



Yes, the long-touted IPMS Canada Decal Bank is now up and running. (Sorry... no ATMs yet.) To make a withdrawal or a deposit, or just to see how it all works, go to the IPMS Canada website. You'll find it explained right there. As this is a new feature, we expect there may well be things that need to be tweaked or changed. So, if you find something confusing or difficult to understand, please let us know so that we can make some mods.



Yep... it's a good time to heed the immortal words of Sgt. Esterhaus. Use some common sense, get your info from reliable authoritative sources, don't hoard, stay home, stay safe, and build some mod-

els. For the longest time we modellers have been the nerds of the hobby world, seen as being socially awkward. While others are out playing golf or softball, or working out at the gym, or on an outing with the bicycle club, in dance class, or meeting up at the pub, we barricade ourselves in our subterranean work spaces gluing little bits of plastic together... ridiculed like Professor Frink or the Comic Book Guy on The Simpsons. Well, who's laughing now? (Actually, no one I hope.) It seems building models has turned out to be the perfect pastime for self isolating and self quarantining. So keep up the good work. This will all eventually pass, and when it does you will have some great new models to show the guys!

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It has finally gotten to the point where IPMS Canada is considering going to an online-only renewal method. This means, if it is implemented, that members would no longer be able to join or renew their memberships by sending a cheque or money order to our PO box. All such transactions would be done online via our website. Actually, that's even easier than mailing payment.

Why are we considering this? For one, it's becoming more difficult to physically access the boxes at P.O. Station B. Someone has to regularly travel into downtown Ottawa, find a parking spot, enter the post office, and collect the mail. And there's no telling how long the post office will actually be open in the future as many facilities are going to reduced hours. It's also much easier for us as far as the banking and bookkeeping goes. It's easier for you too, as you don't have to scrounge an envelope, write a cheque (for which you'll incur a charge), or pay postage. And you're already doing it if you buy any hobby supplies online.

If you have any opinions on this, one way or the other, let us know. We'll be letting *you* know the outcome once we work out the details.





National Director

Bob Migliardi

Questions & Feedback

The material on the updating and promulgation of new Chapter guidelines in the last *beaveRTales* has generated some interesting feedback and questions. Without any specific member attributions I'll try to address some of the comments... especially as it seems there are some rather glaring misconceptions about how IPMS Canada operates.

"...Take the budget you use to go to the US Nationals and use it to attend Canadian shows across the country. As there are going to be few potential new members at the US nationals compared to shows in Canada it would be a much more effective use of funds and more appreciated by club members."

OK... let me set the record straight once and for all. **NO** IPMS Canada money has **ever** been used to send **anyone** to the US Nationals, or to any other model convention, show, or contest! Any members of the National Exec that go to these various events do so on their own dime. For my part I have attended various US Nats, regional and local events, as well as the IPMS UK Scale Model World, and have always paid out of my own pocket. I have no idea where this old rumour comes from, but much as I hate the phrase, it's Fake News, folks.

"...Hand out IPMS flyers at model shows and/or have a booth with someone there to help explain benefits of IPMS membership."

This is often done. It's easier if some Exec members are attending or if local national members or a friendly vendor volunteers to help, but if not we try to request that material is at least put out for any interested parties to take.

"...Have an introductory "deal" for new local club members so that they get a discount on IPMS membership when they join."

Hmmm... an interesting point and something worth looking into. Of course, there already are a few chapters that subsidise national dues for any of their local members who join.

"...Sponsor the "Best Canadian Subject" at major (or all) shows, (if possible) have someone from

IPMS Canada to present it and then feature those models in your publications. This would support local clubs directly, and recognition in your publications would give these awards extra value for the winners and publicity for the clubs' shows."

IPMS Canada does present a "Best Canadian Subject" award at each US Nationals. You read about it each year in **RT** (if you're reading your **RT**). There is also one presented (thanks to member Charles Detheridge) at IPMS UK's Scale Model World each year. Also, any IPMS Canada local chapter requesting sponsorship is provided funds, though what category our sponsorship covers varies from show to show.

"...Initiate a membership "drive" at major clubs with personal appearances at meetings. Most have never even seen or met the executive members."

Another interesting idea. Personally I'd love to speak briefly about IPMS Canada and the benefits of membership. I just don't know how I could justify spending the money to travel to Vancouver or Halifax or Edmonton for a 20-30 minute presentation. It's the reason we have to rely on the local chapters and national members who belong to those chapters to help promote national membership. And some chapters have done this admirably... and some have not. We'd welcome any practical suggestions.

"...Make the National executive responsible to members. Have open elections of executive (or at least max two year term of existing executive with rotation of leadership role within team) and suggest clubs help with nominations. With internet meeting apps there is no reason a geographically diverse executive wouldn't work."

I understand what you're saying. In the April 2018 *beaveRTales* there was an article posing this very question, asking among other things: *"... Should IPMS Canada operate with a constitution, by-laws, and an executive elected by the membership as, for example, IPMS USA?"*

We received feedback from about five or six members, some of which we presented in the subsequent issue. All said the organization should be kept as is. Still... perhaps a consideration to revisit at some time in the future. As currently constituted, the National Exec has members in: Ottawa; London; Waterloo; Petawawa; Edmonton; and Bellvue, WA.

Promoting the Hobby

"...Help support new/young modellers by sponsoring a show's Junior Best Canadian Subject award

with winners receiving free membership to IPMS Canada and recognition in your publications.”

I concur that we should help support these new, younger modellers coming into the hobby. This is why when IPMS Canada is asked for sponsorship support we always try to sponsor something akin to the “Best Junior Award” (possibly in addition to others), if it’s available.

“...Help support local clubs’ public exhibition of models outside of model shows. Some clubs have been able to get displays at local venues for Remembrance Day etc. Promoting these ideas to other clubs might help generate more.”

Agreed. How might IPMS Canada help the chapters promote their various shows, contests, and exhibitions? They can, and do, place announcements on the IPMS Canada Facebook page. There’s also a listing of coming events on our website where they can announce their event and link to it. And *beaverTales* is always looking for material on coming events for its pages. One thing to note here is that the chapter has to let us know and request our help. If we don’t know what’s coming up, we can’t announce or promote it. Also, once the event is over and done it would be nice to receive a short write-up along with some photos so that we can show all the members what it was like.

