



Comm One



News of the Reading Aero Club

June 2024

President's Message – Todd Weaver



Riding my mower around the yard this past weekend I found myself gazing at a Piper passing overhead and wishing I was in a club plane. That got me back to thinking about the oil temperature gauge issue we're battling in 46B. Aaaaand that got me thinking about the Board Members here at RAC who

work tirelessly to keep this Club flying. There's not a day that goes by that these men aren't corresponding and working through numerous challenges. I mean that literally. There really isn't a day that goes by that they're not doing a task for the good of RAC.

Think about this. As of December, this club has 50% more planes to maintain than it did this time last year. We already know how much effort Steve Palumbo and his team put into keeping our two planes airworthy. Now increase that responsibility by another half!! Yet, Kevin and Drew volunteer for their love of this great flying club. Let's not forget, these guys keep full-time jobs, have children, grandchildren etc...etc

We have more planes because we have more members. More planes and more members mean more dues and flights to invoice, more parts to pay for and more fuel reimbursements, more Hobbs time corrections...you see where this is going. Like our maintenance team, Ron, Paul and Rick (*our financial crew*) work tirelessly, keeping our books in order and bills paid. Perhaps you picked up some new RAC apparel at the Clubhouse recently. Thanks again Jay for keeping Club members looking the part of belonging to America's oldest flying club. Jay has also begun lending his professional knowledge to his "**Turn Your Head and Cough**" column. I dare say there are likely few other flying clubs with such a monthly feature.

I could fill another page with all that our Operations VP is constantly working on. Walk through the Clubhouse or any one of our hangars and you'll see evidence of Tim's devotion to RAC. The recent WWII weekend saw him

ensuring our club capitalizes on every opportunity to build revenue.

As you continue reading, you'll no doubt find valuable information on a safety-related topic courtesy of our worldly and wise Safety Officer Brian.

The fact that you're reading any of this Comm One is thanks to our Recording Secretary Jacques.

While it was my intention to shine a spotlight on the hard work of these and numerous others, I unfortunately don't have the space to mention here, my secondary point is what we as members can do to help out. Having an "owner's mentality" is a good place to start. Keeping in mind if we leave something undone or done inadequately, it will be left for a fellow club member to do. Whether it's using a hangar checklist to ensure a plane is ready for the next member, double-checking ourselves, volunteering for a committee or offering to bring food (inclusive of cookies) to a Club meeting, every little bit helps. Remember, you own this Club.

Hope to see you this weekend!
Todd Weaver
RAC President



Upcoming Events

- **Club Meeting:** 7/13/2024, 7:30 PM
- **Food @ 7:00 by:** Tim Guldner
- **2024 RAC Summer Picnic:** 7/13/2024 12:00PM – 10:00PM EDT
- **Signup:**
<https://www.signupgenius.com/go/10C044CA8AE2EA7FA7-48469600-reading>



General Announcements

WWII Weekend June 7-9, 2004

WWII weekend occurred this past weekend and was a success! The event was well-coordinated and well-attended by club members. We would like to thank all those club members who attended to help the Club with volunteer efforts, as well as continuing to help build a relationship with our local airport management and representatives. Hopefully, all volunteers had a chance to take a break and enjoy the static displays, air shows, great food and talk with veterans, active duty personal and thank them for their service. It truly was a great opportunity to meet extraordinary people, engage in a fantastic event at the local airport, learn about a historic time period and help out your flying club.

N2373K Return to Flight Following Engine Overhaul

Upon N2373K returning to flight, the flight profile and procedures required to properly break-in the newly-overhauled engine is **VERY IMPORTANT**. As such, all members flying **N2373K** during this time must fly the appropriate mission profile during the initial 15-hour engine break-in period and conduct flights that consisting of 2-hour legs at a minimum. Provided below is a bulleted list of the required flight rules required to safely “break-in” the new engine:

- Reduce taxi times
- 2 hr minimum flight legs
 - First hour: 75% power
 - Second hour: Alternate between 65% and 75% power
- Monitor engine gauges & record parameters every 15 minutes
 - Oil pressure
 - Oil temperature
 - RPM settings
- Fly between 3,000,-5,000 ft altitudes
- Plan descents to reduce power at a rate of 100 RPMs per minute.
 - ABSOLUTELY AVOID CLOSED THROTTLE DESCENTS!
- Closely measure oil usage after each 2 hr leg.
- Only add provided MINERAL oil.
- Closely inspect engine compartment after each leg.

