



Comm One



News of the Reading Aero Club

July 2024

President's Message – Todd Weaver



Looking back, I can't believe a month has already passed since WWII Weekend. Despite the not-so-hot (literally) weather, the club still managed to earn a respectable income from the event. It was a good time spent with fellow club members and

their families. Thanks again to everyone who chipped in.

Speaking of "chipping in"!!! Who didn't notice that it took less than 6 days to get 73K through its most critical phase of engine break-in?!! Drew picked her up the afternoon of Thursday, June 20th. By the evening of Tuesday the 25th the plane was available for all modes of flight. That was a tremendous amount of flying by a few devoted members working for the good of the club. Thanks to those who found time to help ensure the new powerplant will serve us reliably for years to come.

With some effort, we have now have two planes running in top form. With a bit more effort we should soon see the Dakota back on the schedule for our enjoyment.

I don't know about you, but all this work tends not only to build my appetite but also makes me thirsty! Good thing the summer picnic is now just days away. Lisa and I look forward each year to hosting this event in hopes club members, their spouses and adult children build more great memories spending time with fellow members. Live music, yard games,

swimming pool, Mission BBQ, adult beverages and Marie Perry's world-famous airplane cookies will be on hand to enjoy! Marie makes Betty Crocker look like a part-timer so don't miss out! Please take time now to sign up and let's hope for sunny skies! The link to sign up is below.

[Reading Aero Club: Reading Aero Club Summer Picnic \(signupgenius.com\)](https://www.signupgenius.com/10C044CA8AE2EA7FA7-48469600-reading)

We hope to see you there!!

Todd Weaver
RAC President



Upcoming Events

- **Club Meeting:** 7/11/2024, 7:30 PM
- **Food @ 7:00 by:** Clubhouse Cookout provided by Tim Earnest, Brian Stoltzfus and Keith Krott
- **2024 RAC Summer Picnic:** 7/13/2024 12:00PM – 10:00PM EDT
- **Signup:** <https://www.signupgenius.com/go/10C044CA8AE2EA7FA7-48469600-reading>



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General Announcements

N2373K Return to Flight Following Engine Overhaul

As mentioned above, N2373K has fully returned back to flight. The engine break-in flight profile and procedures required to properly break-in the newly-overhauled engine have been successfully completed. As such, N2373K is back to normal flight operations while still requiring **MINERAL OIL** until advised otherwise. Happy flying!

Summer Picnic: July 13, 2024

The Club's annual Summer Picnic is scheduled for Saturday **July 13, 2024**. Our very own Club President, Todd Weaver, will be hosting this fantastic summer party at his residence. This is one of the many great opportunities offered by the Club to meet your fellow aviators outside of the Clubhouse, talk shop, share stories, enjoy the sunshine and have an all-around great time! Sign-up for the event is available online at <https://www.signupgenius.com/go/10C044CA8AE2EA7FA7-48469600-reading>

When signing up, please indicate how many adults will be attending as a \$25 per person, non-refundable contribution will be billed to your Club account. The summer party is rain-or-shine, and we ask that you bring your own folding chair. Food, drink, live music, yard games and swimming along with the usual hijinks will be available. We kindly ask that you leave the kids at home with the babysitter.

Fall Wash-n-Wax October 5, 2024

The fall Wash-n-Wax is scheduled for Saturday **October 5, 2024**. While it is a bit in the future, please check your availability and put it on your calendars. In addition to cleaning the three airplanes, we also use this time to clean the Clubhouse as well. So please plan to attend the Wash-n-Wax event this fall, and as an added bonus fulfill some of your annual service hours for the year.



