

PUTTING WINGS ON

YOUR DREAMS

VOLUME XV

ISSUE 10



Editor Jim Hudson

The Impossible Turn

I've been a member of T-Craft for nearly 20 years. During that time, I've never had, or do I recall any kind of serious engine problems in flight with any of our aircraft. We pride ourselves with very well-maintained aircraft, 100 hour inspections, and getting things fixed as soon as there is any hint of a problem. Thanks to our Director of Maintenance James Eyre and the crew at Aero Service, our birds are kept in tip top shape.

However, the recent problem with 93S Engine (see the report below) has brought to mind the possibility of an engine failure on take-off, or in flight. There are numerous occurrences every year, it happens. At the recent Safety Standown, Bruce Booker presented a talk on "Search and Rescue and You", an excellent talk on how NOT to be one of his customers. Bruce stated several cases in which a pilot took off with a known engine problem or kept flying after a problem developed in flight and kept flying anyway, which resulted in a crash with fatalities.

This reinforces being prepared for the worst, an engine failure on take-off. We've all heard or read about making, or not making the Impossible turn. Do you think about it, or what you would do if the engine quit on your next take-off? Have you ever practiced the "Impossible" Turn, at a safe altitude of course? Are you prepared for an engine failure in flight? Are you always looking for an out and know what actions you will take?

An excellent article on the Impossible Turn with detailed maneuvers you can practice is in the March 2012 newsletter - <http://www.t-craft.org/Newsletters/201203.pdf>

Former member Bill McGlynn wrote a great article specific to Nampa about engine failure on take-off in the December 2009 newsletter: <http://www.t-craft.org/Newsletters/200912.pdf>

A related article "What would you do if the Big Fan Stops" is in the October 2015 newsletter: <http://www.t-craft.org/Newsletters/201510.pdf>.

Having an abort plan and doing a quick mental review of what you would do with an engine failure is something we should do prior to taking off every time. The main thing, in any situation is to Fly the Plane.

Fly Safe and Don't do anything Stupid.
Jim

November 2018

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	

Calendar of Events:

The next board meeting is Nov 13.
The next membership meeting will be
Tuesday, November 27, 2018.

11/13/2018 - Board Meeting
11/10/2018 – Accounts due
11/20/2018 - Accounts past due
11/27/2018 – Membership Meeting

If you have any ideas for safety meeting presentations or would like to arrange a presentation, contact Membership/Safety Director Jim Hudson

Fuel Reimbursement

\$4.70 per gallon.

Articles or Pictures

If you have any pictures or articles for the newsletter submit them to Jim Hudson

Member Statistics:

105 Members
24 on wait list.
36 Class I Members (34%)
69 Class II Members (66%)
10 Inactive (voluntary suspension)
15 Suspended (BFR/Med/Attend/Billing, including the 10 Inactive)
6 Social Members (non flying, not included in "Members")

(Please report any BFR's, IPC's, Upgrades, or new ratings to Jim Hudson)

Ratings

13 Student Pilots
69 Private Pilots
01 Recreational Pilots
10 Commercial Pilots
12 Air Transport Pilots
33 Instrument Rated Pilots

BFR's

John Brown
Brian Corey
Pete Glick
Lucas Wilhite

Level II Upgrades:

David Blood
Pat Charlton

Back Country

Lucas Wilhite – Level II

New Members:

Chris Nerigich – Class I

Ian Bock – Class II

Awards

James Eyre and Dennis Wheeler

50 Year Aviation Safety Awards

By Jim Hinen

They say a good landing is one you can walk away from and a great landing is when you can reuse the aircraft. The standard for this award is a good landing. The Division of Aeronautics is honored to be able to represent these awards to aviators who have watched aviation grow and

develop over the last 50 plus years. This is an amazing accomplishment and well deserved by these pilots.



Peter Andersen being presented with his 50 Year Aviation Safety Award



(From left to right) James Eyre Sr., Jim Hinen, and Dennis Wheeler



Wright Brothers Master Pilot James M. Eyre Sr.



Video of the Award: <https://www.youtube.com/watch?v=yNAI5fnbwFU&feature=youtu.be>

Idaho Master Pilots

The Division of Aeronautics would like to acknowledge the 2018 recipients of The Wright Brothers "Master Pilot" Award. The following individuals have received this award... "in appreciation for your dedicated service, technical expertise, professionalism and their many outstanding contributions to further the cause of aviation safety."

