

THE BEARING LINE

A STEARMAN FLIGHT UPDATE MARCH 2024





Welcome to the premier issue of The Bearing Line.
This electronic newsletter is to keep you, the
members of Stearman Flight, "up to speed" with
what's happening with your organization. As editor

my intention is to publish this quarterly... but I make no promises. This is a volunteer gig and my time is split between this, other Stearman Flight activities and a self-imposed summer assignment of turning avgas into round-engine noise and vibration. I'll do my best to get this newsletter out with some regularity, but don't expect to set your fine Swiss watch by the precise timing of the publication schedule.

In addition to keeping you up to speed this newsletter will endeavor to offer short articles from time to time on subjects ranging from flight safety and formation flying techniques to anything else that might be of interest to Stearman Flight pilots. Periodically, it will introduce you to the people "behind the curtain" – the volunteers who make this tick.



Bill Austin. John Rettick Editor

As a disclaimer, I'm neither a professional journalist nor a graphic artist. I'm just an amateur scribbler who raised his hand at the wrong time and offered to get this rag started, so bear with me as I attempt to generate something informative.

If you want to see this newsletter succeed then you need to be a part of it as well. Write something to contribute, ask a question, send me photos or suggest a topic you wish to see covered in a future issue. In the meantime enjoy the read... and your summer flying! Respectfully plagiarized from

Presidents Corner



I'm excited to see this newsletter as an avenue for increased communication amongst Stearman Flight. The entire organization is full of talented people who give an amazing amount of time to further our goal of safe formation flying in the Stearman.

We have a new Board of Directors and Officers and we are analyzing the feedback from the survey sent out in February. We received 54% reply rate, with many excellent inputs.

Julie Thomas, President

David Burroughs, Vice President
Carey Hardin, Secretary/Treasurer
The above three listed officers are also part of the Board of Directors with:
John Rettick, Board Member, Standards Chairman
Ben Thomas, Board Member

We are in a constant challenge to fly, volunteer and keep our personal lives balanced. If you have time to share, please let me know and we will get you involved!

I look forward to the coming flying season and hope good maintenance and good health allow us all to get a lot of flying accomplished this year!

Julie Thomas

https://youtu.be/4D4a4Pp-IHE?si=Piz0qYwFwsQZ-Uv1

Here is a video discussing Knowledge vs Skill. I believe it has some insight on the commitment involved in formation flying and the path to excellence.



President's Corner
History of Stearman Flight
Malden Formation Clinic June 1, 2024
Who's Who?
Standards and Training
2023 In Review
Board of Directors & Committee Chairs

Page 1 Page 2 Page 2 Page 3

Page 3 Page 4 Page 5





A BRIEF HISTORY OF STEARMAN FLIGHT

To gain some historical perspective on Stearman Flight it might be of interest to members to know how our organization came to be. We are an offshoot of JLFC, the Joint Liaison Formation Committee, a catch-all FAST signatory that represented pilots flying everything from the Stearman and other WW II primary trainers to liaison aircraft such as the L-4, L-17, L-19, O-2 and others.

As Stearman participation in JLFC grew over the years it became increasingly apparent that JLFC was unable to adequately serve the needs of the Stearman community. Catch-all formation procedures, manuals and standards that were developed for such a large and diverse cross- section of high- and low-wing, fixed-gear and retractable, single- and multiengine aircraft types were often unsuitable or incompatible with our needs.

At a Galesburg meeting of JLFC Stearman pilots in September of 2008 there was a consensus that we could be more responsive to Stearman pilots' needs by withdrawing from JLFC and forming our own organization, and the commitment was made at that meeting to do so. Going "solo" would allow us to develop our own Stearman-specific manuals, procedures and training programs, and we could better assure compliance with FAST standards.

In early 2009-a few short months and a *lot* of work later -a presentation was made to the FAST BOD requesting signatory status for Stearman Flight. Signatory status was granted in Spring 2009, and as the saying goes, "The rest is history."

HAVE YOU ATTENDED A CLINIC YET?

If not, what are you waiting for? This organization exists for only one reason – to serve you. You've paid your membership fee so don't be shy about taking advantage of your organization's capabilities. All it takes is a phone call or an e-mail to get the wheels turning for your own clinic. Getting involved will open up your flying activities to an entirely new world of fun and satisfaction.

Don't make the mistake of thinking that a clinic has to be a big production either. Clinics can range in size from just two airplanes to upwards of half-a-dozen or more. The size hinges on how many pilots in your area want to participate, how ambitious you want to get in putting one together, and how many Instructors and Check Pilots are available on the dates you wish to hold your clinic.

If you're new to all this we suggest that you keep your first clinic relatively small and simple. After all, if you're new to formation flying you've got to start out flying 2-ship formations anyway, so there's no reason why you can't organize something as small as a 2-ship clinic.

