



CHAPTER 1093
Experimental Aircraft Association

LOOKIN' UP

The EAA Chapter of Modern Explorers

EAA Chapter 1093
Midland, MI
Jack Barstow Airport
KIKW
April 2018

President

Dave Fick

davef3079@gmail.com

Vice-President

Jeff Gallant

jrgallant@dow.com

Treasurer

John Haag

johhaa@yeoandyeo.com

989-944-4446

Secretary

John McPeak

989-205-2969

jdmcpeak@modernmetalcraft.com

Past President

Mike Woodley

586-944-7101

C205Mike@yahoo.com

Young Eagles Coordinator

John Sorg

jcsorg@att.net

Publicity Chair

Brett Kischnick

bkischnick1@gmail.com



Next membership meeting is
10AM, April 7th 2018

In this issue:

- Scholarship programs:
 - EAA Chapter 1093 2018 Scholarships
 - EAA Sport Pilot Academy Scholarships
 - 2018 AOPA Flight training Scholarship
- AOPA offers high schools a free, aviation-based STEM curriculum
- Liftoff Learning and I Hart Flying Foundation partner on flight scholarships
- Members in the News
- Special Young Eagles event - March 31st
- Winter near Mackinac Island from the air
- Midland Barstow Aviation Camp - June 18-22, 2018
- Princess or Pilot?
- Upcoming Events at the Midland Community Aviation Discovery Area
- Recent Young Eagles flights

EAA Chapter 1093 2018 Scholarships

Chapter Scholarships are due during March. Please consider the local youth you know who are deserving, and submit a recommendation. Ask others for their support; more supporting recommendations builds a more complete picture of the youth, intentions, potential, and future in the aviation world. Go to the Chapter 1093 web site and click on [Scholarships](#).

Chapter Scholarships will be awarded at the May 2018 Pancake Breakfast. There were 5 winners last year who together took home. \$2500.00

Do you know of someone deserving? A youth or adult who dreams about learning more about aviation, maybe making it a career or even just a hobby? Someone who needs financial assistance to realize that dream?

Application Forms (from the individual) and *Recommendation Forms* (from supporters) will be accepted through the end of March, 2018. These forms are available [here](#).

Download the forms, fill them out completely, and mail them as indicated on the form. The Scholarship Committee meets during to April review the forms. Hint - the successful candidate will have a nomination package that is complete and has a lot of support. We are looking forward to hearing from and about promising candidates.

Respectfully,

Jim Murphy, Scholarship Chair

EAA Sport Pilot Academy Scholarships

The scholarships cover tuition and on-site costs for the August 4-25, 2018, session of the Sport Pilot Academy, a three-week program that immerses attendees in the aviation lifestyle and assists aspiring pilots in obtaining their sport pilot certificate by the end of the academy.

The Chapter Network Sport Pilot Academy Scholarship offers \$9,999 for full Sport Pilot Academy tuition to qualified applicants who have participated in the Young Eagles program who are in or have been nominated by a member of an EAA chapter.

The Young Eagles Sport Pilot Academy Scholarship also offers \$9,999 to cover the cost of tuition at the Sport Pilot Academy, and is open to applicants who have participated in Young Eagles programs, even if they do not have EAA chapter affiliation.

Application forms and more information on each scholarship, as well as EAA's other flight training scholarships can be found [here](#).

2018 AOPA Flight training Scholarships

For details click [here](#)

In an effort to support outstanding student pilots, the AOPA Foundation and the You Can Fly High School Aviation Initiative will award scholarships ranging from \$2,500 to \$10,000 in 2018.

Applications are now open and close May 2. Award recipients are notified in early June. "AOPA is proud to introduce young people to aviation and the possibilities it offers for productive careers and incomparable adventure," said Cindy Hasseibring, AOPA senior director of the You Can Fly High School Initiative.