Robert A Hoff, Idaho Falls
June, 2018

Johnny G. Stewart, Lewiston
June, 2018

James M. Eyre Sr, Boise
May, 2018

Michael W. Anderson, McCall
April, 2018

Bruce L Whittig, Boise
February, 2018

October 10, 2018

AOPA Distinguished Flight Instructor



Congratulations Jim!

Flight Training Experience Award winners have been announced.

We are happy to report that you have earned a spot in the **AOPA 2018 Flight Training Experience Survey and Awards as a Distinguished Flight Instructor** for your high score on AOPA's Flight Training Experience Survey. You have reached a high standard of accomplishment and we commend you for your commitment to a positive training experience.

Congratulations! I look forward to your continued success in creating lifelong aviators.

Chris Moser

Sr. Director, Flight Training Education, AOPA

Nampa, Idaho – **Jim Hudson**, CFI at T-Craft Aero Club has been recognized for his high standard of flight instruction by the Aircraft Owners and Pilots Association (AOPA), the world's largest aviation association. Hudson has been awarded a spot on the Flight Training Experience Awards as a Distinguished Flight Instructor, a title given to high scoring flight instructors from AOPA's 2018 Flight Training Experience Survey.

AOPA's Flight Training Experience Awards were created to highlight the best flight training the industry has to offer. "We were excited to see how many customers described our winners this year as including them as part of a family and helping them join a rich aviation community," said Chris Moser, Senior Director, Flight Training Education of AOPA's Flight Training Initiative. "Giving the personal touch, in addition to providing great flight training, is something we know helps create lifelong pilots."

**T-CRAFT STATS
August Billing Period**

Top three flyers:

Bill Howard	20.7 hours
John Moen	16.0 hours
John Baglien	15.1 hours

The top billing aircraft were:

N9989E	\$6,285
N13686	\$4,470
N1293F	\$3,234

The top three aircraft flown were:

N13686	59.6 hours
N9989E	49.1 hours
N1293F	37.6 hours

Fuel Reimbursement

\$4.70 per gallon

REMINDER-We receive a significant discount from the AV Center published prices. PLEASE REMEMBER TO REMOVE YOUR FUEL RECEIPT from the fuel pumps so others will not see our fuel price. Also, please do not broadcast our price to non-members.

HOURLY RATES (New Rates Effective 8/26/2018)

Due to increased fuel costs our rates have increases as listed. Fuel Reimbursement is \$4.70/gal



N64375
\$62.00



N4464R
\$73.00



N13686
\$75.00



N1293F
\$86.00



N1891X
\$121.00



N9989E
\$128.00



N7593S
\$128.00

SQUAWKS

- C152 / N67375:
 - Pilot had an emergency landing at KBOI recently (failed magneto). We are working to get it returned to KMAN this week. This particular plane has a split ignition system with the right side being a magneto and the left side being an electric system. The right side / magneto quit working. Pilot / instructor successfully managed the emergency and landed safely. Magneto was inspected and the internals had disintegrated, requiring replacement
- C172 / N13686:
 - In for the 100 hour check and discovered the OEM magneto was near failure, this will be replaced ASAP before it fails in-flight
 - Difficult to remove & replace the engine cowling (historically) which was a real challenge. The fasteners have been replaced making this easier
 - LED beacon was installed
 - Carb heat Cable was replaced
 - The top Garmin G5 avionics instrument has been displaying an error message, so it will be swapped from the upper position to the lower position (swap an identical G5) to see if this clears the error
- C172 / N4464R:
 - Oil change during week of 10/01 and will apply a fix to the brake cables at that time
 - In May 2018, this aircraft had 3,073 hours on the O-320-E2D engine. Currently it has 3,206.5 hours – or 1,206.5 hours past the TBO. Jim Eyre has been looking for options on replacing this engine with both field overhauls and factory replacements being considered. The engine remains operable today with good cylinder pressures and a clean bill of health from the maintenance facility.
 - At the September membership meeting the members passed a motion to have a Factory overhaul on the engine and replaced during the December Annual.
- C182 / N1891X:
 - LED Beacon to be installed during week of 10/01
 - Will have 100 hour inspection during week of 10/01
- C182 / N7593S:
 - Will be in maintenance during week of 10/01 for an oil change
- C182 / N9989E:
 - Will be in maintenance during week of 10/01 for an oil change
 - Altitude squawk on the transponder encoder – about 400 foot error. A replacement encoder has been ordered.

