Report Summary: Evaluation of Ready Land Forces

Evaluation Scope

The Ready Land Forces (RLF) evaluation examined the performance of Program Inventory Program 2.3 Ready Land Forces over a five-year period, from FY 2017/18 to FY 2021/22. It focused on the land equipment aspect of readiness. Key areas assessed included the availability, serviceability and sustainment of land equipment, and the ability to meet the land equipment-related readiness requirements of the Chief of the Defence Staff (CDS) Directive for CAF Force Posture and Readiness (FP&R).

Methodology

The findings and recommendations within this report were informed by extensive data collection and multiple lines of evidence, which included: a review of program and departmental documents; a review and analysis of Program Data, including financial data; key informant interviews; risk sessions; a survey; site visits; as well as international benchmarking.

Out of Scope

Components that were scoped out of this evaluation included the Canadian Rangers Program, the Reserves, the equipment procurement process, as well as concepts that span across the environments (e.g., overall effectiveness of the Ready Forces Program).

Program Overview

The RLF program generates, sustains and renews combat effective, multi-purpose land forces and capabilities that are ready for operations. The Program is deliberately organized to ensure that soldiers are trained and adequately equipped, which allows the Canadian Army (CA) to be scalable, agile, responsive and interoperable, both domestically with civil authorities and other Government Departments, and internationally with allies and partners.

Findings

Finding 1: There is a lack of reliable data to accurately inform Ready Land Forces equipment readiness levels.

FP&R data that specifically speak to land equipment readiness are not available, and further, historical data cannot be accessed. Interviewees identified gaps with current data collection procedures, which lends itself to the need for a comprehensive equipment parts tracking system to ensure access to up-to-date equipment information.

Why it Matters? Limitations in land equipment data negatively impact the ability of Senior CA officials to understand current readiness levels, and subsequently make informed FP&R decisions.

Recommendation 1: To allow for the monitoring of Ready Land Forces equipment readiness levels, existing reporting tools (e.g., SMaRT and DRMIS) should be regularly updated with the required data. Consideration should also be given to tracking additional data (e.g., degree of serviceability, spare part availability) that may further inform land equipment readiness.

Finding 2: The Canadian Army lacks the equipment needed to achieve training and readiness levels.
The CA does not have enough serviceable key land fleet to meet training and readiness levels. Serviceability targets aiming to achieve at least a 70% serviceability rate have not been consistently met. This current state of land equipment is creating concerns about the CA's ability to prepare for and meet the land equipment requirements of the future.

Why it Matters? Currently there are challenges with meeting the quantity of equipment needed to achieve training and readiness requirements. If not addressed, the CA risks not being able to prepare for and meet the land equipment requirements of the future.

Finding 3: The availability of personal equipment fluctuates and may pose limitations to individual readiness.
There may not be enough personal equipment to adequately outfit CA members, as 35% of CA members surveyed indicated they did not have the personal equipment needed to complete their assigned tasks. This equipment shortage has the potential to get worse if recruiting efforts grow and more people are hired into the CAF.

Why it Matters? CA personnel require proper personal equipment and adequate time to train and build proficiency with it. This is essential to soldier safety and optimal readiness.

Finding 4: The Canadian Army faces limitations in its ability to transport and sustain equipment efficiently, which could hinder the ability to defend Canadian assets against adversaries.
The CA's ability to transport equipment for training and operations is limited, often resulting in the CA having to rely on allies and industry. These deficits have led to concerns about the CA's ability to meet the equipment demands of the future threat landscape, and have highlighted the need for Canada to rethink its current posture by prioritizing capability gaps, modifying training approaches, and assessing strategic partnerships.

Why it Matters? Equipment limitations and the extent of the financial and human resources required to transport and sustain land equipment impacts the CA's ability to be agile, defend against adversaries, and sustain relations with allies.

Finding 5: The Department of National Defence procurement process, combined with limited National Procurement (NP) funds have impacted the serviceability, quantity and quality of land fleets.
The current procurement process is not responsive enough to keep pace with land equipment readiness training and operational needs. Finite resources and the duration of the procurement process often impact the CAF's ability to procure. In addition, compounding deficits in NP funds are impacting serviceability levels and the ability to sustain existing land equipment.

Why it Matters? Without an efficient procurement process, the CA risks becoming technologically irrelevant. Continued deficits of NP funds will exponentially impact the CA's ability to maintain its current fleets and adapt to meet future equipment demands.

