



THE SPORT FLYER

NEWSLETTER OF THE SHELBYVILLE EAA CHAPTER 1326

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***April 2022
Volume 18,
Number 4***

Ch-1326 Website: <https://chapters.eaa.org/eaal326>

Chapter 1326 meets monthly on the Fourth Thursday of the month in the Shelbyville airport at 1800 (or 6:00 PM, whichever you prefer.) Any changes of meeting date and venue will be announced in the newsletter or by text message.

Kommandant's Korner

Hello fellow chapter members. Here we are, well into April, and almost a third of the way through the year. Where does the time go?

In my little corner of the newsletter this month, I'd like to talk a little about camaraderie and flying. Before I moved to Shelbyville, TN, in 2006 I belonged to USUA (US Ultralight Association) Club 6 in Southeastern Virginia ('98-'01) and EAA Chapter 4, College Park, MD ('01-'06). These two organizations were vastly different, but great groups of people in their own way.

Club 6, a group of about 50 total members, was based at a grass strip in southeastern VA. On any given Saturday a regular group of pilots would start showing up around 9 am, and after the normal "hangar talk" we'd be in the air by 10 or 11. This group of 6-12 planes would descend on any given runway within 50 miles as long as it had a place to eat! Other weekends we would fly en masse to events put on by other ultralight clubs in the area or maybe an airport open house. It was a great group of people to fly with which included retired military fighter pilots, mechanics, scholars, realtors, and even an Army enlisted guy, me. I learned so much about flying from this diverse group of pilots.

Chapter 4 was a different situation. Chapter 4 was a small chapter, much like our Chapter 1326. Even though the Chapter home was officially College Park, MD, most members were based at W18, Suburban Airport, Laurel, MD (sadly, now closed). On the airport was a little cinder block building which was the main office. The interior wasn't much to speak about, but the Saturday morning coffee klatch sure was! It was an eclectic group of people from rocket scientists from nearby NASA Goddard,

electrical engineers, a banker, a police officer, an actor and cartoonist, and even an Army enlisted guy. Some were active pilots, some had given up flying, some just dreamed of flying, but we all enjoyed each other's company around the table. Usually, the active pilots would decide on some destination in the greater Del-Mar-Va area, and we would take off on the search for, you guessed it, food! If we had an open seat, we'd take one of the non-flyers with us. From this group I learned about craftsmanship, project management (I started my Zenith 601XL while in MD), and still more about flying.

The point of this story is that I hope to build a better bond between our chapter and the pilots based at Shelbyville airport. It is my hope that through our Chapter Facebook group, we can start announcing where people are flying to on a given weekend. Two weekends ago, I flew to Gwinnett County (northeast Atlanta), GA for an EAA breakfast. I would have loved to share that experience with other pilots on the field. I know there are groups of pilots on the field who discuss destinations for a particular weekend. I hope that they will start to share those destinations through the Chapter group page so we can all have fun together. I will work harder to post flights and destinations on the Facebook group page and ask others to share their destinations as well. Together we can have a robust flying group, and a stronger EAA Chapter, based at Shelbyville airport. Together we can share our talents and knowledge and make us all better pilots and people.

So, let's go out and get some \$150 (inflation) hamburgers together!

Mark

Last Month's Meeting

EAA Chapter 1326

Shelbyville Airport

Conference Room

Sharon Tinkler, Presiding

The March 24th meeting kicked off at the usually scheduled 6PM with Vice Kommandant Tinkler presiding as Kommandant Mark was “under the weather” (not COVID so not of interest to the National authorities.). Vice Kommandant Sharon Tinkler opened the meeting a few minutes after the appointed time to conduct some routine business. Basically, the “minutes” of the February meeting were as noted in last month’s The Sport Flyer. Tommy Lynch, the treasurer, gave financial status. (The Chapter is solvent but the big shock was the over \$800 gas bill for the previous month; apparently the result of the building owners turning up the heat to prevent the pipes from freezing.) The business portion of the meeting was intentionally brief. The group then watched an EAA video about “Flying the Spirit of St Louis”, the story of the building and flying of the EAA’s replicas of Charles Lindberg’s Ryan Spirit of St Louis aircraft. According to the EAA and guest test pilots, the “replica” aircraft apparently shares the same “less than desirable” handling qualities of the original aircraft. You can find this video in the EAA “vault” at <http://eaa.brightcovegallery.com/chapters/detail/videos/history/video/6074760092001/from-the-vault-flying-the-spirit-of-st-louis>. The meeting ended at the scheduled 7PM time.