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Maintenance Corner – Kevin Pannebakker



N2373K has gotten its overhauled engine installed and completed 14.3 hours of the required break-in protocol. The engine has performed phenomenally throughout the process. The engine has consumed almost no oil in the 14 hours and an inspection by

Steve Kunkle revealed no abnormalities. The aircraft will continue to utilize mineral oil until its first oil change comes do. **DO NOT USE ANYTHING OTHER THAN THE PROVIDED MINERAL OIL UNTIL INSTRUCTED BY EITHER OF THE MAINTENANCE OFFICERS!** During the break-in process, the GFC500 auto pilot was used extensively and did not exhibit any erratic behaviors. We are planning to take the aircraft to KCXY in the upcoming weeks to have the GI-275 attitude recalibrated and also have the glideslope and localizer functions tested.

N2946B continues to remain out of service. The E.I. CGR-30P has been canceled after it was discovered that the unit is not as capable as originally advertised and they are estimating a 1-month lead time in order to program it. This was vastly different than what we were originally told by E.I. when the order was placed. We are currently asking local vendors again if they can fit us into their schedules to have a GI-275 installed in place of the E.I. CGR-30P. We will also have the oil cooler sent out in the meantime to be cooked and to ensure there are no issues with it.

No news to report on N168F at this time.

As a reminder, if discrepancies are found on any aircraft, please email maint@readingaeroclub.org

Thank you all and fly safely!!

Kevin Pannebakker
Maintenance Director

Completed Items

68F

- Oil Change
- GPS Updates

73K

- Engine overhaul in-progress
- GPS Updates

46B

- Oil verna-therm replaced
- Oil temperature sensor troubleshooting
- GPS Updates



Homer says: "The sky is not a limit, it's just the beginning!"



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Safety Officer – Brian K Stoltzfus

Skew T Log P

Last month, we talked about how to predict cloud layers using the Skew T Log P graph. On the upper right-hand side of the graph, you see CAPE and then a number after it. CAPE is an acronym for *Convective Available Potential Energy*. Without getting into a lot of detail, think of it as a measure of the stability of the atmosphere: The higher the number, the higher the potential for turbulence, severe thunderstorms, hail, and tornadoes. The units of CAPE are Joules per kilogram (J/kg). Below are rules of thumb that show the potential severity of WX Vs. CAPE values:

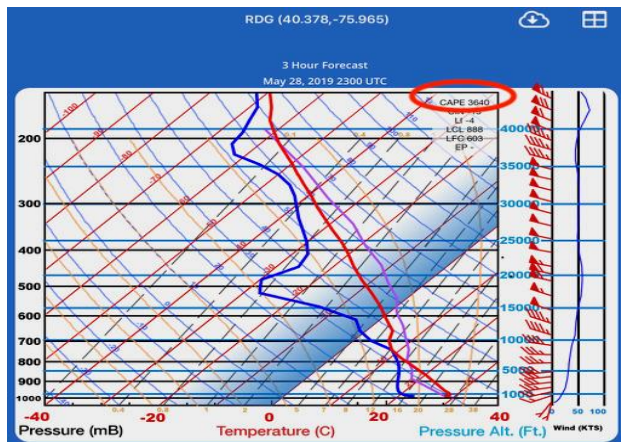


- 0-1000:** Marginally unstable
- 1000-2500:** Moderately unstable
- 2500-3500:** Very unstable
- 3500+:** Extremely unstable

Below is the Skew T Log P for May 28 2019 at 2300Z at RDG, the evening we had a tornado in Morgantown, PA and marble size hail at my house. Notice the CAPE shown is 3640, above the limit for “Extremely unstable”. As with any personal minimums, I would recommend that you set for yourself a CAPE value for which above a certain level, you won’t fly. In my commercial flying job, I routinely fly with a CAPE in the 1500+ range but would recommend something less for club airplanes and experience levels. You might go flying with, for example, a CAPE of 500 and see how bumpy it is. As a side note, it is **IMPOSSIBLE** to have a thunderstorm with a CAPE of zero. (You are missing the one of the required ingredients of a thunderstorm, namely unstable lapse rate) But as with any forecast product, there are limitations to what the CAPE can predict:

1. Storms will only form and the CAPE actualized if the low-level capping inversion is broken.
2. CAPE magnitude can rise or fall very rapidly across time and space.

