

THE SLIPSTREAM

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA

MARCH 2022

PRESIDENTS COLUMN:

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Presidents Column:

I dipped into the Way Back machine for this months Presidents Column.

From the March 2011 Newsletter

Potpourri:

A couple of little things this month:

Maybe spring will finally spring and we can start flying again. This winter seems to have been particularly lousy in the weather department, and I know many of us are getting cabin fever. The Arrow is down for its annual inspection. I flew last Sunday to warm it up before taking it apart for the annual, and discovered the air more turbulent than I can remember it being for a long, long time. I really got beat up in the pattern. After about an hour, I gave up and landed. I try to fly it for at least an hour at a time and at least once each 2 weeks: at least once a week is better, and I really feel bad if it goes three weeks or longer. Sometimes, that can't be helped, but I still feel bad about it. I try to fly long enough to make sure the oil gets up to temperature and stays warm long enough to make sure I've gotten all of the water boiled out of it. Of course, the Lycoming in the Arrow never seems to get really HOT. This time of year, the cylinder heads don't seem to get above about 330, and the oil stays around 150. 150 is not hot enough, but that's measured at the far end of the oil galley, and if the heads are above 212, I know at least some of the oil is above water-

boiling temperature. Then the big challenge is to keep the engine there long enough to cycle all the oil through it. I hope I got that accomplished.

At the trade show last month, I heard that FAA was going to raise the minimum vectoring altitudes around here, in preparation for the Class B re-design.

Most of us non-GPS pilots are not very happy with the proposed re-design (because try as I might, I cannot find the blue lines on the ground, but that's another story). Anyway, they told me that they were going to raise the minimum vectoring altitudes. Jonathan and I found out a couple of weeks ago that the minimum vectoring altitude in the sector above Crest has been moved from 2000 to 2500 feet. I fear that this will cause some trouble in the future. My experience is that it's frequently "close" when being vectored IFR to below the clouds to get down to 2000 feet before breaking out.

With the minimum altitude for radar vectors now at 2500, there will be more times when we won't be able to break out of the bases to proceed VFR to Crest. I do not know the reasons for the change to the MVA, but I see inconvenience in our future.

I got a card in the mail advertising an FAA program called "Operation Rain-check". This FAA safety program is on Saturday, 28 March. Contact Sheri Kasen at FAA at 206-214-4640.

Did anyone get photos from the February NW Aviation show, or the Tech visit with Edwin Sharp?

SCOTTISH HIGHLANDER UPDATE, EAA NEWS:

If this is the same "Operation Rain-check" they've had in the past, that got suspended after 9-11, it is outstanding. I took it in the '90's and found it to be a really good learning experience. I'd encourage all members to take advantage of the opportunity

Finally, another FAA program, the 2011 National Safety Stand Down is scheduled for Saturday 2 April at the Museum of Flight. Contact Minard Thompson at FAA at 425-227-1027. Another good opportunity to refresh before the flying season gets into full swing (assuming the weather gets better).

So the Arrow is mostly open and exposed waiting for the careful eyes of a local IA. While he's doing the engine stuff, I'll take the rest of the inspection panels off. That way, when he gets done inspecting and lubricating, I can follow behind putting things back on (and he can inspect my work). Hopefully things will go smoothly, and it'll be ready to fly again quickly. I try to schedule the annual for March because it's not really into the flying season, yet, and it's conveniently after the trade show, so I can get the show special prices on those things I know I will need (filters, ELT battery, etc.). Try to limit the surprises.



This month, we'll be back in the Mellema (Nason hanger in 2022) hangar at the regular meeting time of 7:00: no dinner this month.

Fly safely.

Brian Lee



Scottish Highlander Update:

Brian asked me to bring my broken Lexan windshield to the meeting this month and talk in general about my build experience. So, I will show a bunch of pictures and talk about the build adventure. I just need to complete these major items before submitting for FAA cert:

- 1) finish replacement of my windshield (tougher than I expected!),
- 2) do the final engine runs to find the proper prop pitch and gather engine data for analysis,
- 3) bleed the brakes,
- 4) replace a leaking coolant line fitting,
- 5) install the vortex generators, and
- 6) complete the fuel tank calibration.

See you on Thursday!

