



NEWSLETTER

JULY 2023

UPCOMING EVENTS

MONTHLY MEETING

AUGUST 19, 2023

BROOKHAVEN AIRPORT

PRESIDENTS MESSAGE - *Andrew Apicos*

Dear Members,

Preflighting an aircraft is critical and essential for safe flight. The pilot in command is responsible for determining that the glider is in airworthy condition. Gliders are preflighted at the tie-down using a checklist recommended by the manufacturer that can be found in the POH. Following checklists is necessary and vitally important to help ensure that all elements are completed. However, preflighting is not a one and done procedure. Pilots are constantly listening to and looking at the aircraft. In fact they use all five senses to build an awareness and a memory of what "feels" right. After towing a glider to 3000 feet, one of our most experienced tow pilots, Don, noticed that the oil pressure gauge was fluctuating. When he landed, he immediately moved the plane to the hangar, and grounded it, until it could be checked out by a mechanic. As it turned out, the engine needed replacement! Proper preflighting and ongoing vigilance during operation is fundamental to safe flight and protects our equipment.

IN THIS ISSUE

PRESIDENTS MESSAGE

OPERATIONS

MAINTENANCE

SAFETY AND EDUCATION

MEMBERSHIP

GOOD AND WELFARE

CLUB OFFICERS

<i>President</i>	<i>Andrew Apicos</i>
<i>Vice President</i>	<i>John Hoge</i>
<i>Chief Pilot</i>	<i>Brian Robey</i>
<i>Operations</i>	<i>Stephen Cluff</i>
<i>Maintenance</i>	<i>Ryan Jacobellis</i>
<i>Secretary</i>	<i>Joe Grossman</i>
<i>Treasurer</i>	<i>Mike Rudolph</i>
<i>Director at Large</i>	<i>Gerry Issacson</i>
<i>Newsletter/Editor</i>	<i>Stephen Cluff</i>

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OPERATIONS - Stephen Cluff

We accumulated a total of **47** glider flights in July as detailed below in **Table 1**.

Longest Glider Flight in July: Andrew and Craig had a 1 hr 6 minute flight on July 30th.

TABLE 1 - GLIDER OPERATIONS

Date	Total	Instruction	Student Solo	Intro Flights	Other	Notes
7/1/23	4	0	3	0	1	Tow Pilots: Wayne Instructor: Andrew Field Manager: Mike H/Joe
7/8/23	12	5	6	0	1	Tow Pilots: Pierre Instructors: Andrew Field Manager: Ryan/Craig
7/23/23	14	2	1	6	5	Tow Pilots: Wayne/Charlie Instructors: Shawn/Andrew Field Managers: Ryan/Craig
7/29/23	10	4	4	2	0	Tow Pilots: Don/Brez Instructor: Shawn Field Manager: Craig
7/30/23	7	5	1	0	1	Tow Pilots: Charlie/Wayne Instructor: Shawn Field Manager: Joe

The Club 172 (N5361K) flew **11.5** hours and the Pawnee tow plane (N7372Z) accumulated **11** hours in July.

Operation Notes:

Runway 6-24 is temporarily closed until **November 15, 2023**.

Glider operations are currently suspended due to the Pawnee engine replacement.

MAINTENANCE - Ryan Jacobellis

TABLE 2 - AIRCRAFT STATUS

Aircraft	Status	Notes	Annual Due
N2055T (SGS 2-33A)	Grounded	Glider maintenance and repairs in progress. Wing parts are shipped.	New Annual Pending Repair
N17956 (SGS 2-33B)	Grounded	Work is completed. Awaiting new FAA Airworthiness Certificate and delivery August.	August 2024
N65918 (SGS 2-33A)	Active	No significant Issues	May 2024
N17917 (SGS 1-26E)	Active	No significant Issues	May 2024
N7365 (SGS 1-34)	Active	No significant issues	June 2023
N7372Z (PA-25-235)	Grounded	Engine rebuild required	May 2024
N4016Z (PA-18-150)	Grounded	Engine is complete	New Annual Pending Repair
N5361K (Cessna 172)	Active	No significant Issues	September 2023

The Club 172 (N5361K) will now be going into annual September, so free to rent in August.

