## November 2022 Edition





RENEWAL

# Great models and a bunch of rats!



We have an interesting beaveRTales for you this time, featuring a couple of superb models and an overflow article on the Balkan Rats. Your last issue of RT contained a great article by John Lumley of Winnipeg, showing how he built his 1/32 CF-18 as used in Operation Echo. There was so much material on these aircraft that it wasn't possible to include it all in the issue. So, we now present it here in your beaveRTales. Hmmm... this stuff just might make for an interesting IPMS Canada free decal sheet. I wonder.....

# Hey Chapters!

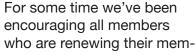


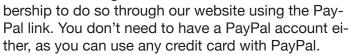
With the wind-down of the Covid pandemic (or at least the worst of it) many chapters are again starting to hold in-person meetings. Sure... virtual Zoom meetings can be fun, especially if you're a computer geek, but they can, at times, be unwieldy and glitchy (?). And of course it's impossible to poke the antenna wire on your buddy's latest aircraft model when it's just a screen image!

How is *your* Local Chapter dealing with the transition back to real meetings? Are you in the same facilities as before the pandemic? What has the turnout of real live modellers been like? Have you instituted any special provisions for the in-person meetings... you know... like all aircraft with large radomes must wear masks? In general, how has it been going? Send us a bit of info and a few photos of your meetings so we can all take some inspiration from your chapter, and see what's going on.

# So... your renewal notice shows up.

# Now what?!





To reiterate... The **ONLY** way you should be renewing your membership online is via the IPMS Canada website "JOIN/RENEW" page. It will take you to the appropriate PayPal page. Some members have gone to the PayPal site, bypassing the IPMS Canada site, and sent funds for renewal. Unfortunately this also bypasses our record-keeping, and it won't let us know that you have actually renewed. A few others have sent electronic money transfers, and this also confuses our Rube Goldberg system.

And if you don't have a PayPal account, but would like to pay with a credit card? It's easy... As you work your way through the IPMS Canada renewal page, you will see a notice that explains how to do it.

So when you receive your renewal notification, either by email or in your **RT**, go to www.ipmscanada.com to renew easily and quickly. And with no envelope, no cheque-writing bank fee, and no postage, you'll also save a couple of bucks!

beaveRTales
is the e-newsletter
of IPMS Canada, which
supplements our printed
magazine, RT. To find out
more about our publications
or IPMS Canada, visit us at
www.ipmscanada.com

# Chapter & Member Liaison



**Kerry Traynor** 

### So, What's Happening?

As per usual in the summer months, at least for me, the modelling mojo takes a holiday as most of us will take advantage of the nice weather and be out in the garden, on a patio with a cold beverage or in my case, both. Mix in a good amount of travel and there goes the summer!

Now that summer is fast disappearing in the rearview mirror, I am back at the model desk and re-focusing my efforts as the Chapter and Member Liaison.

The IPMS Canada executive did meet a couple of times over the summer and discussed a few issues that we thought membership would like to know what may be coming down the pipe.

#### **Model Competition Judging**

As per normal, the issue of judging comes up after every IPMS USA National Convention. This year the discussion seemed to be more pronounced, and the talking points included the AMPS vs. IPMS style of judging, the opinion that models that are weathered don't get a fair shake at IPMS events and the perennial issue of there being a lack of feed back from judges. All of this is not new and is by no means an easy issue to resolve and keep everyone happy.

After a good discussion at the last executive meeting, it was decided that we will be reviewing our own model contest judging format, and when appropriate, request input from both members and the chapters. Please note – and I want to emphasize this – we are in the very early days of this process and IPMS Canada will NOT be taking any action on this matter without due process and input from all affected parties. More to come on this one.