AOPA Foundation High School Certification Scholarships

20 scholarships at \$5,000 each for current high school students, ages 15 to 18. Students can use this money toward their initial pilot certificate including sport, private, or recreational. Approximately 20 teens whose dream is to earn their wings will get closer to their goal thanks to AOPA's You Can Fly High School Flight Training Scholarship Program. Through the initiative, AOPA will award a minimum of \$100,000 in flight training scholarships to deserving high school students who are genuinely passionate about pursuing a pilot's certificate. Each winner will receive \$5,000 toward primary flight training.

AOPA Foundation Primary Certification Scholarships

Primary Certification Scholarships can be used for an initial certification, such as a Sport, Private or Recreational pilot certification.

Advanced Rating Scholarships are designed to support outstanding pilots with career aspirations. Applicants in this category must be seeking one of the following ratings or certificates: Instrument, Commercial, CFI (Certificated Flight Instructor), CFII (Certificated Flight Instructor – Instrument), or MEI (Multi-Engine – Instructor). Multiple scholarships ranging from \$2,500 to \$7,500; ages 16 and up; must be an AOPA member to apply; can use the money toward their initial pilot certificate including sport, private, or recreational.

AOPA Foundation Advanced Rating Scholarships

Multiple scholarships ranging from \$3,000 to \$10,000; must be an AOPA member to apply; age varies depending on rating; can use the money toward an instrument, commercial, CFI, CFII, or MET rating.

	AOPA HIGH SCHOOL FLIGHT TRAINING SCHOLARSHIPS	AOPA FOUNDATION PRIMARY CERTIFICATION SCHOLARSHIPS	AOPA FOUNDATION ADVANCED RATING SCHOLARSHIPS
Application Deadline	May 2, 2018	May 2, 2018	May 2, 2018
Number of scholarships	20 at \$5,000 each	Multiple, ranging from \$2,500 to \$7,500	Multiple, ranging from \$3,000 to \$10,000
Use Toward	Sport, Private or Recreational	Sport, Private or Recreational	Instrument, Commercial, CFI, CFII, MEI
AOPA Membership Required?	No	Yes, click for details	Yes, click for details
Age Eligibility	Ages 15 – 18	Ages 16 and up	Instrument – Ages 17 and up Commercial – Ages 18 and up CFI – Ages 18 and up CFII – Ages 18 and up MEI – Ages 18 and up
Questions?	HS@aopa.org	FTscholarship@aopa.org	FTscholarship@aopa.org
Eligibility Requirements	Click Here	Click Here	Click Here
Frequently Asked Questions	Click Here	Click Here	Click Here
Apply Now	Click Here	Click Here	Click Here

AOPA offers high schools a free, aviation-based STEM curriculum

AOPA is inviting high schools to apply to use its aviation-based ninth-grade STEM curriculum, which is free and aligned to Next Generation Science Standards and Common Core State Standards for Mathematics. "This is a major step in our work to help young people learn more about the engaging and well-paying careers in aviation, and it gives schools the tools they need to teach our children skills that will last for a lifetime," said AOPA President and CEO Mark Baker.

Schools are invited to apply to use AOPA's free, innovative, aviation-based, ninth-grade science, technology, engineering, and math (STEM) curriculum to engage students and help build the future of aviation. The ninth-grade courses are the first of a four-year program that includes three career and technical education pathways—pilot, aerospace engineering, and drones. Each fall, a new grade level of courses will be rolled out and available to schools

for implementation until all four grade levels are complete.

Schools can decide to select individual courses to use as stand-alone electives or implement one or more complete pathways.

The ninth-grade courses were tested in nearly 30 schools with more than 700 students over the past 12 months and include everything a teacher might need—and more. Thorough lesson plans, appealing presentations, assessments, fun student activities, and other learning opportunities are all included. The innovative program has already proven to be an enlightening learning experience.

"I want you to know how much I enjoy teaching this new course! It is an awesome course and our students love it!" said Texas teacher Scott Payne of Berkner High School near Dallas.

Students learned about aerodynamics and wind tunnels by making airfoils out of foam, aluminum, and glue; explored case studies to understand the adverse effects of weather, pilot fatigue, and lack of training; and debated who was first to attain

powered flight - the Wright Brothers or Gustave Albin Whitehead.

