

## CHAA Operations in the Face of COVID-19

Over the past few years CHAA has faced some pretty onerous challenges. One came from the cleverness of the founders who a few decades ago purchased several Harvards in good condition, with quite low time engines. That does appear to be wise, but that plus the longevity of the engines when cared for so well by our maintenance volunteers brought us to having to rebuild several engines over a short time period. This, three years ago placed before us a bleak outlook. But with the support of the members, pilots digging a bit deeper into their pockets, and Ray Whittemore and Sandra Sparkes making a substantial donation to complete the BZT restoration, we did get through that bleak period. Sure feels good to have most of that behind us.

Coming out of this we had a couple of mishaps to airplanes including WLH which tried to explore greener pastures, thankfully without injury to anything other than pride. It now awaits eventual restoration, but not in the foreseeable future. UFZ did one of those dreaded ground loop things, something all Harvard pilots are cautioned about and have in the back of their mind on each landing - back there for respect, not for practice. Thanks to the unfortunate pilot, we have much of the funds to repair UFZ and will clean it up so that in a year or two the *new look* UFZ will display its original authentic colors - the Shane standard - when it flies again in a few years with a newly rebuilt engine, of course. Just a little bug to tuck away.

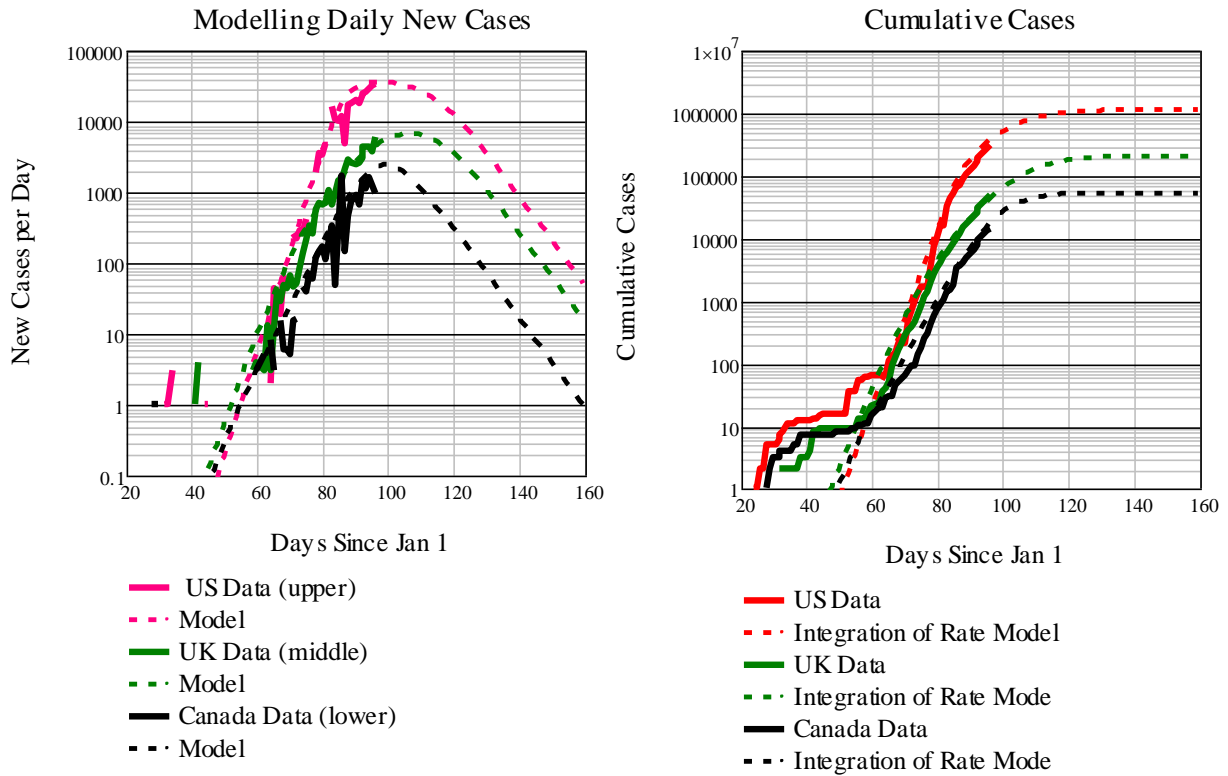
We managed to get through all of these challenges and were in a reasonable financial position to start the 2020 flying season. We were moving our focus from engines & dollars to thinking about the overall operations: spreading our name far and wide to keep these historic airplanes, and the memory of their crucial role, flying. We hoped to update our website to help us achieve that and to attract volunteers to continue doing the many things required to keep it going.