#### **Best Canadian Subject**

Prior to COVID, IPMS Canada sponsored a Best Canadian Subject model contest at the IPMS USA National Convention. This contest was independent of the main competition of the convention. Typically, those IPMS Canada executive and volunteer members who attended the convention would keep a sharp eye open for models with Canadian content

on the competition tables. Final judging would take place on the Saturday morning and the judges would establish the one model that stood out in overall build and finish. The winning modeller would be awarded an engraved pewter tankard and the model would be presented in the Fall edition of **RT**.

With the onset of COVID, IPMS Canada was forced to re-think this contest, as attending the convention proved difficult due to travel restrictions. Once travel was possible, we have found that the logistics, such as getting enough people involved in the judging, were also proving problematic.

This topic led to several discussions over the summer months and led to a point where it was decided to focus on how we could make this a contest where IPMS Canada members built the models. Again, we are at the early stage of putting this together and we need to hash out some of the details before opening it up for consultation from the members and the chapters. Again, more on this later.

#### **Chapter Charter Annual Renewal**

In 2020, IPMS Canada introduced a process where the chapters are required to renew their status as an IPMS Canada chapter. We introduced this process to

- (a) Ensure that the chapter meets the minimum requirements as set out in the IPMS Canada regulations.
- (b) Update any changes in chapter leadership and contact information.
- (c) Provide an opportunity for the chapter to let us know of any issues that they are experiencing and where we can provide assistance.

IPMS Canada uses this information to confirm the chapters are in good standing with IPMS Canada standards. We also use it to update the chapter information found on the IPMS Canada website and it ensures we provide up to date contact information for the chapters in the event that IPMS Canada is asked about who to contact in the local chapter.

This is a process used by many IPMS National Branches around the world, including IPMS USA and IPMS UK. We have updated the Chapter Status form and will be sending it out shortly.

As always, if there are any questions or concerns about the above, or any other chapter or member related matter, please do not hesitate to contact me at: CML@ipmscanada.com.

Regards, Kerry KHARKOYCHANKA

# A Ukrainian-built Antarctic snow cruiser from the 1970s

by Maurizio Laudisa Toronto, ON

#### **Background**

Some of my best modelling inspiration comes from articles, photos, or videos depicting unusual and interesting vehicles and events with storied backgrounds. Such is the subject of this build, an enormous off-road vehicle, or snow cruiser, purpose-built for moving people and supplies across Antarctica and the South Pole. I first discovered it on a YouTube documentary, and researched it on-line by combing through whatever articles and photos I could get my hands on.

More than half a century ago, a column of tracked all-terrain vehicles designed and built in Kharkiv, Ukraine made an unprecedented crossing of Antarctica. On snowy ice pack and unforgiving terrain, these vehicles – named "Kharkovchankas" – covered 2,700 km in high winds and temperatures as low as –80° C (–112° F), eventually reaching the South Pole.

Two generations of Kharkovchankas (Russian for "Woman of Kharkiv") were designed and built by the Kharkiv Transport Engineering Plant, and later manufactured by the Malyshev Factory, in Kharkiv, Ukraine. Based on the AT-T tractor platform (itself based on the T-54 tank), the first generation (at the top) was manufactured in 1957-58, consisting of an elongated AT-T tracked chassis supporting a 220 sq.ft. rectangular superstructure that housed a small galley, toilet, oven, and eight beds.

In 1974–1975, a second generation Kharkovchanka (below) was designed and built for Antarctic service.





The largest design difference was moving the cab and engine in front of the massive rectangular body superstructure, as well as the addition of auxiliary power generation for electricity and heat when the main engine was not operating. Five Karkovchanka-2 came off the production line in 1975.

These remarkable 35-ton vehicles were powered by a 995-HP supercharged V-12 diesel engine and could tow 70-ton cargo sleds behind them. Some remained in service through the 2000s, nearly half a century after they were first commissioned.

