February 2020

WAYPOINTS

President's Message

Good day everyone,

So here we are, first official newsletter of the new year, and we have lots to talk about! Over the past month or so there have been a number of exciting developments.

In January, Jack Dueck, John Mader and myself met with staff at the Art Smith Aero Centre for Training and Technology (the SAIT campus for AME training) to discuss bursaries and Sport Air workshops, the two topics are related. We discussed continuing bursary funding through EAA Canada, hoping that in exchange they would provide us with space for our workshops. Great news, Jack recently confirmed that SAIT has agreed to provide us with three labs and one classroom. We will be announcing the dates in the near future, hopefully by the next meeting.

At the last meeting we briefly discussed the idea of adopting an EAA based website for our chapter. Garry Wright, Jeff Seaborn and I sat in on an EAA webinar explaining how it works and what it can do for us, Garry has been working on it since then and has made good progress. It sounds like it should be relatively easy to access and manage, we will be looking for someone to assist Garry with maintaining the site. Even I understood the basics of the program, so it really doesn't require a real "techy" person, so please consider helping out. You can check out the website as it develops at https://chapters.eaa.org/EAA1410 .

Another exciting development, EAA Canada Council has made an agreement with SmartPilot to be able to present a biannual flight review. It has been approved by Transport Canada and is being offered to EAA Canada and the Canadian Chapters to use as a recurrency training tool and a Chapter marketing tool. We are planning to host one of these events very soon, again we hope to announce the date at the next meeting. More details next week.

Besides the discussion these topics will bring, we will also talk a bit about our plans for the upcoming year, which will include ideas for flying events. I have a few suggestions but I would really like to hear what the members have in mind, I know there are lots of good ideas out there.

Our presentation for the next meeting will be a mixture of topics. We have a few short videos to show that relate to airmanship, I know they will make everyone think! Also, Guy has agreed to relate his experience with IFR/VFR scenarios and will offer some excellent suggestions regarding procedures that many of us can put to good use.

In this issue of the newsletter, VP Kelvin has provided us with an excellent update on the Zenair 601 project. Hopefully we will have a bit of time to talk about it at the meeting.

See you all Thursday!

BOB KELLY`S UNCLE - FRANK KELLY

--- by Clark Seaborn January 2020

Most of our chapter members are unaware of the " aviation DNA" possessed by our chapter 1410 member Bob Kelly. Bob is a very quiet gentleman, now in his 80`s, who attends chapter meetings, who used to travel to Oshkosh in his motor home accompanied by his trusty dog. Bob is retired from a career in the oil patch, where he drilled wells in the cold frontier of Northern Canada, or the sweaty jungles of South America. He owned and flew a Piper Tri Pacer in the 1950`s.

Bob`s Uncle Frank I first met at a Calgary meeting of the Canadian Aviation Historical Society about 1980. At our introduction I discovered that he had retired from Air Canada in 1972 and moved back to Calgary from his last posting in Vancouver. At one of these early CAHS meetings Frank presented a slide show of his early career, I made an audio tape of this presentation. His name seemed a familiar one from an old copy of Canadian Aviation, dated 1936. I brought this vintage magazine to the following meeting, and pointing to a magazine article, asked him, are you the Frank Kelly crawling around a hole in the Arctic ice which was devouring a half submerged Junkers W34? Yes, that was me, he replied? At that time I was flying a newly restored 1933 Waco Cabin aeroplane. It seemed I needed some of his aviation knowledge, and he liked to be around old round engines. So we became fast friends.

Frank was born in Windsor Nova Scotia in April 1910, and moved with his family to Calgary at the age of 8. Seeking a job and career in aviation he rode his bicycle from his home at 303 6th Street SW to the Calgary Flying Club which was then situated at the Banff Coach Road aerodrome. The flying club was similar to clubs across Canada at which the federal government had provided a Gipsy Moth free to encourage flying training in Canada. Frank started his career there as an aviation mechanic. Some two years later he moved to the Calgary Municipal Airport which was newly created at Renfrew Field. It was situated on the south side of 16th Avenue NE in the community of Renfrew- it featured much better runway choices for Calgary wind conditions.

A Calgary Herald article from September 19, 1929 features a photo of the first sod turning for the Rutledge Hangar on that site. The caption reads, . .

