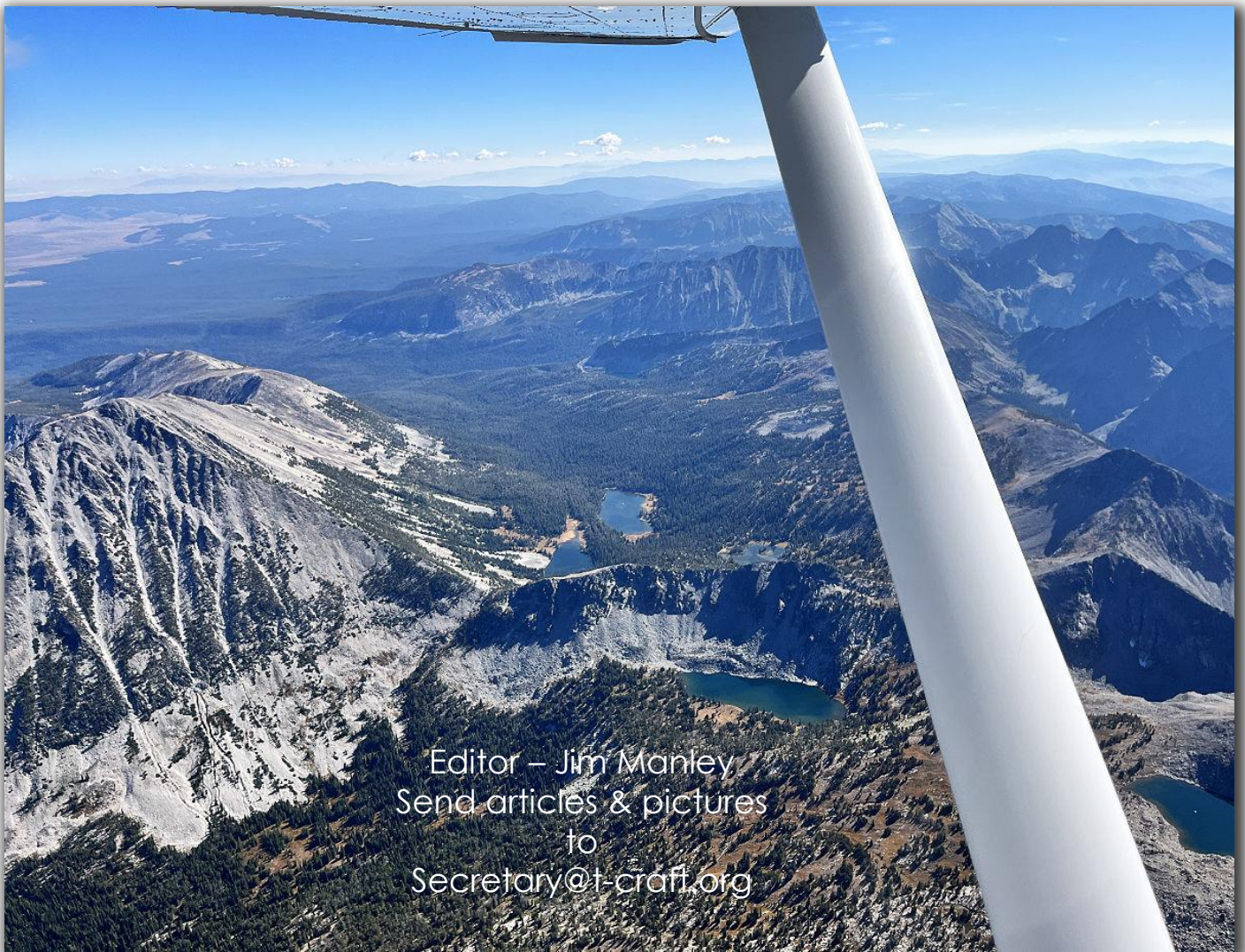


T-Craft Aero Club

Monthly Newsletter

March 2025

Putting Wings on Your Dreams



Editor – Jim Manley
Send articles & pictures
to
Secretary@t-craft.org

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IMPORTANT NOTICES

Karen Daniels Elected as T-Craft Director of Safety

(Submitted by Kent Murri, Director of Membership)

The club membership elected Karen Daniels to the position of Director of Safety at the 27 February general meeting. She describes her flying background as:

I've been a pilot since 1992. My dad was a Marine pilot and then TWA pilot, therefore had lots of exposure to flying from early on. He owned 3 or 4 small planes, including Mooneys and a Cessna 182. I started working as a professional corporate pilot in 1998 - flown CJ3/3+, Premier and other Citations (Ultra & Excel). I'm currently a contract pilot on CJ3 & Excel. I've been a member of T-craft for 3 years. I'm very interested in the safety position because I feel I have a great background with lots of experience in different environments. I always read the accident reports on AOPA's email/website and try to learn from those mistakes so I don't make them myself. I'm not a CFI but have done lots of instruction in jets with my ATP rating—primarily with owner/operators. I've also trained a number of co-pilots in the CJ3+ while working at Jackson Jet Center as a charter pilot.



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N9989E Returned to Service

(Submitted by Kent Murri, Director of Membership; Pete Glick, Director of Maintenance)

The Board has determined that a flight checkout will be required for N9989E due to the installation of the Sportsman STOL kit. The Board agreed that if a member has completed a checkout in N121M, the member is qualified for N9989E and will not need an additional checkout. **However, a separate checkout will still be required for 21M if not previously accomplished.** We will get the Sportsman STOL STC and checkout document posted to the website early next week for member review.

Pilots are encouraged to fly the slow flight/stall series previously flown in 21M for familiarization of 89E new characteristics. The worksheet can be found on page two of the aircraft checkout checklist

When N9989E is returned to service, the same squawk notes will be put in place as we have for 121M indicating the checkout requirement and the list of approved CFIs that can perform the checkout.

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Busy Year Behind and Busy Year Ahead

(Submitted by Pete Glick, Director of Maintenance)

As you all know, T-Craft aircraft received significant upgrades in avionics capabilities. I don't know about you, but I'm still learning many of the details that make the systems so capable. You, as members, were very patient with the aircraft downtime these modifications took. N67375 is the only aircraft in our fleet that hasn't been updated. It hasn't been forgotten. Skyline's schedule is difficult to get into, but I ask about the status regularly. A BIG shout out to your avionics committee (Kent Murri, Elizabeth Carter, Gordon Hall, David Thomas, David Meisner, Slay Windam) who helped determine the equipment installed as well as configuration. Both Skyline in Nampa and The Avionics Shop in Twin Falls completed the upgrades.

The upcoming year isn't slowing down. You'll have to be patient again this summer as we take each aircraft down for badly needed interior work, C-182 digital fuel sending units and AeroLED mods in addition to regular scheduled and unscheduled maintenance. We'll put AeroLED lights on 93S and 21M first since the wings will be open for the fuel sending unit replacement. Skyline told me that an April-May start is expected for this work. I let them know that the priority was first to finish 375 avionics upgrades.

21M will get interior work first since it's the worst shape of any in our stable. We'd also like it finished before the backcountry season gets going fast and furious. Your interior committee members (Jon Miller, Don Roberts, and

Michael Lloyd) are meeting regularly to work through materials, colors, scheduling, and other details for us. The current plan is to start interior work near the beginning of April.

You can see we have a busy summer ahead of us. We will do our best to limit aircraft downtime, but some overlap will be inevitable between Skyline’s schedule and that of the interior contractor from Boise. Thank you again for your continued patience...and your airplanes thank you.

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Maintenance Director’s Report

(Submitted by Pete Glick, Director of Maintenance)

*** The Golden Rule of Fractional Aircraft Ownership – “Leave it better than you found it.”**

1. T-Craft Maintenance Items

- a. Estimate for Cies digital fuel sending unit installation for C-182s. Requires board approval.
- b. Several Aircraft need new fuel placards on top of wing. Will order some.
- c. Upcoming interior repair/remodel. Board approved budget for all 7 aircraft. Committee is currently selecting materials and colors. More information coming in next club newsletter.