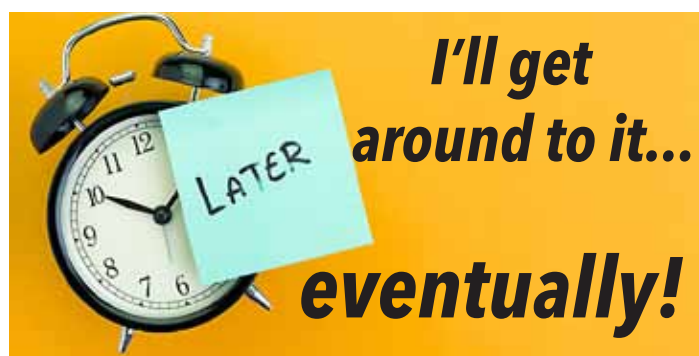
Guidelines Update

“...Some question why this is included at all - what issues suggest to you that the current guidelines are inadequate or in need of revision? Also, responses to “...we want to hear how your chapter works, and comment on what would make it bet-

ter” are likely to be so diverse that commonality could be elusive at best and dysfunctional at worst. Some of us belong to multiple clubs and find each are unique in the way they function and what they need.”

Some chapters have drifted from the old, existing guidelines, and this is an opportunity to get everyone on the same page again. For example, the old chapter guidelines state that the chapter president must be an IPMS Canada member. Well, there are some chapters where this is not the case. Yes, that’s right... the president of an IPMS Canada chapter is not even an IPMS Canada member! I assume this happens primarily because new people are elected to the job who may not realize this is a requirement. Some chapters change their executives and contact persons without notifying IPMS Canada, and then when we try to contact the chapter we get no reply and don’t know who to deal with. A uniform set of guidelines will create an even playing field and hopefully make communication easier. As for soliciting input on how a chapter functions... what happens at typical meetings... what the membership dues are... where and when they meet, or whatever. This is not to produce a common structure or modus operandi within and among chapters. Perhaps there are chapters that would find some of the information useful for their own situations. I don’t really see how just asking for information could be detrimental.

Finally, I’d like to thank those who took the time to send their feedback. It’s much appreciated, and will all be considered and hopefully be used to build a better IPMS Canada.



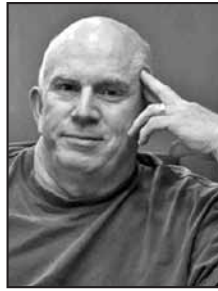
OK... the last issue of **RT** was a bit late going out. Part of the problem was that we were waiting for and dealing with a number of late renewers. This has to be done before running the labels, printing renewal notices, new and renewal membership cards, etc.

And each time an overdue renewal comes in it puts a hold on the process.

The “official” cut-off date for this last **RT** was February 1. Technically, anyone who renewed after that date should not have received the latest issue. Not wanting any procrastinators to be unhappy, John usually bends over backward to remind the late-renewers, and remind them again, and accommodate them if at all possible. But please... will you procrastinating renewers do **your** part and help with the process?! When you receive your email notice asking you to renew, or receive a printed renewal notice in your **RT**, please do so without delay, or you **WILL** miss an issue. Renewing your membership ASAP is quick and easy, and it will be out of the way.

Chapter & Member Liaison

Kerry Traynor



Greetings from *beaveRTales*, the new home for the Chapter and Member Liaison column. This is where you will find news for our members, the chapters and of course, my occasional ramblings.

The reason for moving my column, along with the National Director's column, was so that IPMS Canada could provide the maximum number of pages within **RT** to modelling articles. The editor of **RT**, Steve Sauve, continues to produce a top quality publication and he is looking to make it even better. By the time you read this issue of *BT*, we will have been through a couple of weeks' worth of staying at home and social distancing due to the Covid-19 virus pandemic. This virus pandemic has caused havoc in the economy and people's day to day lives. I truly hope that everyone is safe and healthy. My wife is now working from home and as I am retired, I am spending quite a bit of time at the modelling desk. And based on what I am seeing on social media, I am not the only one. So perhaps spending more time at home has been beneficial in some way. As a friend recently quipped, "we modellers have been training all our lives for this."

So just what are we doing in 2020? I mean, apart from sitting around the house? As the decal sheets are always a big success, we are looking at producing a decal sheet for 2020. We have some ideas for subject matter, but we would also like to hear from you, the members. So if you have any ideas, please forward them along to us. Some conditions apply; one, the subject matter must be Canadian in some manner. Two, any ideas that you throw our way needs to be backed up with research documentation. Please understand that we simply do not have the people or the time to do the research.

We are also working on updating the IPMS Canada Chapter Charter. Our resident graphic artist is working away at that and hopefully we will be rolling this out to the chapters by the summer.

Along with the charter, we are also updating the guidelines that our chapters use to charter and maintain affiliation. The intent here is to create a closer

link between the chapters and the National organization. We are looking at ways where we can help each other in promoting the hobby as well as promoting IPMS Canada and the chapters.

One of our realities is that we have ONE stream of income; and that is membership dues. If we can generate an increase in membership, we can then increase the number of special projects for membership and / or increase the page count in **RT**. Currently, our financial contribution to the chapters is limited to providing sponsorship money to those chapters that produce a model show. IF we could see a significant increase in IPMS Canada membership, especially among the chapters, we could then talk about how else IPMS Canada could financially assist ALL of the chapters.

In January I sent out an email to all of the chapters requesting input from them as to how we can work together in making both IPMS Canada and the chapters better for all. Once I have all of the responses, I will be putting together a summary and then we can start putting together a plan. Hopefully...

One last thing; one of the emails we received from a chapter made comment about how IPMS Canada misuses its limited funds. The National Director addresses these misconceptions in his column, so I won't repeat them here. However, I would like to confirm with you that 100% of the money we collect for membership dues is spent to the benefit of IPMS Canada membership. Every member of the IPMS Canada executive is a volunteer and we receive no compensation of any kind to sit on this board.


Till next time.
Kerry

Alan Constant writes:

"My father passed away a few years back and left my mother with approximately 200 unbuilt (mostly aircraft and armour) kits from the 1970's and 1980's. She would like to get rid of them all. Would you have any idea where she might sell them, or if we could put an ad in your newsletter. I can provide a list to anyone who wants one.