For preliminary information on how to organize a clinic check out the Stearman Flight web site www.stearmanflight.com. Click on "Formation Clinic Info" on the menu, then open the PDF file titled, "How to organize a formation clinic in your area." For more detailed information and to get all your questions answered, or to inquire about instructor and check pilot availability contact our always helpful Clinic Chairman, Carey Hardin cfh@clearwaterconsultants.com.

MALDEN, MO FORMATION CLINIC

30 May - 2 Jun 2024 Arrive 30 May/Thur Depart 2 Jun/Sun

ALL WELCOME!

Come fly for proficiency, or 2 and 4 ship training will be available!

RSVP by 5 May to get a training spot!
We will customize the training schedule after RSVPs are in. RSVP to Julie Thomas, 901-289-7829 or Julie@Mixture-Rich.com with your training desires. First come, first served!



Rooms are blocked at the Airport Inn (on base). Tell Judy you are with the "Stearman Group" for \$70/night rate (2 double beds). Call 573-276-5144.

Thanks to First Flight We have a clubhouse and hangar space for at least 12 Stearman. \$140 covers hangar, transportation, and drinks for the weekend.





Reminder

Yep, it is that time of year again!

Annual membership renewal.

Submit a Stearman Flight Proficiency report

https://stearmanflight.org/ wp-content/uploads/2015/06/ Proficiency-Report-08.pdf

8

Check for \$45 payable to Stearman Flight

Send to: Carey Hardin Post Office Box 1328 Starkville Mississippi 39760



WHO'S WHO? A PROFILE OF THE PEOPLE THAT MAKE OUR ORGANIZATION TICK

Ben Thomas is a current Stearman Flight 2-ship Lead Pilot. He grew up in Hernando, MS. He will graduate in May from Mississippi State University with a bachelor's degree in Agriculture Engineering. Ben is currently active in flying and farming activities with his family. On the family farm in Missouri, he



was eager to drive tractors, run augers and graduate to operating and adjusting the combine for the corn and soybean harvest long before earning his driver's license. Also active in maintenance working on planes, cars and heavy equipment. He completed his solo on his 16th birthday in a Decathlon. He continues his flying experience in aircraft including the Stearman, Maule, Pawnee, AgCat, , Pacer on Floats, and DC-3. Of all the engine combinations in the Stearman, Ben prefers the 450hp with over 800 hours tailwheel time and under 5 hours in nose gear airplanes. He has earned the title "Youngest Stearman Pilot" multiple times at the National Stearman Flv In. He has contributed back to Stearman Flight by flying dedicated Lead at clinics and can be found roaming around the Starkville (MS State) airport looking for people to fly with or helping with maintenance projects. His advice to fellow pilots is, "The only barrier between becoming the next Stearman Flight oracle is attitude, reading the manual, and practice!"



Standards and Training

Welcome to the Bearing Line Stearman Flight Newsletter. I've been the Standards Chairman for

about 10 years. Julie Thomas is the assistant Standards Chairman as well as the Stearman Flight President. Together many hours are consumed working and evolving the training for new formation trainees and instructors. Safety through

is the goal.



It's the start of a new flying season and time to knock a little rust off. Make sure you have a valid Stearman flight card if you plan on flying in waivered airspace. Don't overdo it on your first couple of

flights. After a detailed briefing start off with basic formation changes with minimal maneuvering. When comfortable practice mild Lazy 8s in parade, gradually increasing until you able to lead or fly wing to the Lazy 8 FAST Practical Test guide standard.

The Lazy 8 is a maneuver that both Lead and wing pilots must demonstrate their proficiency during every check ride and proficiency check. The Lazy 8 in parade formation is the only maneuver that has objective parameters in bank & pitch In the FAST Practical Test Standards (PTG). Stearman Flight bank/pitch parameters for the Lazy 8 are 30° of bank (roll wire) & 10° and -10° of pitch.

The Lazy 8 is two alternating, symmetrical, climbing and descending 180-degree turns in a fluid, smooth, continuous flow. It is not required to end the maneuver at the entry altitude and airspeed. The formation Lazy 8 is similar to a commercial Lazy 8 that is evaluated on smooth maneuvering that allow a wingman to stay in position with minimal variation in parade position.

- Lead will start in a descent, attain 110-115 mph, prior to turn
- · Lead will head nod in direction of turn and smoothly increase pitch and bank
- +10 degrees (pitch up) is attained at approximately 45° of turn.
- · Minimum airspeed (70-80 mph) and maximum bank (Roll Wire) is attained at 90° of turn.

- -10 degrees (pitch down) is achieved at
- Lead will arrive at 180° point, wings level, maintaining slightly nose low to regain entry airspeed.
- Then continue the maneuver in the opposite direction for another 180-degrees of turn

It is suggested that warm up lazy 8s at less than 30° of bank (roll wire) & 10° and -10° of pitch. Gradually increasing as proficiency improves.

