



ESSTEM Program Newsletter

Vol. 1, Issue 2 - May 1, 2022

What's New?

Welcome to our new Newsletter

The Essex Skypark Science, Technology, Engineering and Math (ESSTEM) Program mission is to teach local high-school students some rudimentary basics of aviation and flying. This newsletter will keep our readers updated on the Program's activities. As the program progresses we'll keep you informed on its latest developments, and more. Our aim with this Newsletter is also to provide updated information on updates from the Essex Skypark Association (ESA), as well as activities of the various ancillary groups that conduct educational and other recreational community interest activities at the airport.

Free Classifieds

If you'd like to list anything in our classified section at no cost, let us know, we'll be happy to post your submitted written ad. And it doesn't necessarily have to be aviation-related, either, just something that might be of interest to any of the groups covered in this newsletter, or our community in general.

ESSTEM Program News

Open For Business

The ESSTEM is now fully operational and open for business. The Essex Skypark Science, Technology, Engineering, and Mathematics (ESSTEM) program was originally created to introduce high-school students the basic information and skills as a preparatory step to more formalized and accredited general aviation flight instruction.



Although primarily designed with high school students in mind, the ESSTEM program is not offered exclusively to high school students. Since the training is in a personalized one-on-one atmosphere, we can also offer the training syllabus to anyone exploring a hobby or career in flying. The program focuses on the basics of flight training as a preparation for accredited formalized flight training. It also reinforces to students that simulators can be used for more than just video gaming.



We offer two tiers of education for ESSTEM students: the Basic Course, and the Advanced Course. Each course comprises 'ground training' and practical 'flight simulator' time.



In the ground training portion of the Basic Course, the student is taught the basic aerodynamics of how an airplane flies, its various systems and instrumentation, how to interpret VFR aviation charts, and differing methods of navigation. In the flight simulator portion, the student learns how to land and take off in a Cessna aircraft. The student begins already in the air set up for acquiring the required proficiency to execute a successful landing on runway 11 at Bay Bridge Airport (W29) on Kent Island, MD, running parallel to the twin Chesapeake Bay Bridges.

The Advanced Course picks up where the Basic Course left off, introducing the student aviation concepts to more advanced tasks, including aviation safety, flight planning, weather briefing, communications with air traffic control, GPS navigation, and Aeronautical Decision Making (ADM). The simulated flight portion of the Advanced Course includes planning and executing short and cross-country flights, more advanced flight maneuvers, real-time simulated interaction with the instructor posing as air traffic control, and simulated situational changes.

These programs are an excellent overall preparatory introduction to general aviation. For more information on the programs contact Ron Shippee at delmarvaftox@gmail.com.

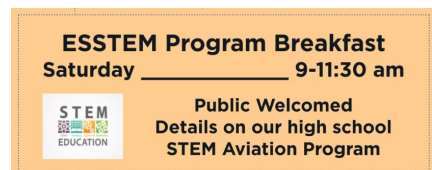


ESSTEM breakfast

We held our monthly ESSTEM breakfast on April 23rd with an excellent turnout, with members of the aviation community as well as the general public as well. The breakfast is free of charge, but donations are accepted. The attendees were treated to a brief presentation of the ESSTEM education program syllabus, in addition to a hearty breakfast comprising

scrambled eggs, pancakes, hash browns, sausage, cinnamon rolls, coffee, tea, and orange juice.

We decided to fix a firm date for the breakfasts for the next several months going forward, the last Saturday of the month is slated and approved by the airport. For the next three months, the breakfast will be held on May 28th, June 25th, and July 30th. All are welcome to join us from 9 to 11:30 am.



ESSTEM's affiliation with EAA Chapter 571

After much discussion, and in the spirit of establishing a deeper sense of community at Essex Skypark, the EAA Annapolis Chapter 571 will become informally affiliated with the airport. The Chapter has agreed to use Essex Airpark as a satellite facility of sorts. This is in the hopes that we will eventually be able to create a spinoff EAA Chapter at Essex. Specific plans are forthcoming, and their progress will be reported in this Newsletter going forward.