Anyone interested can contact Alan at: arcon4944@gmail.com



A Vacu-form WARWICK

by **Jamie Wilcox**

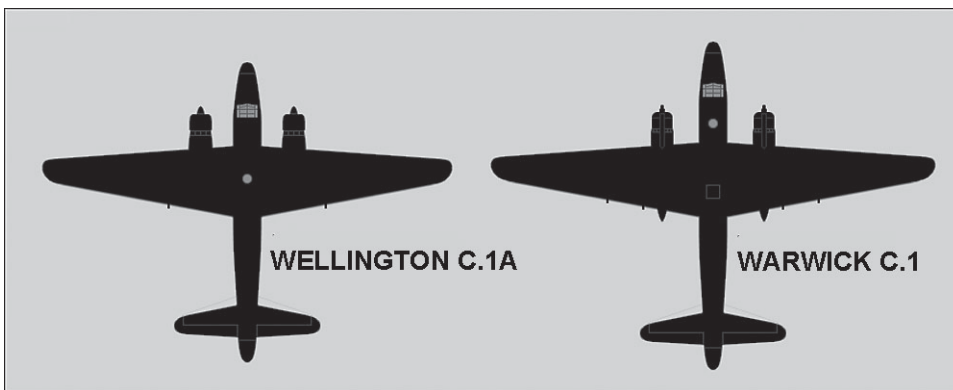
Anyone familiar with the Wellington will see the similarity to the Warwick. As I understand it, they could be said to be different versions of the same design. They shared geodetic construction and a cloth-covered framework. Comparing the basic bomber versions of each, the fuselages are virtually identical, except that a parallel mid-fuselage section was removed from the Warwick to make the Wellington fuselage. The Warwick's span was 96 ft. 8 1/2 in. compared to the Wellington's of 86 ft. 2 in. The nacelles were different, in that the Warwick's were below the

There are some pretty esoteric aircraft available in injection molded models these days. For example, the Armstrong Whitworth Albemarle is fairly obscure, but there is 1/72 scale injection kit of it. So, it is a little surprising that an injection kit of the Warwick is not available, at least as far as I am aware. Given the similarities with the Wellington, any manufacturer of Wellington kits would already have most of the information needed to design a Warwick kit. Having said that, I understand that AlleyCat is working on a kit in 1/72 scale. I recall reading that it is not expected to

be injection, or at least not entirely so, but I have been impressed with the quality of their other products and am hopeful for this kit.

This build was of the old Conrail vacuform kit, pictured in figure 1. Figure 2 shows the instructions which are pretty basic, especially in view of the number of variants that can be built. A build article of it in *Aircraft Modelworld* from June, 1988 said that the kit had

been around for some time by then! I don't recall when I got the kit, but it's been in the stash for a few



wing, while the Wellington's were mounted higher. There were also some differences in the shape and size of the tail surfaces. The turret fits were similar, except that the Warwick added a dorsal turret.

A major difference was in the engines. Being larger and heavier than the Wellington, the Warwick needed more power. Delays in finding suitable ones took the Warwick out of the running as a bomber, as the four-engined heavies came along. However, variants were used in transport, air-sea rescue and general reconnaissance roles. The total built of 846 is not insubstantial, but was far short of the 11,461 Wellingtons. These similarities and differences all came into play in modelling the Warwick.



A Warwick B Mk.I bomber



1



2

decades. Finding that article in a second-hand magazine reminded me of it. I thought it would be a good project for summer holiday evenings at the cottage where, with a few long sessions, I could have the parts whipped into shape for a quick and efficient build. It turns out that was wildly optimistic. As I got into it, I soon realized that it was going to take a lot more effort than first anticipated. So, to speed things up, I gave up on doing the ASR version with all its windows, lifeboat and aerials, and reverted to the original bomber configuration, which was somewhat simpler. Even so, it took way too long. I'm not getting any younger, and there are a lot of models that I want to build. So many kits, so little time!

Now, I'm not about to slag the efforts of those that labour to bring us kits to build. I appreciate them even if, as here, the results are

mixed. There is a lot to say for this kit. The vacuform parts, transparencies and injection detail parts are shown in figure 3. I don't have any plans other than Wellington ones to use for comparison, but the basic shapes and dimensions of the vacuform parts appear to be about right for the most part. I think that the vertical tail and the dorsal turret ring shapes are off somewhat, even after I took some steps to improve on them, and the location of this turret and/or the side crew door are out a bit. The major vacuformed parts are sturdy and well-molded, with a good thickness of plastic. Indeed, the thickness is such that it helped dissuade me from doing the ASR version, as cutting out all its side windows would have been a major chore. I noticed that, in one of the two build articles that I found, the reviewer cut them out, but didn't do more to represent the windows than cover them on the inside of the fuselage with the kit-supplied transparent material, which is like plastic food wrap. The other reviewer simply painted them on. I had ideas of fitting in clear styrene, backed by a representation of the geodetic framework that is seen so prominently through these windows. In hindsight, maybe I should have bitten the bullet and done as I'd first planned. It wouldn't have added disproportionately to the time that the build took. However, something would also have to be done to improve the lifeboat. It is the wrong length, falling between the lengths of the two sizes used, and would have needed a lot of detail added.

I must mention the surface detail. Because of the aircraft's cloth covering, the framework is prominent. The surface is anything but smooth. How the mold





vides options for the several engine types that were used or at least trialed on the Warwick, but the nacelles don't appear to be appropriate for all the variants. Also, I think that the nacelles as kitted fit way too high on the wing, more like the Wellington's. It took a lot of cutting, trimming, filling and sanding to solve this problem. I worked from photos and am not sure that I got all the panel lines and details right. Figure 4 shows the wings, top and bottom, with the nacelles in place. The wing tip formation lights were done by filing out the for and aft notches and gluing into place and sanding to shape pieces of clear plastic. These had first had little holes drilled into them and filled with red or green paint to replicate the coloured lights.

maker (I think the name behind Conrail was Gordon Sutcliffe) copied this for a vacuformed model is beyond me, but the result is pretty impressive, especially on the wings. That's not to say there weren't some flaws, mostly on the fuselage. There were a lot of small bumps, which might have resulted from air holes put into the molds to help suck down the plastic in the kit molding process. These were easily scraped away with a blade. More difficult to deal with were some pits and other depressions in the plastic. I had some success flowing thin putty into these and letting it level out, but didn't completely eradicate them. Unlike a kit with a smooth surface, this one was particularly difficult to repair because the prominent surface detail was so vulnerable to damage. Fixing one problem easily led to creating another. The wings, with their crosshatched framework pattern, were nearly impossible to sand except in frustratingly small areas at a time. The fuselage was a little better in that the visible framework was linear. Sandpaper wrapped around pieces of small-diameter dowel could be run back and forth between and parallel to the framework to smooth things out. The framework as molded was not a constant size or width apart, however, so it was definitely not a case of one (dowel) size fits all.

