



## OPPORTUNITY TO USE CC-330 HUSKY TANKER TO SUPPORT OPERATION REASSURANCE

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### JCSP 50

#### Service Paper

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TO SUPPORT OPERATION REASSURANCE**

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## **OPPORTUNITY TO USE CC-330 HUSKY TANKER TO SUPPORT OPERATION REASSURANCE**

### **AIM**

1. The aim of this service paper is to highlight a potential opportunity for the RCAF to contribute to European security by providing one CC-330 Husky air-to-air refueling (AAR) tanker as part of Op REASSURANCE. Given the uncertain security situation in the continent, especially since Russia's 2022 invasion of Ukraine, it's vital that Canada, as a committed NATO member, continue to provide meaningful contributions to collective security in the region. While the CC-330 Husky fleet will be in high demand domestically, the decision to acquire more aircraft than the fleet it's replacing (the CC-150 Polaris) will provide a measure of operational flexibility that should be leveraged wisely. This paper will also consider the potential benefits to Canada and the CAF of having a CC-330 tanker deployed and providing AAR support to NATO allies in Europe.

### **INTRODUCTION**

2. The recent announcement that the Government of Canada (GoC) will be purchasing nine A330 aircraft (being designated by the RCAF as the CC-330 Husky) to replace the current fleet of five A310s (designated by the RCAF as the CC-150 Polaris) will present both a serious opportunity and dilemma for the RCAF. First, the plan to have eight of these nine aircraft equipped for air-to-air refueling will provide a significant boost to the RCAF's current capability of two A310s that are similarly equipped (plus occasional AAR capacity added by a few CC-130H aircraft that can be modified to conduct AAR when not required for search-and-rescue duties). However, the increased size and quantity of the A330 means that additional infrastructure is required to both park and service the incoming fleet, something that is still being studied and unlikely to be complete in time for initial delivery of the AAR-capable A330s in 2025.<sup>1</sup>

3. At the same time, the GoC has clearly signaled its intent to support Op REASSURANCE, designed to support smaller Eastern-European NATO nations in the face of increased Russian aggression. The clearest sign of this is the recent announcement that Canada will be doubling its contribution to the Latvian theatre of this initiative and taking the lead in that country.<sup>2</sup> While Canada had also deployed CF-18 fighter jets to Romania to support air policing in the Black Sea on a part-time basis from 2017-2022, that effort was ended due to internal issues in the CF-18 fleet and not due to a lack of political will.<sup>3</sup> Providing a CC-330 Husky aircraft to support the fighter forces of NATO allies would be a door to re-engage in European air policing with an RCAF asset.

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<sup>1</sup> *Skies Magazine*. 'Canada takes delivery of first CC-330 Husky aircraft'. 6 September 2023. <https://skiesmag.com/news/canada-takes-delivery-first-rcaf-cc-330-husky-aircraft/>

<sup>2</sup> Brewster, Murray. 'Trudeau announces plans to more than double size of NATO deployment in Latvia'. CBC News, 11 July 2023. <https://www.cbc.ca/news/politics/trudeau-announces-more-troops-latvia-1.6901775>

<sup>3</sup> Berthiaume, Lee. 'Canada will not send fighter jets to patrol NATO airspace for Russian incursions'. Global News, 14 December 2022. <https://globalnews.ca/news/9349314/canada-fighter-jets-nato-airspace-russia/>

4. In addition to the strategic effects of providing a CC-330 tanker to Op REASSURANCE, there are advantages related to interoperability and capability sharing with European NATO allies that could be beneficial to the CAF. The A330 MRTT has been in use for several years by several European NATO countries. First, the Royal Air Force (RAF) has been operating the A330 MRTT since 2012.<sup>4</sup> Second, there is a European tanker pool that operates the A330 MRTT between the member countries of Germany, Netherlands, Luxembourg, Norway, Belgium, and Czechia.<sup>5</sup> Additionally, there is a system, which will be discussed in more detail below, amongst European NATO countries that allows for each country to fly missions for each other in order to increase overall capability and efficiency. If Canada were to participate in this by using a CC-330 Husky to provide AAR support, Canada could then call-in assistance in other areas such as airlift and medical evacuation from other member countries.

## **DISCUSSION**

5. When it comes to where to locate the CC-330 Husky tanker in Europe, there are a number of options. There are multiple bases in Europe where the A330 MRTT is employed, specifically RAF Brize Norton (UK), Eindhoven (Netherlands), and Koln (Germany), the latter two being the home bases for aircraft in the European tanker pool. Selecting one of these three options would give RCAF CC-330 crews an opportunity to learn from best practices of NATO partners who have experience with the aircraft. Selecting one of these bases would also provide opportunities for interoperability training and may present advantages relating to aircraft maintenance and access to spare parts.