#### The build

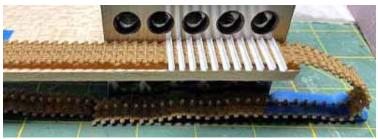
While I found the history and design of both versions fascinating, I fell in love the second-generation: an archetypal Soviet machine, brutish and utilitarian, yet colorful and interesting to look at, almost beautiful in its own right – you could call it "Mad Max goes to Antarctica".

I could find no model of the Kharkovchanka-2 but found an excellent starting platform for a conversion: the Trumpeter



1/35th scale P-40/1S12 mobile radar, kit no. 05969.

The kit provides the chassis, tracks, and driver cabin necessary, with everything else having to be scratch built. It is a beautiful kit out of the box, with great, crisp detail and an impressive radar assembly, so I was sad having to discard most of it for my build, but at least it greatly enriched my spare parts box. From photos of the actual vehicles, each vehicle underwent its own field modifications and adaptations, so that each vehicle would be identifiable and quite unique. I chose vehicle number 3 for my project as it was depicted in a few quality reference photos.



I started with the individual links tracks, which were widened on the original with welded L-shaped, 75cm long steel bars to reduce the pressure on soft snow. Using Tamiya extra-thin, I cemented 1.5mm L- profile Evergreen strips on each link.

I then built up the driver's cabin out of the box. The cabin has crisp details and includes some PE parts to attach radio equipment inside the cabin, grills, and engine cover tiedowns. I sprayed the interior with Tamiya XF71 Cockpit Green, while the exterior was painted with



Tamiya XF8 Flat Blue and XF7 Flat Red, to which I added a couple of drops of blue to produce the deeper, more purply red seen on in photos. I sprayed slightly lighter shades of blue and red to provide some color modulation, and I lightly weathered the interior using pin washes with oils diluted in white spirit. To add a bit of variety, I used a few clear bottles from my spares box and placed inside a cardboard box that I printed and folded.



I continued by dry fitting the cabin on the kit chassis. This is pretty much the extent of what I used from the Trumpeter kit, as everything else had to be built from scratch.

From this point on, my build had to rely on photographic references for proportions and dimensions to be as accurate as possible and "look right". I started by creating cardboard cutouts to confirm size, proportions, angles, and cutouts before committing to styrene (below).



Lacking access to drawings, I discovered that if I sized a couple of photos at a specific zoom level on my computer screen, I could use them as an accurately scaled outline, which greatly simplified the job. Once I was satisfied with measurements and proportions in cardboard, I could finally cut styrene sheets with confidence.

To reproduce the raised riveting seen on the vehicle, I considered raised decals (I had used Archer aircraft rivet decals in the past), but was not comfortable applying the many rows and columns needed. I decided to use a "riveter" tool instead, which when rolled across a styrene sheet, scores a line of small impressions simulating flush rivets. While testing the riveter, I noticed that if I used 0.015" (0.4mm) sheet styrene, the impressions would show as raised rivets on the other side of the sheet! Furthermore, the pressure of the riveter over each row and column created creases in the styrene that looked like stressed metal, adding texture and realism to the surfaces.

With riveting completed, it was time to assemble the sides. I used 1-2-3 metal blocks (so called because each side measures 1, 2, and 3 inches respectively) to ensure that all planes were true and square. I recommend these blocks as an excellent modelling aid, especially when scratch-building. I reinforced the interior with styrene rod and tubing to increase rigidity and strength.



Squareing up the vehicle sides using 1-2-3 blocks.

Once the superstructure was completed, I started on some of the roof accessories and the main access door into the living quarters. Once completed, it was time to dry fit everything together and check how the model was taking shape. I painted and weathered Miniart crates and oil drums for roof cargo and played with the composition until I had a good idea of the result I was after.