Perhaps the most time-consuming part of the build was, surprisingly, the engine nacelles. The kit pro-

Where the kit really suffered was in the detail parts. These included vacuformed engine cowlings and air intakes, injection molded engines, propellers, exhausts, guns, undercarriage and aerials, and the clear parts. They were discarded and replaced with parts from other sources. There's something about the process of finding such parts that I get a kick out of. I guess it's the thrill of the chase. This is where the similarity of the Warwick to the



Wellington really came into play, together with my assumption that, for efficiency, especially given the exigencies of wartime, unless there was a good reason to change something, the parts for the Warwick would have come out of the same parts bins as did those for the Wellington.

After a little online research, I picked up the Revell kit of the Wellington. The one I got was boxed as a Mk II, the Merlin-engined variant. No matter, as I wasn't using its engine parts. This kit reminded me of the Monogram kits of my youth which contained parts for several variants of an aircraft, leaving lots behind for the spares box after the build. It is a treasure trove, containing parts for several marks, with three different engine types and the associated cowlings and propellers, optional turrets, and a number of side window layouts. But I digress.

The cockpit and bomb-aimer's station parts were taken from the Wellington kit and installed in the Warwick. Eventually, so were the under-nose window, the nose turret, the cockpit canopy, the observation dome, the forward aerial mast and the rear turret. No worries... I have plans for the rest of the Wellington kit. Assuming that the Wellington kit is reasonably accurate, it speaks well of the accuracy of the Warwick kit that the under-nose and cockpit transparencies, in particular, fit very well with only a little work. The flare chute on the starboard side aft of the wing was made with plastic tube. Figure 5 shows the fuselage halves ready to be mated. Once they were, some plastic shavings that had been overlooked and left inside appeared and stuck to the inside of the canopy where I could not reach them to remove them. I assume that the culprit is static electricity. Coincidentally, I subsequently read of another modeller experiencing this problem. More often, the problem is static attracting dust to paint jobs. If anybody has ideas about how to deal with static in models, I'd love to hear them.

The bomber version that I built used Pratt and Whitney R-2800s. For these, I combined leftover Aeroclub rear cylinder banks with very nice front banks and crankcases from Hawkeye Designs. The nacelles are Quickboost's ones for the Lockheed Hudson. They appeared right in shape and diameter, but were short in chord. This was remedied by adding cowl flap

rings from the Wellington. The prominent air filters were constructed from plastic sheet. The curved exhaust pipes were made from the corners of a parts tree. To their ends were attached Quickboost's Beau-fighter porcupine exhausts, although they are a little short for the Warwick.

The propellers have a bit of a story. If you don't read the rest of the article, at least read this. The Warwick had 15 foot diameter propellers. I looked for a source, but even the mighty Corsair's notably large prop was significantly smaller. Somehow, I learned that the Lockheed Ventura had 10 foot props. Ten feet in 1/48 scale would be 15 feet in 1/72. The Revell/Monogram 1/48 kit was said to have thin bladed civilian props. The staff at Hobby Depot said some modellers in Ottawa had replaced these with aftermarket military paddle blade props in their builds. Off to IPMS Canada went my request to place a want ad for the thin props, thinking they might do. In no time, I heard from John MacDonald there saying I didn't have to place the ad. He sent me his props, gratis. Thanks, John. Hats off to you. That's modelling at its finest. As it turned out, once I saw them I realized that they were not as suitable as I'd hoped. I didn't use them. Instead, the blades from a scrapped 1/48 Douglas Invader that coincidentally I was given around that time were thinned, shortened and installed in Quickboost's 1/72 B-24 propeller hubs and I had my 15 foot diameter props.

The dorsal and ventral turrets, main gear and main wheels came from a Lancaster Mk.II kit. The tail wheel and yolk, fuel dump pipes, control surface bal-





fit because the Revell kit is a re-issue of MPM's. The exception was the tail turret which was appropriate for a different version of the Wellington than the mask was for. I had to mask it the old-fashioned way, with tape. This was my first use of Montex's masks and I was impressed. The camo

ance weights and D/F loop antenna were all Quickboost Wellington items.

The specific aircraft depicted was BV214, the first production Warwick B.Mk.1, of which there are lots of pictures available. These show it without guns installed, so I cut another corner and left those off. From what I can see of the camouflage, it appears to have been painted in pattern B as depicted in the Warpaint Wellington volume, and so it was painted after the canopies were masked. For this, I used masking from a set of Lancaster masks for the dorsal turret. On the rest of the transparencies, I used Montex masks made for the MPM Wellington, which

is the standard dark brown and green over black. Blue Tack rolls were used to get a tight but not hard edge between the colours. Weathering was kept to a minimum in accordance with the aircraft's nearly new appearance in the photos. Decals were sourced from the Wellington kit and other sheets.

I'm quite pleased with the resulting model, seen in the photos here, so long as I don't look too closely. I'd still like to do the ASR version with its big lifeboat slung underneath, but that will have to wait until somebody brings out an improved Warwick kit. I enjoyed the challenge of this build, but I wouldn't be repeating it any time soon even if I had another Conrail kit. Instead, it's on to other kits.

21st Century Exec

We thought you might get a kick out of this. It's a photo taken by **RT** editor, Steve Sauve, of his laptop during the last National Executive meeting. No one was present at the meeting — physically, that is. Following government recommendations we decided to forego the usual gathering (at least of the Ottawa members) and go entirely online for an all video-conference meeting, an IPMS Canada first, and maybe a worldwide IPMS first... who knows!



THE IRON BEAVER

The following material first appeared in RT Vol 7, N° 4, back in 1974. It was a letter presented in the "Uncle Freddie" column, and we present it here again as there are many who will be unfamiliar with the story. Also, in the intervening years some rare photos have come to light.

"Dear Uncle Freddie,

"It was with not a little surprise and amazement that I saw your request in the March issue of **RT** for information on the Iron Beaver missile. I think I might be able to add some small amount of information concerning this interesting piece of Canadian weaponry, as I was involved in part of the design work at Can-dor Ltd. during the middle and late fifties.