SAFETY AND EDUCATION

Glider Flight Recording Applications Review Part II - Andrew Apicos

Last month I wrote about using the Flyskyhy software application to create a route, (a declared task), from a set of waypoints. This month, I created and selected a single waypoint for my flight named "**IPALL**". This waypoint is located at the intersection between runway's 6/24 and 15/33. The designated altitude for this waypoint is 1401 feet, and it has a radius of 0.05 miles. Why 1401 feet? Since this is the only waypoint, the information presented on the Flyskyhy screen during flight will display the required direction and glide ratio to arrive at that point at an altitude of 1401 feet. At this position and altitude above the intersection of both runways, I can safely reach any of the 4 Insertion Points (IP) for each of the glider runways, hence the name **IPALL**. I created this waypoint with the intention of using it on days when there is lift, to help answer the following question - how do I know how far away I can venture from KHWV, and return safely?

Software applications are not the beginning and end of all flight planning - they are but another tool for the pilot to use. Common sense and good judgment should be the first application turned on before a flight.

Take a minute or two to carefully examine **Image 1**, which displays my altitude at 2326 ft, in -88 fpm sink, and a 24.6 to 1 glide ratio. The black arrow indicates my current location, just south of Sunrise Hwy. The green and black spiral shows that I've just finished thermalling, and within the spiral, the different colors show varying strengths of the thermal, and how well it's centered. The red concentric circles indicate radial distances 0.5 and 1 miles away from my present position. The dark blue line pointing north shows the required direction to the **IPALL** waypoint.

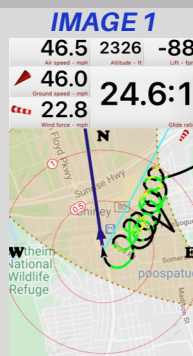


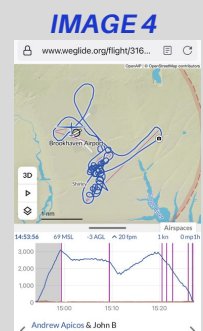
Image 2 shows the second screen, which displays information needed to reach waypoint **IPALL**, highlighted in the green box. At my current 24.6 to 1 glide ratio and altitude of 2326 ft, the screen display "glide to next", indicates that a 10.1 to 1 glide ratio from my present position is required to reach waypoint **IPALL**, which is currently set for an altitude of 1401 ft. The screen also shows that **IPALL** is 1.9 miles away. Note that the 2-33 glider, as the name implies, has a 23 to 1 glider ratio; however, we use 50% of that ratio for safety which is 11.5 to 1. Therefore, from our current distance we can safely reach waypoint **IP ALL**.



Image 3 shows the view looking North from the glider at the same moment. Clearly, we are south of Sunrise Hwy with exit 58 at bottom left. Since both runways are visible, good common sense suggests that at any given wind speed at this altitude, we are safely in range of reaching the IP, with or without using an app.



Image 4 displays the trace and flight profile of the same flight as it appears after I uploaded it to WeGlide.



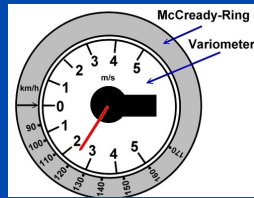
I urge all students to determine for themselves, the distance from various landmarks to **IP ALL**, such as LIE exit 68 or Sunrise exit 58. Similarly, you can set up the map's concentric circles in 2 mile increments from **IPALL**, to identify which landmarks intersect each circle. An astute reader may have noticed the box labeled wind force indicating 22.8 mph? I'll discuss this in my next installment!

GLIDER HISTORY

Paul B. MacCready Jr. (September 25, 1925 - August 28, 2007) was an American aeronautical engineer, three-time U.S. National Open Class Soaring Champion, and first American World Soaring Champion. MacCready's greatest contribution to soaring, however, was his Speed to Fly Theory published in 1954 and use of an Optimum Airspeed Selector, now known as the MacCready Ring. Analog and digital versions of a MacCready Ring are used today to provide glider pilots the optimum speed at which a sailplane should be flown between thermals depending on expected thermal strength, or MacCready Number (MC), which is calibrated to the glider's polar curve.