N7593S - Engine Down for the Count

If you have been checking Schedule Master and/or been to hanger than you should be aware that 93S is down for the count (months that is). She is parked in our hanger with the cowling off & couple cylinders missing. There is a sign telling you not to move prop. Doing so would contribute to the already considerable damage.



After the recent in-house oil change the oil filter was cut open (always after every oil change) to reveal many splinters of ferrous & non-ferrous material. A sure sign that something was amiss under the cowling. Maintenance first did a compression check of each cylinder. #2 exhibited no compression & air was leaking out in several locations. Bore scope was done to that cylinder showing apparent damage.



#2 Cylinder was removed along with piston. A long crack was discovered in cylinder.

#3 cylinder was pulled showing that ½ of piston skirt was missing along with missing scrapper ring.
#6 cylinder piston damaged from material off #3. #3 piston had part of skirt missing.



You understand that inside an engine there are many moving parts under extreme pressure, temperature & RPM. When even a small piece of material breaks from a fast moving part that small particle becomes a projectile & destroyer of whatever it comes in contact with.

So what caused this destruction to occur? Speculations & plenty of opinions as to the why & how. Damage can occur any time of year not just when OAT drops. The common theme from engine builders & mechanics is the lack of or little attention to the engine warm up phase. This could be the lack of preheating or inadequate heating depending on the OAT. The inattention of PIC to allow heat needles to move toward or better yet reach the GREEN Line. PIC in hurry to get off before that next click of the Hobbs meter. As a matter of fact if you actually take the extra time to properly PREHEAT during cold weather you will save Hobbs time when you do crank. An aircraft engine is composed of

dissimilar metals with different coefficient of heat causing expansion/contraction at different rates. Plus cylinder throat has “choke” point.

Have you heard of Shock Cooling? Very hard on an air cooled, internal combustion engine. Say you are at 9000 MSL and realize you need to be at 3500 pattern altitude because you were not planning ahead so you pull the throttle and dive to reach wanted altitude. That hard working power plant is quite hot from moving you along so nicely. You now throw cold air over it plus reducing the cooling effect of 100LL. How would your body react if your warm clothes were ripped from your body & your hot cup of Java taken away as you are tossed into a snow drift!

Training in aviation is a necessary evil however it is sometimes hard on an engine with power off forced landing practice & multiple touch & goes. A good instructor can mitigate these circumstances.

The engine may not show signs of distress for some time after being ridden hard and put away wet. But there is a long term effect that eventually will manifest itself and that may be when you had better have a landing site already in mind. This Internal damage may possibly have started many months ago and over time the accumulated effect of incorrect handling of engine operation finally makes its appearance. The oil filter has been unremarkable as to contaminants & compression checks normal since April 2017 when a minute amount of metal splinters were found in oil filter. Compression checks were good. We flew 93S for 10 hours, rechecked oil filter which was clean & compression checks were good. Clean bill of health at that time so return to schedule.

Aviation is a risky undertaking that is why we do everything possible to mitigate the risk. Good frequent training (a good pilot is always learning) and following proper checklist.

We may have the best maintenance possible however you play a vital role in the maintenance chain of our assets. A solid preflight & planning should include the engine needs & wants. This is part of the obligation you take on as an owner/member. Greatest harm is done during your initial crank & high power usage there after w/o proper warm up. A concerned member treats their assets with great respect. IT'S UP TO YOU!

Cold Weather Blast

In Aviation we do a lot of actions over & over to become better pilots. We may get tired of reading the same material time & again, but we learn something new each time. A hidden gem making us a more aware pilot. So, the following is another verse of same song. Learn + Apply + Share.

Winter flying can be a lot of fun with an anticipated adventure or it can be a struggle. Cold dense air boosts engine power aids wing lift & is often stable & smooth (good time to take significant other(s) flying). After a winter front passes we can get some great visibilities. However, aircraft aren't particularly fond of cold temps & require a bit of extra preparation. Taking the time to prepare yourself, passengers & aircraft will increase safety & comfort. Fortunately, we have a hanger to keep our aircraft out of the harsh elements however it can get quite chilly inside the hanger.