EAA 571 President: Dan Wroe

Contact: 410-991-5514 | EAA571info@gmail.com

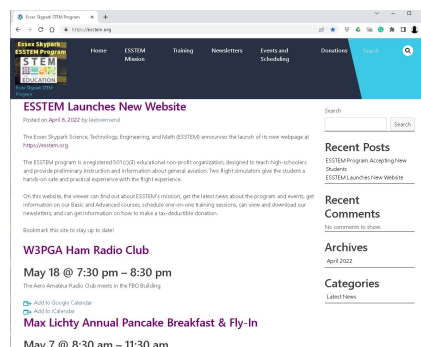
Meetings: Every 3rd Thursday 7:00 PM

Location: Pilot lounge, Bay Bridge Airport, 206 Airport Road, Stevensville, MD 21666

Programs: Young Eagles, Eagle Flights

ESSTEM's New Website

ESSTEM is pleased to announce the launching of our new website - <https://esstem.org>. It is the online presence of the ESSTEM Program, where you can get information on our mission, get details on our training programs, download this newsletter and its archives, view the schedule of events for Essex Skypark and its associated organizations, apply for admission to the training, request class scheduling online, and arrange to donate to our tax-deductible organization. The website is up and running. We're currently working on presenting an overview of the curricula, and setting up a student portal for study aids.



Special Thanks to our donors

The ESSTEM program is a non-profit organization. We comprise an all-volunteer staff, whose purpose is to serve our community to 1) prepare anyone interested in general aviation for formal general aviation flight training, with a special focus on high-school students; and, 2) to serve the Essex Skypark and surrounding communities with a vibrant and functional community activities hub.

As such, we wish to acknowledge here those who have generously given their time and materials to perpetuate our vision:



- Ron Shippee, who has selflessly given his time, materials, and energies to conceive of the program, develop the curricula, and drive the ESSTEM program toward the realization of its goals.
- R. Lee Townsend, for donating a BK Flyer airplane build project, which has been sold to a private builder to help fund the program.
- The Aero Amateur Radio Club, W3PGA, for donating a new Geocache unit, which now resides in the FBO building common area.
- Joe and Jane Toskes, for donating many materials, including serviceable avionics to sell in order to fund the ESSTEM efforts, model airplanes used to spruce up the FBO common areas, as well as many other useful valuable and materials.
- Those patrons who attend our monthly fly-in/drive-in breakfasts, who enjoy a hearty breakfast (most important meal of the day), generously donate to the ESSTEM cause, learn about the ESSTEM programs, and share priceless time together.

To all, we offer our heartfelt thanks.

Essex Skypark Association Update

Don't miss the **Essex Skypark Annual Max Lichty Pancake Breakfast Fly-In** at the airport on Saturday, May 7th from 8:30-11:30 am. Join us for pancakes, sausages, danish, coffee & juice. Presented by Essex Skypark Association. Donations are accepted and appreciated.





Spring has sprung and bustling Skypark activity reflects the pilots' excitement for the 2022 flying season. Many regional fly-in events are scheduled and in full swing this year. Record attendance is forecasted. Essex Skypark's Pancake Breakfast fly-in is scheduled for May 7 and our Wings and Wheels event will be held on September 17.

Airport improvement projects this year include taxiway widening, FBO (office building) repairs, fence repairs, and tie-down refurbishment. Volunteer opportunities abound. Please reach out to Mandy Frail (mandyfrail@gmail.com) if you would like to help out.

Say Hi

Spring is a great time to visit the Skypark. Many pilots are completing annual inspections on their aircraft and doing a little Hangar Spring cleaning. Say hello. We're a friendly bunch.



The ESA welcomes the efforts of Eagle Scout candidate, Ian McClure who is organizing the construction of a community picnic area near the parking lot. The brush has already been cleared to provide a direct line of sight to the runway for plane spotting while enjoying a nice picnic.

Aero Amateur Radio Club Update



Meetings

The Aero Amateur Radio Club meets at 7:30 pm on the first and third Wednesdays of the month at Essex SkyPark, 1401 Diffendall Road, Essex. Meetings begin at 7:30 p.m. local time. Meetings are canceled if Baltimore County Public Schools are closed or dismissed early.

Repeaters

W3PGA 2 M: INPUT : 147.84 MHz, OUTPUT : 147.24 MHz, PL 123.0

W3PGA 70 Cm: INPUT : 444.575 MHz, OUTPUT : 449.575 MHz, PL123.0



W3JEH 1.25 M: INPUT : 222.24 MHz, OUTPUT : 223.84 MHz

Club Nets

Second Wednesday Net – 70 Centimeters (449.575 MHz Repeater) @ 8 p.m. Local Time

Fourth Wednesday Net – 2 Meters (147.24 MHz Repeater) @ 8 p.m. Local Time

Fifth Wednesday Net – 10 Meters (28.445 MHz) @ 8 p.m. Local Time

Radio License Exams

The Aero Amateur Radio Club sponsors Amateur Radio License Exams with the ARRL VEC. Examination sessions are throughout the year. Walk-ins are welcome; arrive no later than 30 minutes after start time. \$15 charge. Contact: Patricia Stone AC3F, email: ac3f@juno.com, landline: 410-687-7209.