Scheduled Maintenance - * As of 2/01/2025

2025 SCHEDULED MAINTENANCE					
N #	100hr (til due)	Annual Due	Annual Input		
375	52	5/31/25		50 Hr Oil Change	
686	82	2/28/26			
64R	31	1/31/26			
93F	65	1/31/26			
93S	34	3/31/25			
21M	70	2/29/25	Friday 2/28		
89E	47	5/31/25	Annual to be signed off when wing repair completed		

2. Aircraft Maintenance Status/Actions Since Feb 2025 Board Meeting.

375

- Next in Avionics mod. Estimated late April input
- Install Reiff heater at engine change

64R

- **GROUNDED**
 - No oil temp
- Pilots door window latch worn – window can come open in flight
- 12V DC power port inop
- Secondary seat stop intermittent
- Rt brake evidence of seepage

686

- Flap switch sticks when released from down position

93F

- One static discharge wick missing left aileron

- DC Power port in instrument panel inop

93S

- Replaced left nav light bulb
- Replaced Mixture cable - excessively stiff.
- Small crack in skin aft of right rear window (100 hr)

21M

- Input to annual 2/29
- Idles 1000 rpm when warm.
- Left tire changed
- Nose strut serviced with air X 2. Reseal at annual

89E

- Left wing repair is complete. STOL kit installed. Maintenance flight upcoming to confirm all systems good prior to release to membership. ([See article in this newsletter](#))

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Water in Fuel

(Submitted by Pete Glick, Director of Maintenance)

Those of you who have flown over the past month or so may have noticed a small amount of dirty water in fuel tank samples during preflight.

AVCENTER responded quickly to my query about potential for water in the supply. They pulled a sample from their fuel truck that gets fuel from the same pump we use primarily as well as from the underground tank itself. They also ran 200 gallons of fuel through a filter. They found no water.

Condensation as moist air cools at night could be a source, but really doesn't explain why each sample looks so dirty and consistent between aircraft. Nor does it explain why we do not find it in some aircraft that sit overnight with similar air space inside the tank. Nor do I think we have that may fuel cap seal problems that suddenly appeared. So the mystery continues.



The pic shows a dirty bubble at the bottom of the tube. **Please continue to be vigilant in sampling fuel tanks on preflight and post refuel. Drain sample until a clear sample is achieved.** We will also replace some of the stained sample tubes.

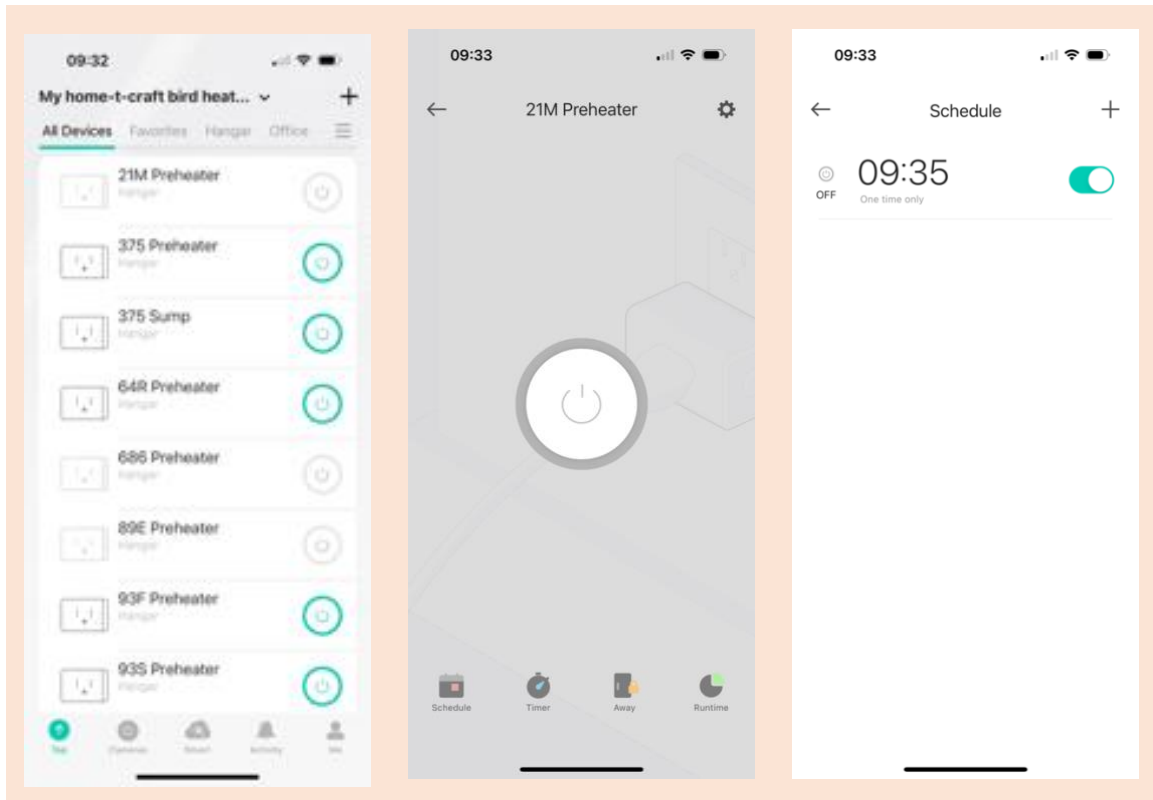
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KASA Remote Pre-Heat Instructions

