

# The Outer Marker

Volume 17 Issue 12

Bonnie Gottschalk - Editor

**MERRY CHRISTMAS!**  
*to You and Your Family!*





**President:** Michael (Mike) Bodine

**Vice President:** Wes Toland

**Secretary:** Bill Rudd

**Treasurer:** Kathleen Wollen

**Young Eagles Coordinators:**

Linton & Kathleen Wollen

**Technical Counselor:**

Egisto (Fred) Salvatori

**Newsletter Editor:** Bonnie Gottschalk

**Webpage Editor:** Mike Smith

**Facebook Editor:** Deb Toland

2020

## “Important Dates”

### **General Meeting**

**December 11th**

**11:30 AM**

**Gateway EAA Chapter 1401**

**Merced Regional Airport**

**HANGAR 10**

### **Board Meeting**

**December 30th**

**7:00 PM**

**Mike Bodine**

**2519 Sea Breeze Ct.**

**Merced, CA**

## Hello Flight Enthusiasts!



**Bonnie Gottschalk**  
**Editor**

Had a wonderful time in AZ for Thanksgiving. The flight out took a bit of maneuvering. John found a hole toward Los Banos, and we were up and outta here! Do not see the boys at Christmas so we celebrate it during our Thanksgiving visits. My son and his wife also have an anniversary in November, so we took the boys for a night so they could enjoy some “me” time. Saw a movie and dinner. Made

the annual Christmas cookies with my grandsons as well.

The Las Vegas trip was not so cooperative, we did not get out of Merced until after 3:00 PM. As a result, we arrived in Vegas quite late and missed the dinner that was planned. Got there at the tail end though so we got to visit a little bit before his Aunt had to go to her room to retire for the night. John’s cousin’s son has a friend who is in the, Michael Jackson One Cirque So Le production and she (his friend) got 8 of us tickets at half price. It was a fun evening! All in all, we had a nice visit. The flight home was fine until Merced where we had to once again find a hole in the fog to descend. We made it though, safe and sound. That is what matters, right? I hope you all had happy Thanksgiving days.

Tim Wennberg presented information on the new types of batteries available with the problems and advantages of each type. Sorry we missed that. Thank you, Tim!

*You can still attend the meeting if you did not RSVP for party just will not have a sandwich available. But you can bring your own, like me, if you wish to. Still would love to see you there! Bringing an unwrapped toy to donate is optional.*

Until then, I pray God blesses you all with good health, prosperity and clear blue skies!

Bonnie

\*Due to the cold weather the board has decided to not have a General Meeting in January. February will resume as scheduled.

# President's Proclamation



**Mike Bodine**

## **December 11, 2021** **Gateway EAA Chapter 1401**

December 11<sup>th</sup> is our Annual Christmas Party 11:30am at Hangar 10. All unwrapped toys brought to the Christmas Party will be donated to the **Life Line Christmas Store** for distribution. Food and desert will be available for members who have already provided their selections. Coffee and beverages will be available for all.

November General Meeting included the election for, President and Secretary. The results are:

President: Michael Bodine

Secretary: Bill Rudd

Tim Wennberg was the speaker, and he did an excellent job of defining and explaining the use of new aircraft batteries. There were plenty of questions and a discussion on their safety and use.

The board has voted to only have aircraft display at the January general meeting, without a social.

Next board meeting 7:00PM Dec 30<sup>th</sup> at the Bodine's

Mike Bodine

# 2022 Gateway EAA

## Tentative Meeting Schedule

Board Meetings	General Meetings	Meeting Location	Meeting Agenda and Activity
Dec 2	Dec 11	EAA Hangar #10	<b>Chapter Christmas Party</b> Aircraft display
Dec 30	<b>Cancelled</b>	EAA Hangar #10	Aircraft display and Social
Feb 3	Feb 12	EAA Hangar #10	Aircraft display and Social
Mar 3	Mar 12	EAA Hangar #10	Aircraft display and Social
Mar 30	Apr 9	EAA Hangar #10	Aircraft display and Social
May 5	May 14	EAA Hangar #10	Aircraft display and Social
Jun 2	Jun 11	EAA Hangar #10	Aircraft display and Social
Jun 30	July 9	EAA Hangar #10	Aircraft Display and social
Aug 4	Aug 13	EAA Hangar #10	Aircraft Display and social
Sept 1	Sept 10	EAA Hangar #10	Aircraft Display and social
Sept 29	Oct 8	EAA Hangar #10	Aircraft Display and social
Nov 3	Nov 12	EAA Hangar #10	Aircraft Display and social
Dec 1	Dec 10	EAA Hangar #10	<b>Chapter Christmas Party</b> and Aircraft display