After constructing the roof rails with styrene rod, which I shaped and bent cold, I sprayed the superstructure with Stynylrez gray primer using









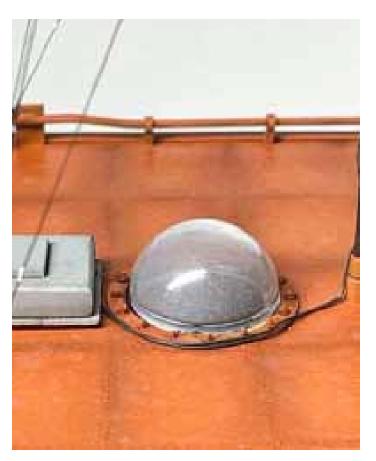
I did not attach the superstructure to the chassis yet so I could paint it without having to mask all around it. I searched for the right kind of orange, but I was having trouble discerning the right shade, as there are many different oranges offered by several hobby paint manufactures. I decided that I could exercise more control by mixing my own, and settled on a mix of one part Tamiya XF7 Flat Red and two parts Tamiya XF3 Flat Yellow which matched color photos well. I first sprayed a gloss white stripe half- way through the superstructure, and after masking it, sprayed the rest orange.

After clear coating using Alclad II Aqua Gloss, I applied 3rd party custom-made decals based on artwork I had provided. I also printed my own yellow and blue stripes using transparent decal sheets and my inkjet printer. These decal stripes, which wrapped around the entire superstructure, were applied over the white stripe I had painted and masked earlier. Another gloss coat sealed all decals.





With the superstructure nearly finished, the final challenges were building the tall, almost nautical, mast housing a ground radar, and the clear dome used for navigating by the stars. I had already installed telescopic brass tubing anchored to the floor of the superstructure to securely insert and house the main brass mast. I built the radar housing and

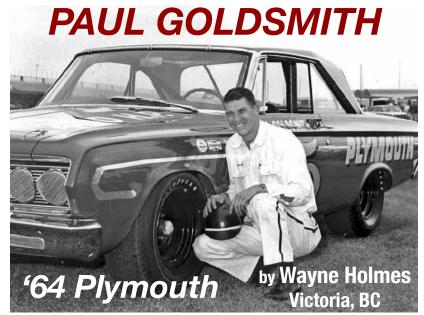


its supporting platform from styrene rod and spare parts, then glued the sub-assembly to the brass mast with CA glue. I installed an orange light from spares on the top and fabricated two anchor points to attach reinforcing cables. Cabling was done using fine EZ Line, with the insulators simulated by a small dot of acrylic white paint. Finally, I wound up some lead wire along the mast to simulate electric wiring.

The clear dome had me stumped as I couldn't find anything suitable and in the right diameter. I finally located some half-domes used for crafts in clear acrylic and of the correct size, which I ordered and used to good effect. I sprayed flat varnish on the inside of the dome to weather it a little and give it a more realistic scale finish.

With the superstructure completed, I could finally attach it to the rest of the chassis and begin weathering the entire model. I used various oil washes and fine paint spattering with a brush to break up the surfaces and provide visual interest. I applied AK Ultra Matte Varnish as the final coat. A base and a figure from Paracel added scale to the finished model. I spent about 160 hours over 2 1/2 months on the project, and I'm satisfied with the result. It is a unique subject with an interesting history that really pushed my scratch-building techniques and presented several problem-solving challenges.





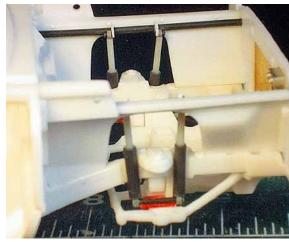
Paul Goldsmith was one of those guys who would, and could race just about anything. He won the National Motorcycle Championships in 1953, 1954, and 1956. He won USAC Stock Car Championships in 1961 and 1962; entered six Indy 500 races, (finished 3rd in 1960) and won 9 Grand National Races.

A number of years ago Model King re-released the Lindberg Plymouth Belvedere kit as Goldsmith's 1964 racer with a number of new racing parts and a decal sheet to do Goldsmith's car. To do an accurate model of this car will require some extra work and an aftermarket decal sheet.