Finding 6: Royal Canadian Electrical and Mechanical Engineers (RCEME) Technician labour hours are key to enabling equipment serviceability.
A deficit of RCEME Technician labour hours is contributing to the CA's challenges in sustaining land equipment needed for training and operations. These challenges will likely be amplified as new technologically advanced equipment tends to require more direct labour hours to maintain, as well as additional infrastructure demands to repair and sustain the equipment.

Why it Matters? RCEME Technicians are critical to the maintenance and repair of land equipment. Prioritizing efforts are needed to not only fill and maintain these essential occupations, but ensure sufficient direct labour hours, without which the CA may not have the ready fleets needed to respond to domestic and international operations.

Recommendation 2: Ensure sufficient technician capacity to meet equipment serviceability targets.

Finding 7: Simulation training is an under-utilized method of training across the Canadian Army. Simulation training cannot replace the benefits of live training; however, it allows for the mastery of basic skills.
Simulation training is an efficient, cost-effective method to master basic skills. Seventy-one percent of survey respondents agreed that more time on simulators would be beneficial to developing readiness, ultimately helping the CA prepare for future threats with minimal wear and tear on equipment and impact on ammunition stocks.

Why it Matters? Simulation training can optimize CA personnel readiness through innovative scenarios, allowing for the efficient mastery and proficiency of equipment operation.

Recommendation 3: Simulation training should be further encouraged and integrated throughout the training continuum as a reliable method for developing soldier skills.

Overall Conclusions
The RLF program continues to strive to meet land equipment readiness requirements. Challenges with readiness data, the geographic distribution of equipment, and limited technician capacity have impacted the availability and serviceability of equipment. If these challenges are not addressed, the CA risks not meeting its training and readiness levels, impacting the ability to support new and ongoing domestic and international operations as set out in Canada's defence policy: *Strong, Secure, Engaged*, as well as preparing for the land equipment requirements of the future.

Annex A—Management Action Plan

ADM(RS) Recommendation

1. To allow for the monitoring of Ready Land Forces equipment readiness levels, existing reporting tools (e.g., SMaRT and DRMIS) should be regularly updated with the required data. Consideration should also be given to tracking additional data (e.g., degree of serviceability, spare part availability) that may further inform land equipment readiness.

Management Action

Action 1.1: The CA Equipment Readiness monitoring is under review within the COS Army Ops Line of Governance that aims to incorporate the raw data from DRMIS and maintenance tools in order to best define the current state of readiness. From a thorough understanding of the readiness, the CA can glean how and where priorities can be managed to meet the equipment readiness requirements. This will also better support the FP&R readiness reporting to Strategic Joint Staff. Digitization of Equipment Readiness - The CA G3, G4, and DAS will develop a digitalization tool that can incorporate the raw data provided by DRMIS in order to best reflect the states of readiness across the CA.

Deliverable: Develop a more refined Digital Equipment Readiness strategy
OPI: COS Army Ops (G3 and G4) – Canadian Army
OCI: DGLEPM – ADM(Mat), DAS – Canadian Army
Target Date: March 2024

Action 1.2: Equipment will subsequently be grouped by Phase of the Managed Readiness Plan (MRP) to better define the equipment readiness levels and impacts applicable to each phase of the MRP (Build, Contingency, Committed) and the role that it must perform.

Deliverable: Refine digitalization methods of equipment readiness reporting, reflective of the three Phases of the MRP.
OPI: COS Army Ops (G3 and G4) – Canadian Army
OCI: DGLEPM – ADM(Mat), DAS – Canadian Army
Target Date: December 2024

ADM(RS) Recommendation

2. Ensure sufficient technician capacity to meet equipment service ability targets.

Management Action

Action 2.1: With the ongoing reconstitution efforts, it has become evident that RCEME technician capacity is declining and Strategic Intake Plan targets are not being met. As such, it has become much more important that, to the extent possible, all technicians should be employed in positions where they can directly contribute to fleet serviceability. For certain reasons in the past, it was occasionally manageable to employ technicians in out-of-trade positions without sacrificing fleet serviceability; however, with the current and forecasted shortage of personnel, this may no longer be possible.

