

Editor Bert Osborn



PUTTING WINGS ON

YOUR DREAMS

VOLUME XV

ISSUE 1

Submitted by Jim Hudson

Membership and Safety Director - From the FAA

Back to Basics

The January/February 2018 issue of FAA Safety Briefing takes a forward-thinking journey “back to the basics” of flying fundamentals. Articles in this edition provide important tips, techniques, and resources that can help you better aviate, navigate, communicate, and mitigate in today’s complex operating environment.

Feature articles include:

- Simple? – Defining and Refining Basic Skills in a Complex Environment (p 8) (<https://adobe.ly/2BLLeLiA>)
- Fantastic Four Fundamentals – Unlocking the “Superpowers” of Basic Airmanship (p 10) (<https://adobe.ly/2BLmTjg>)
- Where the Heck Are We? – Understanding the Lost Art of Aerial Navigation (p14) (<https://adobe.ly/2Btu4iZ>)
- How to Talk Like a Pilot – The Basic Elements of Aviation Communication (p 18) (<https://adobe.ly/2p7KwQb>)

- American Ninja Pilot – Hone Your Flying Skills with 6 Basic Risk Mitigation Steps (p 22) (<https://adobe.ly/2zb67XZ>)

The link to the online edition is http://www.faa.gov/news/safety_briefing/. There you will also find new mobile-friendly links to each feature article. Be sure to follow us on Twitter - @FAASafetyBrief

FAA Safety Briefing is the safety policy voice for the non-commercial general aviation community. The magazine's objective is to improve safety by:

- making the community aware of FAA resources
- helping readers understand safety and regulatory issues, and
- encouraging continued training

Produced by the editors, *FAA Safety Briefing*
Address questions or comments to: SafetyBriefing@faa.gov.

Have fun, Fly safe and Don't do anything Stupid,
Jim

February 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			

Calendar of Events:

The next membership meeting will be January 30, 2018. The next board meeting is February 13.

02/10/2017 – Accounts due
02/13/2017 - Board Meeting
02/20/2017 - Accounts past due
02/27/2017 - 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
\$4.26 per gallon.

Articles or Pictures

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

Ratings:

15 Student Pilots
68 Private Pilots
01 Recreational Pilots
12 Commercial Pilots
09 Air Transport Pilots
31 Instrument Rated Pilots

Member Statistics:

38 Class I Members (36%)
67 Class II Members (64%)
06 Inactive (voluntary suspension)
19 Suspended (BFR/Med/Attend/Billing, Including 6 Inactive)
11 Social Members (non flying, not included in "Members")

We started the year with 106 members and ended the year with 105. 105 is our limit but last year we lost 27G and we allowed the LSA pilots to stay on if they wanted to.

We still have 15 people on the wait list.

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

BFR's

Andy Toth

C182 Upgrade-Check Out

New Ratings

New Members

John Larsen Class II
Jiyen Li Class II

LOST AND FOUND

Lance Smith lost a Light Speed headset in one of our birds. If you come across it would you let him know? Thank you.

WINTER FLYING HOURS

5.4.3 "Use it or lose it" hour: In addition to monthly dues, members will be charged one of hour of 152 time at the scheduled rate if they don't fly the equivalent to that time during the month in any of the club planes. The "use it or lose it" hour is intended to encourage members to fly at least monthly to stay somewhat proficient.

5.6 Winter flying hours: During the months of December, January and February the monthly “use it or lose it” minimum flying charges may be combined in any of these three months. For example, if a member did not fly in December or January but flew the equivalent of three hours of 152 time in February, the December, January and February “use it or lose it” dollars would be applied to the February billing period. The same is true if the 3 hours were flown in any of the three winter months. If a member did not fly in any of the three winter months they will be charged for three hours of "use it or lose it" time in the February billing period.

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

SCHEDULING COURTESY

A scheduling issue came up recently in which a member took out a plane that another member had scheduled for a given time block, depriving the member who scheduled it the use of the plane. The member who took the plane thought he scheduled it at that time, but he had actually scheduled it for the following day. It was an honest mistake that happens very rarely. However, it does bring up a couple of scheduling precautions. One should always re-check your schedule just prior to taking the plane, to check if there had been any changes or squawks, and to double check you have the correct plane scheduled. If for some reason you decide to take a different plane than you scheduled, make sure you change it on schedulmaster, and not just log out the plane. Be aware of when the plane is due back. Don't assume that you can take it longer than you have it schedule for if no one had it scheduled after you, someone could schedule behind you while you're flying. If for some reason you're going to be late on your schedule, let the next person know. If you're stuck somewhere because of weather or other issues you should contact those impacted, and also one of the board members. Also, don't forget to cancel a schedule that you're not able to make. Failure to cancel a schedule or remaining portion of a schedule is the most frequent problem we see. We very rarely have scheduling problems, and for the most part, members are very courteous and respectful of other members.