Upcoming Hamfest Events

May 1, 2022 – Warminster ARC Hamfest, ARRL Eastern Pennsylvania Section Convention

Location: Bucks County Community College – Lower Bucks Campus, 1304 Veteran Highway (Rte. 413, Bristol PA 19007

Info: <http://www.k3dn.org/hamfest>

June 4, 2022 – Manassas Hamfest 2022

Location: Manassas Park Recreation Center, 99 Adams Street, Manassas VA

Info: <http://www.manassashamfest.com>

FCC \$35 Amateur Application Fee Effective Date Will Be April 19, 2022

The FCC released a Public Notice on March 23, 2022, stating that the amateur radio application fees, including those associated with Form 605 application filings, would become effective on April 19, 2022. The Federal Communications Commission's authority to impose and collect fees is mandated by Congress.

New FCC Application Fee Will Not Apply To Amateur Radio License Upgrades

The Federal Communications Commission (FCC) staff has clarified in response to an ARRL request that the new \$35 application fee will not apply to most license modifications, including those to upgrade a licensee's operator class and changes to club station trustees. The FCC staff explained that the new fees will apply only to applications for a new license, renewal, rule

waiver, or a new vanity call sign. As previously announced, the new fees take effect on April 19, 2022.

“We are pleased that the FCC will not charge licensees the FCC application fee for license upgrade applications,” said ARRL Volunteer Examiner Coordinator (VEC) Manager, Maria Somma, AB1FM. “While applicants for a new license will need to pay the \$35 FCC application fee, there will be no FCC charge for future upgrades and administrative updates such as a change of mailing or email address. Most current licensees therefore will not be charged the new FCC application fee until they renew their license or apply for a new vanity call sign.”

ARRL previously reported that the new \$35 application fee for Amateur Radio licenses will become effective on April 19, 2022.

Further information and instructions about the FCC application fee will follow as it is released.

Lewis and Clark Trail On The Air

Clark County Amateur Radio Club, out of Vancouver, WA, will be hosting a new event to start June 2022. CCARC is an active club of over 400 members. It has also received the recognition of being an ARRL Special Services Club. The club has made a big impact on the amateur radio community in the Pacific Northwest. Lewis and Clark Trail OTA is being organized by a committee of CCARC members. The event will be from June 4-19, 2022. Lewis and Clark traveled through 16 states, and we're working on getting a club from each state to activate.



There will be certificates sent out for those that contact all 16, and another certificate for those that contact less than 16. We see this as a chance to promote the Lewis and Clark Expedition and honor them for their achievement by bringing them in to the amateur radio world of 2022. Mark your calendars for this special event and see how many contacts you can make.

www.LCTOTA.org

AMA (Academy of Model Aeronautics) Update



The Chesapeake Bay Miniature Aircraft Association (CBMAA), affiliated with The Academy of Model Aeronautics (AMA) operate out of Essex Skypark. The AMA is a nonprofit community of modeling enthusiasts who come together to celebrate model aviation.

The CBMAA welcomes the public to their activities, as well as guest AMA member flyers. Model aviation activities include Control Line, Ducted Fan, Electric, Fixed Wing, Float/Sea Planes, Fuel/Gas, Giant Scale, Helicopters, Park Flyers, Pattern, Radio Control operations, and are open for business from dawn till dusk.

Whenever there is General Aviation aircraft operating around the airport, a club spotter with aviation radio will clear the skies of model activities.

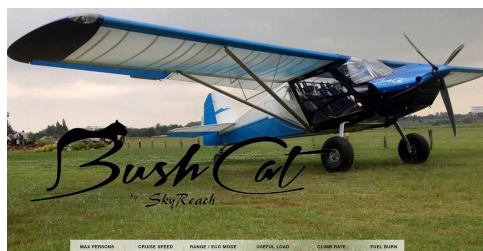
The club also features Open Membership, Informative Programs, Pilot Instruction Training, Community Involvement, and Club-only events.