"This is a major step in our work to help young people learn more about the engaging and well-paying careers in aviation, and it gives schools the tools they need to teach our children skills that will last for a lifetime," said AOPA President and CEO Mark Baker.

The curriculum is aligned to Next Generation Science Standards and Common Core State Standards for Mathematics. Teachers who want to implement the program will be introduced to the concepts through a professional development workshop that supports them with either an on-site learning experience at AOPA headquarters in Frederick, Maryland, June 26 to 28, or by connecting online during that same time. Cindy Hasselbring, AOPA High School Aviation Initiative senior director, noted that donations to the AOPA Foundation allow the innovative program to be offered free of charge to any public or private high school and would likely engage some students "who may never have considered aviation before."

The deadline for applying to use the aviation STEM curriculum during the 2018-2019 school year is April 19.

Liftoff Learning and I Hart Flying Foundation partner on flight scholarships

Two organizations dedicated to sparking youth interest in aviation careers are partnering on a joint scholarship in an effort to bring attention to gender and diversity gaps in aviation, especially among pilots. Liftoff Learning and I Hart Flying Foundation will offer flight scholarships during a six-week "scholarship showdown," with recipients to be selected in April or May.

East Coast-based [Liftoff Learning](#) and West Coast-based [I Hart Flying Foundation](#) have teamed to offer flight scholarships over a six-week "scholarship showdown" social media campaign.

With the lack of qualified pilots looming over the aviation industry, both organizations—founded on the mission to advance youth in aviation and flight training—decided to work together to expand and diversify talent of aviation and science, technology, engineering and mathematics (STEM) professionals. Each organization has set scholarship criteria and application details on their websites. They expect to select recipients in April or May, with flight training to follow shortly after the scholars are announced publicly.

Chapter 1093 Approved Buying a Flight Simulator

There are two parts to this message. You may read and answer PART 1, and stop there. OR, if you want to know a lot more about the topic first, read PART 2 and then go back and answer PART 1.

PART 1. What are your opinions regarding the purchase of an *FAA Approved Flight Simulator* (means you may log limited amounts of IFR and VFR proficiency and training time) for use by Chapter members, flight students, and potential flight students?

Two major considerations, cost and frequency of use. The cost is probably the easier to handle - there are grants, folks who will contribute, and funds from the Chapter. Frequency of use drops dramatically a year or so after installation. To keep this up we need viable education programs supported by dedicated individuals. It can be done.

Email your thoughts to Jim Murphy at coljimurph@icloud.com

PART 2.

Background. The EAA mission statement encourages the use of chapter assets - talent, time, and equipment - to promote aviation and its possibilities within our local communities. A brief look at the experience levels of our membership and the types of aircraft in their hangars tells us we have a lot to offer the general public, especially our youth. The popularity of Young Eagles and Aviation Camp shows there is interest.

Goal. Develop, offer, and publicize programs that bring to Midland a greater awareness of the possibilities in aviation. Examples:

- Classroom Visits aimed at specific age groups
- Merit Badge Classes
- Young Eagle Program Expansion
- Eagle Program
- Aviation Camp
- IFR Club
- VFR Club
- First Lesson Program

Method. There are many things we would need to do to improve and expand our impact within the community, but the purpose of this letter is to consider the addition of a rather expensive tool, a flight simulator. So, let's focus just on it.

The Simulator. We currently have a simulator, one that uses inexpensive controls plugged into a standard PC loaded with MS Flight Simulator. This is a very good system when used as we use it - to attract attention at the county fair. It can also be used to demonstrate several principles of flight. Admittedly, "flying" this type of simulator is a lot of fun, but it does not imitate the aircraft we fly. Realism, known as fidelity in the simulator business, is lacking. For our purposes as pilots, a flight simulator must make you feel as you would if you are actually controlling that make and type of aircraft, like a C-172S, or a Cirrus, or a Piper Warrior. The controls should provide feedback that is appropriate for the flight maneuver, the panel should represent your aircraft, whether vacuum or glass, and the gauges should respond precisely. It must be as reliable as your aircraft. It must have an Instructor's station with full authority and capabilities in navigation, aircraft systems, and systems failures.