“to Frank Kelly, mechanic with the Rutledge Air Service, falls the honour for turning the first sod for Calgary`s first permanent hangar. . .. The honour was bestowed unanimously by all the members of the Rutledge company upon Frank, the congenial prop spinner and general efficiency expert, usually unhonoured and unsung depend the reliability of the motors as they rip the air.. . .” The Rutledge Hangar still exists as a boys club, in the SW corner of the athletic field.

The camaraderie and enjoyment that all people had of hard working Frank , as expressed in this news article was typical throughout his career, his toughness, and his good nature and humour followed him throughout his life.

By 1931 business was slow at the airport, and a Radium strike at Great bear Lake enticed Frank to move there with a couple of pilots and Curtiss Robin aeroplanes, CF-ACJ and CF-ACP. They worked there for about a year and a half, in part flying hay into Peter Pond, and flying fish out from there. By then in the depths of the depression, business just ceased to exist. It was then that Frank joined Canadian Airways, the largest aircraft operator in Canada, and teamed up initially with pilot Archie McMullen and his Bellanca Pacemaker, flying the mail down to Aklavik and all over the Western Arctic. Frank served as the air engineer on the flights, facing the same risks as the better paid pilot, and doing much of the bull work to warm the oil and engine prior to flight, loading freight, jacking the frozen skis free of the ice, and performing engine and aeroplane maintenance with frozen fingers whenever needed.

Frank was at Aklavik when Wiley Post and Will Rogers came through on their attempted circumnavigation of the earth in 1935, in fact Frank`s photos may be the last of that famous duo who crashed departing Alaska a day or so later. Later in 1937 Frank was involved in ferrying gas down the MacKenzie River to assist the massive search effort for the Russian Levanevsky crew lost over the pole. Frank charmed us with many stories about that pioneering part of his career.

Frank met and married his wife Marion in 1939, and from then on his physique became not so trim. Early bush photos of Frank typically show him standing on his aeroplane float holding a newly caught fish dinner.

In 1937 Frank , seeking a slightly more secure life, hired on with Trans Canada Airlines in its formative year. There, for the following 35 years he serviced larger and increasingly complex aeroplanes and their engines- the Lockheed 14`s and 18`s, DC-3`s, North Stars, the Lockheed Constellation, then finally into the age of the first jets.

