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> 2022 Event Schedule

> > Oshkosh July 25-3 I Oshkosh, WI

Swift National 2022 Sept. 28 — Oct. 2 SMF Headquarters Athens, TN

# Swift Museum Foundation, Inc.

Volume LIV Issue #6

May 2022

## Executive Director's Report By Scott Anderson

I want to thank those of you who have sent in articles for the newsletter, past and current regular contributors that make our newsletter more diverse and interesting with your stories and photographs. Technical information articles are always good as well as sharing your experiences with our members, new and old, is invaluable. This input is particularly important to our new members, of which there are many who continue to join our great organization. They benefit greatly from your years of knowledge and experience. This helps them to learn more about the Swift.

The season for flying events is on and we would like to hear from you about what you've been doing in the "World of the Swift". Please take a few minutes and write up a small article for us. Your personal involvement makes it better for all of us.

**Reminder!!! 2022 Raffle ticket sales begin June 4**<sup>th</sup> and will be held online as it was last year. If you cannot participate online, give us a call here at Headquarters and we will be happy to assist you in getting your tickets. Five great prizes again this year so you have a real good chance at winning while helping support your Swift Museum Foundation.

Please consider the SMF in your donations of usable Swift salvage parts, historical information, and your estate planning. We work every day to make your Swift Museum Foundation, Inc. a better and stronger organization which in turn, helps to keep our Swifts strong and flying. Please do what you can to help us help you and your Swift!

# Welcome Our Newest Members of the Swift Museum Family!

Mike Beavers	ТХ
John Martens	CA
Josh Correa	NC
John Bagley	ID
Robert Fratti	ID

#### **SMF** Committees

Executive Paul Barnett Paul Mercandetti Sam Swift Scott Anderson

#### Nominating

Paul Barnett Pick Freeman Scott Anderson

#### Audit

Paul Barnett Paul Mercandetti Sam Swift

**Finance** Sam Swift Paul Barnett Scott Anderson

Fund Raising Jim "Frog" Jones

**Newsletter** Pamela Nunley

#### Nat'l Convention/Fly-in

Paul Mercandetti Sandy Mercandetti Scott Anderson

#### Parts

Steve Wilson Ken Coughlin Steve Roth

#### **Formation** Paul Mercandetti

Jim Roberts

#### Building

Roger Weber Scott Anderson Paul Barnett

IT/Web Tracy Rhodes Jim Jones

#### Aging Aircraft

Master Cylinder Boots

can use Bogert grommet s

install the small end in the original groove. The larger id will then be installed in the original groove in the master cylinder body or parking brake assembly.

nd can either be in

Steve Wilson Ken Coughlin Dave Carpenter

## Swift National Fly-in and Convention Report By Paul Mercandetti

# Swift National 2022 SEPTEMBER 28 — OCTOBER 2

We are making progress in getting things together for **Swift National 2022** here in Athens TN. I've gotten some ideas from our members on things to do to interest you and more ideas will help me to give you a better product.

Remember to contact the **Comfort Inn - Athens (423-252-8030)** and request the <u>Swift Convention rate</u> of \$96.00 plus tax. Once again, we are asking you to please <u>pre-register</u> with your form that will be sent out with next months newsletter. This will assist us in the planning stages and is especially important for us in the ordering of food, which is our biggest headache. We are looking forward to seeing all of you in September...or before at any of the upcoming fly-in events *ie*. Triple Tree, Oshkosh, local events, etc.

The infamous duo, Wade and Terry Gillaspie, hosted an event at their local airport that included not just Swifts but many other types as well. If you are hosting or know about an event in your area let us know and we can post it. Who knows who might show up? We're always looking for an excuse to burn some avgas.

## Swift Formation Committee Report By Paul Mercandetti

All is quiet on the Formation front. I guess no news is good news. Just keep 'em flying as it's just "plane" fun. There are still a couple of hold outs on the proficiency reports. Please do not let yourself become "non-current". If you get a chance to put together a formation flight for a waivered airspace event please let me know ahead of time (if possible) and forward me some pictures.

