



Higher Living

For a while now Higher Living has been dormant, and we hope this revival of our customer newsletter can once again be a useful resource to all of you. This issue will mark the first for 2020 and our intention is to publish quarterly.

We are sending this first issue to everyone but you can opt out of receiving futures issues by indicating you would rather not receive them in your Pilot Profile section of the www.ExecFT.com website. Of course, we hope you will consider this once quarterly mailing to be a benefit.

We will also archive all newsletters under the NEWSLETTERS selection from the website main menu.

If you know of topics you would like to see covered please send them to david@execft.com.

Over the last year we have seen many changes to our company, new airplanes, instructors and an office in the new FBO. In this first new

newsletter, we will take a look at some of that in the following sections.

We had a very successful year and I'm looking forward to things to come. In 2019 we saw 22 persons pass their FAA check rides in all categories from Private Pilot to CFI. We are working steadily to continue to improve our fleet and are just now completing an engine replacement in N98166 and rolling out ADS-b out to all aircraft and ADS-b out and in for all our IFR aircraft. New equipment of this type is expensive, and we are making sure we apply our equipment dollars in the most useful areas. I will personally never rent an aircraft I would not comfortably fly myself.

Come fly with us.

- David Williams, President
EFTS

Contact Us

Schedule your next aviation adventure. info@execft.com or www.ExecFT.com

Coming Events

- **Saturday March 21, Wind and Wings – The Science of Flight. NC Transportation Museum, Spencer, NC.**
- **Saturday - Sunday, Mar 28-29, 2020 Weekend Private Pilot Ground School - Mooresville, NC Lake Norman Air Park (14A)**
- **3/31-4/5 Sun n Fun, Lakeland, FL www.flysnf.org**
- **Friday - Saturday, Apr 17-18, 2020 Festival D'Avion - Carthage, NC. Moore County NC (KSOP)**

We Have an Office!

Once the new FBO at KTTA opened we soon moved into our office. Personally, this is something I feel we have needed for a long time and we are very happy to be here.



We are normally only there when we have lessons scheduled but please come by and visit us. Take the hallway to the right after entering the front and our office is the first on the right (beyond the break area).



An additional benefit of our office is that Checkride examiners are more willing to come to KTTA since we can provide a private area for oral exams.

We have added EFTS hats and shirts for sale in the office and you know you need one, or more, of those.

Rough Runup? Maybe You Can Fix It

We have all had the experience of having a greater than normal RPM drop or a rough running engine during the magneto check portion of a runup. While occasionally that is enough to return to the ramp and ground the airplane it can also be caused by a fouled plug which can be easy to fix and allow you to go on your way. Let's have a look at how to do it.



The normal scenario is this. The engine is running otherwise okay but when you run up the engine RPM and move the mag switch from left to right you notice that one side is rough while the other runs smooth.



In most cases this is caused by a single spark plug which has become fouled (usually because of a too rich mixture during a too long idle period prior to takeoff). If both left and right are rough, then you should stop and cancel your flight because the following

process probably will not fix the problem.

If just one side is rough, then follow the steps below to diagnose and fix this common problem.

- 1) Place the mag switch on BOTH.
- 2) Raise the engine RPM to around 2400. Make sure the airplane does not move!
- 3) Now bring the mixture control back towards lean just to the point where the engine begins to run a bit rough and leave it there for a bit. Doing so greatly raises the temperature in the cylinders and will normally remove whatever is preventing the plug from properly firing.
- 4) After about a minute return the mixture to rich and set the RPM to 2000 and perform another magneto check...left and right. It is now probably smooth. You can fly.
- 5) If better, but not fixed, you can repeat this process once again. If no improvement, then do not fly because the problem may be in the magneto itself rather than a plug.

In all cases if you feel there is any issue with the safety of the engine or if you are uncomfortable with trying this procedure then please return to the ramp, shut down and

let an EFTS person know what has happened.

Things to Know About ADS-b

Automatic Dependent Surveillance – broadcast is a new FAA system to get used to. Its primary purpose is to eventually eliminate or greatly reduce the need for radar in the monitoring of airplane traffic. There are two sides of ADS-b, IN and OUT. We will discuss both below. Beginning on January 1 of 2020 ADS-b OUT became a requirement for all airplanes flying in the areas where a transponder is currently required. That includes A, B, C airspace as well as all airspace included in the 30-mile class A transponder zone and above B and C airspace up to 10,000 feet.



Without describing every detail ADS-b OUT sends a signal from the aircraft which is received by a ground-based station and is relayed to ATC. This information includes the airplane N, altitude and vertical speed. The ground station then transmits the ADS-b IN signal in response. ADS-b IN is the complementary function in

which a receiver located in the airplane displays information on other aircraft in the local area on a suitable display. It also can display weather and text aviation products such as METAR and PIREPS.