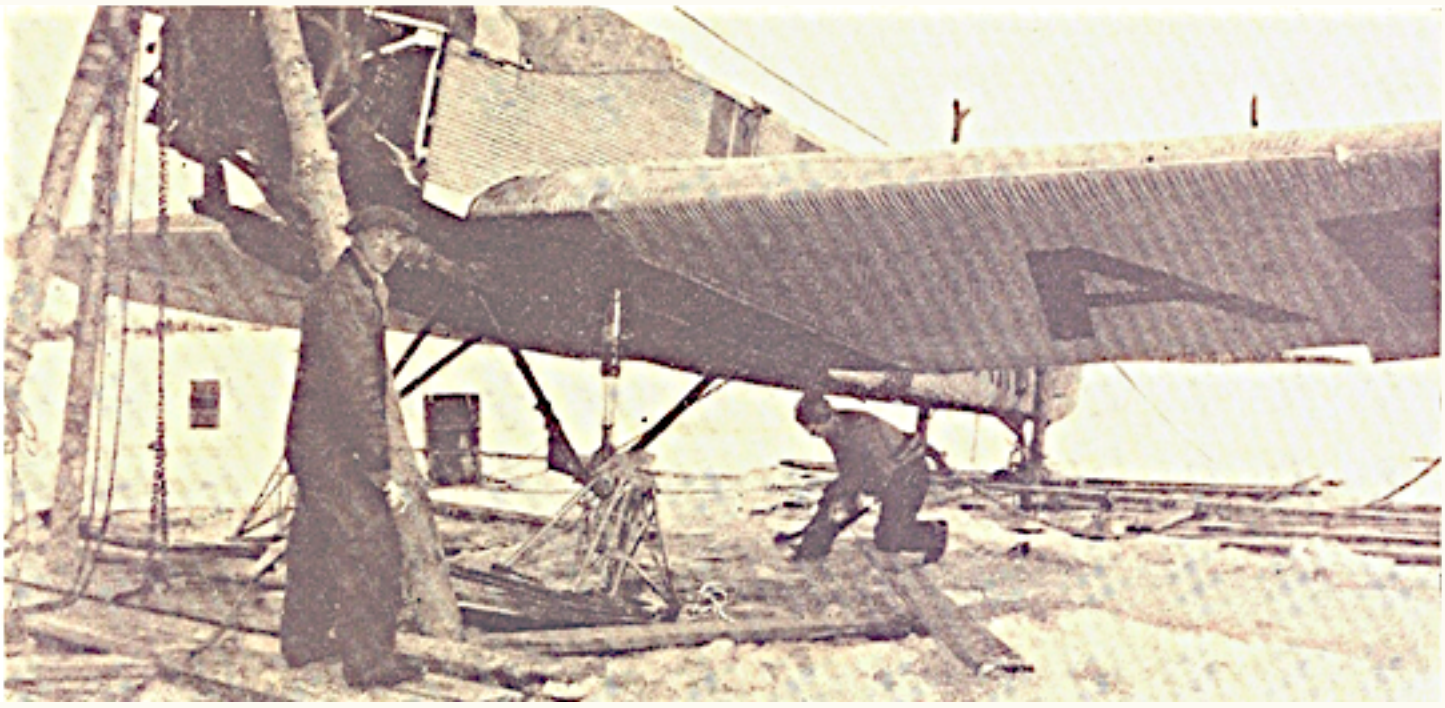
The difficulty in servicing the Wright Turbo Compound engines of the Constellations, the most complex mechanisms devised by man in the 1950`s, left an indelible impression on Frank. This lifetime career of maintenance nightmares wasn`t going to be repeated on Frank`s retirement home.  His home in Calgary`s Braeside district was a beautiful arrangement of spruce trees, juniper shrubs and gravel-no lawn to cut, no hedges to trim. . .

In the early 1980`s I flew frequent flights to Edmonton Muni on business, taking my 1933 Waco and passing over Franks house prior to letting down into my Priddis base. Now in his later years his wife Marion frequently commented about Frank`s deafness, years of pounding pistons might have caused a little hearing damage. On one occasion passing over Franks house, I pulled off the throttle a couple of times, simulating the noise of a faltering engine. I leaned over and looked out the side window, and 10 seconds later, running out of the front door of 444 Bracewood Crescent was the stout form of Frank, looking up in the sky to find the aeroplane in peril.. There was nothing wrong with Frank`s hearing

I am very grateful for the lessons learned from Frank. One day he took me into his basement to show me something in his toolbox. As he opened this time honoured chest I was amazed to see all of his essential tools, tied together in pairs with string- like a baby`s mitts. This care and attention kept these essential instruments of his trade from falling into an icy lake as he perched precariously over a floatplane engine. His bush beginnings were still evident.

On another occasion he showed me how to lap valves on a radial engine without having to pull a jug. On yet another occasion he laboriously tutored me for several hours to make Navy 5 Tuck splices in control cables. This time honoured and authentic method of making cable ends has since been repeated by me in about 100 instances in a few old aeroplanes. Like I said, I am very grateful for Frank`s lessons.

You might recall my mentioning the slide show presented about 40 years ago- well the slides went missing. Following Franks passing in November 2, 1990, and then the passing of his wife Marion and his son Tim a few years after that, those old aviation pictures that delighted an audience are nowhere to be found. I have the audio part of the presentation and would really like to synchronize the audio with the photos. Bob Kelly and I have searched, asked questions at many possible sources, and so far no clues have surfaced. If anybody in Chapter 1410 has heard of these slides, we would be delighted to bring the voice and experiences of Frank Kelly back to our meeting. In the meantime I am delighted to include a few of Frank`s photos in this newsletter.



What Happens When Trouble Comes

--- transcribed from Canadian Aviation, 1936

Even in the best regulated families, mishaps occur. As Bobby Burns used to say, “The best laid plans of mice and men gang aft agley”.