They're always interested in new members; for information reach out to the club's contact: Joseph Eiben by phone at 410-391-3772, or via email at buddah02@verizon.net.



There is an informal gathering for breakfast and talk among several club members on Wednesday mornings at 8:30 am at Endy's Restaurant in Essex (next to the DMV office). Drop-in and say hi. Good food and good gathering, and occasionally members go and fly afterward, either at an indoor location or at Essex Skypark, depending upon the weather.

Jemicy School Bushcat Build Project



MAX PERSONS	CRUISE SPEED	NAME / BUILD NO.	WING TYPE	WING AREA	WING SPAN	WING TIP
2 PERSONS	81 KIAS	8000	2400	1200 sq	17'10"	17'10"

The Jemicy School Bushcat build in the Speakeasy Hangar on E Row is progressing nicely. The students work most Saturday and Sunday mornings. The latest milestones include aileron and flap rigging and tail feathers! All are welcome to drop by and see the kids in action.

The "Bushcat Build" is a STEM program conceived by Claudius Klimt and Jeff Auen. In association with the Jemicy School in Owings Mills, MD (specializing in learning differences like ADD, ADHD, and Dyslexia) Claudius, Jeff and a team of volunteers are building a Skyreach Bushcat airplane with two groups of high school juniors and seniors. Thirteen students in total work in two shifts at Essex Skyparks's "Speakeasy Hangar"



for 4 hours on Saturdays and Sundays. The program includes materials science classes, experimentation, and a taxi experience as well as all the skills necessary to assemble the airplane.

Demonstration flights are also offered for all interested students. The goal is the first flight in June and then we will fly it to Airventure Oshkosh in July where the Bushcat will be prominently displayed. The school is planning a field trip so the student builders can attend the air show and proudly display their work.

The discussion has already begun for the second Bushcat Build starting in the Fall. SiriusXM Aviation has sponsored the program and we are seeking additional sponsors.

Follow their progress at <https://bushcatbuild.com/>, a beautiful website commemorating the group's aircraft-build progress.

The Max Lichty **Essex Flying Club**



If you might be interested in becoming a non-flying supporting member of the club, drop us a note at info@essexflyingclub.org – We'd love to hear from you.

Spring is here and the club airplane has been getting more and more active. Members, make sure you get in on the fun!

May Feature Article - Lesson Learned -

A Pretty Day

It starts out innocently enough. The weather today is prime for flying, you've got nothing in particular to do on your schedule. It's been a while since you took to the skies, so you decide you'll go for a leisurely ride and enjoy the freedom of flight and its sights for a little while.



Excited about going up for a little escape from the hum-drum of terrestrial existence and to have a bit of fun, you wheel your airplane out to the ramp and do your pre-flight checks. Everything is good there, you make sure you've got enough fuel and oil on board, climb in and start your ship up. Seatbelts secured, taxi out towards the runway, and do your pre-flight runup. Everything's A-OK, so you roll out onto the active runway, get on the radio and announce your intentions. Throttle pushed up to the firewall, you do your takeoff roll, and you get airborne. Everything's beautiful.



You might cruise around for a little while drinking in the sights, maybe practicing some maneuvers, exercising prudence in not stressing your airplane, and not exceeding your operational expertise. Your head's on a swivel, watching out for other traffic. Safety is important to you, and you take it seriously amidst the glee of freedom you're experiencing. You decide to take a ride up to a nearby airport

to check up on some friends, or just do some practice landings, or to use the facilities, or just to get a refreshment. You're doing what you love to do, relishing the joy of flight, and doing everything safely and correctly.

Then The Fun Stops

Then, as you're approaching the remote airport, you get a call from Guard on the local airport's frequency. You're sickened to be informed that you've busted a VIP TFR, a VIP temporary flight restriction. Your heart sinks. The Guard comes back on the radio and gives you vectors to exit the area and to make sure you comply a helicopter pulls up and escorts you out. They give you a phone number to call when you are safely on the ground. Uh-oh.

In this geographical area of the world, and especially with the current governmental administration, VIP TFR notices are common occurrences. The government will close airspace or tightly restrict the traffic in an area on such-and-such a date for so many hours to allow safe travel for a VIP, typically for the President or Vice-President. Non-VIP TFRs are common around major sporting events and for certain scientific purposes, as well.