In order to meet the requirement EFTS is using two different methods.

For our aircraft which are VFR equipped we are using the uAvionics TailBeacon. Those of you flying these aircraft can then, optionally, make use of the Stratux devices located on those airplanes to relay the IN signal to your aviation applications on your tablets or iPads (such as ForeFlight). Flying with Nav lights on always will become a requirement for those airplanes so the TailBeacon will be powered.



This mounts in the position of the tail nav light and provides ADS-b OUT to ATC.

For our aircraft which are IFR equipped we have added internal devices which are capable of both transmitting the OUT signal and receiving the IN signal. The IN signal is relayed to our Garmin GTN 650 GPS units and will display both traffic in the vicinity and weather. This system is activated when the transponder is turned on. Be aware that the traffic and weather display isn't 100% live, there is a delay of varying length, so don't always depend on it for flying in congested or stormy areas. My personal experience is that not all aircraft are always displayed so you must continue to be vigilant and look out the windows.

So, What is a Stratux?

If you have flown any of our VFR aircraft, you have seen the device below in the front window.



The purpose of the Stratux is to add the ability to make use of the ADS-b IN signal which is broadcast to all aircraft. If you have a tablet or an iPad which can receive Wi-Fi then all you need is an application which can display

the information. To use it just turn on Wi-Fi on your device and look for the Stratux SSID and allow your device to connect...no password is used.

While my preferred application to use with this device is ForeFlight on my iPad there are many others which will work. I will list some compatible applications at the end of this article.

What you will get is a WAAS GPS position display with weather and airplane traffic information. This will all be shown on your favorite aviation application.

The Stratux device is in our VFR airplanes only because our IFR aircraft make use of the Garmin GTN 650 GPS to show traffic and weather but we didn't want the VFR flyers to be left out. The Stratux is a receiver only and does not transmit any information. In the Library section of our website you can find more detailed operation info about this device. Please note that in the Library we call it the "FrankenStratus" in deference to the \$700 Appareo Stratus device which this successfully replaces.

Here are some applications which work with the Stratux. I have seen some of these in action but have personally only used ForeFlight.

FlyQ EFB 2.1+ (iOS)
Naviator (Android)

AvNav 2.0.0+ (Android)
ForeFlight 7.x (iOS)
WingX (iOS only)
Avare EFB (Android)
FltPlan Go (Android, iOS, and Windows)
DroidEFB
AerovieReports
AvPlan EFB
iFly GPS 9.4+
DroidEFB 2.1.1+

Recently New Aircraft – Ready to Fly Now

Over the last few months EFTS added 3 additional aircraft to our growing fleet. A Cherokee 140, a Piper Warrior and a Cessna 172XP are ready for you now via the scheduler.

N711FL is the newest Cherokee 140 in the fleet.



It is intended as a VFR aircraft and includes a Garmin G5 attitude indicator, new upholstery, new audio intercom connections and the addition of a 12V power adapter so you can plug in your devices. Also, there is a Stratux ADS-b IN receiver which can send traffic, GPS and weather to tablet applications or ForeFlight on iPads.

N41669 is an IFR equipped Piper Warrior.



Very similar in appearance to a Cherokee except for its longer wings. This airplane features a rear storage area and a Garmin GTN 650 GPS to display all ADS-b IN data.

N1467V is a Cessna 172XP which has been in our fleet for most of the last year.



All of you are familiar with a Cessna 172 and the XP model adds an adjustable pitch propeller. Our aircraft includes a GTN 650 GPS for ADS-b IN display. This aircraft requires a brief checkout procedure before you are authorized to fly it due to the addition of the adjustable pitch propeller.

All these aircraft are available on the web site airplane scheduler. Try them out. They are already very popular.

Question of the Month

If a pilot carrying passengers landed 45 minutes after sunset but wasn't night current.

Did he violate a Federal aviation regulation?

Answer:

This pilot was on the ground well before the one hour after sunset. However, being legal and current isn't always the same as being proficient or safe. Remember that night landing currency can count for day currency as well, and certified flight instructors don't count as passengers. So, if you aren't current or confident, take a CFI along — you might just learn something as well as being more comfortable with night flying.

FAR 61.57 (b) (1): No person may act as Pilot in Command of an aircraft carrying passengers during the period beginning 1 hour after sunset and ending 1 hour before sunrise, unless within the preceding 90 days that person has made at least three takeoffs and three landings to a full stop during the period beginning 1 hour after sunset and ending 1 hour before sunrise and

- (i) That person acted as sole manipulator of the flight controls, and
- (ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if required)

The "Higher Living" newsletter editor can be reached at david@execft.com and he welcomes your feedback and article subject suggestions.