



MOBILIZING INSIGHTS IN DEFENCE AND SECURITY

MOBILISATION DES IDÉES NOUVELLES EN MATIÈRE DE DÉFENSE ET SÉCURITÉ

ANNUAL REPORT 2021-2022



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Mobilizing Insights in Defence and Security: Annual Report 2021-2022.

 ISBN:
 D1-27E-PDF

 DGM No.:
 DGM-7122-XWC

MINDS ANNUAL REPORT 2021-2022

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MESSAGE FROM THE ASSISTANT DEPUTY MINISTER (POLICY)



The third year of the Mobilizing Insights in Defence and Security (MINDS) Program was marked by significant challenges in the global security environment and within the defence institution itself. In response to Russia's invasion of Ukraine, the program responded quickly to internal requests for support and convened a panel of experts who, in conversation with internal practitioners, explored the conditions for and likely trajectories of conflict escalation. Similarly, as efforts to change the culture of defence began, MINDS' Collaborative Networks, Rapid Response Mechanism, and other capabilities were leveraged to gather candid, constructive, and innovative advice to tackle the most fundamental challenge facing the Defence Team. In addition, MINDS facilitated numerous relevant and timely engagements on the Middle East, the Indo-Pacific, emerging technology, and other key issues.

Internally, the program has applied innovative methods and new tools to meet the growing demand for external expertise and the growing supply of prospective funding applicants and partners. New tools like

MS Access and Power BI have enhanced the program's already strong commitment to data-driven decisionmaking. Similarly, the application of Agile and Design Thinking methodologies have yielded new insights about the program's role and contribution to its diverse community of potential clients and stakeholders.

Through its sustained outreach activities, the program has ensured its suite of funded activities remain relevant to the immediate and emerging challenges facing the department. In doing so, the program's role in facilitating conversation has grown, and is evidence of the value that dialogue and knowledge exchange present to internal and external partners alike.

I am confident that MINDS will continue to be a critical enabler of the defence policy making process and will deliver valuable insights on emerging challenges in the year ahead.

Peter Hammerschmidt Assistant Deputy Minister (Policy) Department of National Defence

EXECUTIVE SUMMARY

In its third year of operations the MINDS program was focused on continuing to foster new partnerships, meet the increasing demand for external expertise among DND/CAF practitioners, and innovating on and up-scaling the program's internal processes. In collaboration with a diverse and growing network of national and international experts and internal partners, MINDS again generated valuable insights and a space for conversation and thinking on the most pressing challenges facing the Defence Team, including culture change, continental defence, the war in Ukraine, and military capabilities.

Through its diverse and flexible mechanisms, MINDS has reaffirmed itself as an agile and relevant enabler for policy and decision makers alike.



IN 2021-2022 MINDS						
Launched	3	Collaborative Networks				
Funded	46	Targeted Engagement Grants				
Hosted	21	Expert Briefing Events				
Awarded	28	Scholarships				
Provided	1	Rapid Response				



MINDS identifies and creates inclusive opportunities to amplify diverse voices in defence and security, including those of women, Indigenous peoples, youth, and other underrepresented groups.



Collaborative Networks and Expert Briefers engage with and inform the ongoing work of the Defence Team.



MINDS fosters collaboration and builds connections between DND/ CAF and the expert community.



MINDS employs design thinking, agile methods, digital tools and other innovative approaches to maximize the impact and benefits of external expert engagement.



INSIGHT AND INNOVATION

In 2021-22, insights drawn from the MINDS program's various pillars proved to be invaluable enablers for policy makers in confronting the difficult challenges facing the department, from culture change and emerging technology, to the Russian invasion of Ukraine and climate insecurity. Innovation remains central to the program's ethos, ensuring that MINDS' capabilities scale with the increading demand with the increasing demand for external expertise, and the program achieves its objectives of:

- Providing the Defence Team with relevant and timely advice;
- ✓ Fostering the next generation of experts; and,
- Contributing to Canadians' understanding of defence and security issues.

Growing Supply & Demand

Deliberate and sustained promotional outreach and relationship building efforts by the MINDS team have yielded increased awareness of how the program can support the work of the Defence Team, and consequently, increased demand for external expert engagement in 2021-22. Emerging issues prompted defence and security practitioners to seek expertise and engage externally to better anticipate, adapt, and act with more comprehensive and nuanced understanding, in the ever-changing security environment. Introductory briefings to senior officials and a growing sense of 'brand recognition' at the working-level have solidified MINDS as a valuable enabler for policy and decision makers alike, and as an important node in the defence and security community. Similarly, the program now sustains its full complement of nine collaborative networks, the volume of Targeted Engagement Grant applicants continues to grow year-on-year, and the program receives numerous submissions for potential expert briefers each month.