T-Craft Flying Stats

The top three flyers:

Jim Hudson	6.6
Hootan Shariat	6.2
Chad Hess	5.6

The top three aircraft flown were:

4464R	21.4
13686	18.3
67375	15.00

The top billing aircraft:

4464R	\$1,519
13686	\$1,336
7593S	\$1,148

President's report on the state of the Hangar

The contractor will complete the drawings shortly. We will have to pay the balance of \$5,000.00 when that is done. We can then get started on the permitting process. The construction scheduling will be next. We will then pay the balance on the steel to get it manufactured and delivered. We have made the down payment on the hangar and will be getting engineered drawings shortly. These drawings will be used to obtain our building permits. The hangar will have 5 bays and we will use one for our T-Craft plane. We already have 6 people on a waiting list of for the prospective hangar bays. All of the people on the waiting list are T-Craft members.

The search for the 8th Aircraft

T-Craft is not in a hurry to purchase aircraft number 8 immediately. Right now we don't have a place to park it and we will probably actively pursue a new aircraft in the late spring. After polling the membership, the aircraft search committee had recommended a 6 place aircraft. A Cessna 206 had been recommended as had a Cherokee 6.

WINTER HEATING RULES

PRE-HEAT PRE-HEAT PRE-HEAT PRE-HEAT

Heaters & power cords are out. Next time you arrive at hanger to fly and you have layers of clothing to stay warm, please remember that your aircraft is also cold. There are two (2) power cords per aircraft. One power cord for oil sump heater & another for the small heater on chair. Please leave heater on chair. Usually takes a good 30 minutes to take some chill off engine & surroundings. Except for 64R, which has oil sump heater plug located in left nose air intake, the other aircraft have a plug located near oil dip stick tube. This should have been pointed out to new members during your walk-a-bout introduction to the aircraft/hanger and certainly during your aircraft checkout. If not please get with another member to help guide you. Taking care of an engine now will give us longer engine life. Please read "[Cold Weather Operations](#)", and a related article [Why you're more likely to have an engine fire this fall](#) on our web site in the site index.

Thanks. Safe enjoyable flying. DOM

HOURLY RATES (Effective 1/26/2018)



N67375
\$60.00



N4464R
\$69.00



N13686
\$71.00



N1293F
\$82.00



N1891X
\$116.00



N9989E
\$122.00



N7593S
\$122.00

SQUAWKS

13686 - Two Garmin G5's have been installed. The defective G5 used as the directional gyro has been replaced and is functioning correctly.

9989E - 89E was having problems with its radios. Neither Nav radio would pick up a VOR. That problem was addressed and corrected by Gordon and Jim.

91X - Has been mothballed until February. Engine is shipped from Mobile, Alabama. 2,228 road miles to Nampa (1,547 as crow flies).

93S - The bid to paint the spinner, nose bowl and top of the cowling to the windscreen on 7593S has been received. 93S will be ferried to Challis shortly for the paint job.

64R - had its annual. The engine looks fine and the dual harnesses have been installed.

67375 - The radio in 375 has been re-installed. If it hiccups let the DOM know. Jim would like the TKM 385 radio replaced with a Garmin.

1293F - The Garmin GTX 335 had been ordered and installed. The DOM saved T-Craft \$800.00 by ordering before the 1st of January. The ADF has been removed and the 406 ELT has been installed and registered with NOAA. The ELT is good to January 2020. The Hobbs meter has been replaced with a Hobbs meter that "clicks" to next tenth so members won't have to decide what part of next numeral is showing.

Remember to report squawks on schedule master. The old clip boards for reporting squawks have been retired.

Aircraft annuals have been scheduled and calendared through May.

The 3 Jeppeson chips for the 3 Garmin 430's have been updated. The cost for each bird per year is \$440.00 for 686, 93S and 89E.

The proposed 2018 calendar has been set. The fall plane wash will be October 2. The Garden Valley fly in will be June 8-9 and the poker run will be April 1-7.

CARE OF YOUR AIRCRAFT

Please remember that after landing club policy requires us to clean the leading edges and the windscreen of bugs and foreign debris. There should be no need for any such requirements, 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, after you land, clean the bugs off the leading edges and windscreen. Then use the furniture polish on the leading edges.