I wanted to model the car as it appeared when it made it's debut at Daytona. It was here that Mopar introduced it's new Hemi engine. Paul Goldsmith won the pole position, setting a track record at 174.91 mph, 10 mph faster than the previous year. The Hemi Plymouths completed a 1-2-3 sweep with Goldsmith finishing 3<sup>rd</sup>, behind winner Richard Petty and 2<sup>nd</sup> place finisher Jimmy Pardue.

The Hemi engine as supplied in the kit is quite good and only needs fuel, ignition and oil lines to jazz it up. The suspension needs a little extra work. These cars had twin shock absorbers front and rear. Cut away part of the front inner fenders to allow for the new twin shock set up. The new shocks are made from plastic rod and tubing and plastic rod is used for the tube bracing that the shocks are mounted to. { show the photo of the front shocks} The rear requires mounting brackets for the new rear shock absorbers, made from scrap plastic.

The kit includes racing exhaust dump pipes that exit at each side of the car. They should end at the passenger side of the car only. Tires that come in the kit



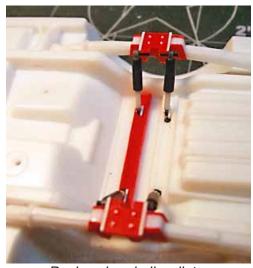
Rear shocks

look cool but are too low and wide and the tread pattern is nothing like anything used on a stock car. I used resin tires made by Plastic

Performance Products instead

The oil in the rear axle of these cars could get really hot and required a cooling system. I made a cooling radiator which fits on the underside of the car from plastic strip and brass screen and the pump is made from plastic rod and a couple of pulleys that I found in my spares box. { show photo of rear axle and oil radiator } Once the bits are glued together, plumbing that runs from the radiator to the pump and the back of the axle was duplicated using guitar string.

There is a good roll cage in the kit and by reversing the interior side panels you can replicate the bare door panels seen on most NAS-CAR racers at this time. Interestingly the one photo that I have

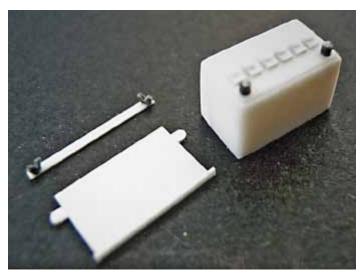


Real axel and oil radiator

that shows part of the car's interior indicates that the door panels were left as is , with only the arm rests removed. This picture may have been taken pre-race day and may not be correct for the car as raced at Daytona. The seat needs a side bolster made from scrap plastic as well as seat belts and a shoulder harness. An asbestos floor mat was made from surgical tape.







Battery and bracket







CF-18 188794 launching for a mission. Aside from the AIM-9M and AIM-7M, a GBU-10 is mounted on a 'fat' SUU-63/A wing pylon. DND Canada photo CKD99-2085-09

While putting together John Lumley's CF-18 article for **RT** 44-3, I wanted to add in some Hornet photos from the deployment that John's aircraft represented. That brought me back to my time in the air force at 1 Air Maintenance Squadron (1 AMS) at 4 Wing, CFB Cold Lake. And that led me to a large number of photos that wouldn't fit in **RT** 's limited space, but would certainly fit in with **BT**'s flexible page count.

The photos in this article were shot on (then leading edge) 1.5-megapixel Kodak DCS-420 digital cameras by Canadian Armed Forces (CAF) Photographic Technician Master Corporal (MCpl) Danielle Bernier. Danielle worked with me at the 4 Wing Photo Section, which was part of 1 AMS. To support the ongoing Canadian air operations in the Balkans, Danielle deployed with the CAF Air Task Force from Cold Lake to Aviano Air Base in Italy from April to October 1999.

For a retrospective overview of the CAF air campaign, visit journal.forces.gc.ca/vo1/no1/doc/55-61-eng.pdf to download an article entitled, *Mission Ready: Canada's Role in the Kosovo Air Campaign.* 

Glossary of terms used in the photo captions:

LGB - laser-guided bomb.