But the real interest in the story is what a well regulated family does when mishap occurs, and this story is going to relate what happened after Supt. W. R. May, of Canadian Airways Mackenzie division went through the ice with the Junkers CF-ARI at Fort Chipewyan, NWT, on December 12 last. His mishap happened while taxing to the shoreline, immersing the undercarriage and lower part of the front end of the fuselage. Complete immersion was checked by the low wing structure characteristic of the Junkers aircraft.

Engineers A. D. Goodwin and F. Kelly were assigned to the task of salvaging the machine. A job fraught with much risk and keen discomfort because the ice in the vicinity had become thin from below and each day someone fell in the water, with the result that much time was spent in changing to dry clothes, thawing out, etc. As the water was 20-feet deep at this spot, and the current was swift, ropes were tied around the waists of the engineers as a precaution against being pulled under the ice.

First thing to do was to erect tripods from which to swing block and tackle. Owing to the thin ice, it was necessary to lay planks all around the machine and on these the engineers stood as they worked. One tripod was set up at the front end and the other at the tail, the ends of the spruce poles resting on the bed of the lake.

The machine was then gradually hoisted out of the water, but it could not be moved shoreward until the ice thickened. This was a slow process because of the mild weather prevailing, and because of the swift current underneath. At this stage they were joined by T. W. Siers, superintendent of maintenance, who had come on from McMurray. Examination disclosed that the parts damaged by immersion and ice were the rudder, the tail plane, and the trailing edges of the wings, while some damage had been done to the longerons at the rear end of the fuselage during the salvage work.

The use of an empty warehouse was secured, part of the end of which was removed, and a heater installed. The owner of a local restaurant, a Chinese, obligingly loaned a Delco lighting plant and also attended to the physical comforts of the trio. The usual daily procedure at this period of the work was to flood the ice and work on salvage during the daytime, while the evenings were occupied in repairing the dismantled units.

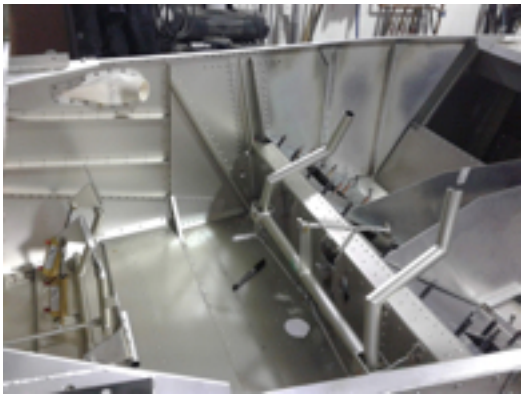
Zenith 601 XL-B Build Project Status Update -February 2020