Steve

EAA News:

Celebrate EAA Learn to Fly Day:

EAA is excited to announce that EAA Learn to Fly Day is scheduled for May 21. This is the perfect time for your chapter to host a Flying Start event, and reach a new audience of aviation enthusiasts. Flying Start is an opportunity for your chapter to provide an open house event for those interested in learning to fly. Following a short EAA-prepared presentation, the event is often capped with adult Eagles Flights for attendees.

To Read More: [Click Here](#)

Thoughts from Susan for Vintage Chapters:

As I write this, we are a mere 165 days away from EAA AirVenture 2022. Activities in the Vintage office in Oshkosh are really picking up. I call March "all heck breaks loose month" or something similar to that. I am sure that this holds true for all of the Vintage chapters who are busy organizing their events for the upcoming flying season. There are the events like cook-outs or maybe flying out to meet the group for that infamous but now elusive \$100 hamburger. These events are always a lot of fun but every now and then I remind myself about the crucial role of the typical VAA chapter.

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EAA Chapter 35 Adirondack Chairs:

EAA Chapter 35 is a group of approximately 135 aviation-minded folks in San Antonio, Texas. We are fortunate to have

TECH COUNSELORS AND FLIGHT ADVISORS



Chapter 441 is fortunate to have two tech counselors.

Feel free to call Brian (253)-369-0489, or Dave Nason any time. You don't need to wait for some significant milestone in your project. Remember, this is not an "inspection".

The shop doesn't need to be cleaned for a visit. All are quite used to looking at pieces, parts, and assorted bits, and will be happy to answer questions, offer advice, and generally talk about projects, building, flying, or whatever.



GUESS THAT AIRPLANE; GUESS THAT INSTRUMENT PANEL

This months Guess that Airplane:

See Page 9 for February's Airplane:

This months Instrument Panel:

See Page 10 for February's Instrument Panel



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EAA NEWS CONTINUED, EDITORS CORNER JANUARY MEETING MINUTES OF JEFF MILLERS DESIGN IN PHOTOS:

a great clubhouse and large hangar/building facility of our own. In keeping with the EAA chapter mantra that the single most important thing for chapter health is to “do something,” a group of members started planning to build an Adirondack chapter chair and deliver it to AirVenture as part of the EAA program where chapters build, decorate, and donate a chapter Adirondack chair to the Blue Barn. What a cool idea.

To Read More: [Click Here](#)

EAA Jobs:

To view jobs: [Click Here](#)

What are we not teaching Student Pilots Today:

By Steve Krog, EAA 173799

This piece originally ran in Steve’s Classic Instructor column in the February 2022 issue of EAA Sport Aviation magazine.

I have had the pleasure of teaching people to fly fixed-wing aircraft for nearly 49 years and have taught many students young and old(er). Consequently, my viewpoints that I’m about to share may reflect long-held opinions. The bottom line, however, is that as an industry as a whole, we are not necessarily turning out competent-thinking pilots today. Rather, we are teaching students to just pass the test!

To Read More: [Click Here](#)

Editors Corner:

I hope that this finds you well. I dipped back into the Way Back machine for the Presidents column. Please remember that it discusses things that happened in 2011.

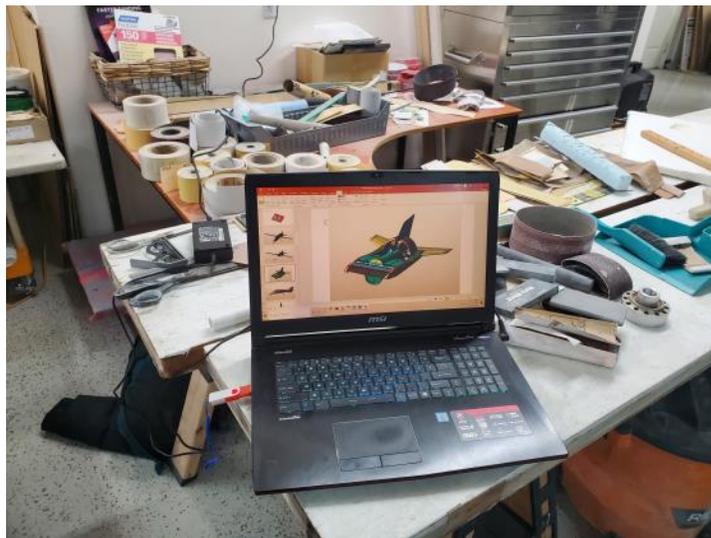
It looks like I am going to miss the next meeting again. I may be back in the hospital being observed for my kidney and liver functions. This is really difficult to accept as I don’t feel sick, just a lot tired and heavy. I have actually lost about 20 pounds, some of it fluid and some body mass.