Checkspeedgeardown



At left is a photo of the boots for the Brake Master Cylinder. If you have any knowledge of where we may be able to obtain these, please contact us here at Swift Headquarters 423-745-9547 or Swift Parts 423

-744-9696. Email: swiftmuseumfoundation@aol.com

## Huntsville, Texas Fly-in Submitted by Terry Gillaspie

Wade and I had a beautiful day for a fly-in at Huntsville, Texas on Saturday May 7th. We try to always have a fly-in on the first Saturday in May and had to shut it down for the last 2 years. So we were very excited about this fly-in and of course our sweet Swift family showed up. We had 9 Swifts:

Wade and Terry Gillaspie Steve and Barb Wilson Mark Holliday Vernon Rooze Lance Small Keith and Brenda McCarty Jerry and Holly Bauerle Mike Bell Keith Richbourg

Hal Cope and Wen "Susan" drove in for the day. Thanks again for being such a great group of friends and planes. (See photos on page 7)

### Tales of a Traveling Swift Instructor – ADEL Gear By Will "Buddy" Kientz

For the last decade, I've tried to become more heavily involved with the Swift Museum Foundation. I have been actively flying our Swift for around thirteen years and turning wrenches on it for seventeen years under the direct supervision of my father who has owned it for over fifty years. Seven years ago, I got my CFI and became a Swift Museum Foundation checkout pilot. During this time I have flown a good handful of Swifts as well as assisted in the pre-buy inspections of several more.

The Swift seems to have two main Achilles' heels. Probably the most dangerous structurally, is corrosion in the horizontal stabilizer. The most problematic though seems to be the main landing gear. There are two types of gear on the Swift, ADEL and ELI (Electronic Labs Incorporated). ADEL gear is the most common and are most easily identified by the "nipple" or Schrader valve on the inboard side of the strut between the torque/scissor links. This port is used to service the gear oil. Some Swifters have removed the plug and inserted a Schrader valve so that they can put nitrogen (~30psi) into the strut to help set the O-rings. This is not required, but in my opinion helps to aid in the longevity of your seals.

The main difference between the ADEL gear and that of the ELI gear is that the ADEL is spring oil where ELI is oil air. Whenever I'm looking at photos of Swifts for sale, one of the first places I look is at the gear. If the airplane appears to be squatting on the ground and the torque links aren't extended, it could possibly mean the O-rings have gone bad on the brass bushing inside of the strut. This can also be an indication that the springs are going bad and the springs are no

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Founded by Charles E. "Charlie" Nelson 1968 longer holding the gear up. The fluid assists in "artificially" holding the gear up and increases the longevity of the springs as well as dampen oscillations. In the last five years, I have overhauled two sets of gear, with the assistance of my IA father, and assisted in a third. While on the road to instruct, I have run into two sets of ADEL gear that have required overhauls. This has always been a tough subject to bring up to the new owners. "It just came out of annual" or "It already went through a pre-buy inspection." are phrases that I often hear which puts me in the tough position of explaining that the gear needs to be removed because the O-rings on the brass bushing need to be replaced and often even the springs will be worn out too.

How can you tell that the gear needs to be removed and the O-rings replaced? On ELI gear, the struts will be fully collapsed as there is no spring inside the strut. On ADEL gear, you need to try to fully extend the strut. To do this, go to the outboard side of the wing and crouch under it. Put your back under the main spar and push up. If you are unable to do this, use a jack. When you release the pressure, the strut should remain fully extended. If the strut compresses back to where it was, it is more than likely resting on worn out springs and all the hydraulic fluid has seeped past the O-rings. A quick check of this is to then jack the airplane up (remembering to put 50lbs of weight on the tail!) and remove the plug on the inboard side of the strut. Before the next step, make sure to cover your tire with a rag in case you spill any hydraulic fluid. Fill the strut with 5606 hydraulic fluid and reinsert the plug. Replace the rag with a white rag in case the strut leaks. Then let the airplane down onto its gear. Apply some weight onto the wing and see if the strut collapses. If there is a leak, often times it will seep to the back of the strut housing. See the attached photo.