Basic Med

What documents does T-Craft Need for Basic Med? We have Six members who have obtained completed their Basic Med requirements.

1. We need the AOPA Basic Med Course Completion Certificate,
2. The Physician's Signature and Declaration page from the Comprehensive medical Examination Checklist,
3. Copy of your Driver's license showing the expiration date.

MEMBERSHIP DUES

At the Annual meeting in 2018 the membership approved continuing monthly dues at \$60.00 per month. That rate combined with the low hourly rates (effective January 26th) for our aircraft, makes T-Craft the leader in high quality, low cost flying. Thanks to our Treasurer Dennis Wheeler for negotiating our lower fuel prices, and the great maintenance under the watchful eye of Maintenance Director Jim Eyre.

OFF FIELD FUEL REIMBURSEMENT

If you purchase fuel off site you will be reimbursed at the club rate per gallon, currently at \$4.26 per gallon. In order to get the reimbursement, send your receipt(s) to the club mail address to the attention of Reggie Sellers, or scan a legible copy and email to Reggie Sellers. DO NOT put your receipt in the club pouch, these are for Nampa fuel receipts only and your personal receipt will probably get lost.

Remember. You use your credit card to purchase your fuel offsite. Submit the bill to Reggie and he will give you property credit.

Note of Interest

The NDB north of Nampa has been decommissioned. That has created some changes in the IFR procedures. The departure procedure from both 29 and 11 used to include a hold at the NDB. There have been two new departure procedures created as a result of the decommissioning. We now have the ADEXE ONE ODP from runway 11 and the CADKI ONE ODP from runway 29.

F-111 Aardvark, Part 2

By Joe Bejsovec



Bravo! The Aardvark was flying again.

The pilot had pilot related tasks like filing the flight plan, pre-flying the airplane, taxiing into position, taking off, talking to traffic control on the radio, adjusting the wing sweep handle, the slats/flaps, the gear, the autopilot, the lights, and the Terrain Following Radar. The TFR could be flown at 200, 300,

500, 700, and 1000.' The ride setting could be set to hard, medium and light. When topping over a mountain in hard ride the airplane achieved negative Gs and the loose stuff in the cockpit would rise up to the canopy and pelt the crew on the downward swing. To activate the TFR, all he had to do was hit a toggle switch and down we'd go from any altitude. The pilot also flew bomb runs and joined up with the tanker to take on fuel. One day in south England we hit a tanker just before landing. Sometimes scheduling lacked sense. It was twilight and the skies (surprise) were clear. After taking on a thousand pounds, which we were going to have to dump before landing, we pulled up abeam the tanker and Wally said, "You want to see something cool?" At that point we turned on the dump valve and lit the afterburners. A two hundred foot flame lit up the sky and all the telephone exchanges in south England. As may be expected, we got briefed when we returned to Heyford.

The Weapon Systems Officer, me, did the job of four BUF crewmembers: simulated copilot (ScP), electronic countermeasures, navigator, and bombardier. As ScP I prepared for the job by having soloed in a Cessna 150, obtained an AB Glider Rating in England, and spent time in the F-111 simulator when it wasn't scheduled for crew rides. As ScP, I managed the fuel, set the radios, talked to the command post on one to tell them where we were. Weather in England defied prediction, so as we taxied down to the runway I listened to the CP freq to hear where those who took off before were now heading. I looked out and cleared right turns, timed takeoffs to the decision point, read aloud the departure and approach plates, and looked up to gage the nearness of the tanker boom. In circling formation, left wing, focusing on lead's left wing light, and in the soup while waiting for crossing from Italy into France I noticed Wally's eyes bouncing around like a broken slot machine. When I asked him what's going on, he said he had a bad case of vertigo, so I started reading the attitude indicator to him and he calmed down, and we stayed in formation. On the bombing range I dropped a practice bomb from the right seat. At 500' 480 ktas I could pickle a retarded bomb off as soon as the target passed the nose. No HUD on the right side. Then applying full throttle and bending the stick back could score the hit upside down, before rolling out of the immelman for downwind and another attack. Flying with Greg Poe in the Pitts, the roll was a ponderous thing, rolling around the pucker point, inviting food to depart the stomach. Rolling hammerhead stalls were a lot more fun. A roll in the Aardvark was almost a nonevent. It was immediate, smooth, with no wallowing, around the forehead, and a thing of beauty. We flew the F-111 as intended. We'd flip the TFR switch and down we'd go. If we were still in the soup at low level, we'd abort and climb out. Low levels had to be flown VFR. Then the same generals at USAFE got involved and said we could only engage the TFR at low level in VFR conditions. Dangerous nonsense. Shortly afterward, Wally and I were descending over the Welsh hills in the soup. Wally looking out and informing London Center we were still in the soup, when I glanced at the radar altimeter. Shoot, we were passing 300 feet. UP UP, I yelled and Wally gave me the what-the-heck look but brought the stick back. Wally, you trying to kill me again?