If you are not familiar with our winter engine pre-heat operation, please ask. We use two (2) electric cords per aircraft plus a small heater with dryer vent tubing attached. The foam pads fit into air intake openings in nose cowling. One electric cord attaches to a plug found near the oil dip stick (64R has plug in left nose cowl). This plug is on a line coming from the oil sump pan heater. The other electric cord plugs into the small heater. Please keep the heater on a chair. A blanket is available to place over upper cowling keeping the warmth in while you do your usual thorough preflight. When you are ready to go experience a fun, safe flight PLEASE UNPLUG the heater. No reason to keep it running while the plane is gone. With power cords strung across hanger floor you & your passengers should tread cautiously. Also ensure electric power cords are not lying in a puddle of water on hanger floor especially if plugged into circuit.

Starting an aircraft engine can result in a discharged engine wear. This situation preheat and/or not enough that hooking up the heaters do a good preflight (of at suffice. However, you may our small heaters really don't OAT is below freezing why each opening in nose cowl.



All this of course is only good if each member is willing to take the extra time to ensure a good preheat & save Hobbs time. BTW 93F has heat to each cylinder when the sump heat is plugged in.

The damage that we do to an engine w/o preheat can occur in two common ways. The first is making lots of cold starts when the temps are below 40 F. Secondly a few cold starts when OATs are in the single digits can do even more damage that may not be readily apparent until next summer when you have low oil pressure or low compression. While the engine may run ok after it is warmed up, damage will become apparent at some point and shorten engine life. The amount of engine wear that one cold start costs in engine life can be beyond belief – and it doesn't have to be that cold. Avgas doesn't vaporize very well when cold especially below about 20 degrees F. Preheating helps to ensure adequate lubrication during the start, initial engine warm up phase & to aid better fuel vaporization.

Cold weather and moisture affect electrical systems & battery power output (even when fully charged) is reduced dramatically. We use sealed batteries which provide extra capacity cranking. A significantly discharged battery will take hours to recharge in flight, a potentially exciting situation should the charging system fail. Let maintenance know ASAP about low battery power. Leaving a discharged battery remain in extreme cold conditions will result in the battery literally swelling & bursting at the seams. This did occur to one of our batteries.

Good preheat will make the battery's life easier. Battery output is diminished severely in cold weather. At freezing temps the battery will only crank about half as long as it would at 70F. The contracted metal of a cold engine makes for increased resistance the battery must overcome, causing it to discharge more amperes & straining the starter. **Do Not Attempt a Start with a Low Battery.** This will only compound the situation. Notify maintenance to get battery charged up to capacity. Monitor alternator output (ammeter) especially after starting & during low RPM operations to verify system is charging properly.

Even with our pre-heating arrangements the engine block requires a bit of time to reach operating temp. Please allow for the needle to come off the bottom and approach the green before putting power to her. The engine will bless you with long life and continued safe flying. When you arrive at our hanger plug in oil pan & heater. Length of preheat will depend on how long engine has been exposed to OAT. Reach thru an access opening to touch engine block to determine if your amount of preheat has taken chill off engine. The time it takes to do a "good" preflight may be enough but not always. We have been using this method to preheat for several years & if done with patience/care has been sufficient. Have an "early" morning flight you might make arrangement to start preheat night before. During work week Aero Services if given enough notice will visit our hanger to accommodate.

With persistence & lots of priming aircraft engines can be started & run when cold-soaked. But the engine will be damaged for lack of lubrication as excessive priming dilutes & washes off existing oil film on cylinder walls & may cause a carburetor fire (providing opportunity to exercise your emergency egress procedure). As the engine warms up moisture from engine & oil vaporizes & is

even after some preheating battery and unnecessary stems from too short a heat. We have said before and oil sump heat while you least 30 minutes) should need to extend the time as put out that much heat. If not use a separate heater for Perhaps one in cabin. Throw

vented overboard through the breather tube. This tube may freeze shut causing the engine's internal pressures to increase until the crankcase oil seal is pushed out of position resulting in the speedy exit of engine oil as it flows aft over the cowling & windshield. Continental Engines (182) are particularly susceptible to have these tubes freeze. The tube exits engine case a few inches aft of prop flange & routed rearward along top of engine. This routing exposes the tube to cold air coming through the cowling. A hole located up from the exit end of the breather tube should be checked for blockage (especially if aircraft has taxied through snow or icy slush).