March 26, 2022 EAA Fly-in Breakfast

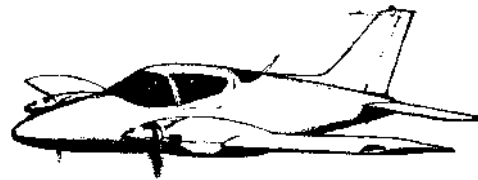


The March Fly In breakfast was a little more challenging and bumpier than usual, but Ch-1326 members persevered. Our faithful Kommandant, Mark Stauffer, was “under the weather” the week of the Ch-1326 March social and breakfast. Complicating matters was the absence of Secretary, Newsletter Editor, and more importantly, “pancake chef” Randy Kelly, who was off in Spartanburg SC renewing his flight instructor certificate. With typical EAA efficiency, Chapter 1326 members demonstrated that ancient Chinese Proverb 总是有备用计划 (Or for those of you without a universal translator; Zǒng shì yǒu bèiyòng jìhuà!) Rumor has it this is attributed to the ancient Chinese

General Sun Tzu, but in colloquial aviator speak, “always have a Plan B”, or simply, have somebody else who can take over if you are not there.

Although Randy WAS able to help the “Setup Minions” clear the hangar and set up all the stations before departing Shelbyville for Spartanburg, via Atlanta GA (don’t ask), one of the big questions was who was going to start the coffee and biscuits which seem to have become Mark’s specialty. Leigh Kelly emailed important questions to Mark, like, coffee ratio and oven biscuit temperature. So Saturday morning prior to the official “minion assembly time”, Helene Wharton had already shown up to start pre-heating ovens and Leigh Kelly started the coffee. (See earlier reports about the importance of coffee at aviator functions. Randy’s usual pancake duties were (we hear) easily assumed by Treasurer (and chief breakfast supplier buyer) Tommy Lynch, and the slicing, cooking, and stocking the serving line proceeded with normal Ch-1326 efficiency.

As usual, our first customers arrived early, but serving proceeded on time. Also as usual (when the weather gods are amenable) Charlie Niles arrived in his Aeronca Champ, and claimed the coveted airplane parking spot



closest to the sign-in and serving line.



The Champ arrives. (Nope, this is not “stock” footage. Verily this is Charlie’s Champ which always seems to be the first in the breakfast parking line.)

Airplanes and customers continued to arrive at regular intervals as both the flight line and most of the tables in the hangar began to look more cozy, including visitors from the turbine crowd.



What’s a fly in breakfast without representatives of “Doc” Piper and “Van’s Air Force”?



The hangar is starting to look cozy.



George, George – there's a Panther on the ramp!! What do we do?



Honey, the twins are here.



Around and around and around we go, KSYI for breakfast is the stop to know.

According to our chapter accountant(s), 62 visitors graced our hangar before we stopped serving, and one of our members counted 35 airplanes on the South ramp. (We don't know how MANY of those airplanes carried folks to our breakfast, but a full flightline is a happy flightline.) All good fly in breakfasts have to end though, so at the normally

appointed 0930 mark, the Ch-1326 servers switched over to cleanup crew mode as the fleet started to disperse.



"Deploy the Fleet" – Darth Vader

Randy Kelly
Staff Writer



EE Zurg note: Those members who were at the February fly in breakfast may have seen a flyer advertising a program for the March fly in breakfast titled "My engine just quit. Now what? Or, what can a powered plane pilot learn from a glider pilot. Staff editor Randy had developed this program for Ch-1326 but could not present at the March breakfast because that happened to be the weekend of the only convenient in-person Flight Instructor Review Course (FIRC) within his window of opportunity, so I begrudgingly gave him permission to depart the local area. Randy promised to be available to make this presentation at the April 23rd fly in breakfast. Kudos to Project Police WOMAN Leigh Kelly for stepping up to the task of reporting on the March 26 breakfast event.