The relevant authorities take TFRs very seriously, especially VIP TFRs. We're taught that any of three things can happen after a violation, depending upon its severity: 1) your airman certificate can be suspended or revoked; 2) you are subject to criminal prosecutions; and in extreme cases, 3) the use of deadly force is authorized. It's an extremely serious matter. On April 20th of this year, a newflash came across the wires, stating, "US Capitol Police issues alert to evacuate buildings due to 'tracking an aircraft that poses a probable threat to the Capitol complex.'" They don't fool around.

The FAA timely publishes upcoming TFR notifications. It is incumbent upon every pilot to check and see if any are active restrictions in the regions in which they'll be operating, prior to taking off. The same applies to Restricted Airspace limitations, which are either active or inactive. Within 30 miles of Reagan National Airport, the airspace is very tightly controlled. Prohibited airspaces are always closed.

The Aftermath

Once you're safely on the ground, you, still red-faced from the incursion, call the phone number to the Secret Service that you've been provided by the nice helicopter, where you have to explain yourself and your actions in the incident. You could be the most patriotic person in the country, with a long history of military service, and without any malicious intent whatsoever, and still, come away feeling like you're viewed as a domestic terrorist.



Even if not that extreme, you're sure you're now on a list somewhere.



Even though you've satisfied the Secret Service's curiosity that you meant no harm, you still need to deal with the FAA, to determine what the next course of action will be. You're facing, in progressive degrees, a terse talking to (a slap on the wrist), a suspension of your airman certificate for a period of time, a revocation of your airman certificate, a fine, and/or criminal charges. At least you have dispensed with the deadly force option. You still need to convince the FAA that it was a one-off oversight. You plead your

case with them in an interview; your history as an airman weighs heavily into the subsequent action they'll take.

Proper Protocols

You kick yourself for exercising poor judgment in flying. But it is perhaps better to term it that it was a lapse in observing proper protocols. Poor judgment is more correctly applied to running out of gas, or flying VFR (Visual Flight Rules) into IMC (Instrument Meteorological Conditions).

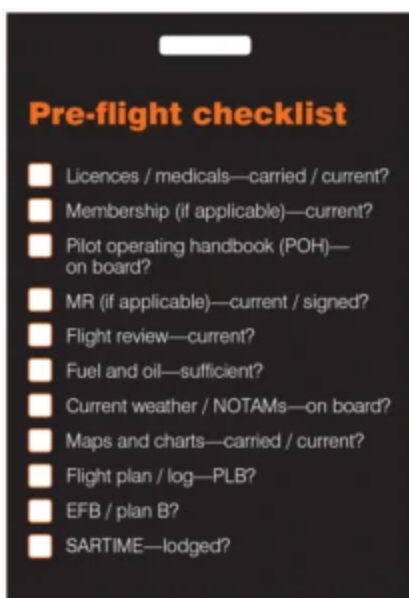
The fact is, we're no longer living in the barnstorming age. This is especially true for those of us who live in certain highly-controlled airspace areas of the country. Maybe some of that throwback to those halcyon days still exists in sparsely populated rural areas of the country, but authorities get nervous when near large airports or military operational areas, or other federal districts are concerned.

Accident Chains and Incident Chains

We're taught in ADM (Aeronautical Decision Making) that most aviation accidents occur because of a sequential combination of events that result in disaster, and properly recognizing and responding to the beginning events of an accident chain increases the life expectancy of the pilot. Accident chains don't always begin in the air, they frequently begin on the ground. It's why we do pre-flight inspections prior to going aloft to make sure our ships are airworthy.

We make sure our airplanes are sound. We make sure the weather is suitable, within the operational capabilities that we've gained through experience. We make sure we're physically and mentally fit to be the Pilot In Command. We self-brief our flights prior to going up; what our intentions are and we mentally go over emergency procedures. Once in the air, we are vigilant to scan the instruments and listen to the airplane to make sure all is well. We are also vigilant to the extent possible about where we physically are at any given moment and who else is around us to avoid. We monitor air and ground traffic on the radio and interact when appropriate. We let our superior judgment obviate our need to exercise our superior skills.

It's easy to overlook an item or two, which is why we have checklists. And it's especially easy to overlook some items when we are about to embark on a leisure flight without any formalized flight-planned mission. Now, the mission needn't be a particularly important one. It might just be a flight to a nearby airport restaurant for some breakfast. It is still incumbent upon us to plan every flight, even the impromptu ones.



