

The Eagles Nest!

News from Scotia Eagles EAA Chapter 1051

"A welcoming community for all aviation enthusiasts to meet and share their passion for aviation with like-minded people."

Scotia Eagles
C/O Todd Simms
1636 Highway 201
South Greenwood, NS
B0P 1R0

2021-22 Executive:

President: Todd Simms president@eaa1051.org
Vice President: Jim Walker z2030@protonmail.com
Secretary: Larry Bogan secretary@eaa1051.org
Treasurer: Eric Sawler treasurer@eaa1051.org
Director: Christoph Both christoph.both@acadiau.ca

Newest Member: On behalf of Scotia Eagles, I'd like to extend a heartfelt welcome to Clark Brander of Port Hawkesbury, our newest Eagle who joined the Chapter in late June. Great to have you join our band of merry aviators!

Note of Thanks: The Chapter now has vests with the Chapter crest sewn on to wear at future functions thanks to the skill of Elizabeth Walker, who volunteered to take on the painstaking task of sewing the complicated crests on the mesh vests. They look great and we'll be putting them to good use at our next public events.

2022 Memberships

Know anyone who wants join Scotia Eagles and enjoy the company of aviation enthusiasts?
Membership is only \$30.00 which can be paid by e-transfer or by mailing a cheque, if preferred.

E-transfers can be paid using the following information:

- Name – "Scotia Eagles EAA"
- email address – "treasurer@eaa1051.org"

Please include your name and your email address in the comments or memo so we can properly record your dues and keep you on our membership email list.

We're happy to take cheques if it's more convenient for you, they can be mailed to:

New News

1. **Newsletter** – We welcome your suggestions for content or submissions, especially if you are building a plane and are interested in sharing your trials, tribulations and progress. Trip reports are always welcome not to mention inspiring!
2. **July 9 Fly-In at Freedom Aviation 14 Wing Greenwood:** Scotia Eagles partnered with AVFA to host a fly-in that occurred just before construction on the new hangar commenced. I guess timing is everything! A bright and sunny day brought eight aircraft to the ramp to enjoy some BBQ and swapping true tales of derring-do that actually occurred in the skies of Nova Scotia! (or did they...?)

Right after lunch Patrick Gilbert gave his presentation on Air Cadet glider operations from the perspective of piloting an overpowered tow plane. Lots of things to go wrong when you're doing constant launches with multiple gliders airborne at the same time, but Patrick provided a great explanation of how the Cadet tow plane SOPs anticipate and handle the types of emergencies that can arise. Thankfully, due to the excellent procedures that are used, emergencies are rare but as always in aviation, it's best to be prepared. Thank you Patrick for your engaging presentation that covered the mundane – *HOW* many launches per hour are you programmed for again...? and highlighted one of the many niches of aviation that only a very few are privileged to see.
3. **Fly-in Scheduled August – September**

August: On August 20th Ron and Kathie Testroete graciously agreed to host a fly-in at Hillaton and to really put on a show, prepared a tasty BBQ'd chicken dinner for the



attendees. Fourteen aircraft flew in on a gorgeous sunny summer day to enjoy the feast (some going back for seconds, an impressive feat considering the full plates that were being passed out!) and many of the aircraft based at Hillaton were pulled out on the line for attendees to look over. Never turning down an excuse to fly, several pilots conducted impromptu demo flights for other attendees. In one case, a trip to the gas station for 30 L of supreme was arranged to get the extra fuel for the unplanned flight. Aren't aviation enthusiasts some of the most generous people around? We have a fantastic sport and some of the most generous people you will find to share it with.

September: With the hangar construction in full swing at Freedom Aviation in Greenwood, AVFA and Scotia Eagles have decided to cancel the planned Sep 10th fly-in. Too busy and a bit more crowded than normal with the BBQ and seating areas occupied by excavators – seems like we should plan the next fly-in for 2023 when everyone can see the shiny new facilities that Freedom has brought to life.

4. **Eagles Event:** Scotia Eagles is planning a low-key follow up to the Young Eagles of June. We're planning a (Mature) Eagles day on Sep 24th. This event is intended to give a familiarization flight to adults who are thinking of getting their Pilot license and joining our friendly band of merry aviators. Tentatively planned for Hillaton with Freedom Aviation/Greenwood as the backup, we're looking for pilot volunteers who have an airplane and are interested in sharing their love of aviation.

The requirements to participate are pretty challenging: you need to be an EAA member and

have an airplane to fly. Okay, maybe not so challenging after all! Interested in participating? Contact Christoph Both before Sep 7th and let him know so we can add you to the list. We'll be making the final decision on the 7th on whether or not to proceed based on the number of seats that can be offered to the public. Hope you can help out!

5. **YE Video:** We have a moment of the June Young Eagles day event courtesy of Ian Swimminer. He brought his professional video gear and conducted interviews and took video of the comings and goings on the ramp. After many hours of volunteer effort on his part, he presented the Chapter with a professional video covering the days events. You can find it on the Scotia Eagles Website (<https://eaa1051.org>) or at <https://chapters.eaa.org/eaa1051/young-eagles>. Feel free to have a look and pass it on to your friends to show them what a great day they missed and a whole lot of smiling and happy Young Eagle faces!

6. **Scotia Eagles AGM:** We are having our Annual General Meeting Saturday November 5th tentatively planned for the Greenwood Aviation Museum Conference room. We'll confirm the timing and location at least three weeks prior to the meeting. Elections will be held for Chapter positions, among other topics. Interested in helping to run the Chapter and be involved in planning the monthly events? Let the exec know and we'll put you up for nomination for one of the positions.