I am planning to write an article about VTOL as there are a few unique airplanes and concepts that the industry have applied.

Did anyone get photos from February tech visit with Edwin Sharp’s RV-14A? Please send some on to me and I will include it in the April Newsletter.

Build Straight.

Berling



Januaries Site visit in photos:

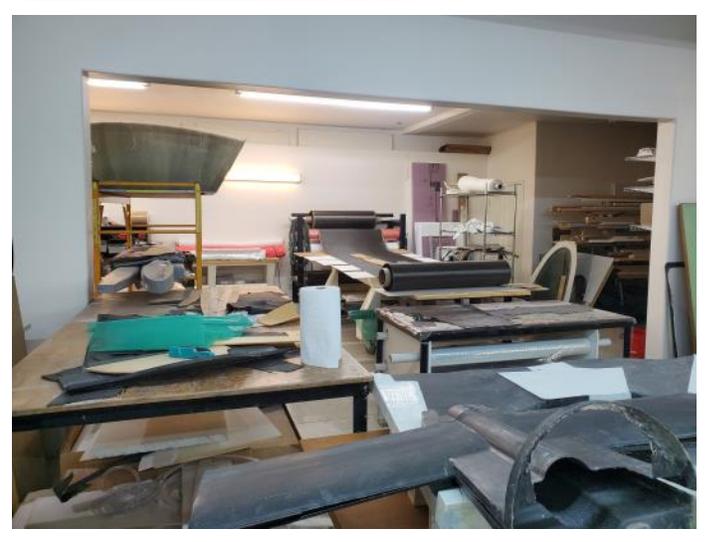
In January we visited Jeff Miller at his hanger on Norm Greer airport. It is truly a haven of experimental design and a lot of prototyping. He is designing a pusher aircraft with an annular ring around the propeller. Enjoy the photos from the site visit.



JANUARY JEFF MILLER PROJECT VISIT, CONTINUED:



JANUARY JEFF MILLER PROJECT VISIT, CONTINUED:



MOVIE AND AN AIRPLANE:



Movie and an Airplane:

Last months selection:

Toward the Unknown

A group of Edwards Air Force Base pilots push themselves and the airplanes to the limits seeking Supersonic flight.

Director Mervyn LeRoy

Writer: Beirne Lay Jr.

Stars: William Holden, Llyod Nolan, Virginia Leigh, Murray Hamilton, James Garner, Karen Steel, Charles McGraw and more...

Airplane: Martin XB-51

To Read More:

IMDB: [Click Here](#)

Wikipedia: [Click Here](#)

TCM: [Click Here](#)

Rotten Tomatoes: [Click Here](#)

This Months Movie and an Airplane:

Hint: French

Several aircraft from the movie.

LAST MONTHS GUESS THAT AIRPLANE:

Martin XB-51

The Martin XB-51 was an American trijet ground-attack aircraft. It was designed in 1945 and made its maiden flight in 1949. It was originally designed as a bomber for the United States Army Air Forces under specification V-8237-1 and was designated XA-45. The "A" ground-attack classification was eliminated the next year, and the XB-51 designation was assigned instead. The requirement was for low-level bombing and close support. The XB-51 lost out in evaluation to the English Electric Canberra which - built by Martin - entered service as the Martin B-57 Canberra.

This unorthodox design, first flying on 28 October 1949, was fitted with three General Electric J47 engines - an unusual number for a combat aircraft - two underneath the forward fuselage in pods, and one at the extreme tail with the intake at the base of the tailfin.[1] The innovative, variable incidence wings, swept at 35° and with 6° anhedral, were equipped with leading edge slats and full-width flaps. Spoilers gave most of the roll control and undersized ailerons provided feel for the pilot.[2] The combination of variable incidence and slotted flaps gave a shorter takeoff run.[3] Four 954 lb (4.24 kN) thrust Rocket-Assisted Take Off (RATO) bottles with a 14-second burn duration could be fitted to the rear fuselage to improve takeoff performance. Spectacular launches were a feature of later test flights.