Any water in the fuel system can cause excitement you may not desire especially when OATs get near freezing. During your excellent preflight do the Cessna Wing Rock and be sure to check fuel drains & sump. Fuel selectors can freeze in position so move the selector thru all positions just remember to place in BOTH for T/O.

Allow engine to slowly warm up at 1,000 to 1,200 rpm unless it is necessary to reduce rpm to keep from exceeding oil pressure redline. As the engine oil warms up the rpm can be slowly increased. **Please Allow Plenty of Time For The Engine To Warm Up!** Hydraulic lifters, which adjust the valve lash to compensate for engine expansion during warm up & operation, are dependent on oil to work correctly. We use Phillips XC 20W-50 which allows oil to circulate easier throughout the engine after start but still requires warm up. In no way does our use of multigrade oil constitute a mitigation of the potential engine damage since the problem is one of dissimilar metal parts that heat at different rates. At cold temperatures you can literally have aluminum to steel contact. No oil will protect against that situation. The oil we use does make starting a bit easier however.

Don't Consider Taking Off Until Oil Temp Has Reached at Least the Bottom of the Green.

Just like all of us, aircraft engines are sensitive creatures. Reduce power gradually especially in cold weather. Just because the air is cold & dense doesn't mean you shouldn't lean. The scavenging agents in avgas require some heat, usually around 1,200 degrees F. to keep lead from depositing in the combustion chamber & on the plugs.

If landing & taxing through snow/slush minimize brake usage (should do so year round). Warm brakes will melt any frozen material upon stopping then refreeze locking plane in position (could ruin your entire day). This is especially bad situation if parking outside for extended time (MYL?).

It is the responsibility of all T-Craft members to care and operate our aircraft in a responsible and safe manner. Please remember aircraft engine temps need to come off the bottom and indicate an upward movement BEFORE doing a power run up. Best to have it touching the "green". Winter flying is going to cost you additional time on the Hobbs (especially so if you don't preheat!). Learn to live with it. Be kind to your engine and it will provide you with many hours of safe flights!



Heaters have a safety switch on bottom which has tape over. If tape comes loose the heater may turn off so make sure tape is secure.

Winter flying requires the correct mental attitude, a commitment to pay extra attention to the care & maintenance of aircraft, & a willingness to wait out suspicious weather. These are minor inconveniences compared to the payoff. Slow the pace of your preflight so something important is neither skipped nor missed with your discomfort of the cold.

Have fun, be safe, pay attention to the little things, take care of our aircraft, and please don't do anything foolish (or stupid).

Thank you for taking your time to read all this.

Jim Eyre
Director of Maintenance
T-Craft Aero Club

Plane Wash – A Fun Time was had by All

We had a great turnout, great weather and got the birds spiffed up
Thanks Vivian Brandt for the fantastic Pulled Pork BBQ









New Hangar Update

- Hangars are well under way in construction.
- Ceiling is on, only insulation for the hangars will be in the ceiling
- Walls going on now, partially up. Expect this to be done by end of two weeks or so
- We have a waiting list of individuals who expressed interest
 - Will have a meeting in the next couple of weeks to see who is still interested
 - If all hangars are filled after that, we will not have extras, otherwise will open for rent
- Hangars with water/sewer will be \$350/month; without will be about \$250 - \$285/month
- Building will not be heated but bathrooms will be heated (water, etc.) This accounts for the increased rate on hangars with water (utilities will be included)
- Foundation is above the nearby apron. The new apron will be laid out 20 feet from hangars, expected gradient will be 2% from the hangars to prevent water from coming into the hangars. TBD how this actually lays out in the end
- President and contractor are still discussing how we move forward with electrical connections. Expecting the electrical / lighting to be less than \$10,000 and possibly less than \$6,000 (will be looking for volunteers to help with this work)
- Investigated the cost of epoxy coat on concrete for all hangars. Commercial cost for a PROPER job (including grinding, etc.) is \$20,000. Probably more than we would spend. However, this is the BEST time to do it (before any oil gets spilled on it)
- Jim Manley recommends that if we leave it open the concrete can begin “dusting” which can make maintenance of aircraft more difficult. Possibly worth it to put a sealer rather than epoxy on the floor. Can be hand mopped on without hiring a contractor. Economical and easy to clean. May need to heat the building in order to lay the epoxy down (winter, cold temps)

New Plane?