One day making a finger-tip, three approach to Upper Heyford, I was looking out as usual, when I spotted a glider at co-altitude, right in front of us, and called out on the radio, "Bogie at 12!" Two went over and one went under. Didn't hear anything about a glider crash. Shortly afterward I was made an instructor. IWSOs fulfill the need for an instructor to fly with staff wienies, though all the staff wienies I flew with were excellent pilots. But the main job of the IWSO was to fly with pilots newly separated from their instructor pilots. With me, they had lots of training squares to accomplish: low levels and bombing ranges. The most memorable flight I had was with a student. We did a pitch-dark night low level in Scotland. The head wind over the flat was 50 knots without turbulence, but when we got to the mountains, the burbling wind created severe turbulence knocking the plane off the TFR and thrusting it into the ground. UP, UP, I yelled. With the stick aft and the throttles in full mil, the kid replied, what the hell do you think I'm doing? Reading the radar altimeter passing through 300' I said it wasn't enough, and he finally plugged in the afterburners, arresting the violent descent and finally climbing out. We put it on autopilot at 15,000 and let it go round in a couple circles until we recovered our senses, glad to have survived the wild ride.

The WSO monitors the Radar Homing and Warning receiver, and if an item of interest, turns on the deception jammer- a neat device that offsets the return the enemy sees. As navigator, the WSO fulfills the travel plan and arrives at scheduled times for bomb runs, low level entry and especially tanker rendezvous. As bombardier, the WSO preflights the bombs, sets up the bomb panel and finds the target on radar. Compared to the blobby picture on the BUF, the F-111 was a dream, capable of painting individual fence posts in the desert. Throwing a toggle switch puts the radar in the air to air mode, a pencil beam used to find the tanker heading our way. When the tanker reaches 22 miles the

WSO instructs the tanker to turn left 180 degrees in front of the receiver. Any how it's a busy job and instructor pilots who occupied the right seat said it was an overwhelming job- just the way I like it. Thanks for inviting me to recite F-111 events from the past. I loved the Aardvark, and as Janet says, "Joe, you're addicted to adrenalin."

Joe Bejsovec

PS. When I finished up in England, two years to go, Personnel, determined to get the last ounce of blood out of me, gave me orders to Takhli, again. Having a brew in the club, a fellow WSO came up to me and told me he just got divorced and wanted my orders to get out of England. With the okay of the DCO, he went off to check out in the A model at Nellis, which is what was flying at Takhli. On a practice bomb run at one of Nevada's bombing ranges, an engine blew up killing both the IP and WSO. Se la guerre.

IFR Training | Electronic Flight Bags – Training Courses – and Flight Simulators

Written by Tad Jones

My friend "Chopper Dave" and I have been doing some IFR flight training together and have been trading-off being safety pilots for each other. The other day Dave was asking me what I like to use for my electronic flight bag, recommendations for an IFR study course, and what I use for my flight simulator.

This is a description of what works well for me. There are a ton of options out there and other pilots may have other suggestions for what works best for them.

I like to use the iPad mini 4 in the cockpit. I used to use a full-sized iPad but it just seemed too large for the smaller airplanes that I fly. The current iPad mini only comes in the 128mb version now and that is the one I have and I really like it. It also looks like they may have come down in price a bit since I purchased mine. If you get one for aviation I would suggest purchasing the one with cellular service. Even if you don't take advantage of the cellular service feature, the cellular version includes an internal GPS receiver and I have found the internal GPS actually works pretty well...even when I forget to turn on my Stratux :) The Wi-Fi only version doesn't have built-in GPS. My wireless carrier only charges an extra \$10 per month to extend cellular service to the iPad & that way I can open and close flight plans during flight, receive weather updates, etc...as long as I am in cell range. One thing worth mentioning is that when flying into the Idaho backcountry the majority of the backcountry doesn't have cell service so don't expect to be able to close your flight plan using your iPad after you land at a backcountry airstrip. I currently have the iPad paired with a Stratux that I built from a kit which works great for receiving ADS-B and displaying surrounding traffic on my iPad.