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>



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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.

Proposed Currency Rules Revisions

We included the first draft of proposed rule changes in our May 2024 Comm One and discussed further revisions at our May 2024 membership meeting. Following the great feedback from the membership, the proposed rules have been revised to incorporate those suggestions and made changes appropriate for our ever-changing Club environment. Please take the time to review the proposed rule changes below. We will be discussing them further at our June 2024 membership meeting followed by an official vote.

#1 - Current Rule:

II. COMPETENCY AND CURRENCY

A. Pilot members are required to pass an initial checkout with a Club-approved Certificated Flight Instructor for each kind of operation (i.e., Day VFR, night VFR, IFR, or right seat) for each Club-owned aircraft which the pilot member wishes to operate. Prior to receiving the initial Club approval, candidate Club Certificated Flight Instructors are required to pass appropriate check ride(s), as deemed necessary by the Club Safety Officer.

#1 - Proposed Rule:

II. COMPETENCY AND CURRENCY

A. The following aircraft checkout requirements shall apply:

- a. New Pilot Members are required to pass an initial checkout with a Club-approved Certificated Flight Instructor for each Club-owned aircraft which the new Pilot Member wishes to operate. An initial checkout must include each kind of operation (i.e., Day VFR, Night VFR, IFR, or right seat), under which the new Pilot Member intends to operate the aircraft.
- b. Existing Pilot Members are required to have passed an initial checkout with a Club-approved Certificated Flight Instructor for Day VFR and/or right seat operations, for each Club-owned aircraft which the Pilot Member wishes to operate.
- c. In addition to initial checkouts, existing Pilot Members are required to pass a checkout with a Club-approved Certificated Flight Instructor prior to operating a Club aircraft under IFR,



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- when said aircraft has had any combination of automation, navigation, or instrumentation avionics substantially upgraded. The need for said checkouts shall be determined by the Executive Board after consultation with Club Certificated Flight Instructors.
- d. All Pilot Members are required to have passed an initial checkout with a Club-approved Certificated Flight Instructor for Night VFR, in a Club-owned aircraft, should the Pilot Member wish to be PIC under Night VFR.
 - e. Candidate Club Certificated Flight Instructors are required to pass appropriate checkout(s), as deemed necessary by the Club Safety Officer.

#2 – Current Rule:

II. COMPETENCY AND CURRENCY

E. Pilot members, with the exception of Club-approved CFIs with a full Pilot Membership, who operate Club aircraft must meet the following currency criteria:

i. Pilot Members: A flight in a non-high-performance Club aircraft within the preceding 60-day period for currency in a non-high-performance Club aircraft. Or, a flight in a high-performance Club aircraft within the preceding 60-day period for currency in a high-performance or non-high-performance Club aircraft. Club approved CFIs have the discretion to waive this requirement on the basis of recent flying experience and such waiver must consist of a signed endorsement in the member's logbook.

ii. Pilot members flying Club aircraft must complete a check ride with a club-approved CFI, on an annual basis. The anniversary date for each check flight will be on the last day of the twelfth month following the previous annual check flight.

iii Associate Members functioning in the role of approved Certificated Flight Instructor: A flight as PIC in a Club aircraft within the preceding 120-day period. Said flights will have certain scheduling restrictions applied (see the Aircraft Reservations section).