Proficiency Flights

In Feb 2023, Formation and Safety Team (FAST) announced its emphasis on ensuring Proficiency Flights incorporated a large majority of the formation maneuvers. This was to avoid "Saturday flights to pancake breakfast" counting as the proficiency practice for the year. To support this focus, Stearman Flight has clarified the proper requirements for flying and documenting FAST Proficiency Flights.

For 2024

To submit a qualifying proficiency documentation, please note the following requirements:

- Proficiency Report will be submitted with a
- A Satisfactory Stearman Flight Performance Report with the number and type of maneuvers

The minimum required maneuvers for the FAST Level Proficiency flight:

Briefing Under Run Takeoff Lazy 8 in parade Lead Change Trail Knock It Off Break Rejoin Cross Under Rlind Landing

Debrief

Required reading for Flight leads, instructors and check pilots.

A little bit of a deep dive into the FAST signatory training and evaluation genesis. When developing a signatory training program for the basic FAST qualification card, members will reference all FAST Standardization Documents (flyfast.orga) which include:

- FAST Formation Maneuvers Guide
- FAST Radio Communication and Cockpit Visual Signals Guide

- · FAST practical test guides (wingman and flight lead)
- . FAST Foundation and Principals

Last year the Formation and Safety Team (FAST) president created a group from multiple signatories tasked with updating the FAST Formation Maneuvers Guide (FMG). The updated FMG can be found on the Flyfast.org website. The FMG is only 19 pages long and describes the basic formations, fingertip, trail, route etc. The FMG purposely has no specifics on how to change from one formation to another.

The FAST Wingman and Flight lead Practical Test Guide (PTG) are the evaluation criteria for each FAST formation maneuver. The Stearman Flight training syllabus is derived from the FAST PTG. It is used by check pilots when conducting lead and wing pilot practical tests and flight leads when evaluating proficiency flights. Instructors will use this guide when preparing students for the practical test.

I task all Stearman flight leads, instructors and check pilots to read entirely these two documents to refresh ourselves on the parameters to train and evaluate our formation pilots to achieve and maintain the qualities to competently fly formation safely and in waivered airspace.

Ref FAST PTG -

C. TASK: LAZY EIGHTS, LEFT AND RIGHT USING 45° BANK TURNS, AND PLUS / MINUS 20° OF PITCH (Signatories may authorize lower bank/pitch standards if necessary for their aircraft

Stearman Flight bank/pitch parameters for the Lazy 8 are 30° of bank (roll wire) & 10° and -10° of pitch.

Objective: To determine that the applicant

- · Maintains precise station keeping position and understands and appreciates the acceleration and deceleration effects with respect to the lazy-eight maneuvering
- · Uses power with anticipation, smoothness, and well within engine limits
- · As required, advances the propeller control to a higher rpm so as not to exceed engine limits in engines that are supercharged
- On the inside and the outside of the turns, does not change position fore and aft as the result of acceleration or deceleration effects in the maneuvering

Stearman Flight 2023 in Review

Blue Angels Homecoming Show



November 2023 Echelon pass (see shadow on right) with 3 second break indicated.

Stearman Flight participated in the Blue Angels Homecoming Show with 6 aircraft. The waivered airspace was located at the Pensacola Naval Air Station, with the aircraft based out of Pensacola International Airport, 10 miles away.

The ground track and holding, airshow passes and return to Pensacola International.













Pilots: (from left) John Rettick, Roy Kinsey, Julie Thomas, Howard Thomas, Carev Hardin, Sam Hardin, Phil Webb







BOARD OF DIRECTORS

President
Julie Thomas (901)289-7829
julie@mixture-rich.com

Vice President
David Burroughs (309) 261-0992
davis@Prove-it.net

Secretary/Treasurer Carey Hardin (662) 312-8300 cfh@clearwaterconsultants.com

FAST Representative #1 Julie Thomas (901)289-7829 julie@mixture-rich.com

FAST Representative #2 John Rettick (309) 275-4967 jrettick67@gmail.com

COMMITTEE CHAIRMEN

Records Chairman Sam Hardin (662)694-1957 samhardin@hotmail.com

Standardization Chairman John Rettick (309) 275-4967 <u>jrettick67@gmail.com</u>

Clinic Chairman
Carey Hardin (662) 312-8300
cfh@clearwaterconsultants.com

Public Relations Chairman Rod Hightower (314) 302-8174 rwhightower@sbcglobal.net

Standardization Chairman
The Bearing Line Editor
John Rettick (309) 275-4967
jrettick67@gmail.com

"Safety in Formation"

We're on the web at: www.stearmanflight.com