# Chapter Events



Tim Wennberg  
presentation on batteries



# Day of Flight

Give now

To commemorate the Wright brothers' inaugural flight on this date in 1903, we're inviting you to fuel the future of aviation!

**When you donate to EAA on our Day of Flight giving day, you're supporting things like:**

- \$25 – Provides Materials for a Classroom STEM Activity
- \$55 – Sponsors a Student/Scout on an Overnight in the Museum
- \$100 – Helps Facilitate a Young Eagles Flight
- \$1,000 – Supports an EAA Speaker Series Presenter
- \$5,000 – Sponsors a Cockpit 360 tour for one of EAA's Historical Aircraft
- \$10,000 – Improves Buildings on the AirVenture Grounds

**What is the Day of Flight?**

The Day of Flight on December 17, 2021, is an opportunity for EAA members and aviation enthusiasts to help fuel the future of aviation. Working together, we're raising funds and awareness of EAA's programs in education, safety, and outreach.

**How can I join in the fun?**

There are so many ways to make a difference!

•[Give online](#) >

- Donate to our Facebook campaign
- Text "FLIGHT" to 920-315-7447
- Call us at 888-500-5600
- Email [Donor@EAA.org](mailto:Donor@EAA.org) to let us know that you'd like to support the Day of Flight
- Share the campaign with friends by [downloading our toolkit](#) >

**How will my gift be used?**

Your donation will be used to further the mission of growing participation in aviation.

**What is the minimum gift amount?**

The minimum gift amount is \$5, and every gift counts toward our goal!

**Whom should I contact with giving-related questions?**

Please reach out to the EAA Aviation Foundation by calling 888-500-5600 or emailing [Donor@EAA.org](mailto:Donor@EAA.org).

Give Now >



All,

The Kolb Mark III is a family of American side-by-side two-seater, high wing, strut-braced, pusher configuration, conventional landing gear-equipped ultralight aircraft that is produced in kit form by New Kolb Aircraft of London, Kentucky, and intended for amateur construction

The Mark III's standard engine was originally the 64 hp Rotax 582 engine, but the current engines offered are the 80 hp Rotax 912UL or the 100 hp Rotax 912ULS. In its home country the aircraft is normally licensed in the Experimental - amateur-built category.

The design features a forward fuselage of welded 4130 steel tubing, mated to an aluminum tail boom. The horizontal stabilizer, tail fin and wings are also constructed of riveted aluminum tubing with all flying surfaces covered in doped aircraft fabric. The wings and horizontal tail are quick-folding for storage and ground transport. The original Mark III can be made ready to fly from trailering in eight minutes by one person without the use of tools, while the newer M3X variant is rated at 15 minutes to assemble for flight.

The landing gear is sprung tubing for the main gear, with a steerable sprung tailwheel and the cabin is 45 in (114 cm) in width.

Factory options include brakes, Ballistic Recovery Systems airframe parachute and powder coating of the steel parts. The manufacturer describes the aircraft as STOL, with a 200 ft take-off run



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The easy to build Twinstar Mark III is designed primarily as a STOL class aircraft. It has generous wing area, big flaps, ailerons and powerful engine options that make operation from short fields possible. With gross weight of a1000 lbs. and slow stall speed, it qualifies as an experimental kit build light sport aircraft... Perfect for Sport Pilot.

Kit Price: \$12,000

Built Cost: \$27,000

### Performance

Maximum speed: 85 mph

Cruise speed: 75 mph

Stall speed: 33 mph

Never exceed speed: 90 mph

Range: 130 mi

Rate of climb: 950 ft/min

CHEERS!