#2 – Proposed Rule:

II. COMPETENCY AND CURRENCY

E. Pilot Members, with the exception of Club-approved Certificated Flight Instructors with a full Pilot Membership, who operate Club aircraft must meet the following currency criteria:

i. Pilot Members: A flight in a Club aircraft within the preceding 60-day period. Club-approved Certificated Flight Instructors have the discretion to waive this requirement, on the basis of recent flying experience.

ii. Pilot Members flying Club aircraft must complete a check flight with a Club-approved Certificated Flight Instructor, on an annual basis. The anniversary date for each check flight will be on the last day of the twelfth month following the previous annual check flight.

iii Associate Members functioning in the role of approved Certificated Flight Instructor: A flight as PIC in a Club aircraft shall be completed within the preceding 120-day period. Said flights will have certain scheduling restrictions applied (see the Aircraft Reservations section).



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Maintenance Corner – Kevin Pannebakker



Lots of things have been occurring on two of our aircraft! With the flying season underway, the Maintenance Team and the Board have been working very hard to address everything and keep all aircraft operating reliably and safely.

First the good news. The FAA recently dropped a new AD that was applicable to the Archer III series of aircraft, of which **N168F** is. The AD was prompted by the finding of incorrectly drilled wing spar bolt holes while performing an investigation of an incident where an aircraft collided with a vehicle on the ground while taxiing. The investigation was completely unrelated to this and the issue with the wing spar bolt holes was not caused by this collision. Piper released a mandatory service bulletin, which the AD mandates you follow. It effectively grounded the affected airplanes until inspections and the applicable repairs were made. Where's the good news in this for us? Luckily, **N168F**'s serial number falls well outside of the specified range and no further action is required.

N2373K is currently in Bloomsburg having the overhauled engine installed. During this time, they will also be replacing hoses as required and the motor mounts. We anticipate the airplane to be ready late next week. Once we get the airplane back, we will need to perform a very regimented break-in process that may limit the type of flying it can perform until then. This will ensure the engine breaks in properly and gives us the reliability it has in the past. Stay tuned! We will also be planning to take the aircraft immediately to KCXY to have the attitude indicator calibrated to correct the nose high indications on the GI-275 and also troubleshoot the issue with intercepting the localizer.

Now to the elephant in the corner, **N2946B**! As most of you have noticed, the aircraft has been grounded since the discovery of a high oil temperature indication. The airplane has been taken to Steve Kunkle's and had an oil verna-therm (think of it as a thermostat for the engine oil) replaced and the oil temperature troubleshot. At this point-in-time, all troubleshooting leads us to a malfunction

with the indicator. Gauges are extremely hard to come by and are labor-intensive to install. With the obsolescence of parts, we are looking into upgrading the engine instrumentation to all digital, which are more reliable and will solve the problems not only with the ammeter, but this as well. We are currently obtaining quotes and will keep the membership posted. Since this indication is required by FAR 91.205, the airplane will remain grounded until a solution is decided on and implemented.

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: "Stay actively involved with your Reading Aero Club. There are plenty of opportunities to make meaningful change and meet fellow aviators!"





Skew T Log P

One tool that is not widely taught to pilots is the Skew T Log P chart. I have been trying to do my part to change this by proclaiming the utility of this fantastic tool. There are many uses for the Skew T Log P but today we will focus on how to find cloud bottoms, tops and layers.



Every day at about 1100Z and 2300Z, at 72 locations in the lower 48 states, an instrument called a Radiosonde is launched via a weather balloon. It records air pressure, temperature and dew-point at various altitudes. Wind speed and wind direction aloft can be inferred by tracking the balloon's drift from the station. All this information goes into the computer weather models. This data and the data from the models can then be plotted with temperature on the X-axis and altitude (and pressure) on the Y-axis. It turns out that a judicious choice of how the "graph paper" is formatted, can visually help glean important information. For example, we know that temperatures usually decrease with altitude. (Remember in a "standard atmosphere" temperature decreases 2C for every 1,000'). The "graph paper" is set up such that if the red line goes straight up with altitude, that means the atmosphere is about standard. If red line slants to the right the atmosphere is more stable, to the left, less stable.