(Submitted by David Thomas, Director of Hangar)

When you log into the app for the first time it will give you the option of setting up 2 party authentication. **Please resist the urge to do this** as the person logging in will not be the recipient of the two party authentication. That will go to the Director of Hangar Maintenance and you will need to reach that person for the code in order to finish your login. Director of Hangar Maintenance will, then need to disable the two party authentication.

Please let me know if there are any questions regarding the utilization of these actions.



Above is the page that should be shown once you are logged in. "All Devices" or "Hangar" tabs should both work to find your aircraft. From this page you can simply press the radio buttons for the aircraft you have scheduled to fly. This will set the heater(s) to run for exactly 3 hrs.

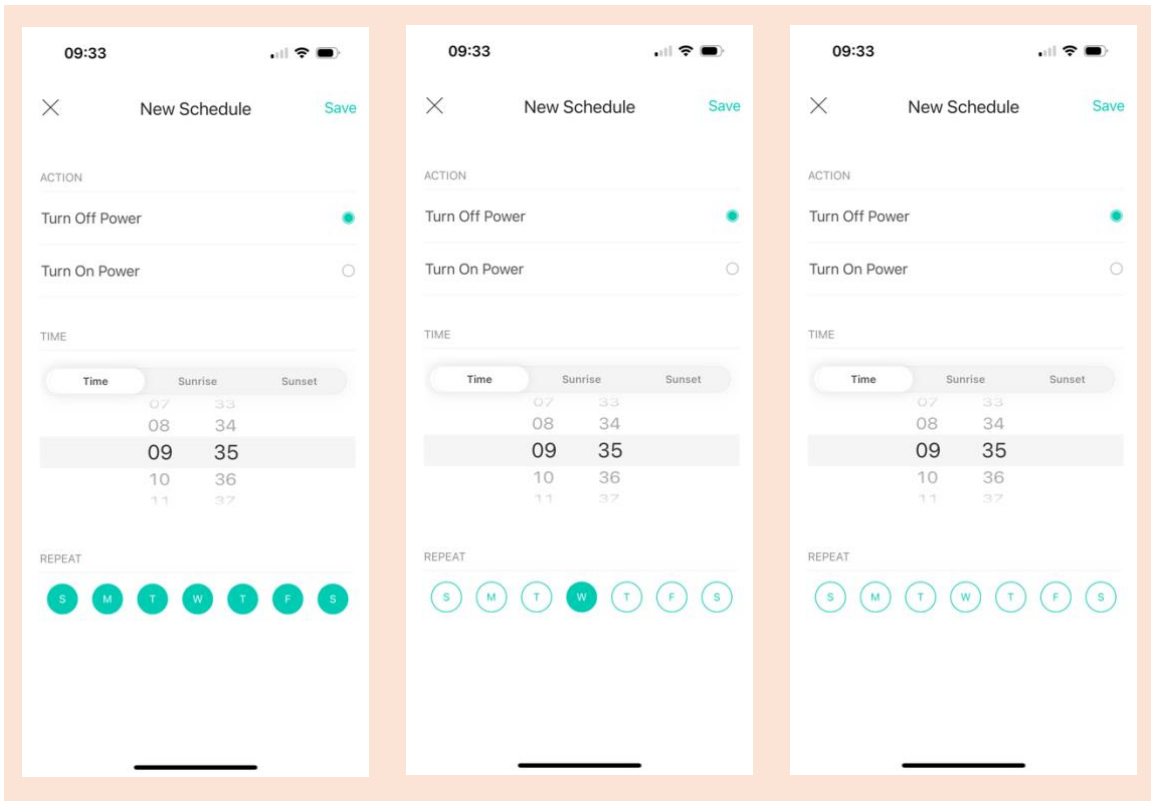
If you are not at the 3hr window and need a different solution, click on the outlet (left side of page) for the aircraft you have scheduled.

