RCAF TRANSFORMATION - KEY PROGRAMMES

ROYAL CANADIAN AIR FORCE ASSOCIATION

RCAF Projects Over $100M – Thematic Summary (With Remarks & RCAFA Positions)

Fighter Capability & Weapons Systems

Project	Budget	Remarks	RCAFA Position
Future Fighter Capability Programme (FFCP)	$19B initial acquisition and sustainment funding	Lockheed Martin winning the bid in 2023. 88 x F35 planned, 30 currently funded. Deliveries start 2026; IOC 2029; FOC 2032/33.	Critical to RCAF future combat capability. CF18 transition timeline must be maintained to avoid a readiness gap and potential loss of air sovereignty. No mixed fleets unless composed of F35/unmanned combination or eventual Gen 6 mix (a second manned fleet would seriously impact costs, personnel and transition timelines).
Future Fighter Weapons – Long Range Air-to-Air Missiles ([1]LRAAM)	> $1.5B	Intended for F35; funding via NORAD modernization. Intended to provide long-range, beyond line-of-sight	Supports capability enhancement; advocate timely delivery and funding stability. Critical to deterrence at home

[1] Initial Operating Capability (IOC), Full Operating Capability (FOC), Foreign Military Sales (FMS)

		engagement capability. Greater than 200km in range required.	(Continental Defence) and for high risk deployed operations.
Future Fighter – Long Range Air to Surface Weapons (LRASW)	>$1.5B	Intended for the F35 stand-off attack (not funded at this time)	Supports capability enhancement, advocate funding urgently. It is necessary for operations in high-risk threat environments (domestic and foreign)
Advanced Short Range Air-to-Air Missile (ASRAAM)	$250M-$500M	Replace AIM9M with AIM9X. Awarded via FMS; increased numbers via NORAD modernization.	Supports capability enhancement; advocate timely delivery and funding stability.
Medium Range Air-to Air Missile (MRAAM) Sustainment	> $1.5B	Includes aircraft software, simulator upgrades, ground test equipment; awarded as FMS.	Supports capability enhancement; advocate timely delivery and funding stability.

ISR & Joint Capability

Project	Budget	Remarks	RCAFA Position
Canadian Multi Mission Aircraft (CMMA)	$8B acquisition / $10.4B program	CP140 Aurora replacement; Canada approved sole sourcing of up to 16 P-8s. IOC – 2027-2028 Currently, 14 aircraft funded.	Critical capability for domestic sovereignty and alliance control of maritime spaces. Must remain fully funded and achieve FOC soonest.

			Expand ASW capabilities rapidly (stand-off weapons)
Airborne Early Warning (AEW)	$5-9B	This is a new capability for the RCAF in option analysis. 4-6 aircraft considered. This system is essential to enhance Canada's ability to increase situational awareness in its National and NORAD mandates and contribute capabilities to NATO missions.	Supports capability enhancement; advocate timely delivery and funding stability. Must be highly integrated with NORAD and F35 capabilities

ISR & Joint Capability

Project	Budget	Remarks	RCAFA Position
Enhanced Satellite Comms Project – POLAR (ESCP-P	$5B - $10B Additional funding, to put the project into the $5-10B range, was secured through NORAD Modernization	Provide narrowband and wideband SATCOM to support Arctic ops, to include BLOS comms support IOC/FOC – NLT 2035 FOC – NLT 2038	Key to Canada establishing full spectrum connectivity and sovereign national operations in the Arctic. Programme needs to be accelerated for an earlier IOC
Surveillance of Space 2 (SoS2)	$250 - $500M	Sensor/system to track man-made objects in space.	Key contribution to NORAD and Canadian

		Aim is to improve space situational awareness capability delivered by the Canadian Space Surveillance System (currently one platform called Saphire) Seeking an end-to-end solution that will run for at least 10 years Ground Based IOC late 2026, FOC 2027 Space Based IOC/FOC 2030	monitoring operations in space. Predictable funding and resource allocation need to be maintained.
Defence Enhanced Surveillance from Space Project (DESSP)	$5B - $10B	Detection of objects on the earth's surface using synthetic aperture radar, other payloads (full spectrum) Intended to complement current RADARSAT Constellation	Key national programme for Canada’s ability to detect threats on land and sea approaches to Canada and North America. Programme needs to be accelerated for an earlier IOC/FOC

Mobility/Joint Capability

Project	Budget	Remarks	RCAFA Position
CH149 CMLU (Cormoran Mid Life Upgrade)	$1.24B	Extends life to 2040; includes enhanced SAR capability and simulator. 16 platforms funded. IOC 2027/2028	Supports capability enhancement; advocate timely delivery and funding stability.
CH147 (Chinook) Mid-Life Upgrade	TBD	All aircraft delivered (14 remaining). ISS contract from 2013. Mid-life upgrade under review	Supports capability enhancement; advocate timely delivery and funding stability.
CH146 Griffon Limited Life Extension (GLLE)	$800M for the upgrade $2.2B for support until 2039	Mid-life upgrade - includes avionics, new engine controls radios, displays, Mode 5, ADS-B, digital cockpit.	Supports capability enhancement; advocate timely delivery and funding stability.
Cyclone Maritime Helicopter Programme (MHP)	$3.2B acq / $2.4B ISS	Block II delivery complete (26 aircraft). Requires mid-life updates, no funding currently. Given the unique nature of this fleet, there are serious challenges with long-term sustainment funding	Essential capability for the RCN. Canada needs to increase funding to maintain a viable and combat capable fleet (numbers TBC) until a revised procurement/sustainment plan is developed.

