

Pressing Strategic Opportunity:
The Ukrainian “Flamingo”

or

Reclaiming Sovereignty
via
Focused Partnership Initiatives



Context and Strategic Pivot

As the Prime Minister himself has said, quite openly, Canada needs to reduce its dependence on the U.S. in every manner possible. Specifically, Canada needs to **disengage** from its dependence on U.S. built weapons, regardless of the attraction of **sharing** or **interchangeability** of supply trains. It needs to recognize the need for its own **sovereignty** in that arena.

To that end, it is strongly recommended that Canada identifies, from among other NATO nations, Corporate entities which offer military capabilities that

- directly relate to the mission of the Canadian Armed Forces,
- offer an area of interest for expanding Canada's own production capacity, of ALL components, to meet its own needs or that of its Partners, and
- offer an area of interest for expanding Canada's own Defence-related R&D.

It is strongly advised that the focus should be for Canada becoming **one of only two** partners in what I will call

- **Joint-Defence Partnership Initiatives.**

In doing so, Canada ensures that its own interests *will* be fully met, *ensures* the survivability of its own capability, and have the *ability to continue independently* if something were to happen to its Partner's production capacity, and vice-versa.

Redefining the Mission of the Canadian Armed Forces

- Extending the Depth of the Recognized Threat Zone

Canada has long ignored the strategic need to "**Project its Power**"! As a *Moral* leader in the world that is unfolding before us, Canada can no longer ignore its *unmistakable responsibility* to accept the need to address that challenge ... **and succeed at it!**

One key area where Canada could pursue to project its power, is to build its own independent *throw weight* of long-distance weaponry capable of **targeting beyond the horizon**. If only to meet *its own clear need* for a missing defence capability, Canada needs to incorporate that capacity as part of its spectrum of military options.

There is an opportunity at hand which would facilitate Canada's fast-tracking that capability:

- Ukraine's **Flamingo** cruise missile (*Fire Point FP-5*).

Ukraine has home-grown that missile design and manufacturing capability. It is, however, limited in that it is the only producer and that its location, *Kyiv*, is under bombardment by Russia's ongoing assault by their own long-range missiles/drones.

It would reinforce the existing close ties with Ukraine ... if Canada were to leverage that relationship to **offer to become Ukraine's ONLY non-domestic producer** of that same weapons system, putting in place all required facilities to manufacture all the parts and final assembly of the missiles, allowing Canada to build up that capability while at the same time becoming a key facilitator to a strategic partner who is currently under threat of extinction by Russia. A key deciding factor for Ukraine, which Canada should underline, is that the U.S. could not impose any export restrictions from Canada to Ukraine.

Capacity ... and More

Once Canada has firmly established its capability and capacity, it could then consider ramping up the scale to ensure the ability to meet wartime-level demands ... by looking to expand "captive" capacity to meet non-core needs of other *friendly* nations.

To that end, Canada and Ukraine could become partners in expanding the market for those missiles to friendly Countries having a similar need, such as

- Australia,
- Japan,
- Taiwan,
- Greenland,

and potentially others, while remaining selective regarding those potential "customer", underlining the Canadian/Ukrainian ability to assist those countries in expanding their own "throw weight" with a long-range missile capability as well.

Expanding the Horizons

Canada should look to enter into similar partnerships with **other key capability manufacturers**, by underlining the advantage of having an equal production partner being **away from the threat zone**, which could be a key motivator for partner-Countries to enter into such agreements.

It remains to be determined which capabilities meet both Canada's strategic needs and the partner-Countries' willingness to share a strategic capability.

Second Strategic Partnership Initiative

Canada needs to leverage its established military manpower by implementing **technologies that generate a multiplier effect**, generating greater impact from those existing forces. For example, imagine the use of combat-zone **attack drones**. The current paradigm is to use a single pilot per "RPV" (remotely-piloted vehicle). That paradigm limits our capacity to project our forces.

A revised paradigm would approach the situation as follows:

- one RPV unit would be deemed as a "**squadron-command unit**" (SCU) and would have integral electronic capabilities for it to fulfill its mission in that role
- that SCU would be semi-autonomous, meaning the assigned Pilot is intended as a fallback to manage mission re-assignment/re-definition
- the Pilot's role also encompassing the monitoring of, and response to, in-flight threats impacting the "**salvo squadron**" (squadron of munition drones assigned to, and controlled by the SCU)
- the SCU has links to each of between 5-20 "**munition drones**" (a.k.a "attack drones")
- the combined squadron is guided as a unit via the SCU
- the drones are all aware of the presence and location of every other drone, to ensure maintaining mutual clearance zones to avoid collisions, this being performed by on-board collision avoidance processing logic.
- flight path to near target zone is centred on the SCU, with units flying in a "*programmed erratic pattern*" such that they don't convey any human pattern of activity, like the shape-shifting flight of large flocks of birds (a.k.a "*murmuration*"), thereby minimizing the

likelihood of being correctly classified, by the enemy, as incoming munitions.

- once near target, the SCU would have the electronic capability to survey the target zone and identify (via use of AI-assisted capabilities) various *targets of military interest*, also having the ability to auto-recommend/auto-assign the *threat-level associated with each* of those and assign a *target value weight* to facilitate automatic prioritization of such targets, to the extent of even recommending count of in-flight munitions required for each target evaluated in such fashion.
- once targets have been "*characterized*" and "*prioritized*", the Pilot could then "scroll" thru the "target list" and confirm the *tasking of individual/groups of munitions* for the identified targets, specifying a selection from a *set of targeting patterns* for each as required for groups, if the preassigned pattern isn't optimal.
- once drones are on their "**kill path**", the final flight path to its assigned target, if the distance from target is less than a designated reference distance, that kill path is *locked-in until mission completion*.
- if, on the other hand, a munition drone is "*neutralized*" before reaching target, one of the other drones, not already assigned to that same target but intended for a lower priority target, which has not reached that reference distance for its own designated target, if it was *previously identified as a fallback* for the "fallen" ordinance, it will *automatically be re-assigned the targeting mission* of the "fallen" ordinance which *would already be in its own guidance memory*.
- that *chain-reaction of auto-retargeting* would have a ripple effect with re-assignments passing on to the various units in the squadron.
- that auto-retargeting would also ensure the highest priority targets *always get the highest likelihood of success*.

As it happens, the **same manufacturer** for that *Scorpion long-range cruise-missile* is also a manufacturer of *attack drones (munition drones)*. That would make the pursuit of that relationship and Partnership an even more **attractive strategic initiative for Canada to pursue**, with all due respect, within the shortest timeframe possible!

It behooves the Government to give the above proposals serious, and immediate, consideration.

Thank you for hearing me out.

Disclosures Statement

I do not have any business/investment interest in the business(es) that produce either the Scorpion cruise missile or the attack drones, which are mentioned as part of the above proposal, nor in any of their various component suppliers.

Eric Marceau

B.Eng. (Mech., McGill '80), retired