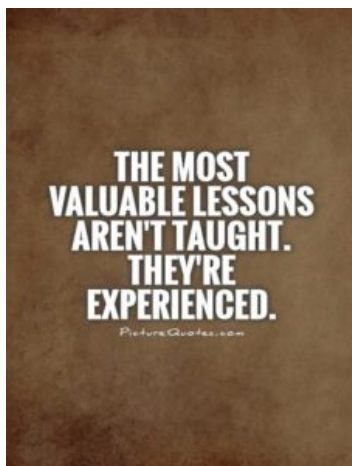
This busted TFR event didn't happen because of a lack of observing operational protocols, we did everything correctly flying-wise. But there was a lack of flight planning protocols. One of the items in proper flight planning is to check the NOTAMs to make sure that everywhere we'll be flying is legal at the time we're in the air.

It doesn't happen to just new pilots either. Seasoned pilots who've been going up for decades are still at risk, and some would argue even more so because of the complacency that occurs from knowing a route and the lay of the land so intimately. There is that strong urge to "just go up for a little bit," without any flight planning.

This particular event did not result from an accident chain. Rather, it's more correctly termed the beginning of an incident chain, caused by a lack of exercising proper flight-planning protocols. The airspace violation didn't result in a potentially catastrophic series of events but had we, not heard the Guard calling us and we continued on our merry way toward the kill zone, it could have been disastrous.

Our "Don't Do That Again" Lists

Whether a pilot will ever admit it or not, we all have a "Don't Do That Again" list floating around in our noggins. Because we're still here to talk about it, the outcome obviously wasn't as dire as it could have been. Hence the importance of applying proper ADM prior to even climbing into the cockpit. We're all human and subject to omission and error, which, again, is why we have checklists. We have to cross-check our Go/No-Go decisions to see if we're even legal to fly where we'll be going. And in that cross-check we need to be just as diligent as we are when measuring our fuel or oil prior to flight.



A Powerful Lesson Learned

Since we were able to walk away from the event, we can at least chalk it up to another item on our list, which, because of its severity will be indelibly burned into our mental checklists going forward. Mark Twain once said, "A man who carries a cat by the tail learns something he can learn in no other way." We all have lapses in protocol from time to time, but it's guaranteed you'll never let it happen again if the FAA allows you to retain your airman certification.

"Experience: that most brutal of teachers. But you learn, my God do you learn." – C.S. Lewis



What's coming up in the Essex Skypark community?

Check out our [Online Calendar](#)

May 2022						
1 Sun	2 Mon	3 Tue	4 Wed	5 Thu	6 Fri	7 Sat
			8 1000 AM C-130 loaded @ 1000			9 1000 AM C-130 loaded @ 1000
10 Sun	11 Mon	12 Tue	13 Wed	14 Thu	15 Fri	16 Sat
11 1000 AM C-130 loaded @ 1000	12 1000 AM C-130 loaded @ 1000	13 1000 AM C-130 loaded @ 1000	14 1000 AM C-130 loaded @ 1000	15 1000 AM C-130 loaded @ 1000	16 1000 AM C-130 loaded @ 1000	17 1000 AM C-130 loaded @ 1000
18 Sun	19 Mon	20 Tue	21 Wed	22 Thu	23 Fri	24 Sat
19 1000 AM C-130 loaded @ 1000	20 1000 AM C-130 loaded @ 1000	21 1000 AM C-130 loaded @ 1000	22 1000 AM C-130 loaded @ 1000	23 1000 AM C-130 loaded @ 1000	24 1000 AM C-130 loaded @ 1000	25 1000 AM C-130 loaded @ 1000
26 Sun	27 Mon	28 Tue	29 Wed	30 Thu	31 Fri	
27 1000 AM C-130 loaded @ 1000	28 1000 AM C-130 loaded @ 1000	29 1000 AM C-130 loaded @ 1000	30 1000 AM C-130 loaded @ 1000	31 1000 AM C-130 loaded @ 1000		



Classifieds (free listings)

FOR SALE: 1946 Erco Ercoupe 415-C, light sport certified, SMOH 660, TT 3340, C-85 engine all high 70s, Last annual 8/2021, Icom IC-A210, King Xponder, GDL-82 ADS-B out, Stratux ADS-B in, extended range tank, asking \$25k. Leave msg Lee Townsend at (540) 793-3450 or email leetownsend@gmail.com.



ESSTEM Newsletter is published monthly – We're always looking for feature content – Contact us below to submit your articles and items of interest for the Essex Skypark community.

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