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“How people treat you is their karma; how you react is yours.” -Wayne W. Dyer



## A 1942 Ryan PT-22 "Recruit"

N46751 (Serial number; 2176)

(1,048 "Recruits" were made)

(Known commercially as the Ryan

Aeronautical ST3KR)

(118 ST3KR's were made.)

### **Operational history;**

The PT-22 was developed in 1941 from the civilian Ryan ST series. The earlier PT-20 and PT-21 were the military production versions of the Ryan ST-3 with a total of 100 built.

**The PT-22 was the United States Army Air Corps' first purpose-built monoplane trainer.**

The rapid expansion of wartime aircrew training required new trainers, and the Ryan PT-22 was ordered in large numbers. Named the "Recruit", it entered operational service with the U.S. Orders also were placed by the Netherlands but were never realized as the nation capitulated to Axis forces. The small order of 25 ST-3s was redirected to the United States and redesignated as the PT-22A. Another order also came from the U.S. Navy for 100 examples. The PT series was in heavy use throughout the war years with both military and civil schools, but with the end of the war, was retired from the USAAF.

### **Performance;**

- **Maximum speed:** 125 mph
- **Cruise speed:** 100 mph
- **Stall speed:** 62 mph
- **Never exceed speed:** 190 mph
- **Range:** 231 mi
- **Service ceiling:** 15,400 ft

**Armament;** NONE

**Avionics;** NONE

Several PT-22 remain in flyable condition worldwide, as the aircraft continues to be a popular sport plane and warbird.



(In 2015, Harrison Ford was flying a vintage model of such a plane, Ryan Aeronautical ST3KR, when he performed an emergency landing on a golf course near the Santa Monica Municipal Airport. The actor suffered broken bones and required surgery.)

CHEERS!



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# Lift Your Spirits

Pilot rules of flying to live by if you want to be an old pilot!



## AIRCRAFT RULES

Somewhere in the top 10... "When landing, it's wheel side down."

1. Every takeoff is optional. Every landing is mandatory.
2. If you push the stick forward, the houses get bigger. If you pull the stick back, they get smaller. That is, unless you keep pulling the stick all the way back, then they get bigger again.
3. Flying isn't dangerous. Crashing is what's dangerous.
4. It's always better to be down here wishing you were up there than up there wishing you were down here.
5. The only time you have too much fuel is when you're on fire.
6. The propeller is just a big fan in front of the plane used to keep the pilot cool. When it stops, you can actually watch the pilot start sweating.
7. When in doubt, hold on to your altitude. No one has ever collided with the sky.
8. A 'good' landing is one from which you can walk away. A 'great' landing is one after which they can use the plane again.
9. Learn from the mistakes of others. You won't live long enough to make all of them yourself.
10. You know you've landed with the wheels up if it takes full power to taxi to the ramp.
11. The probability of survival is inversely proportional to the angle of arrival. Large angle of arrival, small probability of survival and vice versa.
12. Never let an aircraft take you somewhere your brain didn't get to five minutes earlier.
13. STAY OUT OF CLOUDS!!!! The silver lining everyone keeps talking about might be another airplane going in the opposite direction. Reliable sources also report that mountains have been known to hide out in clouds.
14. Always try to keep the number of landings you make equal to the number of take offs you've made.
15. There are three simple rules for making a smooth landing. Unfortunately, no one knows what they are.

# A BIT OF HISTORY

Military.com | By Bryan Hubbard



A modified B-36 Bomber became the nation's only flying nuclear reactor in 1955. The plane, which became as the Nuclear Test Aircraft, help explore nuclear-powered propulsion and the effects of radiation on airframes. (U.S. Air Force photo)

At the height of the Cold War, U.S. Air Force scientists dreamed of a fleet of nuclear-powered aircraft. They almost made it happen. It was 1955. The atomic power industry was maturing in the United States, and President Eisenhower had already made his call for "atoms for peace." The industrial race to domesticate the atom was underway. The military race to employ to our nation's defense was already more than 15 years old.

"Popular Mechanics" painted visions of a helpful "nuclear genie" that included everything from nuclear-powered excavation to atomic-powered homes. The atom was being trained to become man's best friend.

Meanwhile, the U.S. Navy had its nuclear-powered vessels like the U.S.S. Nautilus - the Navy's first nuclear-powered submarine. Down the hall in the Pentagon, Air Force leaders wanted a nuclear-powered craft of their own for similar reasons - unlimited range, power and endurance.