EAA Chapter 1326 Project Police raid Arion Aircraft LLC – Chapter 2: The Maintenance Hangar

Last month we left our Ch 1326 Project Police team of President Mark Stauffer, Mark Cannon, Helene and John Wharton, and Leigh and Randy Kelly in the "Assembly Hangar" of Arion LLC at Shelbyville airport. After Nick Otterback's excellent tour of the facilities Arion Aircraft uses to host and assist Experimental aircraft builders, Nick led the team over to Arion's Maintenance and rebuild hangar. As we noted last month, the maintenance hangar is the home of the more "routine" aircraft maintenance and service work such as annuals, engine overhauls, and Arion installed modifications.

There is an old cliché, "We put that design back on the shelf." Sooo – walking into the maintenance hangar and looking to our left, Nick pointed out the original Lightning prototype aircraft sitting on the shelf sans engine or avionics. (Editor note: I don't recall Nick telling us why they still had the prototype around, but if I had to take a guess, I'd opine it was more for the reason of having a fuselage they could use for other prototyping efforts rather than pure emotional reasons.)



Lightning prototype preserved for posterity?

Continuing with the cheap clichés, namely “packed floor to ceiling”, this corner of the shop also seemed to be the repository for lots of parts that were awaiting shipping, were there as spares, were “in development” or for some other purposes.



Cowlings and Spinners. (Which one goes on that Harley?)

As we noted last month, Arion is the North American distributor for Jabiru, serving all of US and Canada, including the Canadian Air Force. (Editor Note: We’ve heard the Canadians use Jabiru parts, probably engines, in some of their recce drones, but I was unable to find any online references.) Arion does firewall forward kits for about 2 dozen different aircraft that use Jabirus. A bunch of Jabiru Gen 1, 2, and 3 engines were seen on stands, aircraft, and hiding in corners while in various stages of strip-down, rebuild/refurb, salvage, or scrapping. Nick noted that they use a shop in Nashville for their machining work.



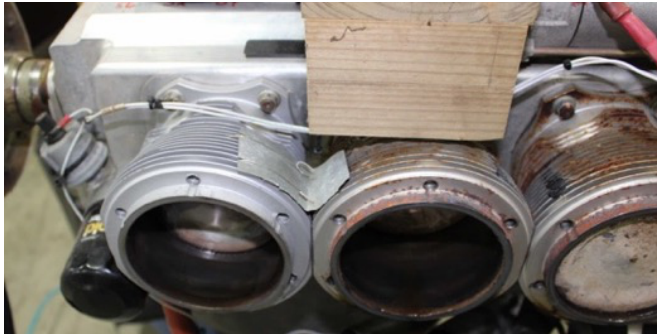
Jabiru block on build-up stand.



What’s wrong with this Jabiru cylinder? (Do YOU pay attention to your CHTs in flight?)

Jabiru uses steel for their cylinders which is good from a strength perspective, plus you don’t need to sleeve the cylinders, but steel rusts. Apparently, however, the steel cylinders on Jabirus have a rust problem in high humidity areas, and one of the engines in the shop had some pretty severe pitting. (Editor note: The cylinder above displays a different problem not uncommon to ANY aircooled aviation engine, that being cracking in the vicinity of the exhaust port. Thermal cracking as a result of either cylinder overheating, or cooling thermal shock is a problem in any of our “tightly cowled” aircraft engines. In this editor’s opinion, procuring a multi-cylinder engine analyzer to monitor cylinder and exhaust gas temperatures is an excellent investment, AS LONG AS YOU LEARN HOW

TO INTERPRET THE READINGS AND USE THEM TO MANAGE YOUR POWERPLANT!)



Jabiru corrosion? How baffling?

One of the nice things about “experimental” aircraft is the ability to use parts not certified for “production aircraft”, which can be a significant cost saver. While it IS possible for owners of production aircraft to fabricate certain parts for their aircraft, they still have to be approved by an A&P, and will probably look more like the “OEM” part than say, the inter-cylinder baffles in the preceding photograph.



Wow, NGK aviation plugs.



Evil Editor Zurg notes: Cost is one of the big incentives to build an experimental aircraft. As an exercise on cost savings, go to YingLing Aviation and price some Continental inter-cylinder baffles for your Cessna and compare it to a piece of 2024 or 7075 from Aircraft Spruce. CAUTION. Don't think that because you're building an experimental aircraft that conventional autoparts (plugs, wires, regulators, oil filters, distributor caps, etc) are now open season. Parts *if approved by the aircraft manufacturer* can be used on a kit, and we frequently see things like the NGK plugs above on experimental aircraft, but this DOES NOT MEAN that your local ACE Hardware, Chevy, or Ford dealers are also experimental aviation supply houses. If you're thinking of “saving some scratch” on parts for your Lightning or Jabiru, go talk to Nick and his guys/gals about the legality and “wisdom” of your substitutions.