**PGM** - precision-guided munition.

**ECM** - electronic countermeasures.

MJU-8A/B - Infrared Countermeasure Flares.

Mk. 82 - US 500-lb general purpose bomb.

Mk. 84 - US 2,000-lb general purpose bomb.

**GBU** - the Paveway II laser guidance kit that turns a normal bomb into a 'smart' bomb or PGM.

GBU-10 - Mk. 84 fitted with precision guidance.

GBU-12 - Mk. 82 bomb with precision guidance.

**AIM-9M** - updated version of the AIM-9L Sidewinder infrared homing short-range air-to-air missile initially used on the CF-18.

**AIM-7M** - Sparrow radar-guided medium-range air-to-air missile used on the CF-18 during OP ECHO.

**CATM** - Captive Air Training Missile. An unpowered and unarmed training version of the AIM-9 Sidewinder. It can be mounted and flown on the aircraft and the missile's IR tracker functions like a live weapon.

**ALE-39** - Countermeasures Dispensing Set (CMDS); a defensive countermeasures system fitted under the intakes of the CF-18. The modular containers of flare and chaff cartridges are colloquially known as 'buckets.' The CF-18 received the more-modern ALE-47 dispensers after 2006.

**NITE Hawk** - AN/AAS-38 Nite Hawk is a FLIR, laser designator, and laser tracker pod system for use with laser-guided munitions. It is always mounted on the CF-18 left side engine intake trunk where an AIM-7 or AIM-120 would usually be mounted.

**SUU-63/A** - designation for the F-18's four underwing pylons. Stores are attached directly to it or through the use of various adaptors.

**BRU-33/A** - two-store Vertical Ejector Rack (VER) carried on the wing and centreline pylons' BRU-32/A incorporated stores rack.

**LAU-115/A** - rail-type launcher used for a wing-mounted AIM-7M or AIM-120 on the CF-18.

LAU-7/A - wingtip AIM-9 launcher on the CF-18

**IFR** - inflight refuelling. Also AAR - air-to-air refuelling.

**HAS** - Hardened Aircraft Shelter; NATO-standard protection that would allow one or two fighter-type jets to be stored, serviced and protected from a direct hit by Soviet 500-lb/226 kg bombs, and from nuclear, biological or chemical weapons attack.



188753 taxiing for a mission. The night identification light has been removed and the window cover added. The Mk. 84 bomb body shows more weathering than the GBU-10 guidance kit (below). DND Canada photo CKD99-2041-08







188746 loaded with two GBU-10s, AIM-9Ms and an AIM-7M. Note the evident wear and tear on the Mk. 84 bomb body. *DND Canada photo CKD99-2094-06* 



188798 loaded for an air-to-air mission. AIM-9Ms and AIM-7Ms are the only weapons visible. This was earlier in the Roto 3 deployment, as the **RT** article showed that 798 later had two IFR probe damage markers under the LEX. Note the camouflage demarcation dips down from the LEX to the night formation light. *DND Canada photo CKD99-2066-05* 



188798 armed with an AIM-7M and AIM-9Ms, presumably returning from a mission. Note the empty left outboard SUU-63/A wing pylon, which may indicate that a weapon was used. *DND Canada photo CKD99-2145-03* 



188733 taxiing during a training mission. It is carrying a CATM training missile in place of an AIM-9M. Note the damage repair on the front of the radome and the replaced AAR probe door. Two IFR probe damage stencils are applied just under the LEX. DND Canada photo CKD99-2120-04



188733 is loaded with AIM-9Ms, AIM-7Ms and carries the NITE Hawk targeting pod on the port side intake trunk. It carries a mix of mission marks for Mk. 82s, GBU-10 and GBU-12 drops. *DND Canada photo CKD99-2117-09* 