The interest in atomic-powered aircraft began in 1946 in the Nuclear Energy for the Propulsion of Aircraft (NEPA) program managed by the Army Air Force and later the independent U.S. Air Force. By the end of 1948 the U.S. Air Force had invested nearly \$10 million.

While experts prepared extensive studies on their feasibility, actual aircraft development waited until after 1951 when the Aircraft Nuclear Propulsion (ANP) program replaced NEPA.

ANP aimed to "produce full-scale development aircraft reactor and engine systems" according to Brian Bikowicz, a nuclear history scholar. While Project Pluto successfully tested nuclear ramjets and Project Rover tested nuclear-powered rockets, an operational atomic aircraft was never actually developed.

"Manned nuclear aircraft pose the most difficult engineering development job yet attempted with in this century," said ANP Director B.C. Briant in 1954.

The difficulty didn't stop the Air Force and its team of scientists from trying.

In 1952, the Air Force started the X-6 program to produce two flying testbeds powered by atomic energy. The Air Force chose a modified Convair B-36 "Peacemaker," designated the NB-36H. Only one of these special aircraft ever made it to testing - Serial No. 51-5712, the Nuclear Test Aircraft (NTA).

The NB-36H carried a small air-cooled reactor in the aft bomb bay. The NTA had shielding around the reactor itself and a totally new nose section, which housed a twelve-ton lead and rubber crew compartment. In the fuselage and behind the crew compartment, designers installed water jackets to absorb radiation. Due to the modifications only the pilot and copilot could see through the foot-thick, leaded-glass windshield. A closed-circuit television system allowed the crew to check the reactor as well as other sections of the aircraft.

Between 1955 and 1957, the NTA made 47 test flights yielding valuable data on the effects of radiation upon airframe and components.

The United States had competition in creating atomic-powered aircraft. The Soviet Union operated a similar test program. One Soviet plan envisioned a "flying boat." In the plans for the aircraft "the wingspan was more than 130 meters, and the total power of the engines exceeded one-half million horsepower. This airplane was supposed to carry 1,000 passengers and 100 tons of load at a speed of 1,000 kilometers per hour" according to R. G. Perelman in "Soviet Nuclear Propulsion" (1960).

In late 1958, "Aviation Week" reported that the Soviets successfully flew a prototype of an atomic-powered bomber. This report, accompanied by the general paranoia created by Sputnik and the enthusiasm of a technological race, temporarily fueled ANP to increased budgets.

But the enthusiasm would not last. In the end, the program produced too few results over too long a period. The development of accurate and powerful missiles and the growing emphasis on space also lessened the appeal of atomic-powered aircraft. On March 28, 1961, President Kennedy cancelled the ANP program writing, "Nearly 15 years and about \$1 billion have been devoted to the attempted development of a nuclear-powered aircraft; but the possibility of achieving a militarily useful aircraft in the foreseeable future is still very remote." President Kennedy redirected much of the effort toward space and the race to reach the moon -- an effort and endeavor that captivated the American imagination, public support and eventually succeeded.



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# Plane & Pilot



[Cub Crafters Founder Jim Richmond Flies West](#)



[Big Approvals For Garmin GFC 500 Autopilot: Cessna 210s, Mooney M20s and Beech Bonanza Vee Tails!](#)

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This photo was taken by a soldier in Afghanistan of a helicopter rescue mission. The pilot is a PA National Guard guy who flies EMS choppers in civilian life. Now how many people on the planet you reckon could set the ass end of a chopper down on the roof top of a shack, on a steep mountain cliff, and hold it there while soldiers load wounded men in the rear. If this does not impress you... nothing ever will.

# ADVERTISEMENTS

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## EAA Events



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AIR MUSEUM  
Castle Air Museum



Taildragger Café, Minden NV

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Air Center** 

<http://gatewayaircenter.com/>

  
**LifeLine**  
Community Development

**LifeLine CDC**  
Mailing address:  
731 E Yosemite Ave Ste B #165  
Merced CA 95340  
lifeline@lifelinecdc.org  
209-259-8950  
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