7. **BD-4C Project Visit:** If anyone is interested in coming by and having a look at the progress we're making on the kit, I am having having an "open hangar" Sunday 11 September between 2:00 PM and 4:00 PM. The workshop will be tidied up enough that you will be able to get in edgewise and have a hands-on look at the plane and it's parts.

You can find me at: 1636 Highway 201, South Greenwood NS.

Coming from Greenwood on the 201, I am located 5 minutes from Walmart on the right/South side of the road; yellow house, green roof. The workshop is in the detached garage, the entrance door is on the left side next to the garage door. All are welcome and feel free to bring along any friends who may also be interested in seeing how the kit is coming together. Hope you can stop by! Todd Simms 902-840-0727

Builder Updates – Todd Simms BD-4C

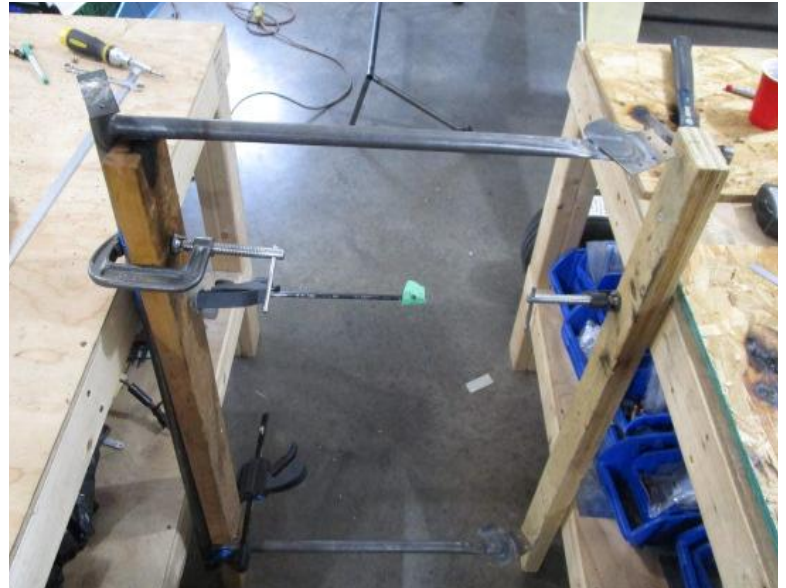
1. A news set of supplemental blueprints arrived this summer for a revised rear seat. The existing plans called for a cloth sling seat suspended between two rods. I've sat in one of those seats and climbed out after only two minutes! Not a good design. The new plans have a seat pan bent from 0.50" sheet aluminum suspended from two rods attached to welded 4130 steel brackets.
2. First up was to bend the sheet pan according to the new plans. Bending that much 0.50" aluminum turned out to be a bit of a challenge, especially with the angles needed to get it to fit. We used a slow and careful approach and crept up on the bend angles and got them pretty much right on.

The bottom of the seat has a shelf that sits flat on the cross tube, then the bottom sits flush against the lower



tube. The upper lip is bent so it sits perpendicular to the face of the upper tube with a top lip that covers the top of the tube. Ten bolts go through each face for a total of twenty bolts holding the seat against the tubes.

3. Speaking of tubes, the next step was to make the mounting brackets and attach the arms to the tubes. The arms are also made of 4130 tube, flattened at the bottom ends and welded onto the mounting brackets. The upper ends are cut out to fit flush to the upper tube and also get welded. It turned out that the brackets were too wide so I had to make a jig to bend



them inward to fit the width at the bottom of the mounts. We heated the tubes with a torch and bent them several times until we had the right width at the bottom to mount to the frame.

The lower frame is in the background, the longer arms go upwards to join the rear of the door frame and the shorter arms are attached to the lower side of the rear of the door frame. The arms are bolted to the fuselage frame so are removable for now though once the skin is on, it will be a real struggle to get them out but it should be possible.

4. Once the tubes were in place, we clamped the seat pan in place and drilled ten bolt holes in the top and in the bottom tubes. I checked that all twenty bolts fit and then took them out, I have left the pan in place but it gets taken out and put back a lot to ease access to the back of the cabin.



attempts to use a wire welder convinced me that it would take too long to figure out how to weld the steel, so I was better off getting a professional to do it up for me. Of course, we squared up the frames before welding them and once I got them back, discovered that the door openings in the airframe weren't square ... so the frames didn't fit, they jammed in the corners. I had some scrap tube left over so we cut out short sections from a couple of corners and cut new sections to weld in that would correct the frame angles. This time, I had the welding shop come to the "hangar" to weld the doors and do the seat frames while they were here. A short 4.5 hours later ... all the welding was done and my wallet was quite a bit lighter! By the way, grabbing a frame near the just welded corner with your bare hand gets your attention ... ask me how I know!

6. We hung the doors on their hinges, then took 0.020" sheet aluminum cut a bit oversize and marked it to fit the door frame with a lip onto the airframe that extends about 0.375". Marked the inside of the skin against the door frame and then measured an inch inward from the top half and marked out a side window. Cut it out with a dremel. The corners were a bit tricky, so the solution was to mark a curve using a compass and then using a dremel to cut in to the line and then cutting the slots out to make a rounded corner.

5. The cabin doors are made of 0.75" square 4130 tube cut so there is 1/8" clearance on all sides except for the hinge, obviously! We had them cut to fit and I took them to the welders to get them done as my

7. You may remember that I had hoped to have started balancing my flight controls by now. Well, hope springs eternal! I am now hoping to get at this necessary step by the end of September, but we'll see how things progress.

Are you building, overhauling or upgrading your aircraft? Send us a quick update on what you're up to and we'll share it with the members in our next newsletter!