Driving Innovation and Efficiency

To meet the growing demand for and the reach of MINDS, a number of important innovations and improvements in the management and operations of the program were pursued. Revised evaluation rubrics infused greater rigour and yielded more nuanced assessments in the grant and network competition processes. New data management and analysis tools, including MS Access and Power BI, were integrated to improve the efficiency of evaluation processes and to enable data-driven decision making and planning. Lastly, the MINDS SharePoint site grew as an important source for on-demand research, expert briefings, and guidance on maximizing the value of external engagement.

Challenges Tackled

The 2021-22 MINDS Policy Challenges articulated the key strategic policy issues facing the Defence Team. The challenges are co-developed with key stakeholders from across DND/CAF and tie the various program elements together to ensure that funding decisions are aligned with National Defence and broader Government of Canada priorities as they evolve. Applicants for Targeted Engagement Grants, Collaborative Networks and Scholarships must demonstrate how their research proposals will address at least one of these Challenges. In 2021-22, two new Challenges were added related to Climate Change and Defence's Role in Pandemic Preparedness and Recovery. A list of all Challenges is below and a more detailed overview of the associated key questions is available at Annex A.

Well-Supported, A Changing Global Approach to Approach Approach Diverse, to Defence: to Defence: Security Defence Defence: Resilient Environement Anticipate Adapt Act Engagement People and **Families** The Rise of Grey Zone Cyber, Creative National Conflict: Space, and Recruitment Resilience Below Information and and Threshold as Retention Continental Tactics Operational Models Defence and Hybrid Domains Warfare Innovative The Evolving **Defence** Role The Role of Approaches Role of Major in Pandemic Artificial to Force Mix Powers Response Intelligence and Structure Anticipating The Future Future of Capacity Challenges Building Addressing Emerging and Prevent-Technologiy ing Sexual and Military Misconduct Application Climate Change as Canada's a Threat to Defence National Relationships Defence Role Resilience in the Arctic Addressing and Preventing Hateful Conduct and Radicalization Defence Procurement

FY 2021-2022 POLICY CHALLENGES

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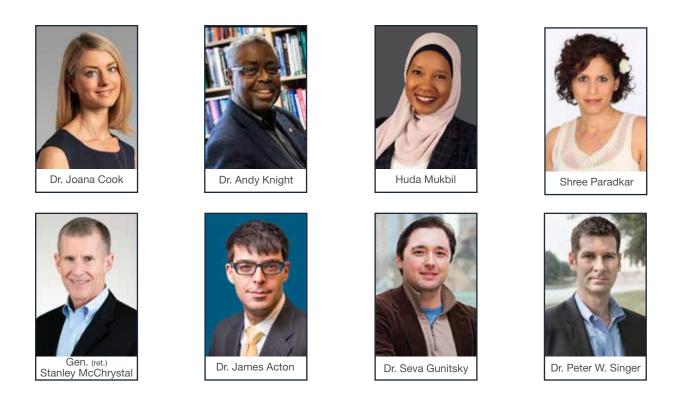
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A – EXPERT BRIEFING SERIES

Through the Expert Briefing Series (EBS), top Canadian and international defence and security experts are invited to brief the Defence Team and Government of Canada officials on priority issues. Through virtual webinars and roundtable discussions, defence and security practitioners engage in rich conversations with leading experts and diverse thinkers.

In 2021/2022, MINDS hosted more than 21 expert briefings and roundtable engagements on a range of complex challenges. A detailed list of all engagements is included at Annex B, with highlights including:



Dr. Joana Cook, Assistant Professor at Leiden University examined the roles of women and gender in counterterrorism in the 20 years after 9/11.

Dr. Andy Knight, Professor at the University of Alberta, **Huda Mukbil**, a former Senior Intelligence Officer at the Canadian Security Intelligence Service, and **Shree Paradkar**, a *Toronto Star* columnist discussed **systemic racism in Canadian society and DND/CAF**.

Gen. (ret.) Stanley A. McChrystal, a senior fellow at Yale University presented key insights from his latest book Risk: A User's Guide.