Here is a link showing the different options and sizes of the Apple iPads:

<https://www.apple.com/ipad/compare/>

Here is a link to the iPad mini 4:

<https://www.apple.com/ipad-mini-4/?afid=p238%7CsNAb6SfCr-dc%20tid%201870765e38482%20pcrid%20228944428739%20&cid=aos-us-kwgo-ipad--slid--product->

I also purchased the apple iPad cover which was about \$40 and so far it has been totally worth it. One drawback to the stock cover is that it is not the toughest cover out there. I like the simple design of it, but if you are looking for something that might take a bit more abuse then there are a lot of other options out there for iPad covers made by other manufacturers. I usually take the cover off when flying but leave it on all other times to protect the glass. The stock cover is also compatible with my knee pad iPad Holder if I want to leave it on while flying. The stock cover also works as a table stand when I am reading study material on the iPad.

There are a lot of options for electronic flight bag software and I like using ForeFlight on the iPad. ForeFlight seems very intuitive to me and I like the fact that it works on both my iPhone and iPad

and I also like using the desktop version for flight planning and checking weather, etc. The desktop and device versions are all linked to your account so when you update information on one device it will update your other devices. With ForeFlight you can download all of the FAA published material including VFR Sectionals, IFR Low Charts, Approach and Departure Charts, etc. One feature I really like is that the charts are both seamless and interactive. That is, if you are flying from one area a sectional might cover to another sectional there is no switching of maps required. ForeFlight shows it all as one seamless chart and it shows the location of your airplane on the charts. Included in the "Documents" tab you can also download FAA published books for free such as the FAA Airplane Flying Handbook, Instrument Flying Handbook, Instrument Procedures Handbook, Aviation Instructors Handbook, and of course the Airman's Information Manual (AIM). Just having that feature saves a ton of money in not having to purchase books. Another advantage is that the information is always up to date which is a really nice feature.

Here is a link to ForeFlight:

<https://www.foreflight.com/pricing>

You can customize your Foreflight subscription to suit your own needs too. Foreflight has a little hidden link at the bottom of the pricing page allowing you to "build your own plan" instead of choosing the pre-packaged plans. Just click on the "Build your own Plan" option at the bottom of the page. I used to have a customized plan but recently I upgrade to the "Pro Plus" plan for the interactive IFR Charts & additional features. That way I can see where our flight is located on the actual IFR chart & where my airplane is located on the Airport Diagram for taxi and ground operations. ForeFlight will provide an audible and visual warning when approaching a runway which I think is a great situational safety feature along with the interactive airport diagram. I can see this as being super useful at an unfamiliar airport.

There is other software out there like WingX and FlyQ but I haven't used those and they might do the same thing as Foreflight. I have been super happy with Foreflight though and it works well for me.

For my IFR written study material I am using the Sporty's Instrument course and it works really well on the iPad. Sporty's has an app for the iPad and iPhone that allows great interactivity with all of your purchased courses from Sporty's and they are continually being updated with new information and features. This course is great both for pilots aspiring to get their instrument rating and those that are instrument rated but would like an IFR refresher. With the Sporty's course I can study reading material, watch training videos and take practice tests using the iPad app which is super convenient. The Sporty's course has been great for me but there are also other options out there. Some other great options are King Schools, Gleim, Rod Machado and Pilot Workshops. I did the King Schools training program for my Private Pilot's license back in the early '90's and then I did the Sporty's Private Pilot Course as a refresher and I liked the Sporty's course a lot so that is mainly why I chose the Sporty's Instrument course and I am really enjoying it.

<http://www.sportys.com/pilotshop/sporty-s-instrument-rating-course-ipad-iphone-app.html>

When I am flying I use a MyGoFlight (MGF) Knee board mount for my iPad and it works great! The MyGoFlight products seem to be built really well and are well designed.

<https://mgfproducts.com/ipad-mini-4-sport-case-kneeboard-mountable/>

If you have Amazon Prime you can get free shipping with the following link:

<https://www.amazon.com/iPad-Kneeboard-Sport-MYGOFLLIGHT-compatible/dp/B01BMWEEF6>

The Knee Board Mount is also compatible with suction cup mounts such as the MGF Flex Suction PRO.

<https://mgfproducts.com/sport-mount-flex-suction-pro/>

I have a similar single suction mount and it really doesn't seem to work that well though. It seems like I have to use the pump quite often to keep it attached. When the red line becomes visible you know it is time to add a few more pumps to the device to keep it attached.