To replace the O-rings in the ADEL gear, please reference the W.E. Commings Hydraulic Manual, accessible through the Swift Museum Foundation.

The strut, and indeed the entire retractable landing gear system, separates the Swift from many of the other small two seat tail draggers. Age, as well as too little use, can cause the O-rings in the strut to dry up and shrink which causes leakage. With the ADEL gear, the aircraft rests on the springs and overtime the springs will compress and become less effective.

Some quick tips on the gear. When refueling the main tank, lift the left wing up as described earlier in this article. This will allow the fuel to drain over to the "right" side of the tank and allow more fuel to get into your tanks. This works with ELI and ADEL gear. For storage, lift both of your wings up to relieve pressure on the main springs. This will also increase the longevity of the springs as well as your gear.

To learn more about ADEL gear and the Swifts hydraulic system as a whole, check out the "W. E. Commings Hydraulic Manual". The W. E. Commings Hydraulic Manual, ELI and ADEL overhaul kits, and the Adel springs are all available at the Swift Museum Foundation. Give them a call at 423-745-9547 to place your order.

If you have any questions, feel free to personally reach out to me. Safe flying!

Will (Buddy) Kientz 314-578-7199

## Random topics from a random guy... By Jim Roberts

To lead on a high note, I'd like to share a super story on the **Bill and Will Kientz T-35 "Buckaroo"** project. The story was written by Sparky Barnes (Thank you Sparky!) for the May issue of the magazine *Director of Maintenance*. You can find that issue online at <u>https://dommagazine.com/</u> Once on the homepage, from the list of small headings across the top of the page, click on DOM MAGAZINE, then from the drop down menu, select PAST ISSUES (ACCESS APPROVED). This opens a new web page where you can select the May 2022 issue. Then you can read or download the PDF version of the magazine. The story begins on page 14, and includes some fantastic historical photos courtesy of Bill and Will. If you want to see a photo of Charlie Nelson and Bill Kientz in the Saudi desert in 1972, there it is! After reading the story, I'm more jazzed than ever to see the "new" Buckaroo take to the skies. PS...in the magazine at the top of page 3 there's a small photo of Charlie Nelson in his T-35, flying on the wing of Fred Womack in his T-34. I took the photo some years ago, out the left window of my Swift, and am so glad I did.

To end on a serious note, assuming you all are still reading this and are not online looking at Sparky's story, I have **a few words about fueling your Swift**. You "old heads," bear with me, but I hope this info will prove worthwhile to some of our newer members.

First, it's imperative that every Swift owner understand their fuel system, since we all know there are a lot of variations out there. A good place to start for general info, besides the original red Swift manual, is the time-tested "Blue Book," of Swift maintenance and operations tips. Another good resource is the "Monty the Answer Man" archives on the Swift website. Know YOUR system, its plumbing and idiosyncrasies (big word for "quirks").

Two tips I'd like to share from personal experience are refueling the plane, and tracking fuel burn and fuel on board. As for refueling, one thing we should all be familiar with is the need to ensure the main tanks (original factory mains) are completely full, and you're not just looking at fuel rising to the top of the filler on the left wing. IT TAKES A WHILE for the fuel to run over and fill the right tank, and someone unaware of this quirk can be surprised later in flight.

Since I have outboard aux tanks, I'll fill the mains slowly until fuel rises to the left filler top, then fill each outboard, giving the main tank fuel a chance to run over to the right side. Then I return to slowly top up the mains, while bumping the leading edge of the wing to rock the plane a little and help "burp" the air from the right tank.