6. Other logical options for the CC-330 Husky in Europe include Prestwick (UK) and Riga (Latvia). Prestwick is a well-known air mobility hub which is currently hosting Air Task Force Prestwick (ATF-P) as a major part of Canada's contribution to support for Ukraine. Riga would also make sense as Latvia hosts a large majority of CAF members deployed on Op REASSURANCE and putting a CC-330 Husky in Riga would bolster the already significant CAF presence in the country. Basing in Riga could also invite the possibility of increased Joint Operations and could also increase efficiency if the aircraft swap schedule for the deployed CC-330 were to be synced with the rotation schedule of the main body on Op REASSURANCE.

7. Regarding the employment of the CC-330 Husky in Europe, there are a few options. While it is likely that the aircraft would be deployed under the Op REASSURANCE banner, there are alternatives relating to how closely tied it would be with its host unit. If in Prestwick or Riga, it could be integrated into the existing CAF task force in that location (assuming ATF-P is still active when the CC-330 would be deployed). Similarly, if deployed to one of the RAF or European A330 MRTT bases, the level of integration would have to be negotiated. Regardless, the RCAF would always retain Operational Command of the CC-330 and may only transfer Tactical Control, depending on the force employment concept.

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<sup>4</sup> Royal Air Force. 'About the Voyager'. N.d. <https://www.raf.mod.uk/aircraft/voyager/>

<sup>5</sup> European Defence Agency. 'EDA-initiated multinational fleet of tanker transport now deployable worldwide'. 24 March 2023. <https://eda.europa.eu/news-and-events/news/2023/03/24/eda-initiated-multinational-fleet-of-tanker-transport-now-deployable-worldwide>

8. Aside from providing support to Op REASSURANCE and building experience amongst crews on a new airframe, deploying a CC-330 Husky to Europe could present other benefits to the CAF. Having this aircraft in the European theatre full-time would allow Canada to become more involved in the Air Transport & Air-to-Air Refueling and other Exchanges of Services (ATARES) program. This program uses a credit system that equates military services such as airlift and AAR into an equivalent number of C-130 Hercules hours and promotes the concept of every country participating where they can by earning and spending credits.<sup>6</sup> While the Canadian Armed Forces have participated in ATARES in the past as both a contributor and receiver of services,<sup>7</sup> our participation has been infrequent.

9. By having the CC-330 Husky build credits for Canada in the ATARES program, Canada could leverage existing European defence capabilities and reduce some burden on more strained CAF assets. While 80% of ATARES missions involve air transport and AAR,<sup>8</sup> Movement Coordination Centre Europe (MCCE), who administer the program out of Eindhoven, also coordinate sealift and land transportation.<sup>9</sup> This means that by having a CC-330 Husky in Europe providing AAR support to ATARES members, Canada could benefit by having a significant surplus in credits that could be used for CAF operations between Canada and Europe.

10. The planning aspect of pairing European receiver aircraft to the CC-330 Husky tanker can be done through the existing MCCE with limited administrative burden on the RCAF. While it would likely be productive to attach an RCAF liaison officer into MCCE to ensure that the aircraft is utilized appropriately, the infrastructure to coordinate multinational AAR in Europe already exists. Aside from the professional development and networking advantages of having an officer attached to MCCE, it could be useful to establish a Canadian presence in the event that increased collaboration is sought in the future.

11. As far as the practical implications of deploying a CC-330 tanker to Europe full-time, it's important to consider the domestic obligations of the fleet. Before the introduction of the CC-330, the CC-150 fleet has been allocated three lines of tasking (or LoT, a term that describes the number of aircraft available to fly on an average day) for its five aircraft<sup>10</sup>. Although it should be fair to assume that the CC-330 will enjoy better serviceability than an aged CC-150 fleet, a conservative projection for nine CC-330 aircraft is five and a half LoT, roughly the same LoT to aircraft ratio as the CC-150 fleet.

12. If a half LoT is allocated to the CC-330 Husky aircraft that is not AAR-capable for VVIP and other strategic passenger airlift, this leaves an even five LoT for the eight remaining aircraft. If the intent is to have one tanker on each side of the country allocated to NORAD duties, this

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<sup>6</sup> European Air Transport Command. 'ATARES'. <https://eatc-mil.com/en/what-we-do/atares>

<sup>7</sup> Royal Air Force. 'RAF transport aircraft flies Canadian Military Assistance supplies to Europe for Ukraine'. 15 April 2023. <https://www.raf.mod.uk/news/articles/raf-transport-aircraft-flies-canadian-military-assistance-supplies-to-europe-for-ukraine/>

<sup>8</sup> U.S. Government Accountability Office. 'Military Airlift: DOD Plans to Participate in Multi-National Program to Exchange Air Services with European Nations'. 30 October 2013. <https://www.gao.gov/products/gao-14-30r>

<sup>9</sup> U.S. Government Accountability Office. 'Military Airlift: DOD Plans to Participate in Multi-National Program to Exchange Air Services with European Nations'. 30 October 2013.