By: Kelvin Downs

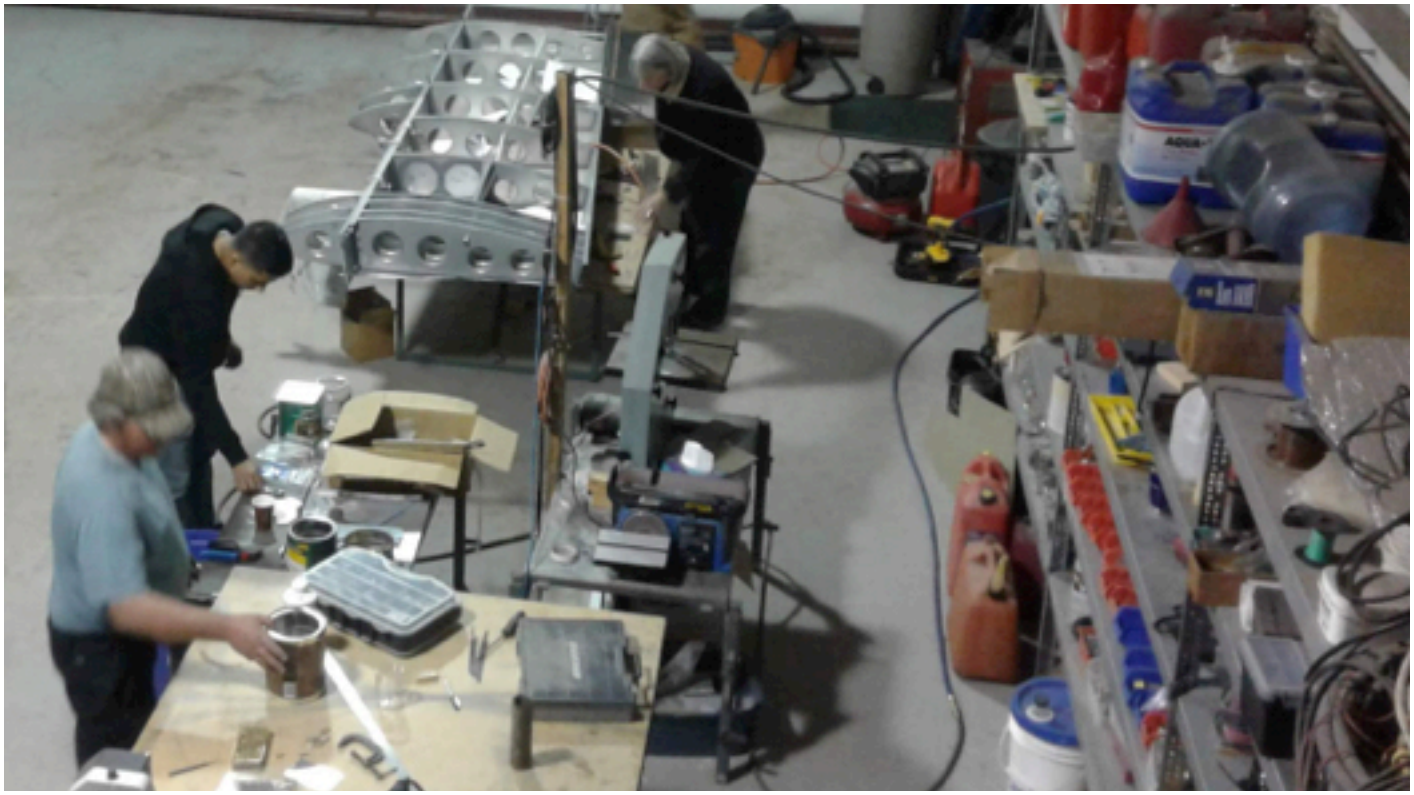
A journey of a thousand miles begins with a single step. – Lao Tzu

Success is not final, failure is not fatal: It is the courage to continue that counts. - Winston Churchill

Perhaps these quotes are a little dramatic in their relevance to building an airplane unless perhaps you were the Wright Brothers building the first airplanes or perhaps you're a member of the Zenith 601 XL Build project team and you have just spent the last 6 weeks installing the seat and baggage compartment structure within the fuselage. Yes at times it did appear as though the end of certain tasks were far off in the future. But we as team have persevered. It has been almost a year since we started our project full of optimism and hope that we would be taking to the wild blue yonder in a year's time. Yes it has been almost a year since we started our project. What happened? Airplane building happened and what a wonderful journey it has been. Our original group of 7 minus 1 then plus 1 (7 members) and some dedicated volunteers have faced numerous challenges and learning opportunities that have definitely brought us all closer together over the last year. It all began with Jack Dueck's vision to gather a group of people as an EAA Chapter 1410 initiative to introduce the idea that we could build an airplane. What a preposterous idea. Who builds their own airplane? Well Jack does and he has built a few airplanes in his day.



How do you turn a vision and perseverance into an airplane? With a group of people that bring labour, enthusiasm, initiative, knowledge and finances to the act of building an airplane is a key ingredient. Our group is a diverse gathering of experienced builders, pilots, non pilots, young, old, partners, and volunteers. Our youngest participant Lucy is 11 years old and our oldest is Jack with an age spread of somewhere around 70 years. That's diversity! In addition to our vested partners we are very fortunate to have some dedicated volunteers who show up on a regular basis to help. These volunteers include Doug Eaglesham (Chapter 1410 guru on almost everything), Ron Gardner (has the tools that Jack doesn't), Lucy Barlow (11 years old, smart, keen,



enthusiastic, and someone to tease) and our latest participant being Ken Martin (experienced metal worker). How fortunate we are to have this talented group helping out. Our vested partners are Jack Dueck, Debra Dueck, Vance Lucas, Kent Barlow, Sukhman Singh, Ethan Chan and Kelvin Downs.

An important first step that we took as group was to undertake some fairly detailed project planning which included a set of bylaws, cost estimates, schedules, regular financial reports, effort hour tracking etc. Having a plan is necessary step to stay on track and eliminate any misunderstandings by the members.