One good technique is to park or position the plane with the right wing low prior to fueling. Sometimes gravity can be our friend. I've been know to enlist help at Oshkosh or Sun 'n Fun to spin the bird around if it was originally tied down with the right wing high. I only had to be surprised once when, believing the plane was full, I checked the main gauge after about 30 minutes in flight and it was showing just above half full. I had refueled with the right wing high, and gravity worked like it always does.

And I always refuel the plane myself. Besides keeping potentially careless hands at a safe distance, the above mentioned quirk of the slow-filling right main tank could be an easy trap for a lineman to fall into...."Yes sir, she's topped off!"

#### Swift Museum Foundation, Inc.

With regard to tracking fuel burn and fuel on board, we each have our own techniques, and if you have a fuel totalizer, you're ahead of the game! Being a cheap airline pilot (redundant term), when I restored our Swift, I chose not to install a totalizer, and instead rely on a little spiral notebook, my "Redneck totalizer." I log the time on each flight, and figure an average of 10 GPH (which is pretty solid for our engine). If you start with full tanks (a known quantity, assuming you correctly fueled the plane), it's simple math to track fuel burn and fuel on board until you refuel again.

For example, I carry 52 gallons total, so if we've flown a total of 4 hours, there should be around 12 gallons remaining. If I add 30 gallons, there should be 42 gallons on board. I won't go into "usable" fuel. Again, know your system. This is pretty simple, assuming you read the tach correctly, write the times down correctly, and do the math correctly. A lot of assumptions at play, and recently I flunked math. On the first leg home from Sun 'n Fun, I stopped in Georgia to refuel, and when topping up the plane, I was surprised to add significantly more fuel than expected.

I checked the notebook and saw a simple math error, made a week earlier on arrival at Lakeland. My erroneous math showed five gallons more at shutdown than the correct amount. That led me to believe, after refueling at Lakeland, that I had more gas than was actually onboard. Fortunately, I always plan to land with one hour reserve, and that was the saving grace. The FAA-mandated 30 minutes for day VFR would have been cutting it real close. Hmmm....maybe a totalizer is in my future.

So in summary, know your systems, be sure you refuel accordingly, keep careful track of fuel burn and fuel on board, and always check your math, whether using a totalizer or a notebook. Blue skies, and hope to see you at Oshkosh!



# Raymond Zehner and Swift N78172

The above photo was shared with us by Zendra Zehner, daughter of the late Raymond G. Zehner of Henrico, Virginia and his Swift N78172. Raymond was a long time member and supporter of Swift.

#### Page 7

# Huntsville, Texas Fly-in Photos

Photos courtesy of Terry Gillaspie and Paul Mercandetti







## Swift Museum Foundation Offering For Sale — Last Call! Super Custom Swift N80555 via Sealed Bid



Serial #58, GC-1A converted to a GC-1B. Past Oshkosh Lindy Award winner. Powered by a 210 HP Continental engine, equipped with a Nagel sliding canopy, sticks, and retractable tailwheel. Smooth skinned, flush riveted, and a recent leather interior installed with Cessna 152 seats.

TTAF: 2095.3 — TTE: 1423.1 — SMOH: 384.3

Garmin 430/WAAS, GNC 250XL, and GTX 335 with ADSB out. Century I wing leveler and HIS installed in a custom panel with full set of El instruments.

Substantial but repairable damage to airframe due to a take-off accident with a light prop strike. Multiple issues with paperwork on modifications performed to the airframe. Aircraft and records are available for inspection at Swift Headquarters during normal business hours 9-5 EDST M-F. Please schedule an appointment for inspection.

Minimum bid of \$60,000.00 is required. — You must be a current Swift Museum Foundation member to place a bid. — All sealed bids will be opened at 12 p.m. on June 7<sup>th</sup>. Member with the highest bid will become the next owner of this aircraft.