Below is a Skew T Log P for RDG on April 13th 2019. The red line going up vertically with a tilt to the left is the forecast temperature of the atmosphere as a function of altitude above RDG. The blue line just to the left of the red line is the dew point. If you look at the numbers on the X-axis below, you see skinny red lines going up at about a 45° angle from -20,0,20 and 40. That is where the "skew T" name comes from. The "LOG P" comes from the fact that atmospheric pressure does not decrease linearly but logarithmically with altitude. But we don't have to worry about that. What we care about is how close the red and blue lines are together. Where the red line and blue line touch, you can expect clouds. In this example, notice how the red and blue line come together at about 1,000' and don't come apart for good until about 16,000'. So, the graphical forecast for the same time period might show "overcast at 1000' tops at 16,000'. But are there any layers between 1,000' and 16,000'? YES!!! Notice that at about 3000' the red and blue lines start to come apart with a maximum separation at about 7,000' and then come back together at 10,000'. So you can expect at least a couple of thousand feet of no clouds between 3,000' and 10,000'. This would be important to know if the freezing level is say 4,000' and the MEA is 6,000'. Also, you can see the freezing level is just over 10,000'. This is just a taste of the information that can help a pilot understand the weather. Another month, I'll talk about how to predict thunderstorms with the Skew T Log P.

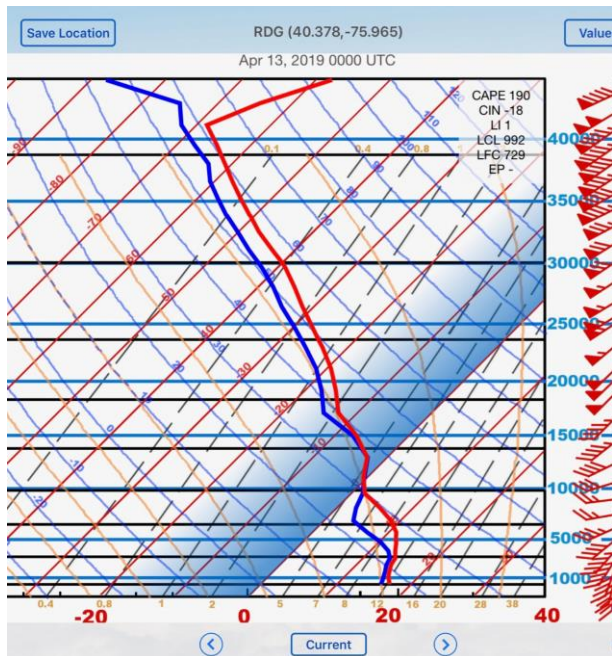
Highly recommended app: <https://skewtlogpro.com/> (iOS and/or iPadOS only. One price for all devices on your iCloud account)



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Safety Officer – Brian K Stoltzfus



Brain Stoltzfus

Safety Officer

- (1) Learn more about SkewT LogP charts at : <https://www.youtube.com/watch?v=2pMYkSwZp0g&t=6s&frags=pl%2Cwn>
- (2) And https://www.youtube.com/watch?v=SU_ecl-vcNY&t=369s&frags=pl%2Cwn



Administrative VP – Jay Nassar, MD



Turn Your Head and Cough

Has anyone been in one of our cockpits lately? Of course you have. But has anyone enjoyed being in one of our cockpits prior to take-off in the lovely June heat? Especially in one of the Pipers with the teeny tiny window on the pilot's side. Isn't it amazing all the places we can sweat from?! Well, that ain't fun. And it can have a serious effect on our health and well-being. Why? Because it can lead to something most of us might not even consider, DEHYDRATION. The FAA, CAP and Aviation Medicine websites all talk about the dangers of dehydration and the potential for catastrophic results. Symptoms range from THIRST, to SLUGGISHNESS, FATIGUE, NAUSEA and EMOTIONAL INSTABILITY. As it progresses DIZZINESS, WEAKNESS, CONFUSION and SLURRED SPEECH then on to DELIRIUM, CIRCULATORY PROBLEMS, DECREASED BLOOD VOLUME and KIDNEY FAILURE. Then everyone's favorite, IMMINENT DEATH. So, watch out. STAY HYDRATED! And I mean nice cool 40 degree WATER. If it's going to be a hot day, you may actually need 40 OZ of water prior to flying. And remember, our planes as of now have no bathrooms. So be prepared and fly smart!