Paul B. MacCready Jr. and the MacCready Ring (Top).



MacCready also developed the first human powered aircraft, the Gossamer Albatross, which crossed the English Channel in 1979, and the first solar powered aircraft in 1980, the Gossamer Penguin (Bottom).



Glider Exam Questions

1. Assuring compliance with airworthiness directives is the responsibility of the:
 - a. FAA certificated mechanic.
 - b. Pilot in command of the aircraft.
 - c. Owner or operator of the aircraft.
2. If an aircraft's operation in flight was substantially affected by an alteration or repair, the aircraft documents must show that it was test flown and approved for return to service by an appropriately rated pilot prior to being flown:
 - a. With passengers aboard.
 - b. For compensation or hire.
 - c. By instructors and students.
3. An aircraft's last inspection was performed on July 12, this year? The next annual inspection will be due no later than:
 - a. July 13, next year
 - b. July 31, next year
 - c. 12 calendar months after the date shown on the Airworthiness Certificate.
4. Which is prohibited if the aircraft being used has not had a 100-hour inspection or annual inspection within the preceding 100 hours of time in service?
 - a. Giving flight instruction for hire.
 - b. Conducting any commercial operation.
 - c. Carrying passengers, either for hire or not for hire.
5. An aircraft operated for hire with passengers aboard has a 100-hour inspection performed after 90 hours in service. The next 100-hour inspection would be due after:
 - a. 90 hours' time in service.
 - b. 100 hours' time in service.
 - c. 110 hours' time in service.

Answers: (1). c (2). a (3). b (4). a (5). b

MEMBERSHIP

Andrew Newitt and Benjamin Furer attended their first meeting and Dana Delvalle attended her second meeting on **July 15, 2023**.

Eligible members at the **July 15, 2023** meeting voted 10-1 to sell the club 1-34 (N7365) and purchase Gerry's 1-34 glider for \$11,000. This purchase is currently on hold pending completion of ongoing maintenance repairs with other aircraft.

Many thanks to those members who graciously contributed to our bond fund. The initial bond enrollment period ended **July 31, 2023**, with a total of \$17,500 funds committed for. The enrollment period will be extended to **September 30, 2023**, so there is still time to contribute. Please send or hand deliver your check at your earliest convenience.

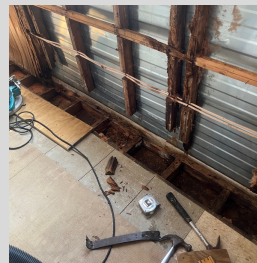
GOOD AND WELFARE

As many of you are aware, Andrew has been writing about the WeGlide and Flyskyhy apps. The Soaring Society of America (SSA) recently entered into an agreement with WeGlide, to provide subscription services to SSA Members and Clubs at no charge as a benefit of SSA membership. The retail subscription price is \$67 per year. Please visit <https://www.ssa.org/weglide> to learn more about WeGlide benefits and to activate your free membership. We encourage all active flying members, especially student pilots, to take advantage of this free opportunity and open an account. We will be discussing this exciting development at the next meeting and in future articles.



Club member Pierre-Alban Grellet-Aumont (Far Right) competed and won Day 3 and placed third overall at the 1-26 Championship in Waynesville, Ohio in May.

A big thanks to new member Jim Warner, who has been volunteering his time repairing portions of the clubhouse floor, walls, and roof!



N17956, now model 2-33B, has been test flown and is nearly ready for delivery, pending minor repairs to the canopy and issuance of a new FAA Airworthiness Certificate.

Club History

July 1998 Newsletter - 25 years

	<u>Longest Glider Flights</u>		
Jeff Rothman	7/18/98	2-33	3:00
Carmine Sodano & Joe Luicci	7/25/98	2-32	2:20
Inta and Gunny Bumburs	7/5/98	L-13	1:30

July 1973 Newsletter - 40 Years

Glider Launch Accident

On July 29, 1973, the SGS 2-33 N7555 was being launched when the right wing struck the parked PA-18 N4410Z. No injuries occurred to the members involved. More information will be available when the accident committee makes its final report.