We currently don't have the funds for a new aircraft due to engine replacements on 2 planes. We are still looking for possible good prices on a non-turbo 206, but still need to discuss with membership. The August 2016 newsletter details another club's assessment of a 206 Purchase.

Tips and Tricks

This is a new area in the newsletter. All members are encouraged to submit items you find helpful to the newsletter editor.

At the recent Division of Aeronautics Safety Standown, a very good presentation was given by Ian Mortensen on Survival and wilderness first aid.

He wears his immediate survival kit, with items in his shirt/pants pockets. Here's a list of his immediate survival items he gave us – one item he didn't list was a big sewing needle he keeps in his hat.

- 1) Fixed-Blade Survival Knife — <https://www.whiteriverknives.com/collections/survival/products/ursus-45>
- 2) Laser Flare — <https://www.greatlandlaser.com/green-rescue-laser-flare/>
- 3) Satellite Communicator — <https://buy.garmin.com/en-US/US/p/592606>
- 4) Tourniquet — <https://ratsmedical.com/collections/rats-tourniquets>
- 5) Paracord Bracelet — <https://www.survivalstraps.com/collections/custom-color-survival-bracelets/products/wide-survival-bracelet>
- 6) Heavy Duty Bag — <https://www.bestglide.com/heavy-duty-survival-rescue-bag.html>
- 7) Compass — <https://www.bestglide.com/fb1605-nato-survival-compass-peyser.html#.W-DXhXpKii4>
- 8) Wool Hat — <https://www.smartwool.com/shop/men-accessories-hat/mens-the-lid-sw0sc143?variationId=A25#hero=0>

As far as wilderness first-aid training, he highly recommends the folks at Wilderness Medicine Training Center (<https://www.wildmedcenter.com/>).

Journey to an Instrument Rating James Patterson

The following is the first entry of a detailed blog about my journey. The rest of the story can be read on my blog at: <https://www.daggerfalls.com/blog/journey-to-an-instrument-rating>.

The Goal

After more than 20 years of flying as a VFR (Visual Flight Rules) private pilot, mostly in the Idaho backcountry, I decided to embark on the journey toward a rating that would allow me to earn a little money while flying and to expand my skillset and range of experience in the air - specifically, I was seeking a commercial pilot certificate. As private pilots, we are restricted from charging for flying and I have adhered to that throughout my years as a pilot, never accepting compensation for a flight. However, a commercial certificate is, in most cases, of little use without an instrument rating, so the instrument rating is the hurdle I must clear before launching on the commercial training path.

In March of 2018, it became clear to me - and my peers - that our jobs in a local company for which we worked for many years (in my case 14 and in others more than 30) were going to be transferred to our plants in Asia. Rather than lament this, I decided I would take the time afforded

me to earn my commercial certificate and find work in the aviation field. I decided to follow my own training recommendations in this pursuit:

- Study and pass the written exam for your rating / certificate BEFORE getting in the airplane
- Pay for the flight training (in the air) up front, in block, and FLY, FLY, FLY many times per week so that you don't have to "relearn" lessons from week to week

It is these two actions that, in my opinion, most impair a student's progress toward a rating or certificate. I have seen a student pilot log many hours (sometimes 70 to 100 or more) toward a private license but fail to complete the course and checkride because they didn't complete or pass the written test. And others take twice or three times longer to complete the basic training because they don't fly frequently enough. Each time they arrive at the airport, they have to learn again the lesson they completed in the last session, rather than build on it and move forward. So, I purchased a "[KING](#)" Instrument course, The Instrument Pilot's Flight Manual, the Practical Test Standards, Oral Test Preparation Guide, and many others as I started down the path toward my intended goal.

REMINDERS

MAINTENANCE TIP

When we are pilots in training our CFI's instill in us good habits on how to care for our birds. As time passes, occasionally we all forget and become rusty pilots in relation to care and maintenance of our aircraft. The Maintenance Tip for today is simply, when cleaning the windscreen, use only vertical strokes. Do not use circular strokes. Over time, circular movement of the cleaning towel will leave a corresponding mark in the screen that will require replacement.