All in all, it was looking pretty good - not easy - but, pretty good. Life of CHAA looked good.

And then, just when we could breathe a little easier....

We are hit with COVID-19. The whole country is hit with this pandemic - out of the blue, a shocking surprise - to most. But some lowly little nerd who goes by the name of Bill Gates who all of us know gave a TED talk on this in 2015 which is worth watching. And just this past October he funded a simulation, called Event 201, of a pandemic and the response to it. The outcome was not good, backing up what he talked about in 2015. The timing was eerie! For one month later it started for real. The test is now for real. We are in a pretty tight shutdown now, one likely to go on for another month or so. I have been doing data analysis on this for the past week or so. Driven by two things: concern for family and friends, who are spread out from BC to Ontario and the UK, and my interest and ability in analysis, that amazing world of mathematics and physics.

The following figures give the basic big picture. I will spare you the mathematics part, but it is pretty solid.



The left plot shows the new cases for each day since the start of the year. The virus arrived in these countries towards the end of January, about day 30. It bounced around a bit, just a few cases, not much to consider. But around day 50, well into February, it started to grow in that exponential way that investors look for. But this growth is not good. The solid lines are the actual case data, the dashed lines are my fancy model which fits the data and then projects how it *may* go. The arrest of the growth and transition to decreasing cases depends on what we all do. Our governments at the federal and provincial level have been working this hard for the past few weeks. If we all do what is asked of us, the above curves are the best we can achieve. If we do not, the case counts will be a lot worse.

The Harvards were crucial in WWII in their training role. Everyone in Canada and the other countries pitched into that terrible event. This pandemic is about the biggest challenge that has come our way since WWII, and it will take all of us doing our part to stem it. The models on the above figures assume we are all doing that. As these show, the growth of the pandemic takes off from only a few identified cases. Just a few. But this virus spreads easily. Fortunately most of the people that become infected have only mild effects, but about 15% have serious effects and about 1-2% die from it.

The curves in these plots also give us guidance on what needs to happen. The number of cases must be brought down, below 10 per day in all of Canada, and those few have to be cornered. If the projections above are accurate, we should expect the case count to go below 10 per day in

Canada in about 40 days. 40 days! Seems like a long time, and it is. But nowhere near as long as the Harvards were used for in their original role. This will be hard on all of us, but we just have to do it. That will lead us to then play our respective parts in the recovery of our economic system. As challenging and foreboding as that looks from now, we will get through that as we have got through previous wide scale challenges. By doing our part we will at least be here to do it.

So we are in pause mode for another 40 or so days. And then.., and then..., we enjoy the peace of that Harvard “roar” and what it means to our world of societies.

Our schedule changes will remain tentative as we watch the progress against the virus. And the Board will continue with its current makeup, to the next AGM whenever we are able to hold that.

In the meantime, I thank all of you for your support of CHAA. And we can appreciate with added meaning the role the Harvards played.

Please remember to watch our social media channels for other news and updates via Facebook, Twitter and Instagram. Plus, remember that through CanadaHelps, CHAA members or any member of the public is able to conveniently make a one-time or recurring donation online via the direct link. We have a charity profile at: <https://www.canadahelps.org/en/charities/canadian-harvard-aircraft-association/>. We appreciate those who have taken part in this program to date and look forward to continued donations in months to come.

I wish all of you the best through the next few weeks, and look forward to seeing you again waiting for great breakfasts at CYTB.

Sincerely,

Bjarni Tryggvason

President, Canadian Harvard Aircraft Association