After they get everything put back together, the engines are mounted on Arion's “easily moveable” engine test stand to make sure everything works like it should.



Arion's portable engine test stand. (Hum, this could bring a whole new meaning to the term “racing the engine on a test stand”. ;-)

Engines and prototype airframes were not the only items of interest in the “maintenance and upgrade” hangar - there were (of course) airframes in other stages of maintenance and upgrade. Up close to the engine shop was a Jabiru J430, which had originally been built and flown in the UK, but it's (new?) owner brought to the US and was having the Arion folks put in upgraded avionics.



Aay mate, how's your Jabiru J430?



Jabiru J430 side stick (designed to doubly confuse Cessna pilots and instructors who are used to flying left hand in the left seat, and right hand in the right seat.)



The UK Jabiru awaiting a new panel (with Nick, Leigh Kelly, and Mark Stauffer hiding outside the windshield.)

Scattered about the rest of the hangar were a number of other Lightnings in for upgrades, plus a Lightning demonstrator, an upgrade trainer, and an IFR certified Lightning.



Lightning,



Lightning, and



Leigh with another Lightning, and



Another Lightning with IFR avionics (looks the same outside).

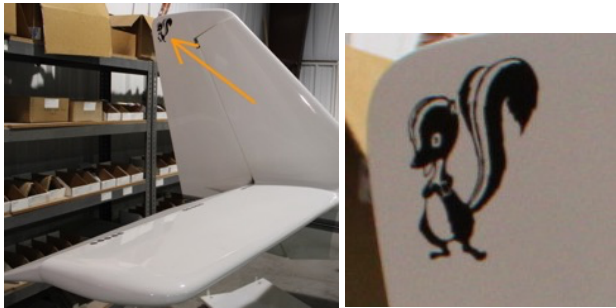


IFR qualified Glass Lightning's Cockpit.

In another corner sat another Lightning, N3134S which belongs to an SR-71 pilot (in his mid 80s) that was getting re-winged with the new spars to save weight. True to the pilot's "Lockheed Skunk Works" aircraft heritage, 34-Sierra also had a Skunk on her tail, and an innovative internal mounting of an ADSB-out tail beacon inside the fuselage. (Gotta love elegant solutions like that. 😊)



Lightning being upgraded to new spars and wings.



Lockheed Skunkworks logo.



ADSB-out tail beacon stealthily hidden behind the seat.

Off in another corner sat a Zenith 701 aircraft that had originally come to Arion for an annual and some minor repairs. This “good deal” Zenith was acquired “sight unseen” by a “new” owner, but ended up being the “poster child for a good pre-buy inspection”.



Mark: “Hey, this 701 looks pretty good from 30ft.”

First it had some building problems. According to Nick, some of the holes drilled in the wing spars weren’t in the right place, so they just drilled new holes, leaving the old holes in the structure. It was finished and flew, but it had empennage, tail, and rudder damage caused by a tail strike during some less than graceful STOL attempts.



Zenith from 2 feet. “Ouch, that tail tiedown and rudder pivot bearing don’t look good AT ALL!”



Evil Editor Zurg notes: This tale of woe is one that has unfortunately been repeated before by buyers looking for “a good deal”. We recommend you heed Nick’s words, “You should have gotten a pre-buy”, less you hear him give the disparaging words “Nothing we can do,” and have your \$2,400 annual quickly turned into a \$10,000+ rebuild. Ouch!!

Parked in another corner was an RV-6, surrounded by RC model aircraft. (Didn’t we tell you Arion supports all kinds of builders?) The RV apparently belongs to Nick, and the RCs belong to some of the Arion employees and friends of the local RC club.



Momma RV-6 and the kids

The Arion RC aficionados apparently have quite an extensive collection. There were models scattered around a corner of the shop as well as in a back room.