Operational History:

In 1950, the United States Air Force issued a new requirement based on early Korean war experience for a night intruder/bomber to replace the Douglas A-26 Invader. The XB-51 was entered, as well as the Avro Canada CF-100 and English Electric Canberra; the XB-51 and Canberra emerged from these as the favorites.

Test flights showed the XB-51 to be highly maneuverable at low altitudes and substantially faster than the Canberra and faster than most fighter aircraft of the era. However, the XB-51's endurance was significantly lower than that of the Canberra and this factor was decisive in its cancellation. In addition, a load limiting factor of only 3.67 g (36 m/s²) meant that the general strength of the airframe was relatively low and would prevent tight turns while fully loaded.



To Read More:

Wikipedia: [Click Here](#)
 Military History: [Click Here](#)
 The Aviationist: [Click Here](#)
 Military Factory: [Click Here](#)

Specifications:

General characteristics:

Crew: 2
 Length: 85 ft 1 in (25.93 m)
 Wingspan: 53 ft 1 in (16.18 m)
 Height: 17 ft 4 in (5.28 m)
 Wing area: 548 sq ft (50.9 m²)
 Airfoil: NACA 63A010[7]
 Empty weight: 30,906 lb (14,019 kg)
 Gross weight: 57,874 lb (26,251 kg)
 Max takeoff weight: 62,452 lb (28,328 kg)
 Powerplant: 3 × General Electric J47-GE-13 turbojet engines, 5,200 lbf (23 kN) thrust each

Performance

Maximum speed: 644 mph (1,036 km/h, 560 kn)
 Range: 1,075 mi (1,730 km, 934 nmi)
 Ferry range: 1,444 mi (2,324 km, 1,255 nmi)
 Service ceiling: 41,750 ft (12,730 m)
 Rate of climb: 6,600 ft/min (34 m/s)
 Wing loading: 105.6 lb/sq ft (516 kg/m²)
 Thrust/weight: 0.27
 Armament
 Guns: 8 × 20 mm M24 cannon (0.79 in) cannon with 1,280 rounds
 Rockets: 8 × High Velocity Aerial Rockets (HVAR) or
 Bombs: Up to 10,400 lb (4,720 kg) carried internally

LAST MONTHS GUESS THAT INSTRUMENT PANEL:**Fairchild C-123 Provider:**

The Fairchild C-123 Provider is an American military transport aircraft designed by Chase Aircraft and then built by Fairchild Aircraft for the U.S. Air Force. In addition to its USAF service, which included later service with the Air Force Reserve and the Air National Guard, it also went on to serve most notably with the U.S. Coast Guard and various air forces in Southeast Asia. During the War in Vietnam, the C-123 was used to deliver supplies, to evacuate the wounded, and also used to spray Agent Orange

Operational History:

The first recipients of C-123 aircraft were USAF transport units, soon followed by the U.S. Coast Guard (USCG) which used the aircraft for search and rescue (SAR) missions, and even the U.S. Air Force Demonstration Team, the "Thunderbirds," used C-123s for a time as a logistics support aircraft for transporting the team's ground crews and equipment. The type would also be widely exported under various U.S. military assistance programs, directly from USAF stocks. A C-123 was used to transport President John F. Kennedy's limousine during his November, 1963, Texas tour. USAF C-123Bs in the 1950s.

The C-123 was nearly ignored by the USAF for service in Vietnam, but a political rivalry with the U.S. Army and the Army's use of the CV-2 Caribou and later pre-production order for the de Havilland Canada C-8 Buffalo, led to a decision to deploy C-123s there. To compete with the well-performing CV-2, the USAF and Fairchild furthered development on the C-123 to allow it to do similar work on short runways. This additional development increased the utility of the aircraft and its variants to allow it to perform a number of unique tasks, including the HC-123B which operated with the USCG fitted with additional radar equipment for search and rescue missions through 1971, and the C-123J which was fitted with retractable skis for operations in Greenland and Alaska on compacted snow runways.

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