As a group we have become a close and cohesive family that look forward to gathering every Saturday to build an airplane and to socialize over beers after a hard day's work. What more could one ask for?

People and friendships are important at least to those involved but I am sure many of you want to know about the airplane. What progress have we made? Are there any lessons that we can pass on?

Our building started with a Zenith 601 XL kit that had been started, but one that had stalled for a number of years. One of the challenges that we faced was that although the work had been done well, a fairly major modification was needed to the wings, centre spar and fuselage as defined by Service Bulletins associated with an upgrade in order to comply with FAA and EU safety concerns.

One of the early decisions that we made was to change out the Lycoming engine that we received as part of the original purchase for a lighter more efficient Rotax 912 engine. We were able to source a used Rotax 912 and very soon after were able to sell the Lycoming with significant reduction of almost 100lbs in weight.

For all those who have been involved in building an airplane I am sure can appreciate that there are many decisions and choices that are made along the way. Some choices are tougher than others. How much effort is necessary? How much money is required etc, but in the case of a different engine it was an easy decision to make.

Over the last 9 or 10 months since making some early decisions on engines, upgrades, becoming familiar with drawings, parts, building processes we have continued to make progress. Wings, ailerons, flaps, stabilizer, elevators, tail rudder are now complete. We have spent a significant amount of time (probably close to 5 months) on the fuselage, aligning, installing centre spars, flight controls, seat, baggage supports etc. Our latest progress has

been installing of landing gear, engine, and fitting of stabilizer and tail rudder. It is definitely starting to look like an airplane.

Next Steps:

It is very exciting to see all the parts and pieces starting to fit together, but as Jack has told us many times when you think that you are 80% done there is still 80% left to go. The work becomes more detailed and takes more time. But we are not deterred, we will persevere.

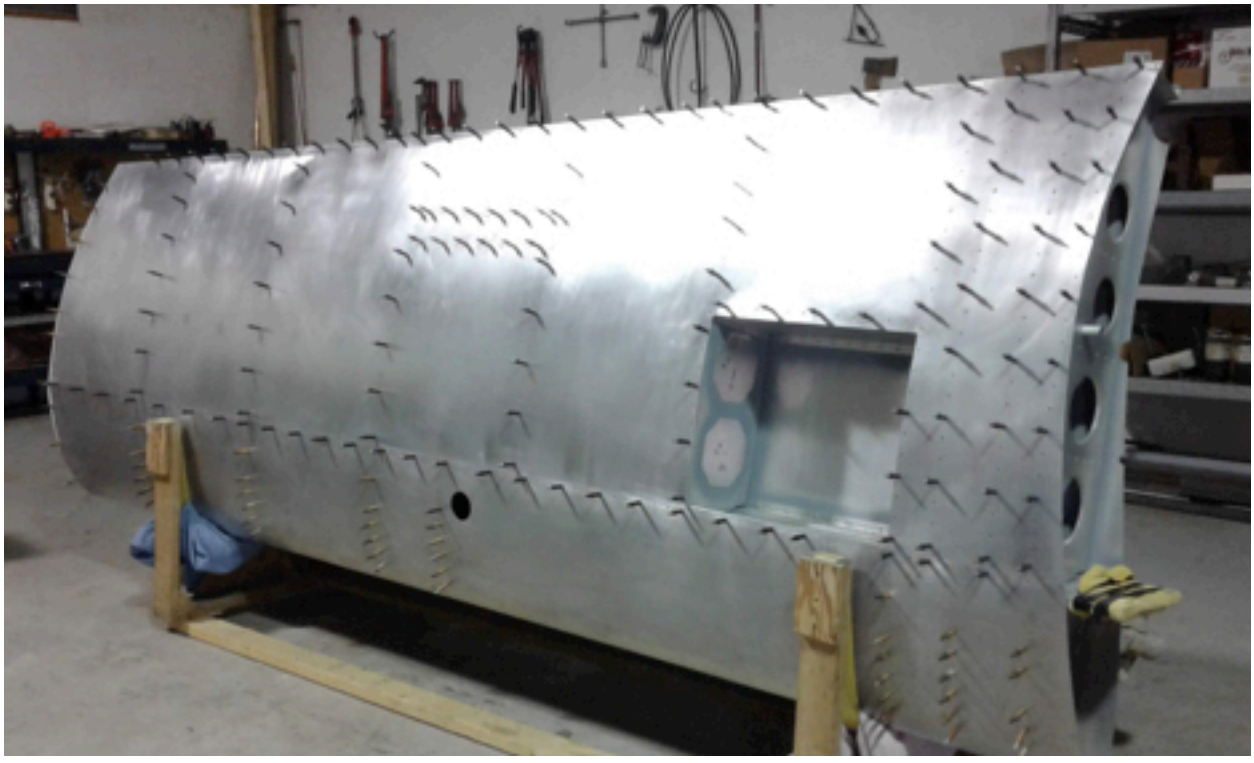
Our next most immediate steps are continuing with engine installation. Doug Eaglesham has been a big help. We have also begun installing the top skin and fitting of the canopy components. We have had slight setback after trial fitting the canopy components, realizing that our upper longerons had been reversed at the very early stages. The longerons are being replaced with only minor rework. All part of building an airplane.