Once you have clicked on the outlet (left side of the page) for your desired aircraft, view the options across the bottom of the page. The two useful options are closest to the left side of the page and include "Schedule" and "Timer".

If you click on "Schedule" you will get a page that is blank but with a "+" sign in the upper right hand corner. Hit the "+" to add a schedule.

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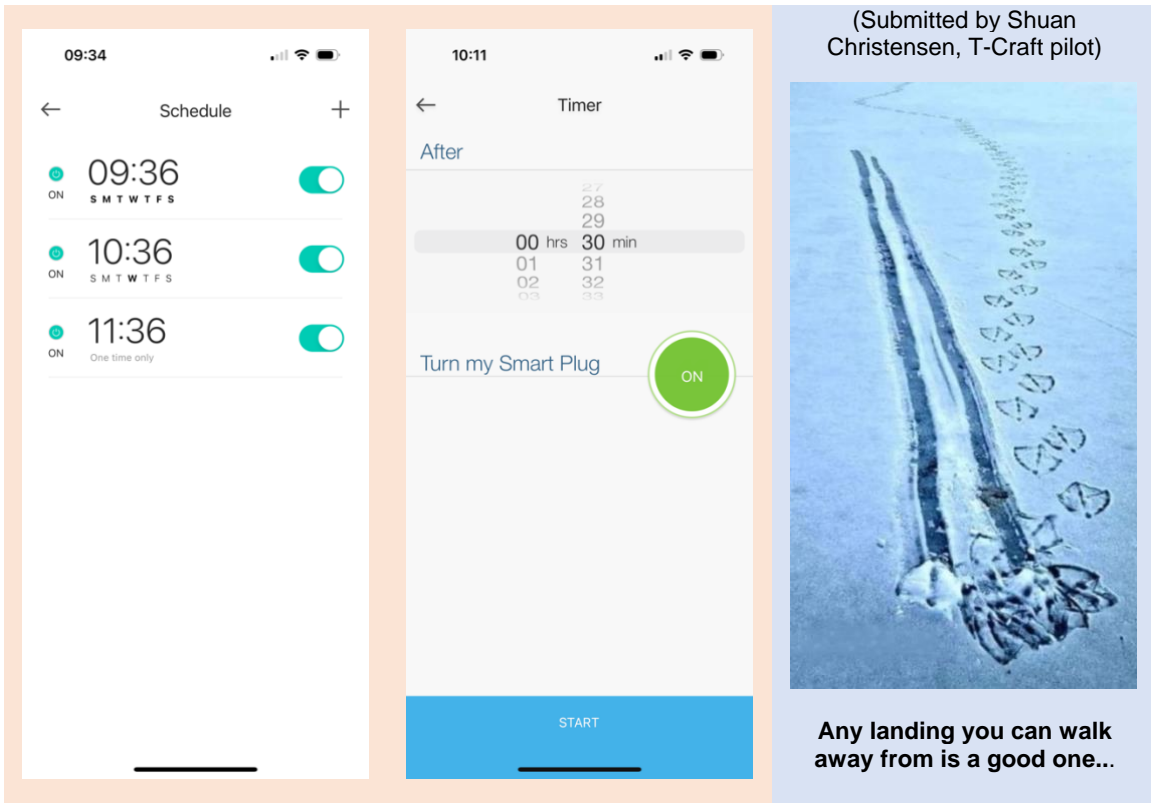
Next, you get the page above. First, pick the action "Turn Power On". Second, select the time for the action to start (allowing for 3 hrs of runtime before your flight." No "turn power off" action needs to be scheduled as the power will turn off automatically after 3 hrs.

Third, see the individual day of week markers at the bottom. Default has all of the days of the week selected. Saving the event with all days of the week selected will result in the action running every day for eternity until the action is deleted.

Unselecting all days of the week will result in the action being run only one time (the very next time the selected time of day occurs) and then the action will be deleted. This is the preferred way to schedule an action with the schedule tool.

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Page above shows three examples of how schedules can be set up. The first example results in the schedule running every day of the week for eternity until the schedule is deleted. The second schedule shows the schedule running every Wednesday for eternity at the chosen time until the schedule is deleted. The last schedule indicates the action will run exactly one time when the clock strikes the chosen hour of the day. The last one is how yours should look when you set up the correct schedule.