Simulator Levels. The FAA specifies various levels of Aviation Training Devices (ATDs). Our budget puts us at Basic, or BATD, and these run from \$6000 to \$18,000. The Advanced ATD (AATD) begins at \$25,000, likely out of our price range. All are desktop units, 3-6 screens, panel, radio stack, flight controls, and the computer(s) to run everything. Higher priced units include the pilots's seat all the framing to mount screens, a second computer, switches and levers (instead of touchscreen), an instructor's station, and the ability to accurately simulate more aircraft types.

We can build our own simulator; all parts are available, and there is a lot of on-line help. We could get it approved by the FAA, but it will take time and a fair amount of paperwork. Guessing total costs for parts to be \$3000 - \$4000. The computer (high speed gaming) is the biggest expense, \$1200 - \$1500. Good quality yoke and rudders would be another \$1500, considerably less if we opt for a simple control stick. The variations are endless, all depends upon what we want the simulator to do for us.

Candidate Simulators. Here are links to four simulators that meet our needs.

[Redbird Simulators](#) (look at the TD)

[FlyThisSim Technologies](#) (look at the VX)

[Elite Simulators](#) (look at P-135)

[PFC Simulators](#) (look at CAT III).

Note that they are in order of price, capability, fidelity, and reliability, with the best being last. From what I have been able to learn over the last six weeks of

research, the Redbird is a step above what we have, but the hardware is mostly plastic. The FTS uses better hardware but everything is touchscreen - lowers wear and tear experienced by physical buttons, dials, and levers, but not realistic. The Elite gets a good rating by most, a step above the Redbird. PFC, however, is top of the line when it comes to the two major factors - fidelity (realism) and reliability. But, it is pricey - for the cost of the CAT III from PFC with only one screen, we can have Elite's model with the three screen view. Note - the main advantage of the 3-screen view is how it looks. It does not do much for training or proficiency. All manufacturers are quick to state how well they stand behind their machines. Now, go back to PART 1, and let me know your thoughts. Thanks for reading!

Best,
Jim

EAA Program

Special thanks to Tom Mudd, Dave Schneider, and Dan Kenny from the Saginaw Valley Air Museum for coming out and sharing with us the story of Bringing Home the Paramount Cabinare" at our past meeting. How exciting it will be so see such a major part of the history of aviation in Central Michigan return to its home.

At the April meeting, Sarah Pagano will present on the Midland Aviation camp and will have Midland Aviation Camp Alumni share how their first steps in aviation careers began in our very own 1093 hangar.

Chris Peden

thesaltypirates@gmail.com

Members in the News

Linda Broodo accomplished her first solo flight on February 28, 2018. Linda is pressing on to earn her private license.



Jack Broodo earned his private pilot's license on March 22, 2018. He plans to start instrument training shortly.



Pat Sisco is Linda's and Jack's instructor.

Special Young Eagles event - March 31st

Fellow EAA Members,

I have been in contact with the student (Katie Powell) that is working with the "Love Your Melon" charity. She is looking for support for a charitable project. She belongs to a national college organization called Love Your Melon with an SVSU chapter. It is a non-profit group dedicated to helping kids with cancer. The local chapter's current project is to provide a special experience for two kids in this area who are battling cancer. One of the activities they want to provide is a helicopter or airplane ride.

If anyone in the Chapter is a YE qualified pilot and would like to fly one or both of these children on Saturday, March 31st that would be greatly appreciated. I will be at the airport to facilitate the disclaimers etc.

Here is the latest from her:

"Hi John,

The kids are 5 and 8 years old. There will be a parent or both of them with each child and two or three of our crew members. So total people coming to the airport will be 7-9. How many can go up in the plane? Definitely not all of us are expecting to we just want to be there for the event. But if the kids and their parents can go up that would be fine with us! "

I did contact the EAA National about the 5 year old. We can still fly the child and provide a YE certificate, I just won't send it in as it won't be recognized. So for that flight, there would be no insurance or waivers and; would not be part of the YE program. Would one of you still be willing to fly the 5 year old?