We are currently in the process of researching and making decisions on the avionics. We have been fortunate to purchase some Dynon Skyview screens and autopilot components that Nico Meijer made available to us from his recent upgrades. Thank you Nico. Decisions that we still need to make are on the Engine monitoring System which will most likely be a Dynon EMS that integrates with the Skyview system. Other components such as radio, transponder, electrical distribution and panel layout are still being researched.

We have ordered our upholstery and have been reviewing some paint schemes. Upholstery and paint discussions sound very close to flying.

So of course the most important question is when do we fly? We believe that we should be able to start flying our 25 hours for certification by July (Yes 2020).

But before we fly there are some additional considerations beyond finishing the airplane. These considerations are the establishment of a Flying Club, hangar space, etc. We have begun drafting the bylaws and cost estimates for operating the aircraft. In the meantime some members of our group are preparing to be future pilots of our airplane by taking ground school training in anticipation of the build completion. The end and the beginning of our journey are in sight. Perhaps this project will encourage and inspire other groups within our chapter to take on future projects. We will continue post future updates of our progress on our new Chapter website. Stay tuned.



WAYPOINTS

Newsletter of the EAA Chapter 1410
High River, Alberta, Canada

www.eaahighriver.org

Who We Are

We are an enthusiastic group of like-minded individuals from various backgrounds who share a passion for recreational aviation in Southern Alberta and we offer the chance to meet others who combine fun with learning.

FOR SALE

Zenith CH250 project. Closeout inspection done. Comes with brand new iCom A210, Garmin GTX320, Dynon D60, Garmin 396 and RWS engine monitor, plus an assortment of AN hardware and tools. Email Robert Fridman for more details (ch250calgary@gmail.com).

Hartzell C2YR-1BFP/F7497-2 72" Blended Airfoil Propeller. Looks factory new! This Scimitar Hartzell prop was bought new in May of 2013 and was totally overhauled in November of this year. It is a "0" time certified propeller that looks like it just came from the factory because most of it did. $9000.00 or best offer. Gary Abel 403-901-7876

How to Join Our Chapter

Attend our next chapter meeting. Ask for anyone and they will be pleased to help. All the required forms will be made available for you to fill out. You must be a current member of EAA International, so please have your EAA membership number. If you are not a member, you can join EAA at the meeting.

Contact us by post at
EAA Chapter 1410
Box 5280, High River, Alberta T1V 1M4
Or by email at
president@eaahighriver.org

For registration forms contact the treasurer (see the list of the executive below).

Please update your web member profiles

On our web site, in the member's section, there are many pictures and profiles that are quite dated (aluminum parts which are now beautiful flying machines). The updates should be sent to the webmaster (webmaster@eaahighriver.org) Please supply: Name, project or aircraft, facts about your project and area of aviation interest.

EAA1410 2019 Executive		
President	Doug Eaglesham	president@eaahighriver.org
Vice President	Kelvin Downs	vicepresident@eaahighriver.org
Treasurer	Vance Lucas	treasurer@eaahighriver.org
Secretary	Doug Robertson	secretary@eaahighriver.org