Another useful tool is the timer tool. This tool is located to the immediate right of the schedule tool. When you choose this tool, you will be presented with a 24 hour selector wheel. Utilize this timer to set the duration of time you would like to delay the start of the action. So, for example, if it is ten P.M. and I would like to fly at six A.M. the following morning. I could select a five hour delay to start the action at three A.M.

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CALENDAR & CLUB STATS

The Month Ahead

March 2025

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Coming Events

8 Mar 2025: Aviation Stand Down Riverside Hotel and Conference Center, Boise.
8:00 am -4:30 pm

10 Mar 2025: Accounts due

20 Mar 2025: Board mtg 7 pm, T-Craft Hangar

20 Mar 2025: Accounts past due

25 Mar 2025: Last flight day in billing period

25 Mar 2025: Membership mtg 7 pm, Idaho Pizza Co
7444 W Fairview, Boise.
Backcountry Seminar

[Click here for Full Club Calendar](#)

New Members

None this month

Resigning Members

None this month

Inactive Requests

None this month

Member Accomplishments

None this month

Member Stats

120 Members (after new members & resignations)
29 Class I Members (24%)
91 Class II Members (76%)
13 Inactive (voluntary suspension)

28 Suspended (Includes 13 inactive)
92 Active flying members (cap: 14 x 7 = 98)

Member Ratings

6 Student Pilots
73 Private Pilots
28 Commercial Pilots
13 Air Transport Pilots
49 Instrument Rated Pilots (not all are current)

[OPS PROCEDURES & POLICIES: CLICK HERE](#)

FUEL REIMBURSEMENT PROCEDURES

T-Craft will reimburse you \$5.70 per gallon for fuel purchased at a field other than KMAN. Fuel receipts from off-site fuel purchases need to be emailed (best way), texted, or emailed to Reggie Sellers, T-Craft Billing Director. Do not leave them in the office.
REMEMBER: When you fuel a club aircraft at KMAN, put the receipt in the red key bag. Do not share T-Craft's bulk rate with others.

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AIRCRAFT

Aircraft Rates

(Rates Effective 26 Jan 2025)

- C-152 (110hp) N67375 \$ 70.00/hr
- C-172 (160hp) N13686 \$ 82.00/hr
- C-172 (160hp) N4464R \$ 82.00/hr
- C-172 (180hp) N1293F \$ 92.00/hr
- C-182 (230hp) N9989E \$ 135.00/hr
- C-182 (230hp) N7593S \$ 135.00/hr
- C-182 (230hp) N121M \$ 135.00/hr

Aircraft Data

Aircraft information and documentation can be found on the club website by [clicking here](#)

Aircraft Scheduling

Guidelines

- Schedule aircraft online at [ScheduleMaster.com](#) (login required)
- Schedule aircraft only for the time you intend to use it. Blocking out an aircraft so it will be available "just in case" makes it very difficult for other members.
- If you are flying multiple days, your number of hours flown should be equal to or greater than the number of days you have the aircraft scheduled for

Trouble scheduling aircraft?

- Use the notification function in Schedule Master to notify you of a cancelation so you can schedule the aircraft as soon as the cancelation is submitted.
- Schedule ahead of time; you can schedule 90 days in advance.
- For long trips, you can schedule up to 14 consecutive days, longer with board approval.
- Call the member who has the aircraft and time slot you want/need and see if they can swap or may already be looking at canceling the flight but haven't canceled yet.

90-Day Attendance Requirement

- Schedule Master (under the Status tab) has a field that shows the date that your 90-day attendance will expire.
- You'll get a notification via email 30 days prior to that date from Schedule Master. You will also get a message after that notification when you log on to Schedule.
- Your flying and scheduling privileges will be suspended if you do not attend a club function prior to, or on that date in the 90-day attendance box.
- Membership meetings, board meetings, and other club functions count as credit for attendance.