Regards,
John Sorg

Winter near Mackinac Island from the air

Pictures by Dot





Sault Locks one week before they were to be opened
- taken March 17

Midland Barstow Aviation Camp June 18- 22, 2018

The Midland Experimental Aircraft Association (EAA) Chapter 1093 has announced the dates of the 2018 Midland Aviation Camp as June 18-22, 2018. The camp is open to students entering 10th through 12th grade this fall and meets daily from 10 am to 4:30 pm, Monday through Friday.



Aviation Camp is designed as an introduction to the many facets of the aviation and space world and emphasizes hands on experience. From airplanes and aerodynamics to weather and flight navigation, campers gain experience by visiting airplane hangars, talking with the builder/owners, learning about careers in aviation, meeting aviation professionals at local corporations and visiting the nearby MBS control tower.

Aviation Camp is held at the Midland EAA Ormond Barstow Aviation Education Center at the Midland Jack Barstow Airport on Airport Road between Eastman Road and Sturgeon Road. Tuition is \$90 for five days. To register contact Janine Rairigh, Camp Administrator, at 989-615-1103 or e-mail

aviationcamp@barstowairport.com to request a registration form. Find Midland Aviation Camp on Facebook and visit 1093.eaachapter.org for more information.

Question: Where does the camp meet?

Answer: Midland Jack Barstow Airport, Experimental Aircraft Association's Ormond Barstow Aviation Education Center off Airport Road near Sturgeon Road.

Question: What does it cost to attend Camp?

Answer: Tuition is \$90 for five days, daily 10 am - 4:30 pm.

Question: What will I learn about at Camp?

Answer: You will learn about careers in aviation, meet local pilots and view airplanes based at Midland Barstow Airport. You will meet and hear from a variety of aviation heroes including military pilots, airline and corporate pilots, air traffic controllers and aircraft mechanics.

To register contact Janine Rairigh, 989-615-1103 or e-mail aviationcamp@barstowairport.com to request a registration form. Apply early! Find us on Facebook at Midland Barstow Aviation Camp. **Midland Barstow Aviation Camp** is an exciting adventure for those entering 10th through 12th grade this fall. In one week you will be introduced to the many facets of the aviation and space world. From **airplanes** and **aerodynamics** to **weather** and **flight navigation**, you will gain first-hand knowledge and hands-on experience.

Special Note: Aviation campers will be invited to participate in a Young Eagles Flight Day on Saturday, June 23, 9:00 am - Noon. EAA members who are experienced pilots will be offering free rides to the students at that time. Flights will start and end at Jack Barstow Airport.

Contact: Brett Kischnick, Publicity Chairperson
Midland EAA Chapter 1093,
bkischnick1@gmail.com
615-517-9547

Princess or Pilot?

Janet Patton, a friend of Linda and a pilot for American Airlines, wrote recently:

I flew to Orlando and back today. It's always the flights that have some travelers going to/from Disney. After the flight back, I was far from the gate walking through the terminal on the way to my car. A man I recognized when I said goodbye to the passengers walked past me then turned back and said, "Thank you for the flight. It was perfect timing." Of course I thought he was talking about

being early and making a connection. But he continued, "We were just at Disney World and my daughter thought she could only be a princess. When we heard your voice in the airplane, I told her 'You can be a pilot.' So, thank you." It's one of the best compliments I could have received! Go be a princess, or a pilot, little girl!

Upcoming Events at the Midland Community Aviation Discovery Area

The purpose of the newly formed non-profit Midland Aviation Education Association (MAEA) is to promote and coordinate educational and recreational activities at the Midland Jack Barstow Airport.

Spring 2018 activities include a possible 'Mosquito Spraying' Saturday for the public to view the working planes and learn more about the process from an exhibit at the Shelter in the MCADA area. The date will depend upon the weather and the working schedule of the spray planes.