Jay Nassar, MD



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Minutes of the May 2024 (5/8/24) Membership Meeting:

1. Record Attendance: 23 in attendance, start time 1930
2. Approve Minutes as written in CommOne: Read by Jay Nassar and approved by all
3. Report Collection of Fines: NONE
4. Report of Executive Board*
5. Financial Secretary Report (written report distributed via email/published on website)
 - a. Reading Aviation Fuel went from \$6.09 to \$6.39 (-0.25 for RAC/gal)
 - b. Insurance Updates: Nothing to report.
6. Bills Requiring Membership Approval: ALL SAY PAY THE BILLS
 - a. See Ron's email
7. Communications (Digital Signboard): See Jacques with ideas, questions
8. Maintenance Report (Kevin):
 - a. 68F: Nothing to report (May need gfc500 FWU)
 - b. 73K: Oil Pressure issue fixed (transducer). Goes to Columbia for new engine 6/12. Got GFC500 FWU.
 - c. 46B: Oil change. No chance to look at wiring. Hunt for Ammeter continues.
9. Report of Committees:
 - a. Building: See Squawk sheet in Clubhouse.
 - b. Audit (Dave Meade): Close to finishing.
 - c. Financial Goal (Ron, Paul, Rick): No increases!
 - d. Insurance Kitty (Dave Meade): nothing to report
 - e. Operations Committee (Tim Earnest): Presentations will now be short series on GFC-500-VFR XC. Jay & Tim could use help; p with the Members' Handbook.
 - f. Swag (John Toomey and Jay Nassar): John Toomey's patches are ready and are \$6. Jay Nassar delivered SWAG to Clubhouse 6/2!
 - g. Aviation Career Expo 2024 (Paul): Email blasts sent out to High Schools, Secondary Schools and Exhibitors. Six Organizations signed up due to hiring slow-downs. Focusing more on Maintenance. Will be putting posters on WW2 water Will be talking to Middle Schools in Reading School District about Aviation. May need FBI background checks. wagons with a QR code.
10. Membership Items:
 - a. Second reading and vote for Philip Ball. God Save the King, unanimously voted in!
 - b. Jeff Smith voted from Associate to Pilot member.
 - c. Tim Gilder passed his IFR Check-ride! (to supply June's food!)
11. Unfinished Business:
 - a. Rules changes as posted in May CommOne to be teased for semantics. The spirit unchanged. Re-look and vote in June.
 - b. FlightCircle "Standby" schedule explanation and note in FlightCircle.
12. New Business:
 - a. Matt Keperling needs help with creating the new RAC website.
 - b. Submit any pics and videos to any Board member to be used on the new website.



Jay



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Minutes of the May 2024 (5/8/24) Membership Meeting:

13. WW2 Weekend approaching! Need people to sell tickets, programs and handle \$\$\$\$. Will start accepting credit cards using Square. Phil Ball do donate iPads for WW2 ticket sales.
14. Good and Welfare:
 - a. Food tonight by Tim Guldner
 - b. Summer Picnic sign-up sheet went out (Todd's 7/13).
 - c. Tonight's Presentation: continuing the series on the GFC-500 by Tim. FD/AP.
15. Adjourn 2114.

<p>Dues: \$75/month</p> <p>Initiation Fee: \$1500</p> <p>68F: \$140/hr</p> <p>73K: \$140/hr</p> <p>46B: \$170/hr</p> <p>Sim: \$20/hr</p>
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<p>100LL prices at KRDG (6/11/24)</p> <p>Reading Aviation \$6.04</p>