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Maintenance Squawks

How to check squawks

- Login to [ScheduleMaster.com](#)
- Click on the colored triangle immediately to the left of the aircraft's registration number
- Read the open squawks
 - Green = low urgency
 - Yellow = medium urgency
 - Red = aircraft grounded
- Click on an individual squawk for details
- to amend or comment on the squawk. entry unless

How to register a squawk

- Click on the colored triangle immediately to the left of the aircraft's registration number
- Click on the + sign to the right of the word "Squawks"
 - If it's a new squawk
 - Give the squawk a title
 - Enter a description
 - Click your estimation of the urgency
 - Click OK
 - Notify Pete Glick, T-Craft Director of Maintenance, by text or telephone if urgent, email if routine
 - Amend an existing squawk (Do not duplicate existing squawks)
 - Click on the squawk name
 - Click on the + sign to the right of the squawk name
 - Enter your comments in the New Comment space
 - Click OK

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Aircraft Care

Pre Flight

- Use the aircraft checklist
- Do not fill oil to POH level, use T-Craft checklist level

Post Flight:

- Install control lock
- Install pitot tube cover
- Place elevator trim in takeoff position
- Place rudder trim in center position (C-182 only)
- Place fuel selector on both
- Open cowl flaps (C-182 only)
- Confirm Master Switch off
- Clean up aircraft interior
- Fasten seat belts
- Shut windows
- Clean windshield
 - Clean the windshield only with Pledge in the yellow cans.
 - Use only vertical strokes. Do not use circular strokes.
- Debug leading edges of wings, struts, engine cowling, and spinner
- Lock all three aircraft doors
- Place key and aircraft credit card in red bag
- Place fuel receipts (from KMAN) in red bag
- Return red bag to key box in hangar office

Check Lists:

- Aircraft checklists are available on the club website - [click here](#)
- You are encouraged to print out your own checklist.

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HANGAR SECURITY

- **Hangar (Preflight and Post Flight)**
 - Always flush bolt the doors (wings and mains) when removing an aircraft from the hangar
 - Always flush bolt the doors (wings and mains) when returning an aircraft to the hangar
 - Always make sure that all flush bolts are engaged after closing the doors (leaving or returning)
 - The aircraft logs are secured in the office safe and the combination is the same as the door code.
 - Heaters set up correctly (in season)
 - Check that the red light is on at the yellow outlet box
 - Do not tie any knots in the pull cord for the yellow electrical box.
 - Never release the yellow box and allow the cord to retract without resistance.

- **Tug:**
 - You must be checked out on the yellow Tug before using it. Please contact a board member for checkout if needed. Checkout form must be completed, signed and on-file.
 - Always park the tug in its assigned location and plug it in for charging.
 - Always take your time with the tug. It will move quick and that can cause problems if not careful.

MEMBER PIREPS

Memorable Flights, Achievements, Reflections, & Lessons Learned from Difficult Flights

(None Submitted This Month)

TIPS, TRICKS, AND FUN

DC-3s, Warbird Pilots, and Flying with Martha Lunken (video 00:54:48)

(Reprinted from Air Facts Journal)

Few pilots have lived as interesting a life as Martha Lunken: from giving checkrides in DC-3s to teaching Neil Armstrong's wife to fly, she has met some of aviation's most colorful characters and flown some of aviation's most iconic machines. She tells plenty of those fascinating stories in this episode—and shares some controversial opinions along the way. In the Ready to Copy section, Martha talks about what she would do as FAA administrator, flying the Lockheed Lodestar, and life as an accident investigator. [Watch video...](#)



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Who's the Pilot in Command

(Reprinted from Air Facts Journal)



FAR 91.3 is one of the simplest and best known federal aviation regulations, and it clearly defines the most essential job as a pilot: to be the boss for the entire flight. But as obvious as this sounds, it's surprisingly hard to do in the real world. Little by little, your authority as PIC can be eroded until no one is actually in command. [Read more...](#)

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Making the Numbers

(Submitted by Erick Paradizo, MAF Instructor pilot, FAA DPE)

Erick presented his Making the Numbers seminar at the February membership meeting. He sent this message along with some graphs members requested:

“I wanted to take a moment to personally thank you for attending the *Making the Numbers* seminar. It was a pleasure having you there, and I truly appreciate your time and engagement. I hope you found the seminar insightful and walked away with valuable strategies to apply in your flying. ... If you have any questions or would like to discuss any of the topics further, please don't hesitate to reach out. I'd love to hear your thoughts and feedback!”