<sup>10</sup> Personal knowledge based on two years (2020-2022) as the 437 Squadron Operations Officer

leaves three LoT for other taskings and training. If the two aircraft allocated to NORAD can be released to conduct routine local training with the RCAF's fighter force in Cold Lake and Bagotville, moving one of those final three LoT should not present a problem. While there is always demand for troop transport and tanker support at various exercises, it's not unreasonable to have two LoT allocated to miscellaneous passenger airlift (above and beyond the half-LoT) and periodic exercise participation.

13. Regardless of where the CC-330 tanker ends up in Europe, some difficult decisions will need to be made regarding the makeup and employment of the detachment. While the crew complement for the CC-330 tanker is still being finalized, the CC-150 fleet has different crew requirements depending on mission set and require fewer cabin crew for AAR missions. If this is also the case on the CC-330, the detachment can deploy fewer aircrew as the expectation is that most missions flown will be AAR. However, it would be prudent to include enough cabin crew in the detachment to be able to take on short-notice passenger missions.

14. In just the past year, there have been multiple short notice taskings to evacuate Canadian citizens from conflict zones (notably Sudan in April 2023 and Israel in October 2023). Having an aircraft and full crew in the European theatre could enable a faster commencement of similar non-combatant evacuation operations in the future. Additionally, having the ability to carry passengers with a deployed CC-330 tanker would increase operational flexibility for CAF operations, especially with a growing presence in Latvia and enduring missions throughout Africa and the Middle East.

15. If the CAF desires a level of operational flexibility with the deployed CC-330 aircraft then the best option may be to deploy it as a small ATF. This could be as simple as two crews, an ATF Commander, a small operations and administrative staff, and aircraft maintenance team (civilian contractors with L3 Harris). While deployments for aircrew are often shorter (60-90 days) than conventional CAF deployments of six months, any tour length should be considered. If the intent is to operate the CC-330 tanker in Europe long-term, full postings could be considered to minimize turnover and time spent away from family.

16. While an ATF should include roles such as Flight Safety Officer, Human Performance in Military Aviation Officer, and Lessons Learned Officer, it should be possible to fill these positions with the crews who would deploy. For a small detachment with only one aircraft, having officers with the required qualifications for these positions would allow them to fill the roles as secondary duties. If there is a shortage of aircrew with these qualifications in the CC-330 community, this deployment should serve as reason to prioritize the training for these personnel and their home units should proactively seek to have selected members course loaded as required.

## **CONCLUSION**

17. In conclusion, the RCAF will have an opportunity to increase its engagement in the European theatre once the CC-330 Husky fleet is online. With the requirement to remove our CF-18 s from the air policing mission in Romania, this is an opportunity to provide an in-demand air asset to work with our NATO allies and continue to show Canada's resolve to be a productive contributor to a peace in Eastern Europe. In addition to supporting NATO, the deployment of a CC-330 tanker would also benefit the CAF by allowing us to learn from the best practices of nations already employing the A330 MRTT and regularly participate in the ATARES program, building credits that will allow us to leverage allied assets to fill RCAF capability gaps in the region. The operational flexibility aspect is further enhanced simply by virtue of having a CC-330 Husky in Europe full-time that can be re-allocated for high-priority national taskings. The combination of an increased NATO contribution while also serving our own interests makes this opportunity worthy of consideration.

## **RECOMMENDATION**

18. It is recommended that the RCAF make one CC-330 Husky tanker available for deployment to Europe as part of Canada's Operation REASSURANCE. This should occur once Canada is in possession of at least five of the nine total CC-330 Husky aircraft to minimize any potential impact to high-priority domestic operations or support to NORAD. Ideally, the deployed CC-330 tanker would be in Eindhoven (Netherlands) to be co-located with other NATO A330 MRTT aircraft, as well as the MCCE headquarters. The deployed CC-330 ATF should include a minimum of two crews, including one crew augmented with a full cabin crew complement, who conduct short rotations of 60-90 days to spread out the operational experience. For non-flying ATF positions, such as ATF Comd, Operations Officer, and MCCE liaison officer, longer tour lengths should be entertained, up to full postings of two years to provide continuity. The ATF should be primarily focused on providing AAR support to NATO allies, with a representative present at MCCE headquarters, and should make full use of the ATARES program to maximize the spinoff benefits to the CAF. While this deployment is still years away, it should be brought into consideration now so that planning can begin and the most value possible can be derived from what has the potential to be a win/win situation for the CAF and NATO.

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