As you probably have observed, high afternoon temperatures can produce intense evening thunderstorms. An already moderately unstable atmosphere can become very unstable with, for example, a 5C increase in surface temperature. Fly Safe.





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Safety Officer – Brian K Stoltzfus

Helpful websites:

Free Skew T Log P charts for locations in the USA: <https://rucsoundings.noaa.gov>

One time Fee based Skew T Log P APP for IOS devices: (lots of good links and free teaching videos here even if you don't buy the APP)

<https://skewtlogpro.com/#>

More technical detail on the CAPE: <https://www.theweatherprediction.com/habyhints/305/>

https://en.wikipedia.org/wiki/Convective_available_potential_energy

Brian Stoltzfus

- Safety Officer



Administrative VP – Jay Nassar, MD



Turn Your Head and Cough

Happy July all! This month's medical topic is one that has plagued me recently. That is the effect of STRESS on a pilot and the toll it takes on our performance and judgement in the cockpit. (No, I can't prescribe a little blue pill to help with that!) We have all faced stress many times in our lives, perhaps even every day. Well, for us pilots, exposure to stress can result in cockpit performance issues. Our ability to communicate effectively can be compromised, and we may feel distracted or disengaged from the important tasks at hand. Aside from health implications, stress can also lead to anxiety and depression. Ways to deal with stress include the 4 A's: AVOID, ALTER, ADAPT or ACCEPT. I know for myself Accept was what got me through my own personal dealings with stress. It's not a "one size fits all" kind of thing. Everyone will have to find their own way in dealing with it. And if you are having trouble, do what I did, seek out your RAC brothers. The Board had my back and helped me feel like they had my back. Another reason to be proud of the Club we all are privileged to be a part of. Remember the S in I'M SAFE is indeed STRESS. Fly safe and fly smart. Then you get to fly again. Keep an eye on the Club FB page for good stuff from Oshkosh!



Jay Nassar, MD



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Minutes of the June 2024 (6/13/24) Membership Meeting:

1. Record Attendance 26 people signed in!
2. Approve Minutes as written in Comm One: All approved
3. Report of Collection of Fines. No fines
4. Report of Executive Board * Complete and read by Jacques
5. Financial Secretary Report (*written report distributed via e-mail/published on website*)
 - a. Trends and analysis - \$20,000 transferred to Capital Improvements, ~\$11,000 from WWII Weekend. Increase in rates in helping and turning the trendiness "UPWARD"
 - b. Insurance updates – Paul waiting to hear back from AOPA attorney regarding insurance liability related to club performed maint on airplanes. NO REPORT.
6. Bills Requiring Membership Approval]
 - a. Two transfer from checking account \$19,955.00, \$22.47 for water, Swe, Monthly transfer to \$3,362.97 to river front, \$1,760 for insurance, Overhaul bill, world Fuel bill, credit memos to Tim Earnest and Corbin. All say pay the bills!!!!
7. Communications (See Digital Signboard).
 - a. Also see books donated by Bill Cano. These are available to borrow.
8. Maintenance Report Kevin/Drew
 - a. 73K Break-in plan
 - i. 68F doing good as we dodged an AD requiring a detailed inspection
 - ii. 73K overhaul in the works, replacing motor mounts and some hoses as well.
 1. Has a very regimented break-in process that needs to be followed strictly. Pattern work is off the table, minimum 2 hour total flight time. will do 25 hours on mineral oil as well. We shall hide the original oil from members so as not to accidents fill it with the wrong oil.
 2. 73K should be back to KRDG Friday 6/21/24 from the overhaul!!!!!!
 3. Will also look at calibrating the attitude in 73K
 4. Also, be aware of the navigation/GPS issues and ILS issues. These will be looked at shortly after getting the aircraft back and Capital City will look into it.
 - iii. 46B
 1. Grounded due to bad oil temperature gauge. Oil temp gauge is required equipment for flight. A lot of troubleshooting performed, still not working, replaced verna-therm as well. Gauges are hard to find. We are proposing new fully digital engine monitors. Considering using a GI-275 which has a ling lead time of about fall. So also looking at company named "Electronic International" which has a 3-5 day lead time.
 2. VOTED to go with Electronics International!!!!
9. Report of Committees:
 - a. a.Building.....Ian Lloyd
 - i. Doing a good job
 - b. Dave Meade
 - i. Mention the importance accurate reservations (including joint reservations) and hobbs/tach time reporting. Mention how much time and effort are expended on correcting such errors in our books.