If I were to experiment with other suction cup mounts I might go with the MGF Flex Double Suction but I'm not sure if I would spend the money because the MGF knee board actually seems to be working

great! Here is a link to the MGF Flex Double Suction Mount. If someone else has used this product please let me know how well it has worked for you.

<https://mgfproducts.com/sport-mount-flex-double-suction/>

One of my friends that I fly with uses a yoke mount for his iPad & MGF makes one that I have thought about getting but I don't really like the idea of my iPad moving around with the yoke while I am flying.

<https://mgfproducts.com/sport-mount-flex-yoke/>

For flight simulator software I have been using X-Plane which I really like because it has a Garmin 430 and it links to my iPad and ForeFlight so it looks very similar to the cockpit and instrument panel in the planes that I fly in reality. A really cool feature of X-Plane is that it links to ForeFlight you can see exactly what the flight would look like on your iPad and save flight tracks just like a real flight when your flight is completed. The biggest challenge with X-Plane that I have found is modifying the rendering settings to make it work with your monitor setup. I have three monitors so I put the 430 on my right-hand screen and I have my rendering settings set up so that the cockpit looks similar to being in many of the same airplanes that I fly in real-life. It doesn't have the Garmin G5's which is one difference to the planes I have been flying but maybe X-Plane will add those features in newer versions as the G5's become more popular and are included in more panel installations.

<http://www.x-plane.com/>

Along with X-Plane I use a Saitek Pro Flight Yoke with a Throttle, Prop, & Mixture Quadrant which makes it a much more realistic feeling of interaction.

<https://www.amazon.com/Saitek-Flight-Three-Lever-Throttle-PZ44/dp/B000TCD1UK>

I use CH Pro Pedals that I found for a good deal on e-bay & those hook directly to the Saitek yoke system. If you are looking at the CH Pro Pedals make sure you get the ones with the USB compatible connector. I think there were some older versions of these rudder pedals that had a different plug connector that may not be compatible with the Saitek or other yoke systems.

<https://www.amazon.com/CH-Products-Pedals-Simulator-300-111/dp/B0000512IE>

Flying the flight simulator doesn't count towards any actual flight time or instrument time but that doesn't really matter to me. I would much rather be outside flying real airplanes but the simulator is a great way to keep your skills sharp when the weather is too bad to fly or when I use up my monthly flying budget before the end of the month. I have been using the simulator to help practice approaches and familiarize myself with approaches to an airport I am planning to fly into. That way I have a better understanding of the airport's procedures before I get there in real-life. The simulator has also been really helpful with my Instrument training for practicing holds & pattern A and pattern B exercises.

Hopefully this helps answer some questions on devices, aviation software, training and simulator options. Remember that these are just tools to aid in situational awareness and flight training. They aren't a replacement for actual flying skills and proficiency. The only way to really master good flying skills is to get out there and FLY! Have Fun & Be Safe!

Happy Flying!

~ Tad Jones

91X-Ray Backcountry STOL Project Update | T-Craft Aero Club Nampa, Idaho.

Written by Tad Jones

N1891X is a 1965 Cessna 182H. I really like the classic look and details of this airplane. The small details like the emblem on the yoke, the cowl flap handle, and the "shark gill" vents in the lower cowling that give this plane its Classic character.



Classic Skylane 182 Emblem

Aero Services in Nampa, Idaho is doing the work on the Backcountry Upgrades and are doing a great job! Jim Eyre is the Director of Maintenance at T-Craft Aero Club and keeps all our aircraft safe and in great working order. Jim has been coordinating the 91X-Ray project with Aero Services. A project like this takes a lot of time and we all appreciate the time and attention that Jim puts into our airplanes.

Idaho has an amazing backcountry airstrip system and the Cessna 182 platform is a very capable backcountry aircraft for accessing many of these airstrips. The stock Cessna 182 doesn't have as much prop clearance as its predecessor and tailwheel brethren the Cessna 180 but it does have more docile ground handling characteristics and can perform take-off and landings more easily in crosswinds and challenging wind conditions due to the location of the center of gravity being ahead of the main gear instead of behind the main gear.