Dr. James Acton, Co-director of the Nuclear Policy Program at the Carnegie Endowment for International Peace, and **Dr. Seva Gunitsky**, Associate Professor at the University of Toronto discussed **Russia's invasion of Ukraine and the conditions and potential for escalation**.

Dr. Peter W. Singer, Principal at Useful Fiction LLC and Strategist at New America delivered a briefing on emerging technology in great power competition and the future of conflict.

B - TARGETED ENGAGEMENT GRANTS

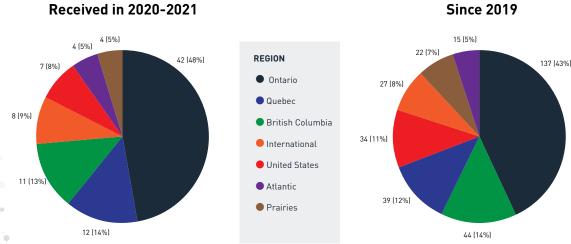
MINDS funds projects which drive innovation, amplify expert and diverse voices, spark wider discussions, and inform policy discussions on important and timely defence and security issues. The grants provide up to \$50,000 in non-recurring financial support for projects such as conferences, roundtables, workshops, research, and publications. To continue to foster the next generation of experts, grants valued at \$10,000 are also available under the Young MINDS Initiative for undergraduate students.

FUNDING RESULTS

Regional Distribution of Applications

\$3,647,135 Requested			\$1,817,824 Disbursed
88 Grants	95 Applied	46 Funded	43 Grants
7 Young MINDS			3 Young MINDS

MINDS issued calls for applications in January and September 2021. The program once again received a high number of applications from across Canada and around the world, covering all policy challenges. More than \$1.8 million in grant funding was awarded for projects that provided new perspectives and opportunities for collaboration, and helped advance defence priorities.



Regional Distribution of Applications Since 2019

HIGHLIGHTS

AN OVERVIEW OF ALL FUNDED PROJECTS IS INCLUDED IN ANNEX C. HIGHLIGHTS FROM THE YEAR INCLUDE:



The **International Crisis Group** conducted a five part series of seminars focusing on various regional issues related to **great power competition and Canada's defence relations**.



Valens Global produced an innovative analysis on the role of emerging technologies, tactics, techniques, and procedures of **information operations in the grey zone**.



CANADIAN GLOBAL AFFAIRS INSTITUTE INSTITUT CANADIEN DES AFFAIRES MONDIALES **Canadian Global Affairs Institute** organized a series of webinars, research papers, and expert presentations on how to **modernize continental defence**.



A team from **Queen's University** produced an intersectional analysis of **sexual misconduct in the Canadian Armed Forces** focusing on impacts on Indigenous servicewomen.



Young MINDS recipients organized a one-day seminar on the changing realities in the Asia-Pacific and produced a novel hack-a-thon on responses to potential grey zone attacks.

C - COLLABORATIVE NETWORKS

MINDS Collaborative Networks bring together multi-disciplinary teams of distinguished experts, from across Canada and abroad. Each Network receives up to \$750,000 over three years to enable more sustained collaboration, and supports DND/CAF through advanced research and activities.





Respond to the need for relevant and timely advice from defence and security experts

- Special reports and briefings on priority subjects
- Promoting partnerships and collaborating with DND/CAF through on-demand expertise and engagement



Foster the next generation of experts and scholars

- Student symposia, summer programs, and networking fora
- Job opportunities for graduate students, emerging scholars, and next generation researchers



Contribute to Canadian's understanding of defence and security issues

- Bilingual podcasts
- Publicly available webinar recordings
- Virtual events and webinar series
- Scholarly outputs, policy-relevant reports, event videos

EXPERTISE ON-DEMAND

MINDS' Networks were called upon to help inform the continental defence and NORAD modernization policymaking process. Network members provided policy notes on key questions related to emerging threats, great power competition, domestic operations, the Canadian Rangers, and more.

The timely and relevant insights provided in response to this call for support was wellreceived and provided valuable inputs in developing considerations and options for continental defence going forward.