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- c. Financial Goal.....Ron, Paul, Rick
 - i. Stress the importance of signing up for ACH as this helps our financial team a great deal.
- d. Dave Meade
- e. Tim Earnest
 - i. WWII Weekend update?
 - ii. Training sessions/profiles
 - iii. Advent of RAC membership manual. Tim and Jay continue to pick away at the new RAC Membership manual. They could use one more to aid in the endeavor. Perhaps a few members, each of which can work on separate chapters?
 - iv. RACER3 call sign is operational. Do not use RACER3 in FOREFLIGHT to file flight plans.
 - v. 46B plane captain advised carpet may need a cleaning.
- f. RAC swag/t-shirt/patch committee.....Due to the overwhelming response, Jay is considering putting together another order
- g. Paul Jones
 - i. Have 11 exhibitors signed up thus far.

10. Membership Items:

- a. First Readings.....None
- b. Second Readings & Votes.....None
- c. Other membership actions..... John Phillips to associate member. Walter Jarrett to pilot member. Kaden Maier resigning. (simple majority votes required for all)
 - i. John Phillips VOTED to associate member PASSED
 - ii. Walter Jarrett voted back to pilot member PASSED
 - iii. Kaden resigned VOTED and PASSED

11. Unfinished Business

- a. Review and possible vote on proposed rules change.
 - i. Rule change #1 voted PASS as written and presented in the June 2024 CommOne.
 - ii. Rule change #2 voted PASS as written and presented in the June 2024 CommOne
 - 1. This was a close vote with 14 YES and 10 NO
- b. Looking for a group of 3 members who have been with the club for at least one year to review club rules and propose updates. This would include adoption of a written procedure or adjudicating and recording rules infractions.
 - i. No volunteers raised hands...

12. New Business

- a. Matt Keperling will begin work on a new RAC website.
- b. The club is looking to form a "Media Committee". In addition to helping Matt Keperling build the new website, this person will maintain said website's calendar of events and posting photos of events for members to view. Also Facebook updates etc. The hope would be that this will be a permanent position.
- c. John Toomey has concerns that two planes are scheduled for 10 days to OSK. It makes it hard for some members who can only fly weekends. It is not a rules violation but an inconvenience.

13. WWII Days reports from Steve Schory and Paul Jones?



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- a. Parked 73 airplanes for the 3 days. The discounted ticket if they bought fuel may have hurt our revenue
 - b. Water sales/Sunscreen amounted ~\$10,825
 - c. Ticket sales ~\$4,200 and they should get half of that
14. Good and Welfare
- a. Food tonight brought – Tim Guldner
 - b. Need food volunteer for July - Tim E, Brian S, Keith Krott will grill out for us at the club.
 - c. Summer picnic signup sheet went out. July 13th.
 - d. Tonight's presentation – Getting to know Flight Director and Auto Pilot (part 2)
 - e. Next Month's presentation – More Tips and tricks on FD/AP
15. Adjourn 9:16PM

Dues: \$75/month
Initiation Fee: \$1500
68F: \$140/hr
73K: \$140/hr
46B: \$170/hr
Sim: \$20/hr

100LL prices at KRDG (7/7/24)
Reading Aviation \$6.09