"For those not familiar with the goings-on in the Canadian aerospace industry at that period, perhaps I should give a bit of background on the Iron Beaver. It is a well known fact that the Avro CF-105 Arrow interceptor was originally designed to carry the AIM-7 Sparrow air-to-air missile. However, midway into the Arrow's development life, it was realized that to best

Though of rather poor quality this photo is extremely rare, as no photos of the Arrow carrying an Iron Beaver have ever been officially released. It appears to have been taken (no doubt surreptitiously) from a vehicle that was on the air-field. It's very difficult to see, but on close examination you can just make out the missile under the Arrow's wing.



take advantage of this aircraft's phenomenal performance, a new weapon system would be needed. The thinking at the time was dominated by two factors: First, the need for a missile with a much greater range than the AIM-7 Sparrow, and second, a missile designed to counter the then-suspected new generation of low-radar profile Soviet bombers. Perhaps a brief word about that itself is in order for the uninitiated.....

"With the perfection of the northern radar screen (DEW line, Pine Tree Line, etc.) it became obvious that for the Soviets to penetrate North American airspace would call for an aircraft which would not present conventional radar images. Reports at the time gave rise to the rumour that Tupolev was experimenting with airframes composed largely of plastic, fibreglass, and wood, and also to a lesser degree with fabric-covered wood airframes. These reports seemed to be confirmed when at the 1957 Domodedovo airshow, a new Tupolev design was demonstrated in flight which, although finished in the standard aluminum lacquer, had a curious "ribbed" effect on the flying surfaces and fuselage. It was for this new type off wood and fabric bomber that the Iron Beaver was designed.

"But back to the Iron Beaver..... Much of the information on this unique missile is still classified. However, the following is known: The length was 84", and diameter 16.5" Large triangular fins were carried at the rear, and smaller triangular canards at the front for guidance. One might wonder how a missile could be designed to home on wood! Unfortunately that is the most classified aspect of the whole system, but it is known to involve a gas chromatograph which

sent the missile homing on the wood's cellulose vapours..... not dissimilar to the current diesel exhaust "sniffers" used to detect submarines, Development of the gas chromatograph homing device was under development in both the US and Canada for some 10-12 years prior to its use in the Iron Beaver.

"Only 37 Iron Beavers were built before the Arrow program was cancelled. Some sources claim that 15 missiles were test fired, while other sources claim 17. Perhaps some of our fellow readers can help clarify this? The first Iron Beaver tested was carried aloft by CF-105 Arrow RL-201, and launched against a gigantic wood and fabric box-kite which had been gotten to an altitude of 7,500 feet! Quite a remarkable feat in itself! Anyway, this very first Iron Beaver scored a direct hit on the kite (no explosive warhead was used in this first series of tests) causing great elation among those involved with the program, Unfortunately, this test was carried out over the far northern ice. The second test firing was conducted farther south over heavily wooded terrain, and the missile immediately dove for the trees. It took several months before the homing system could be re-programmed to differentiate between green wood (i.e. vegetation) and dried cured wood (as used in construction). After this was solved, no further major problems were encountered.

"Of course all this came to an inglorious end when the CF-105 was scrubbed. The missile could not be adapted to work with the avionics and weapon systems of any other aircraft in Canadian service, and



A one-in-a-million shot! A fisherman is proudly displaying his catch somewhere in northern Ontario. In the upper left corner the unknown photographer seems to have actually captured the second Iron Beaver test firing, as it targeted the wooded ground below. This can be confirmed given the location, date, and time of the photograph.

so the Iron Beaver remains to this day a most interesting, if somewhat unusual, uniquely Canadian weapon.

"I hope you have found this at least somewhat interesting. It sure is nice to see that there are others around who also remember the old Beav (as we used to call it)."

Yours truly
(Signed) F.T. Ledner

A clever tip from Steve Sauvé



Here's a quickie thought I had this morning. As I was playing with some 3-D printed bottle holders that Daryl Dean so kindly gave to me, I was looking at his F-15 exhausts and concurrently staring at a couple of cleaned out Keurig coffee holders sitting on my bench. They'd been there for a while, just awaiting an inspiration like this. I cut out the bottom of the Keurig with a #11 blade and they work like a charm for holding skinny bottles like Micro-Sol and Micro-Set. You could probably cut



the bottom open in a criss-cross fashion and then just push the bottle in for nice snug fit. And it's certainly better than just chucking all the used Keurigs into the trash...

VISITING M*A*S*H

by John Clearwater
IPMS Ottawa Chapter

In September 1972 CBS Television launched the war comedy series **M*A*S*H**, which went on to run for 256 episodes over 11 years. When it ended on 28 February 1983 the final episode was the most watched scripted TV show in US history, and remains so to this day. Only *Roots* came even close.

I was a fan, and that is putting it mildly. I watched the shows; saw the movie; read the books, and managed to visit the set while the show was still in production. In 1981 the producers of **M*A*S*H** were approached by the American Red Cross to sponsor a blood donor clinic on set.



I read about it in the *Winnipeg Free Press* and begged to go. My father, an IPMS Winnipeg founding member, made a fake international driving permit as ID so that I appeared old enough to give blood. Fake ID in hand, I flew to Los Angeles and caught a bus to the 20th Century Fox Studios for the great day on set.

It was a great day indeed, with several cast members showing up to donate blood and meet fans. The Red Cross had set up several gurneys in the middle of the interior set sound stage 9, the smallest sound stage at Fox. I happily bled for the Red Cross in exchange for a half day visiting the set. The vast majority of the TV show was filmed inside the studio, with only a tiny minority filmed at the Fox Ranch.



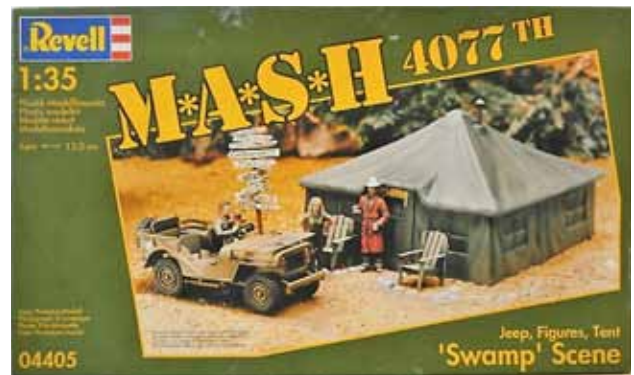
Now fast forward about 38 years, and in January 2020 I completed the **M*A*S*H** tour with a visit to the exterior set location in Malibu Creek State Park, a mere 48 minute drive from LAX airport.