My Short Field Takeoff and Landing Performance

Date		Pilot		Instructor	
Airport		Elevation		Temperature	
Density Altitude		Wind Dir./ Speed		X-Wind	
Runway		Runway Length		Runway Composition	
Aircraft		Gross Weight		Test Weight	
Takeoff Flap Setting		Rotation Speed X.07		Rotation Speed	
V _x /V _y		Takeoff Distance		50 Ft. Obstacle Dist.	
Landing Flap Setting		Approach Speed		Landing Distance	

Take-Off & Landing Distance Card - (See DA Graph)

Airplane Type: Tail Number: Date:

ATIS/WX Data:	Value:	Comments:
Date:		
Time:		
Airport:		
Info ID:		
Mag. Wind:		Headwind comp = $WV * \cos(\alpha)$
Viz:		
Sky:		
Temp:		
Dew point:		
Altimeter:		
Expected runway:		
Runway length:		
Remarks:		
Calculated Data:	Value:	Comments:
Pressure Altitude:		
Density Altitude:		See DA table.
Take-off distances:		See PoH page: Take-off conditions:
a. Ground roll:		
b. To clear 50ft:		
c. TO speed IAS (V _R):		
d. V _X speed IAS (V _X):		
e. TO speed @ 50ft:		
f. Accel. stop distance: (2.5 x TO roll):		
Climb rate:		See PoH page:
a. Rate of Climb (FPM):		
b. Climb IAS (V _y):		
Landing distances:		Conditions: See PoH page:
a. Ground roll:		
b. To clear 50ft:		
c. Landing speed @ 50ft:		
Hydroplane speed:	50	At 30PSI.
SQRT(PSI)*9	40	At 20PSI.

Note: Note: Take care with sign (+/-) of wind and field condition fiddle factors.

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TAKE-OFF AND LANDING PERFORMANCE ADJUSTMENT FACTORS

Add 10% - Short Grass, Rough, Rocky,
Undulating Add 30% - Tall Grass
Add 50% Soft Surface or Scattered Puddles

Landing Add 15% - wet surface Poor Braking
If Wet Grass - Add up to 100%

Landing 10% increase in speed = 20% incr. in Ground Roll

Takeoff 5% decrease in weight = 10% decrease in Takeoff Roll

Fixed pitch prop - Add 15%/1,000ft increase in DA up to 8,000ft

Constant speed prop - Add 12%/1,000ft increase on DA up to 6,000ft

WIND & SLOPE ADJUSTMENTS

“Hurts”

“Helps”

REFERENCES
Aerodynamics for Naval Aviators
The Logic of Flight
Cessna POH Section 5

Rules of Thumb

Temperature Lapse Rate: 2° C per 1,000' Altitude change

Density Altitude: 100' per 1° C difference from STND °C (for a given ALT)

Humidity: 2° C Temp. Dew Point ≈ 10% REL/H (Relative Humidity)

For each 10% REL/H DA (Density Altitude) incr 100' (100% REL/H = 1000' max.)

True Airspeed : Increases 2%/ 1000' Density Altitude

DA = Press. Alt. corrected for Temperature and adj. for Humidity

Conditions: Approach Speed: 55 KIAS, Field Elevation: 2500',
Temp. 25° C / Dew Pt. 21° C, Altimeter: 29.92 in. Hg. & **No Wind**

- Pressure altitude: **2,500'**
- NSTND C° ADJ.: (OAT - STND C°) = (25° - 10°) = 15° above STND C°.
Add 100' per 1° C = 1,500'. 2,500' PA + 1,500' (NSTND C° ADJ) = **4,000**
- REL/H ADJ.: Temp. 25°, Dew Pt. 21°. Diff = 4°
2° C Temp. Dew Point ≈ 10% REL/H. Therefore 4° = 20% less than saturated.
Saturated air is 100% REL/H. 100% - 20% = **80% REL/H**
For each 10% REL/H DA increases 100'. therefore **Add 800'** for REL/H
Density Altitude 2,500' PA + 1,500' Temp. Cor. + **800' REL/H = 4,800' DA**

True Airspeed (From above example)

- 75 KIAS = 76 kts. CAS (**C172N full flap**)
- Density Altitude: 5,000' x 2% per 1000' density altitude = 10%
- 10% of 76 KCAS = 7.6 ≈ **8 kts.**
- TAS = 76 KCAS + 8 kts. = approx. **84kts. TAS**
- Speed on final : **75 IAS = 76 CAS = 84 TAS = GS: 84kts. (no wind)**

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