If you ask most pilots which airplane looks more "Cool" they will most likely say the 180 or the 185 and I would definitely have to agree. The 182 has some distinct advantages over the 180 though. Insurance costs are more affordable. There are a lot of 182's out there so it is easier to source parts. The cabin width was increased in the 182 "E" models by nearly 4" and the subsequent models are what are often referred to as the "wide body" series. 4" may not sound like much but it really gives the pilot and passengers a lot more shoulder room than the 180's, 185's and the early model "A-D" model 182's. Cessna also introduced the "Omission" rear window with the "E" model. This allowed more light into the cabin and the ability to see behind you while flying. This is a nice feature to be able to look at the rudder during run-up to make sure the controls are moving the rudder in the correct direction too :)

There are a ton of modifications available for the Cessna 182 to make them great performing backcountry airplanes. One of the most extreme is the Peterson King Katmai STOL kit.

<https://www.katmai-kenai.com/aircraft/katmai.php>
[Peterson's King Katmai](#)

Since this aircraft is being operated in a Club environment many of the recommendations for modifications have been made with the consideration that this aircraft will be flown by many different pilots with different skill levels.

Taking many items into consideration the backcountry upgrades recommended by the T-Craft Aircraft Improvement Committee (AIC) for 91X included:

- Adding larger tires for more prop clearance and for rolling over gopher holes and rough terrain at backcountry airstrips.
- Adding a new nose fork to accommodate a larger front tire.
- Wing STOL kit.
- Repairing & Rebuilding the Front Seats.
- Adding dual BAS Shoulder Harnesses.
- Replacing the Windscreen. The old windscreen had crazing in the plastic in the Pilot's line of sight. The new Windscreen would be a light grey.
- Removing the stock rear seat and replacing it with F. Atlee Dodge removable folding jump seats to easily make room for camping gear.
- Simplifying the radios and avionics & standardizing the instrument panel.
- Adding an engine monitor.
- P-Ponk "Super Eagle" Engine Conversion

The old O-470 was becoming tired and was starting to show signs that it should be replaced. The membership voted to replace the O-470 with a factory O-470 instead of the P-Ponk "Super Eagle" Engine Conversion. The P-Ponk is a proven design and adds upwards of 35 to 45 horsepower over the factory engines but it also would add quite a bit of cost to the project. The propeller and crankshaft also add considerably to the cost of the P-Ponk conversion.

[P.Ponk Aviation](#)

Work has finally begun on the 91X-Ray Backcountry Project and it is looking great so far! Here are a few photos of the project:



91X-Ray at Aero Services



Top and Bottom Cowling (Note the Shark Gill Vents in the Lower Cowling)
Wingtips will be replaced with wingtips provided with the STOL kit.



Front Seats Removed



Rear Seats Removed



Don't worry...this isn't the new Engine :)...
These are weights on the engine mount to keep the Tail off the Ground.



Wing to Fuselage Seals Removed



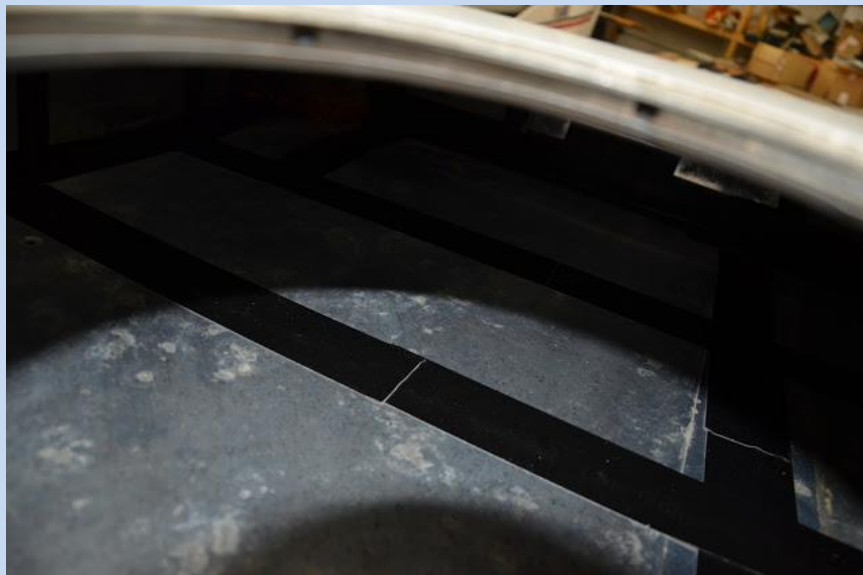
This fuel bladder is from 1978 and needed to be Replaced



Old Fuel Bladder



New Fuel Bladder!



The Area inside the Wing where the Fuel Bladder is installed is cleaned and any rough areas are taped to prevent damaging the new fuel bladder.