More members of the RC collection

Some of these models were rather large. As it happened, RC models are also of interest to EAA Ch-1326 as EAA has a STEM program based on helping young adults build and fly a model aircraft, and the Chapter is looking for a place to build a model with students. Nick said Arion might be able to help, so standby for further news on this STEM program. We will probably be looking for EAA members with both manned and unmanned aircraft building experience and RC/drone flight experience to help with this STEM program.



Small plane or big model?

As the evening drew to a close, Kommandant Mark declared this Project Police Raid to be a success, and we all headed home. (Except for Randy who had discovered that the autofocus on his camera had gotten switched off, and had to run around the shop reshooting most of his pictures.) Thanks again for Nick Otterback’s and the folks at Arion’s kind offer to come see their facility. If you intend to build a Lightning, or have another experimental aircraft project that just doesn’t seem to be “coming together”, we highly recommend you seeking out Nick and his folks advice and services.

Randy Kelly
Sport Flyer Staff Writer



Project Police Tales Wanted

EAA members OR aviation enthusiasts. Do you have an interesting project you’d like to talk about or show us? Have you seen an interesting or unusual aircraft? Do you have an interesting maintenance or build story? Snap some pics and write up a short report, or make some notes to give to our staff writer Randy Kelly for inclusion into *The Sport Flyer*. We’re not picky. ***We don’t care if you’re from OUR EAA Chapter, some other EAA Chapter, or just an aviation aficionado*** – we’ll publish your story anyway. ALSO, later in this issue you’ll notice an *EAA Chapter 1326 Technical Assistants*. These are EAA and/or other aviation technology enthusiasts who may or may NOT be a real expert in that area, but are willing to share their knowledge and building expertise with other members who need some help (or just a sympathetic ear) while accomplishing their build. If you are able/willing to serve/help in this capacity, please contact Randy Kelly at electricrow@pobox.com.

Project Police Aircraft Spotters Quiz



Evil Editor Zurg

Staff writer Randy informed me there were at least two correct answers to the March Aircraft Spotters Quiz (though one is considered an “expert” and was not eligible for this competition).



The March Mystery Aircraft.

Sooo, the winner was (drum roll please), Michael G. Knight of Murfreesboro. Michael’s answer: “That’s a Martin XB-51 Panther, featured prominently in the old William Holden movie “Toward the Unknown”. Not a great movie but had great flying scenes: Lockheed F-94C Starfires, Bell X-2....and a “crashed” Convair XF-82.”

Yea verily, this aircraft was NOT the **Gilbert XF-120** as portrayed in the movie “Toward the Unknown”, but was actually the Martin XB-51. Originally it was designed as a low-level attack bomber. It had a “new” bicycle type gear configuration, full span flaps and spoilers for roll control. It also had three GE J47 engines, two in the pods and one in the tail. The pilot could also control angle of incidence of the wing to minimize nose high take-offs and landings, common for swept wing aircraft. It held a crew of two, a pilot under a top bubble and the Nav just behind the pilot under a flush window. Only two were built as it lost a light bomber competition to Canberra. For more interesting factoids about this aircraft, see this link: https://en.wikipedia.org/wiki/Martin_XB-51

So EAA Project Police, this next month’s Spotters Quiz is going to be a bit more challenging, but also more rewarding. I, Evil Editor Zurg, have diverted some of my guest appearance proceeds to Staff Writer Randy Kelly and authorized him to procure breakfast at the next EAA Ch-1326 breakfast for the winner of the April Project Police Aircraft Spotter quiz. There is a catch though. This month’s quiz has TWO questions, the first being the standard aircraft recognition question, and the second asked in honor of the success of our Arion L.L.C. team who provided enough information and pictures to take up two issues of *The Sport Flyer*. So, here is the first question. What is the aircraft shown below: (Evil hint: for some reason this company has a penchant for designing airplanes with funny looking noses.)



“It’s a bird – it’s a plane – no, it’s a....”

The second question is: who is the manufacturer and what is the “trade name” of the engine shown below. Hint: there MAY be clues in the last couple months of *The Sport Flyer*.



A “Company name”, “Series name” engine. Caution; close examination of this picture may cause cognitive dissonance.