There will be visit by a 4-H group on Saturday, April 28, from 9 - 12 with educational 'stations' and possible Young Eagles rides. A former camper, Hunter White, would like to bring the 4-H group that he is a member of to the airport. He estimates 25 kids in attendance, all old enough for Young Eagle rides. Volunteers are needed both to man the learning stations and to fly. This will run from 9 - 12. I need 4 helpers for stations and as many pilots as I can get. This event will consist of learning stations and Young Eagle flights.

Please consider volunteering. Contact is Sarah Pagano, sarahkpagano@gmail.com (989-525-5206).



The MAEA committee has had several joint meetings with representatives from the Midland Public Schools to help coordinate STEM related school activities at the Discovery Area. Marcia Wiseman is coordinating

a field trip from a first and a third grade class from the Central Park Elementary School on Friday, May 4. For more information about this event contact Marcia, marciaflyinghi@gmail.com. The MAEA committee meets monthly at the Terminal Building meeting room on the second Thursday of each month at 4 PM, and visitors are welcome.



There are plans for Siebert Elementary's 3rd through 5th grades students and their families to visit the Discovery Area on Friday, May 11.

This is a **BIG** and is still in the planning stages. In conjunction with the Midland Public Schools we would like to offer a chance for the third through fifth graders of Siebert Elementary School to come to the airport and learn from us. This is scheduled for Friday, May 11th. The time currently proposed for this even is from 5:00-7:00pm. We will have support from the PTO, but we still need as much help from the airport as possible. This even will be at the MCADA area. We need people to man the educational boards to answer questions and to man additional learning stations. We would also like there to be a few different airplanes parked near the MCADA fence area for the kids to see and for there to be some pilots flying at this time as well. This is the first event we are doing with the school system and we want to make it memorable. Our MPS contacts are still getting us an estimated number of participants but I expect it to be high (high estimate would be 75-100). This is a large under taking that can bring a lot of publicity to the airport, the chapter and

to the MCADA area. More importantly, it is an opportunity for us to share our knowledge and passion for aviation with many young people. You never know what may spark a child's interest!

"Ask any pilot how they started flying and you will hear a love story." We all remember our first time at an airport. All of our stories may be different, but we all have that moment where we fell in love with aviation and there was no turning back. Events like these are our opportunity to provide a young person with their own unforgettable moment. Not every child we teach may follow a path into aviation, but they won't forget the lessons or their amazing day at Barstow. Please consider helping at one or both of these events. EAA members are encouraged to volunteer as aviation resource people for this event. Sarah Pagano is also the contact person for this event.



The Discovery Area's picnic shelter with the six picnic tables may be reserved by individuals and/or groups by contacting Janine Rairigh at 989-835-3231.

If you are able to help, please contact *Sarah Pagano* (email: sarahkpagano@gmail.com)

Recent Young Eagles flights

28 young people were flown on March 10, 2018 by Bryan Martin, Jeff Gallant and Jim Murphy. John McPeak and Dot Hornsby provided ground support.



NTSB Issues New Safety Alert

The National Transportation Safety Board (NTSB) issued Safety Alert to highlight the potential hazards associated with conducting intersection takeoffs and the need for general aviation (GA) pilots to use all the runway available to them for takeoff.

Intersection takeoffs are in GA operations, a common practice often associated with a desire to save time. However, pilots may not fully understand the potential risks associated with conducting intersection takeoffs. The NTSB has investigated at least 10 accidents between 2000 and 2015 where pilots were attempting intersection takeoffs.

The safety alert emphasizes the need for pilots to:

- Know their airplane's takeoff and landing performance limitations
- Not feel obligated to accept an intersection takeoff if offered by air traffic control
- Use all available runway length to increase the margin of safety

Mailing address for all correspondence:

EAA Chapter #1093

P.O. Box 2464

Midland, MI 48641-2464

Please note our NEW Web address:

<http://eaa1093.org/>

Dan Graiver, email: dgraiver@aol.com