The Santa Monica Mountains bear a striking resemblance to the rocky crags around Euijeongbu, north of Seoul, so it was a perfect place to film. Fox already owned the site, and that land had been used for filming movies as far back as 1927. Robert Altman filmed the Donald Sutherland movie **M*A*S*H** here in 1969. Fox donated the land to the state of California while filming of the TV show was still underway, so die-hard fans could hike in and watch from the hills.

The set is far smaller than you think, watching it on TV. Everything is closer together. The park service has put in very professional interpretive signage, but aside from a burned-out jeep and ambulance, nothing from the TV show remains. After the recent fires a fan built a perfect replica of the sign post, and the park rangers installed a selfie post which will hold cameras or phones so you can get the hero shot with the sign post and the iconic mountains in the background.

Building plastic model M*A*S*H

To capitalize on the popularity of the show, Revell put out three plastic models kits tied to M*A*S*H. They released The Swamp; the helicopter, and the truck with figures of the cast members. Strangely, they did not release an ambulance kit. Long out of production the kits can now be had only through auction sites or garage sales.



Revell 04405 "Swamp" Scene with figures



Revell 04334 Bell H-13H Helicopter



Revell 04431 truck and figures 'Medical' Scene



Fred Hutcheson

sends an addition to last issue's article on building a vacu-form machine.

“Regrettably, I did not keep the original digital copies of the texts for the St. John’s Chapter RT articles (issues 20-06 and 21-01). I acted as the “Associate Editor” (and ghostwriter on one item) for those submissions. However, I do have some pictures of Steve (Steve Foster – the article’s author) demonstrating his machine at a Club Day in 2003.”

**THE \$9.95*
VACUUM-FORMING MACHINE**
by Steve Foster

The following article first appeared in RT Vol 21, No 1. It ran down without and is included to make it easier to understand and find the parts and materials lists. We've also added some photos for additional clarification.

The demise of the Master Vac-u-Form machine has been much lamented by modelers over the years. Most attempts to build a homemade effort have failed due to lack of time, skill and knowledge. Today the internet is riddled with vacuum machines that simply aren't worth it.

We're here to change all that and reproduce you in the world's cheapest, simplest, and most easily made vacuum-forming machine. Believe it or not, it is possible to have four hours with no more than an Xacto knife, a light power saw, and a coping saw! And you need. Further, constructing the machine will use knowledge and skills you already have, since it is constructed almost entirely from conventional shop-ware. To operate this machine however, you will need access to a working vacuum cleaner and an electric heat source such as a stove or hotplate.

The list of materials shows what you will need. The list of plumbing parts is tentative as some of them may not be available locally, and sometimes good model-diecast parts to adapt with, or the equivalent just keep looking through the bins and fitting parts together.

List of Materials:
From an electronics supply shop (or if there are none nearby, try Radio Shack):
1 only 5' x 3' Flatboard (or nearest large dimension)
From a hardware or home store (usually store):
1 only ABS plastic connector, 4" to 1.5" ID
1 only 1.5" to 1.5" ID" clamping plate to metal pipe compression fitting
1 only small can of ABS cement

4 only 1-1/2" x 1/4" round head stove bolts
4 only 1/4" wing nuts (or stove bolts)
1 pc. Plywood, 6" x 8" x 1/2" thick
1 pc. 1" x 2" aluminum plate and some 30 gauge sheet metal could be used in place of the plywood and expanding respectively.

Most building supply stores (e.g. Home Depot) have a lot of pipe (where you might find the wood 2" x 2" pieces that you can cut down. If you are into sheet metal, 1/8" aluminum plate and some 30 gauge sheet metal could be used in place of the plywood and expanding respectively.

For this article the four inch diameter version has been chosen for easier reading.
to represent the best compromise in terms of size. (In fact, the old Master Vac-u-Form (diameter)
to suit the need.
is suitable with range of hand tools.

4" or 1.5" connector
Smaller and larger sizes can be built. In fact I have quite one made from a Radio Shack component. It has proved to be the one I use most frequently. If you go for the 2" diameter and cap (available through ABS plastic). To my way of thinking, if you want a large size then that than you should probably go for one

Compression fitting
Smaller and larger sizes can be built. In fact I have quite one made from a Radio Shack component. It has proved to be the one I use most frequently. If you go for the 2" diameter and cap (available through ABS plastic). To my way of thinking, if you want a large size then that than you should probably go for one

January 2003



FILLING & SANDING, WITHOUT SANDPAPER!

by Will Hendriks

Photos By Steve Bamford

Applying model putty to fill seams and gaps, and then sanding and filing to shape is one of the most difficult aspects of scale model building. Often, this process is messy, time consuming, and damages surrounding surface detail. Results can be frustrating and discouraging. Here is a process that I have found to be consistently successful for certain filling applications. It involves the use of readily available Toluene based fillers such as Squadron White putty and Green Putty. Also required are normal

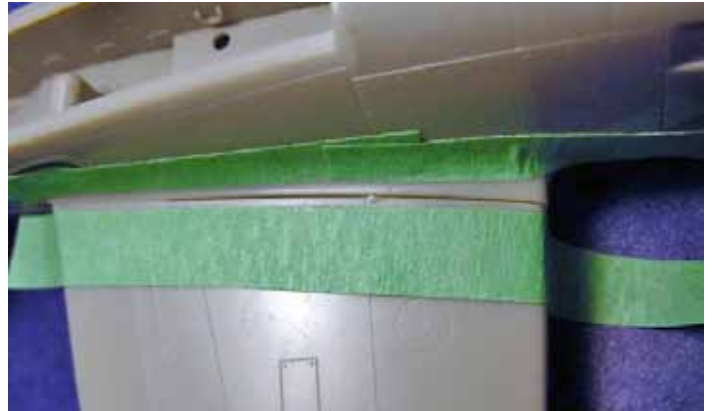


strength nail polish remover, and a few simple tools, as shown. Work in a well-ventilated area!

Here's the offending wing root seam gap on our example.....Hasegawa's 1/48th P-38J Lightning.



Basically, one masks off the areas to be filled. This step prevents errant filler from “etching” into the surrounding plastic.