### **NITE Hawk**



188787 and 798 showing off their Balkan Rats tail marking. It's also a good shot of the AIM-9M on the wingtip LAU-7/A launcher and nicely shows the typical CF-18 weathering on the wings. DND Canada photo CKD99-2145-06

# Missiles PGMs



188791 being readied for a mission on 10 April 1999. Note that the night identification light is still fitted. The aircraft still carries the older style of 'CANADA' marking on the dorsal spine. The weapons are the AIM-9M on the wingtip and GBU-12 on the outboard SUU-63/A wing pylon. The armourer's hand is on the arm/disarm switch that is

turned to the appropriate position at the arming point. Eight GBU-12 mission marks are seen just under the LEX by the windscreen. The pylon has a small 425 Sqn 'lark' badge. The are two video screen

data recording cameras fitted inside the canopy frame; these are not carried on present-day CF-18s. DND Canada photo CKD99-2008-03





188795 loaded and ready for a mission. In addition to the AIM-9Ms, it carries two Mk. 82 500-lb 'dumb' bombs. Note that the nose fuses have been installed at this point. DND Canada photo CKD99-2005-03

Back end details of the AIM-9M and AIM-7M missiles. *DND Canada photo CKD99-2101-09* 





A CF-18 getting 'de-pinned' by a ground crew member prior to a flight. The yellowish tan colour at the aft end of the AIM-9M is a nice modelling detail. *DND Canada photo CKD99-2094-05* 

188794 wearing a mix of GBU-10 and GBU-12 mission marks. This photo also nicely shows the colours of the AIM-9M and GBU-10.

A sidebar note is that 794 is the 2022 CF-18 air demonstration aircraft. DND Canada photo CKD99-2086-07



## **Bombs**



Mk. 82 bombs loaded on a BRU-33/A VER, mounted on a 'fat' SUU-63/A pylon. It is modified from standard in that it is visibly wider at the aft end and is identified by the ALQ-162 ECM set antenna on the leading edge (see arrow). This type of pylon is typically carried just one per aircraft, and often on the starboard outboard hard point, although there are photos of it also being on the port side outer location, and even shots of several fat pylons mounted on one CF-18.

The green streamlined bomb caps will be removed and the fuses will be installed prior to the mission. *DND Canada photo CKD99-2013-01* 



CAF aircraft armourers commemorating the first Canadian GBU-10 loaded for a mission on OP ECHO. Typical of operations past, the weapon has been "tagged" with various slogans. *DND Canada photo CKD99-2041-05* 



A GBU-10 being loaded onto a standard 'skinny' SUU-63/A wing pylon; it is mounted directly on the BRU-32/A rack. DND Canada photo CKD99-2060-09



Three CAF armourers strike a casual pose with a GBU-10. A good modelling note is that the bomb bodies are often quite weathered, while the LGB guidance kit is normally in much more pristine shape. This is because the components of the bombs are assembled and built up only as needed for upcoming missions. *DND Canada photo CKD99-2041-18* 



A CF-18 pilot in the US-style flight gear worn for this deployment. His hand is resting upon a GBU-12 500-lb LGB. The SUU-63/A pylon is the standard 'skinny' type, with just a plain metal leading edge. *DND Canada photo CKD99-2017-02* 

## **Cockpit Video Cameras**

CF-18s used on OP ECHO had two video cameras fitted to the canopy frame, which were trained on the

cockpit video displays to allow post-mission review of the targeting imagery used by the pilot to conduct a mission.

