. The porta potty truck is down.

Nic will be providing CD services for the Green Sea pattern contest in South Carolina. The usual CD has a health issue.

For the October Fest events coming soon, the STEM days will be Tuesday – Thursday, Oct 10 – 12. 592 5th graders will participate. On the airfest day, Oct 14, the air show will be at 9-11:30 AM including the TOC freestyle routine by Don Szczur. We will provide a static display, run by Ralph Graul and Dave Rothbart. Friday night is a big money dinner for VIPs, followed by a night sailplane flight. There is no Harrier in the fest this year.

Show and Tell

Ralph Graul – Adrenaline, pattern plane, was tail heavy, so used 20 oz. Harry Higley prop nut. Tried Saito 150 4/c motor, switched to NGH 25 cc gas motor.

Jack Cullen – Sopwith Pup also Specio sport low wing full size plane, EAA plans, sold off

Carl Hampton – Dadio – large scale sport, electric, 87.5 “ wing, 9.5 lbs, 5S 5000mah battery, 16/8 “ prop.

WINGS OF BALS

John Hunton

Melpar's RPVs were flown by autopilot. When side force was added I saw the capability for greatly simplifying the autopilot system. All we needed now was a wing leveler and we could steer the RPV like a car. Melpar did not want to simplify their autopilot. But I thought that the use of side force could greatly simplify RC and even full scale flight. The sidewinder concept was born. A model of the prototype side force design was built. According to Vince Mankowski this model, which is now in the AMA museum, evokes the most questions of any model in the museum. A larger version, powered by a four stroke .90, was flown extensively at NVRC. Photographs of this model were published in Model Aviation with the invitation that if anyone was interested in it the design could be published. Nobody was interested.

Aeronca K

Hugh gave me an Aeronca K. It was a basket case stuffed inside a trailer. The motor was in pieces, still stuffed with dirt from the crash. I restored the motor, lashed it to a tree and ran it. The airframe hung in the barn for a few years gathering mud dobbers. Parts were falling off of it. I decided I would never restore it so I sold it. The motor was in Tommy Trainer's Oshkosh Grand Champion K. I hear that another dedicated flier is restoring the airframe.

Pipeline

Brother Hugh flies pipeline out of Shreveport Louisiana. I got a chance to visit Hugh for a few days and to see what flying the "pipe" was like. The objective of flying the pipeline is to check the assigned route weekly, biweekly, or on a "special" to look for a leak detected by a pressure drop, whatever the contract calls for. Hugh flies a Cessna 172 owned by the brokering company out of his own grass airport, Strong field. Hugh also maintains the Cessna.

Hugh is a very experienced pilot having taken initial lessons in a Piper J-3, having had his own various

light planes since the 1960's, having navigated for the USAF for over 20 years, having flown bush in Alaska, flown corporate, airline, and freight, having crop dusted and having pretty well covered the USA in 14,000 air hours.

The first pipe we flew began in Shreveport and wandered westward halfway toward Dallas. Hugh flies the pipe at 500 feet, which is normally the lower legal height limit except that while flying the pipe he can stay at 500 feet even over populated areas, which normally require a height of 1500 ft. The company has mandated that pipe liners set up at 2500 rpm that produces a velocity of 105 mph. Things happen rapidly at 105 mph and 500 ft.

Hugh flies the pipe looking straight down out of his side window. This requires a bit of side-slip or cross control (when Hugh let me fly back down a bit of pipe I tried it and it is very difficult to keep the plane positioned and at the right viewing angle). A left turn in the pipe is easy to follow, just increase the bank angle to the left...except that in order not to lose view of the pipeline the turn must be right now and crisp. Therefore, even gentle left bends in the pipe are flown with a crisp roll to 60 degrees and a quick roll back to level.

Right turns in the pipe are something else. Hugh must look out of the right window straight down. This requires a very quick 60 degree bank to the right followed by a quick roll back to the left scanning position. Then, to be efficient, at the end of a pipeline Hugh does a quick wing over and gets quickly back down to the pipe.

On long runs of pipeline, the above paragraphs translate into miles of slightly tilted flight interrupted by quick rolls to either side (with Hugh's techniques he turns so quickly that he does not have to compensate for nose drop with additional up elevator, so the turns seem like low-Gee turns). Near terminals, however, the flight path becomes violent with the constant twisting and turning. Experienced pilots flying with Hugh have tended to become ill (on the other hand I just had a ball) in terminal areas.

All of this might be fun except for some of the hazards. Radio towers dot the countryside like upturned middle fingers waiting to hide in a fogbank and "dis" the pipeline pilot. We saw towers ranging

up to 4300 feet tall, but most are at just the right height to hide just under the horizon and tickle the Cessna underbelly. There are the unbroken miles of trees that extend to the horizon at times. From 500 feet the Cessna might glide a mile (Hugh has a technique thought out...do not stall into the trees or you will nose down, pick one out and fly into it).

Then there are the laws of aerodynamics waiting to be violated just once from 500 feet. While most inspecting flight is done in a cross-controlled state (which is most dangerous for stalling the top wing), Hugh is quick to coordinate before pulling any Gees in turns.

The second and third days, Hugh flew pipelines east and southeast of Shreveport crossing the commercial Shreveport airport and Barksdale AFB at 500 feet several times. We crossed the Mississippi. During the three days we saw a lot of beautiful country from 500 feet, country varying from dense forest (Hugh says that the tree slots are cut by helicopters trailing a string of five running chain saws) to open farm land, where I found it very difficult to follow the cues of the pipeline.

Hugh let me fly all deadheads and do the takeoffs and landings (except at Ruston where he rolled off the pipe to land immediately). I learned a lot from him about how to fly the fabulous GPS, how to drop 10 degrees of flap at any speed to start to slow down for landing, when taxiing how to use full rudder before braking (I hope this sunk in, it really bugs Hugh that most people use brakes and power together), how to takeoff and land with a dysfunctional airspeed indicator (just fly proper velocity to be trimmed at every flap setting)(really happened). But mostly it was a fine experience flying with my very competent brother at 500 feet over the beautiful and varied verdant springtime Louisiana landscape.

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