New Gaskets for the Fuel Bladder



The insides of these wings are in really good shape!



This is the AirGlas Nose Fork for the Larger Tires - It hasn't been unwrapped yet.

Todd Hitchcock at Hitchcock Aviation was instrumental in helping us determine which nose fork to use for this project. [Hitchcock Aviation](#)



New Tires and Wheels



New Windscreen hasn't been unwrapped yet



F. Atlee Dodge Folding & Removable Seats

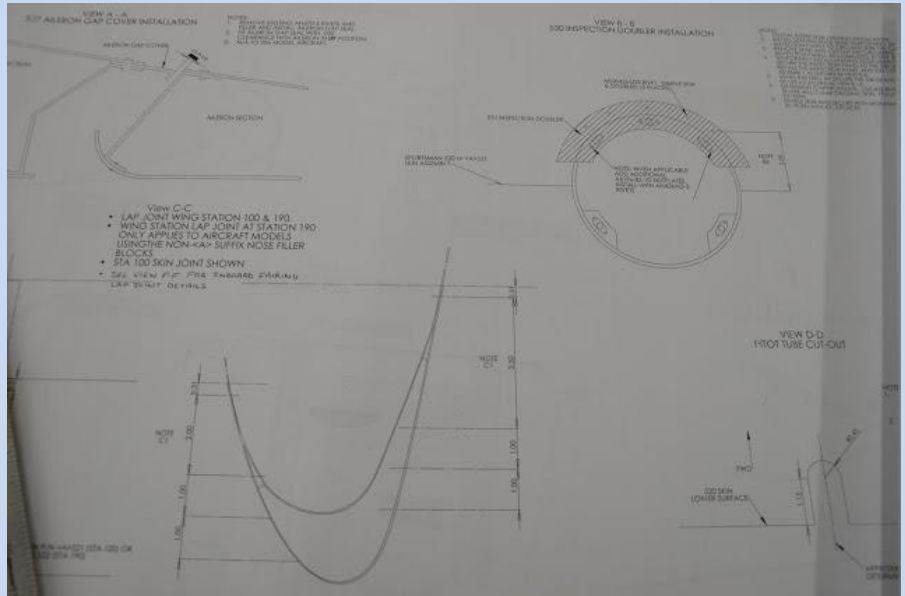
Our Club is lucky in that many of our pilots have experience flying aircraft with different STOL kits. The Sportsman STOL was recommended time and time again so that is what was decided upon.

[Stene Aviation Sportsman STOL](#)

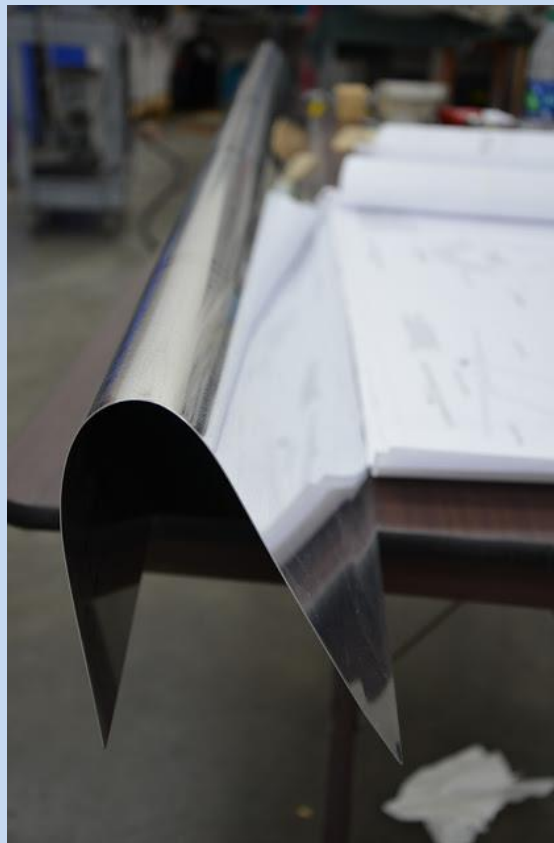
Here is a great article on the history of the Sportsman STOL Kit

[Sportsman STOL History](#)





Drawings for the Sportsman STOL



New Aluminum Leading Edge Cuff



Landing and Taxi Lights



Braces for the Leading Edge Cuff



Cleco's on the new Aileron Gap Seals Provided with the Sportsman STOL



More Clecos



Beautiful Factory Continental O-470



Factory Continental O-470 | That Continental Gold is really Pretty



Continental Valve Covers