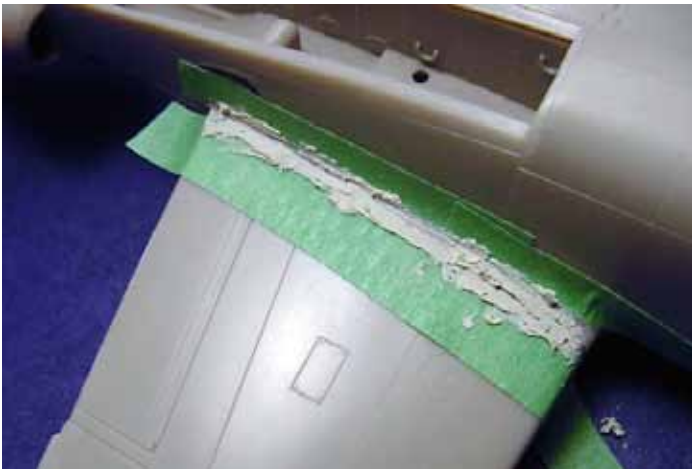


Filler is applied to our high-tech putty knife.....a toothpick.



The filler is applied to the masked areas, in this case the lower outer wing panel/boom joint.





Filler is now fully applied.



The masking tape is then removed.



Now comes the secret part: moisten a Q-tip, cotton ball, or a bit of cotton cloth with normal strength nail polish remover.

Now with the moistened Q-tip, smooth and blend the filled areas and remove excess filler. Best results are obtained just as the filler begins to dry. The beauty



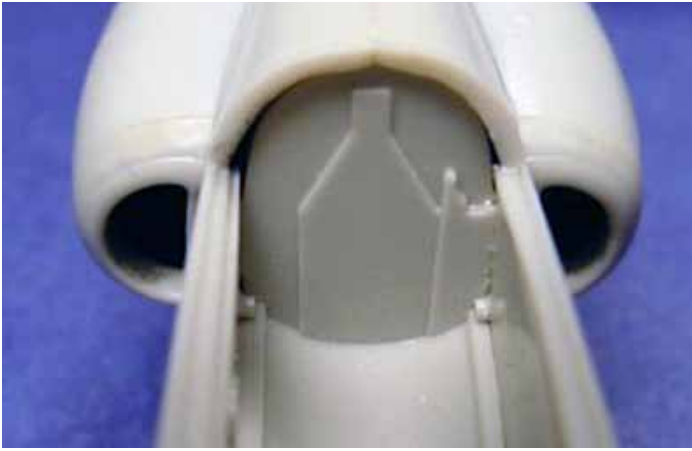
is that the filler can be smoothed perfectly flush with the surrounding surfaces, without harming the plastic or raised detail. If filler gets into scribed surfaces, just remove it with a wooden toothpick, moistened in the nail polish remover. Clean up residue with a cotton cloth. Repeat if necessary.



There! Clean, blemish-free filled gaps in less than five minutes! I usually let the filled surfaces dry several hours before painting.

This technique is a revolutionary way to apply filler, but without the need for sanding or filing! It has the added benefit of preserving detail, which would otherwise be destroyed by filing and sanding, while dramatically speeding up the process. The best application I can think of is filling wing root gaps. It also works very well in hard to reach areas, such as wheel wells and bomb bays. The technique also preserves raised detail on older kits, such as the Monogram classics. Best of all, it is quick, clean, and easy!

The following photos show the wheel bay of the 1/48 Hasegawa P-38. This will give you an idea of the difficult areas in which this filler technique could be really helpful. Obviously this particular filling job isn't complete....this is more of a rough example of the types of places this trick would be the most help.



Hasegawa P-38 wheel well, before filling the gaps (left), and after (right).

Addendum:

Since the previous article was written, I must say that I seldom use Cutex anymore as the solvent, even though it still works great. As mentioned by Dave Lake in the comments below, I have discovered that 99% Isopropyl Alcohol (variously called denatured alcohol) works just as well. It is also a lot cleaner and not as noxious. In addition it does no

harm to the surrounding plastic. There may be other solvents that work as well. This technique also works with other fillers just as well, such as Tamiya, Mr. Surfacer 500/1000/1500, etc. It even works when the filler is dry, which I do not think I mentioned in the article. As always, when trying something new like this, I recommend trying it on a piece of scrap first. As they say, your mileage may vary.

Additional comments:

Steve Bamford adds...

“Some wonder if this works with autobody filler? My filler of choice is automotive autobody finishing filler (comes in 1 pound/.5kg tubes). Automotive autobody finishing filler smells like it is lacquer based. So, I tried Will’s above technique and it works fine with the autobody finishing filler I prefer

to use, so this new technique will be one I will use to a great degree.”

Dave Lake adds...

“Denatured alcohol will also work for this method. While still nasty stuff, denatured alcohol isn’t quite as virulent as acetone.”

— Cover-your-ass disclaimer —

The active ingredient in nail polish remover is acetone.

DO NOT use full-strength acetone, as this will severely damage the styrene surfaces. Nail polish remover is an emulsion of acetone and water, and various girly oils and essences.

Also do not use the “Environmentally Friendly” acetone-free substitutes; they just don’t work! Normal strength nail polish remover (such as Cutex) will not harm styrene or resin: if you are unsure, try it on a scrap piece first. It will, however, strip paint, so be careful.

WORK IN A WELL-VENTILATED AREA!

For more neat modelling tips and info visit Steve Bamford’s Aircraft Resource Center at arcair.com



Many Canadian charities are responding to help stop the spread of COVID-19 and support communities affected. Charities are working with local governments, WHO, and other agencies to contain the disease, stop the spread, and help those in need. Clicking on this image will take you to a page with many charities. You can browse through them and see which one(s) you’d like to help with a donation. Come on everyone... it’s just one less kit... and much more important.

METAL EATER

by
John Clearwater

Remember those old kits where all the parts were coated with electroplate? Remember how glue would not stick to the metal coated parts? Remember how paint did not want to bond either? Many years ago I acquired a large-scale Otaki model of a steam locomotive, but never progressed due to all the drive parts being electroplated. I could not paint them and I could not glue them. Well it turns out to be easier than ever to remove that pesky electroplated layer from our plastic models.

A fairly new product called “green works” from Clorox works perfectly. Said to be 98% naturally derived, the household cleaner removes the silver electroplate in less than 24 hours. I placed the parts, still on the sprue, in a glazed baking dish and sprayed on a thick layer of green works until the parts were slightly submerged. I kept this in a larger plastic container just for added safety. Every couple of hours I would agitate the tray or flip over the sprue. Within two hours much of the metal plate was gone. Within half a day there were only a few specks. Rinse, rinse, rinse, and rinse again once you remove the parts from the cleaner. Dry them and you are ready to paint and glue.