Mobility/Joint Capability

Project	Budget	Remarks	RCAFA Position
Strategic Tanker Transport Capability (STTC)	$3.6B acquisition	Total of 9 Airbus A330s purchased: 5 used and 4 new (. Includes VIP configuration (1 aircraft); 4 used aircraft to be converted to transport/tanker roles.	Essential capability for the RCAF for domestic/continental defence mission. This programme needs to be fully resourced and delivered in close coordination with the CF35 implementation schedule. Tankers are highly valued assets by allies and coalitions, Canada's contribution of this capability would be strategically impactful.
next Tactical Aviation Capability Set (nTACS)	$18.1B	Replace current CH146 fleet. Partnered with NATO NGR and US Army. IOC mid to late 2030s	Supports capability enhancement; advocate timely delivery and funding stability
Fixed Wing Search and Rescue (FWSAR)	Up to $4.7B	Platform roll-out on-going at main bases (Comox, Winnipeg and Greenwood). Trenton will be the last Wing to transition IOC 2025, FOC 2028	Supports capability enhancement; advocate timely delivery and funding stability.

NORAD Modernization & Advanced C2

Project	Budget	Remarks	RCAFA Position
Arctic -Over the Horizon Radar (A-OTHR)	$1B-$2.99B	Long range detection of aircraft and low observable threats. Ambitious timelines; 2-4 sites in southern Ontario. IOC 2028-2030 Canada is to lead the development and deployment of this important NORAD capability	A key part of NORAD Modernization. More direct all of government action required if IOC is to be achieved this decade. Highly complex technology that will likely need more resources (S&T, programme management/implementation, incremental funding for necessary upgrades) to successfully deliver a combat capable system.
Polar – Over the Horizon Radar (P-OTHR)	>$1.5B	Test sites in Ottawa and the North; Request For Proposals cancelled May 2024. Remains in R&D phase Canada is leading this effort.	Part of the NORAD Modernization, critical to the ability to detect over the ice cap well beyond currently available earth-based systems. More resources need to be assigned to ensure this system matures at a faster pace
Defence of Canada Fighter Infrastructure	$7.3B	Part of NORAD modernization; supports fighter infrastructure across Canada – MOB, DOB and FOLs	Critical to the F35 implementation, these projects must hold the highest priority within government planning in order to achieve credible sovereign capability within this decade.
Future - Combined Air	$1B-$4.9B	Includes infrastructure, IT,	Critical to the successful RCAF/CAF operational

Operation Center (CAOC)		C2 networks, 5th Gen data fusion. IOC 2028/2029	transformation into a fully digital combat environment. RCAF should maintain the CAF lead in developing 5th Gen doctrine and set the pace for C4ISR transformation.

Training Systems Modernization

Project	Budget	Remarks	RCAFA Position
Future Aircrew Training (FAcT)	$11.2B over 25 years	Team SkyAlyne preferred bidder; IOC 2027/2028 Includes ab-initio pilot, ACSO and ASOP training. Training locations: Winnipeg, Portage and Moose Jaw	Core programme for the RCAF. All necessary efforts need to be made to ensure a successful transition and avoid any drop in aircrew production during transition.
Future Fighter Lead in Training (FFLIT)	$1B-$4.99B	Training gap in Canada 2023-2030; Hawk retired 2024. Currently totally outsourced. Partnering with allies to train pilots (US, Italy and Finland). IOC 2030-2031	Critical to fighter pilot production. Canada needs to accelerate this programme to reduce foreign dependencies soonest.
Operational Training Infrastructure Enterprise Modernization (OTIEM)	$1B acquisition / $4B sustainment	Modernizing to Gen 5 standards (emulation, synthetic environment, live/virtual construct).	Key capability that will allow Canada to repatriate its core F35 training. Predictable funding and resources need to be maintained.

		Pan RCAF range modernization currently focused on Cold Lake training range and facilities. IOC 2029/2030	

PERSONNEL

Project	Budget	Remarks	RCAFA Position
RCAF Security Force	TBC	The RCAF has identified the need to grow by approximately 1,200 personnel to create an organic security force that will be responsible to provide security across RCAF facilities given the demanding security needs imposed by new platforms/technology and the increased and evolving threat environment.	Given the rapidly changing security environment (physical and cyber) and the growing fleets with high security demands (facilities and platforms), the RCAF needs to be resourced to meet and maintain the highest security standards with the necessary operational flexibility. The RCAF needs to be given the mandate, resources and authorities to manage security at all facilities it is responsible to operate.
CAF/RCAF personnel and family	TBC	A clear need to increase affordable	DND needs to prioritize funding

accommodation/housing modernization	housing has been identified across the CAF but is especially challenging for RCAF personnel and their families given the most dispersed base/wing locations of the 3 services across Canada. ADM IE and CFHA have invested more funds and are looking to quickly grow housing options for the RCAF.	and look for immediate solutions to address this significant issue which affects attraction and retention of personnel. The usual DND/CAF approach of finding a policy which works for all services may not work in this case. Asymmetric approaches may be required, and more authority/resources needs to be delegated to the RCAF to make timely decisions on how best to support specific operational needs.