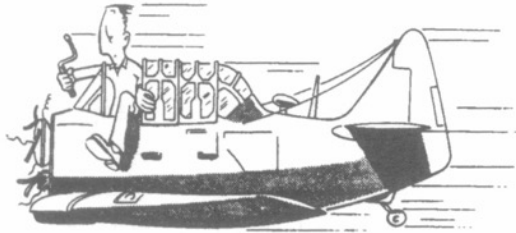
Send your guesses, I mean, answers to Staff Writer Randy Kelly at electricrow@pobox.com. The winner will be notified before the May breakfast.

Chapter 1326 Mission Statement

The Mission of the Shelbyville Sport Flyers Club, EAA Chapter 1326 is to enhance the quality of aviation life for its members by providing information about aviation, flying, and mechanical/maintenance knowledge shared by fellow members, guest speakers and special events which respond to the expressed needs and desires of all members.

Chapter 1326 Calendar

EAA Chapter 1326 Board of Directors Meetings are now held on an unscheduled, as needed basis. If you need to know when, you're already on the e-mail notification list.



Do not attempt restart if engine stopped because of obvious mechanical failure.

April 23rd; EAA Ch-1326 Fly-In Breakfast, Sport Flyer Hangar, Shelbyville Airport. Program; *My engine just quit. Now what do I do. OR, what can a powered airplane pilot learn from a glider pilot?*



April 28th; EAA Ch-1326 April Meeting, Conference room, Shelbyville Airport. Program: *USAF Test Pilot School, a brief history*, video by Aviation Artist Mike Machat.

April 30th; EAA Ch-863, Drive in/fly in breakfast, Lebanon Airport.

May 26th; EAA Ch-1326 May Meeting, Conference room, Shelbyville Airport. Program: Tentatively looking at a speaker with an ultralight.

May 28th; EAA Ch-1326 Fly-In Breakfast, Sport Flyer Hangar, Shelbyville Airport. Program; TBD.

May 7th; EAA Ch-699, Drive in/fly in breakfast, EAA699 Chapter Hangar, Winchester Airport.

June 23rd; EAA Ch-1326 May Meeting, Conference room, Shelbyville Airport. Program: TBD

June 25th; EAA Ch-1326 Fly-In Breakfast, Sport Flyer Hangar, Shelbyville Airport. Program; TBD.

For a good summary of aviation related social and training events in Middle Tennessee, check out the website <https://www.socialflight.com/>

CHAPTER 1326 ADMINISTRIVIA

To join Chapter 1326, send your name, address, EAA number, and \$20/year club dues to: EAA Chapter 1326, 2828 Hwy 231 N. Shelbyville, TN 37160-7326, attn Tommy Lynch. **NOTE:** You must also be a member of EAA National (<https://www.eaa.org>, or call 1-800-843-3612, \$40/year National dues).

Contact our officers by e-mail:

President/Flight Advisor Mark Stauffer:

mark.stauffer1@gmail.com

Vice President Sharon Tinkler: tinkler@me.com

Secretary Randy Kelly: electricrow@pobox.com

Treasurer Tommy Lynch: maddoglynch@comcast.net

EAA Chapter 1326 Technical Assistants

Composite Construction		
TBD		
Wood Construction		
TBD		
Aluminum Sheet Metal Construction		
TBD		
Welding/Welded Steel Tube Construction		
TBD		
Engine Installation		
TBD		
Electrical Systems		
Randy Kelly	electricrow@pobox.com	661-400-0203
Instrumentation and avionics requirements for VFR/IFR		
TBD		

Inputs for the newsletter or any comments can be e-mailed to Randy Kelly at electricrow@pobox.com



From the **Project Police** legal section: As you probably suspected, contents of *The Sport Flyer* are the viewpoints of the authors. No claim is made and no liability is assumed, expressed or implied as to the technical accuracy or safety of the material presented. The viewpoints expressed are not necessarily those of Chapter 1326 or the Experimental Aircraft Association. **Project Police** reports are generally printed as they are received in the next "convenient" issue, with no attempt made to determine if they contain the standard aviator 10% caveat of truth. So there!

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EAA CHAPTER 1326 NEWSLETTER
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ADDRESS SERVICE REQUESTED

THIS MONTH'S HIGHLIGHTS:

- Kommandant's Komments
- March 2022 Fly-In Breakfast
- Project Police Raid on Arion Aircraft L.L.C. Part 2
- Evil Editor Zurg's Aircraft Spotters Quiz and Engine Puzzler
- Monthly plea for "Project Police" participation for new stories and technical assistance