A close-up of a pilot getting ready for a flight. This photo shows more detail of the two canopy-mounted video cameras. *DND Canada photo CKD99-2090-01* 





This view of a CF-18 pilot strapping in for a flight shows some great cockpit and canopy detail. Note the two video cameras mounted on the canopy frame. *DND Canada photo CKD99-2067-05* 

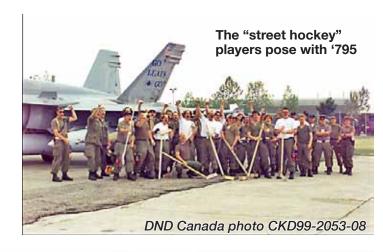




# **GO LEAFS GO**

188795 received some temporary markings on the left fin - **GO LEAFS GO** - showing support for a certain emotionally-polarizing NHL hockey team in Canada. The markings were done up in blue vinyl decal film. While the aircraft was fully-armed and it did taxi under its own power, the best information at the time of writing indicates that '795 did not go flying with these markings in place.

The markings were applied specifically to do up a short home sports-news video story on the Toronto Maple Leafs being in the NHL playoffs. The troops were playing hockey on the taxiway, like a lot of Canadian kids do on the streets in their neighbourhoods. Inevitably someone yells, 'CAR!', or in this case, 'JET!', where the players then cleared the road, the Hornet taxied by, and then the players reset and continued playing street hockey.







The Balkan Rats marking was sprayed onto the aircraft, applied to the tops of the tail fins. The rat faces forward on both sides. It is approx. 28.7 cm or 11" long.



GBU-12 stencil, approx. 15.5 cm / 6" high.

The stencil reproductions on this page are kindly provided from the Patrick Martin collection.



A GBU-10 mission marker being applied to a CF-18 via cardboard stencil and a rattle can of black spray paint on 7 April 1999. DND Canada photo CKD99-2001-02



External fuel tank jettison stencil, approx. 30 cm / 12" long.

These stencil reproductions are all approximately in the same scale.



Air refuelling probe damage stencil, approx. 15 cm / 6" long.

U-10 stencil.

GBU-10 stencil, approx. 20 cm / 9" high.



Mk. 82 stencil, approx. 12 cm / 4.75" high.

**Mission Marks** 





An ALE-39 'bucket' loaded with a mix of (silver) MJU-8A/B infrared flares, and (blue) chaff cartridges. A standard load is 20 of one type and 10 of the other. Two buckets can be loaded under the intakes of the CF-18.

DND Canada photo CKD99-2126-12



Master Corporal Danielle Bernier, photographer for Roto 3 of OP ECHO in 1999.

DND Canada photo CKD99-2103-02



## ATTENTION MEMBERS

IPMS Canada wants to give your local hobby shops some *FREE ADVERTISING* in *beaveRTales...* just like the other businesses you see on these pages. But to do so we need to contact them. Send us the names (and contact info if you have it) of the shops in your area. Email us at *box626@ipmscanada.com*.

Our Promotion honcho will then get in touch with them and make them an offer they can't refuse... so to speak.









ROYAL CANADIAN NAVY
Aircraft Finish and Markings
1944 – 1968



"Royal Canadian Navy, Aircraft Finish and Markings, 1944-1968, Volume 2" The "Grey Book" (2021)

This book illustrates RCN aircraft finish and markings used between 1944 and 1968, expanding further on the material covered in the first volume published in 2007. This is designed as the companion for the first book and also as a stand-alone book on the subject. This volume tells the story in text, photos and drawings of the Canadian Naval Air Arm, from the beginning with the manning of HMS Nabob and HMS Puncher, the two escort carriers starting in late 1943 in Vancouver, until the demise of the Royal Canadian Navy in 1968. The work runs 152 pages (14 in colour + 4 covers), 130+ drawings, over 360 photos, plus a further 60+ colour. Ask about an all special colour printing.

The cost is \$75.00 plus postage \$15.00. 104655@telus.net or canmilair.square.site/s/shop Martin Slides, 20534 50th Avenue,











# Carefree

Hobbies, Models & Collectibles

1029 Speers Rd., Unit 8 Oakville, ON L6L 2X5

905-844-8526 www.carefreehobbies.com



# THUNDERBIRD MODELS

Plastic kits, flying models, paints, tools, decals & accessories!

10% discount to IPMS members

www.thunderbirdmodels.com