CARE OF YOUR AIRCRAFT

Take Time After You Flight

We are continuing to see many instances of lack of care and taking the time to make sure that you're (and our) planes and hanger are put away properly. Gust locks, pitot tube covers not installed, flaps left down, doors not locked, seat belts not put away, master left on = dead battery, avionics master not turned off, lights not turned off (except its advisable to leave the beacon light on as a warning the master was left on), bugs not cleaned thoroughly from all leading edges, windows streaked, dirt and trash not cleaned out (plane and hanger), fuel card or keys missing from the key bag, key bag not zipped or put away, hanger door pins not fully secured, hanger doors left open, hanger lights left on, the hanger itself not locked, lock code not returned to 0000. There should be no need for any such reminders, as a matter of common courtesy we should leave an aircraft in a clean condition after we have flown it. We learned as early as first grade, if we create a mess, we clean it up. That's the grown-up thing to do. PLEASE take you time when ending your flight and be vigilant on taking care of these items.

Oil Usage

Fellow members/owners - in the big scheme of things OIL is relatively inexpensive. However over time we have established a norm for each aircraft on how much oil a particular engine is comfortable with. Jim Hudson has taken his time to produce a comprehensive check list for each aircraft. Included in the pre-flight section it states minimum/maximum oil to check for. Do not go by what the POH says, i.e. engine has a 12 qt capacity. 93S for example would blow oil out breather tube along belly of aircraft until dip stick reads 8. Please use checklist for amount of oil necessary for all T-Craft aircraft. As I have repeatedly said, if you are determined to dump more oil into sump than necessary please present yourself at plane wash to clean the bellies. I keep putting 6-7 Qts oil on back shelf and it disappears quickly. Remember to note oil used on log program. Also putting unnecessary amounts of oil into an engine really screws up any attempt to determine what actual oil usage is. An engine has to work harder if sump is over-filled with oil. Read [Aircraft Oil Usage](#) on our web site under Site Index.
DOM – James Eyre

Check Lists

The club has developed check list for each bird which contain key information on the plane from the POH and some club specific items; oil levels, tire pressures, reminders to log in-out, and clean up items. It's not mandatory that you use a club check list, in fact many members develop their own, which is a good way to get intimate with the details. We've had laminated version in each aircraft, but over time, they grow legs and walk off. Members are encouraged to print out a copy of the club check list for yourself or download the pdf version and have it on your iPad/phone/tablet or build one for yourself. There's a word file as well as pdf version of the club website under the Fleet page. I'm in the process of updating the check-list to include some of the newer avionics, and other items that crop up. If you happen to find any discrepancies or have comments, let me know – Jim Hudson

Schedule Master – 90 Day Attendance and Day/Night Currency

Some of you, in fact most by now have probably received email notices from SM that you're 90 day T-Craft attendance will expire on a certain date. A field was set up in the Status tab to show that expiration date in. This is a way to keep track and notify you of your upcoming 90 day attendance expiration date. You'll get a notice 30 day prior to that date from Schedule Master. You will also get a message after that notice when you log on to Schedule Master. As per club policy, your scheduling and flying privileges will be suspended if you exceed this date, and any future schedules will be canceled if you're suspended. You will NOT be automatically suspended by schedule master if this date is exceeded. You will get notification by the membership director when he suspends your privileges, since there are some circumstances for exceptions.

There are also two fields that you can use to keep track of your 90-day, day and night currency for carrying passengers. You can use those two fields if you wish to enter your expiration date and receive a notice 30 days prior to that date. Students can use the 90-day currency field to keep track of your 90 day endorsement to continue to solo.

Billing – Reggie Sellers

There have been a few mistakes made with the Flight Log System logging so I am writing this in hopes of helping with the billing accuracy.

1. The Flight Log System is NOT connected to Schedule Master in that if you Log a plane out in the Flight Log System and then decide not to fly, you need to log the plane back in. Cancelling the flight in the Schedule Master on-line system WILL NOT cancel the flight in the Flight Log System. You have to do BOTH.
2. When you log a plane in PLEASE hit the GREEN FINISH button. If you hit the cancel button, the flight will not be logged back in making it very difficult and confusing for the next member to take that airplane.
3. If the Hobbs meter is inaccurate when you fly PLEASE call the person that flew before you and work it out. We are all owners of the planes and it is important that the billing is accurate.

Thank you and Happy Flying,
Reggie Sellers

PLEASE REMIT PAYMENT IN FULL BY THE 10TH OF THE MONTH.

Your account will be PAST DUE if not received by the 20th and there will be a \$10.00 late fee. There will be a finance charge if your account is over 30 days past due and flying privileges will be suspended