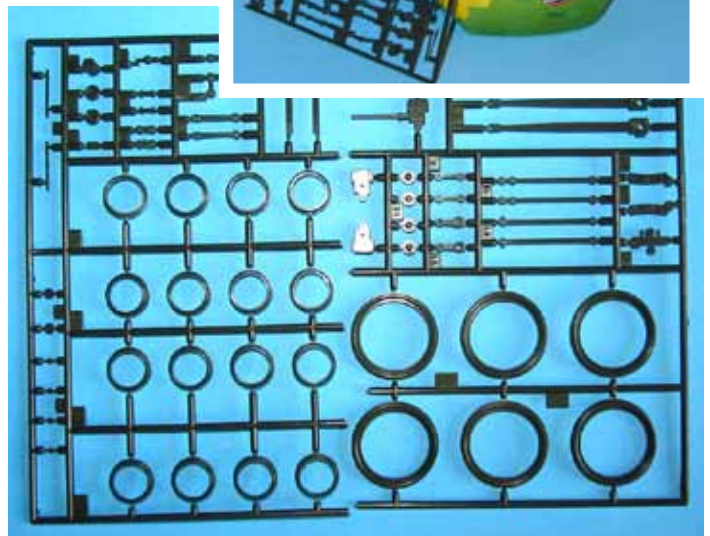
Original electroplated parts on sprue.



Sprue in the cleaning bath.

*“green works”
and a clean
sprue.*

*Formerly elec-
troplated sprue
with all metal
now com-
pletely re-
moved*



The only mystery here is what happens to the metal itself. Where does it go? I could see no residue at all, and no silvery discoloration of the cleaning fluid. It seems that the amount of material actually used in electroplating is so minuscule that it leaves almost no trace in the waste cleaner. So get a bottle of this cleaner and get started on those shiny metal kits you have been putting off forever.

REVIEW

Kerry Traynor looks at:

The Sikorsky CH-148 Cyclone in Royal Canadian Air Force Service

By T.F.J. Leversedge
Kestrel Publications, Ottawa, Ontario

The Leonardo CH-149 Cormorant in Royal Canadian Air Force Service

By T.F.J. Leversedge
Kestrel Publications, Ottawa, Ontario
<https://www.kestrelpublications.com>

Kestrel Publications is a relatively new publisher in the aviation book industry, but the writer, T.F.J. Leversedge, is not. The name may ring a bell for some as he wrote the book *Canadian Combat and Support Aircraft: a Military Compendium*** originally published by Vanwell in 2007. Mr. Leversedge, started Kestrel Publications in 2019 and to date has written, and published, a series of profile books on aircraft that have served in the RCAF. Books are available in both digital and hard copy format.

I happened to come across Kestrel Publications while visiting the Canadian Military Aircraft page on Facebook. On visiting the Kestrel website, I found the two books which are the topic of this review and immediately ordered them. I am including both books in a single review as they are both helicopters and the books are of a very similar format.

I ordered the hard copy version of both books and they were in my hands in about two weeks. The books are approximately 8.5" x 11" in size, and printed in a magazine format with a square (perfect) binding. The Cormorant book is 96 pages in length and the Cyclone book is 80. Each book covers a wide range of topics ranging from the development of the original helicopter and the Canadian military version of the helicopter, the history of getting the helicopters into operational use, brief squadron histories and crew and equipment details. The breakdown of the topics is organized and logical.

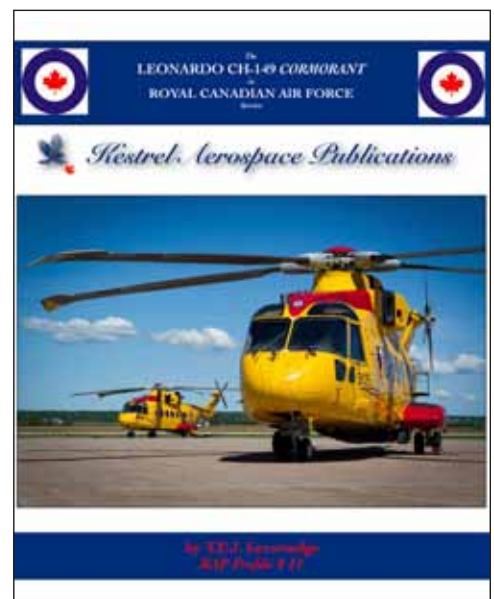
I should note that Mr. Leversedge recently retired from the Royal Canadian Air Force after serving for 35 years. To be honest, I am always a little hesitant with books written by former military members as they sometimes read like a military operational

memo. You do not need to worry about that here. The technical information provided is detailed just enough to allow the reader to understand but does not overwhelm or confuse the reader with technical jargon. The writing style is easy to read and it is obvious the writer takes pride in writing clearly and fluently.

The book comes with dozens of photographs spread throughout the book. All of the photos are in colour and include exterior, interior and detail photos. The vast majority of the photos are credited to the RCAF and the manufacturers. Most of the photos are clear however, there are some that are a little fuzzy. There are also a number of graphics to aid in clarifying what goes where on the helicopter.

After reading this type of book I always ask myself two questions; one, am I better informed about the subject matter than I was before, and two, did I enjoy the experience of reading the book. With both questions I can say that both the Cormorant and Cyclone books were quite successful. I will be adding these books to my library and I can see myself picking these books up again. For modellers, book books are solid reference sources.

So, as you may have guessed, I am strongly recommending both Cormorant and Cyclone books. I don't think you will be disappointed.



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The Greenwood Military Aviation Museum, CFB Greenwood, NS – www.gmam.ca



North Atlantic Aviation Museum, 135 Trans Canada Hwy., Gander, NL – northatlanticaviationmuseum.com



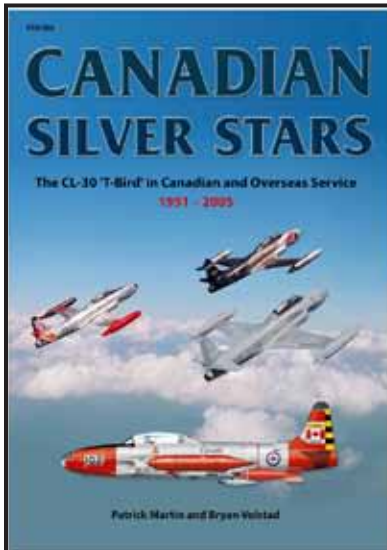
The Alberta Aviation Museum, 11410 Kingsway, Edmonton – www.albertaaviationmuseum.com



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