Deliverable: Conduct a specific review of technician employment and work with L2s with a view to optimizing Direct Labour outputs directed towards operational and training remits.
OPI: COS A Ops (G4)
OCI: CADTC and Director RCEME – Canadian Army
Target Date: December 2023

Action 2.2: Using available recruiting and attractions programs, the CA working closely with Branch and Corps staff will target individuals and resources that allow for the compression of the time required to achieve the Occupational Functional Point. In particular, programs such as Canadian Armed Forces Accreditation Certification Equivalency (CAF ACE) and Non-Commissioned Member Subsidized Training and Education Plan (NCMSTEP) that Facilitate increased recruiting of skilled (i.e., journey-level qualified)

and semi-skilled applicants (i.e., graduates of PSI programs) in order to shorten the path to the Occupational Functional Point, both answering to the CAF's need for trained personnel faster, and reducing the overall resources needed to train them. Recognizing those who have acquired their qualification on their own, members will receive signing bonuses, credit towards pay incentives, and/or seniority in rank.

Deliverable: CA G1 will work with RCEME to identify the right number of technicians through the Annual Military Occupational review. The corps will seek to identify additional pathways to enable skilled hires through the CAF-ACE and NCM-STEP programs.
OPI: COS Army Ops (G1) – Canadian Army
OCI: DGLEPM – ADM(Mat) and CADTC – Canadian Army
Target Date: December 2023

Action 2.3: Fleet-specific serviceability requirements were identified through CAERP FRAGO 002, which was signed in Summer 2021. However, since then, some significant changes have occurred and have resulted in rethinking the CA's Managed Readiness Plan for expectations of its divisions. Specific serviceability targets will be refined in accordance with the Managed Readiness Plan that will be tied to the specific operational remits of the CA. This will allow the CA to focus technician direct labour towards known remit requirements for both expeditionary and domestic operations, as well as training.

Deliverable: Conduct equipment serviceability target analysis based on current substantiated existing operational and training remits.

OPI: COS Army Ops (G3/G4) – Canadian Army
OCI: CADTC – Canadian Army
Target Date: December 2023

Action 2.4: With the fielding of new equipment and reliance on computers and diagnostic tools to diagnose vehicle and equipment faults, it has become increasingly important for RCEME technicians to have ready access to up-to-date diagnostic equipment. While these diagnostic tools are purchased through respective projects, they are often in short supply and many of them require regular software updates that are often not possible without Wi-Fi internet connections (non-Defence Wide Area Network connections). As such, technicians are often forced to wait for diagnostic tools that are in short supply, and they often have to be creative in the ways they update the workshop's equipment. An increase in fielding of these tools, along with a method to update within the workshops, is essential to increasing the production levels of RCEME technicians.

Deliverable: Increase distribution of Special Tools and Test Equipment to meet technician requirements and increase Wi-Fi capacity within maintenance workshops in order to increase technical productivity and maintain currency of diagnostic tools.

OPI: COS Army Ops (G4) – Canadian Army
OCI: DLI / G6 – Canadian Army, DGLEPM – ADM(Mat)
Target Date: March 2024

ADM(RS) Recommendation

3. Simulation training should be further encouraged and integrated throughout the training continuum as a reliable method for developing soldier skills.

Management Action

Action 3.1: A CA ten-year simulation strategy was issued by the Commander of the Canadian Army in November 2020 (Future Integrated Training Environment Concept Paper), followed by an implementation handbook and an updated Canadian Army Administration Order. These references confirm authorities and responsibilities, provide the concept for development of range and training areas and synthetic training environments, provides direction on the evolution management and use of CA legacy simulation capabilities and provides detail on the strategy, policy and procedures that will be followed for the introduction of new systems. We will undertake a review to assess the current challenges to CA simulation capabilities that are centred on a lack of communication of, awareness of, and compliance with simulation policy and governance, the state of inservice equipment and replacement gaps, and interoperability of future equipment.

Deliverable: 1. Complete CAO 28-01 translation/promulgation (ACTION CADTC); 2. Update CAO 21-07 Annex A FCOE for live simulation (ACTION CADTC); and 3. Confirm current/future project compliance with policy direction (references A to C) enabled by a reinvigorated ACDB process (ACTION DLR).

OPI: CADTC/DLR - Canadian Army
OCI: DGLEPM – ADM(Mat)
Target Date:
• Deliverable 1 - December 2023
• Deliverable 2 - December 2023
• Deliverable 3 - March 2024