HIGHLIGHTS FROM THE LATEST NETWORKS

Canadian Network on Information and Security (CANIS)

University of Calgary



- •Conducted research on (mis)information on social media, diaspora influence on foreign policy of host-states, impact of ideology on foreign policy, and assessed public perception of diversity and inclusion issues in the CAF
- •Readily responded to information requests from DND/CAF/GoC
- •Hosted a New Scholars Networking Event and prepared for the inaugural CANIS Summer School to be launched in summer 2022

Co-Directors: Dr. Jean-Christophe Boucher & Dr. Erin Gibbs-van Brunschott Website: canis-network.ca

Research Network on Women, Peace, and Security (RN-WPS)

McGill University



- •Recruited Network members to support activities, such as contributions to a blog post series or an analysis of Canada's feminist foreign policy
- •Hosted a dialogue and teach-in between scholars and public servants focused on sharing the lessons learned from the previous Canadian National Action Plan on Women, Peace and Security
- •Organized its first annual symposium which showcased the most recent academic work related to MINDS policy challenges

Co-Director: Dr. Jennifer Welsh, Dr. Yolande Bouka, Dr. Erin Baines Website: mcgill.ca/rnwps

Canadian Military Sexual Trauma Collaborative Network McMaster University



- •Hosted three online symposiums on sexual misconduct in the CAF
- •Continued hosting bi-weekly Community of Practice meetings with partners at DND/CAF, MRC, and Veterans Affairs Canada (VAC)
- •Delivered presentations on its activities and research findings to government stake holders to enhance relationships with DND/CAF and increase knowledge exchange and mobilization on sexual misconduct-related topics.

Director: Dr. Margaret McKinnon Website: thetraumaandrecoverylab.com

2020-21 NETWORK HIGHLIGHTS



Network for Strategic Analysis (Queen's University)

- Launched Le Rubicon, a Frenchlanguage platform for analysis and debate on strategy, defence, and foreign affairs
- Delivered numerous virtual events on capacity building, peace keeping, NATO, international order, and more
- Held a successful annual symposium in Ottawa with strong DND/CAF participation

Directors: Dr. Stéfanie von Hlatky and Dr. Justin Massie Website: ras-nsa.ca



Innovative Methodologies for Defence Challenges Network (Archipelago of Design)

- Provided design thinking professional development and support to the Special Operations Forces and community
- Produced the first season of AOD Connect, a digital media series focused on design methods and practitioners
- Continued work on the 'serious games' Albatross and Organic Design projects

Directors: Dr. Philippe Dufort and Dr Philippe Beaulieu-Brossard Website: aodnetwork.ca



Network for Research on Hateful Conduct and Right-Wing Extremism in the CAF (Ontario Technical University)

- Hosted webinars and discussions on countering extremism
- Published on gender inequality in the CAF and the impacts of toxic masculinity

Director David Hofmann Website: sites.ontariotechu.ca/rwe-caf/resources/ dnd-information/index.php

2019-2020 NETWORK HIGHLIGHTS



Defence and Security Foresight (University of Waterloo)

- Hosted regional and thematic workshops and virtual foresight activities
- Co-hosted webinars with Women in International Security Canada and NAADSN on applying GBA+ to research
- Published a variety of regional and thematic policy briefs and reports

Director: Dr. Bessma Momani

Website: uwaterloo.ca/defence-security-foresightgroup



North American and Arctic Defence and Security Network (Trent University)

- Contributed extensively to continental defence policymaking through policy briefs and other activities
- Hosted the highly successful Arctic Academic eTalks series with American and other international partners
- Hosted the second annual Student Seminar focused on modernizing North American Defence and Strategic Competition.

Director: Dr. Whitney Lackenbauer Website: NAADSN.ca



Security-Policy Nexus of Emerging Technology Network (Concordia)

- Produced briefing notes assessing the implications and ethics of emerging technologies
- Conducted research on the use of Al in battlespaces, as well as the ethical and legal considerations that arise from its applications

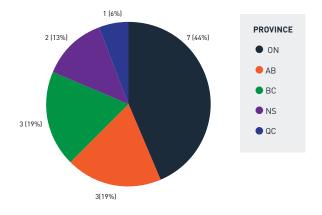
Director: Dr. Kash Khorasani Website: www.concordia.ca/ginacody/research/ spnet.html

A GROWING NETWORK... OF NETWORKS

A call for Network applications was launched in November 2021, resulting in a record 16 applications. Applicants were primarily from academia (11), but also non-governmental organizations (3), and private entities (1).

After a rigorous evaluation process, the three Collaborative Networks selected for 2022-23 were:

Regional Distribution of Applications Received in 2020-2021



Canadian Defence and Security Network (CDSN) Carleton University



The Canadian Defence and Security Network will expand upon its current research agenda as an existing national network to focus on the impacts of global emergencies on Canada. CDSN's research will provide relevant and timely defence policy thinking on climate security, global health security, natural disaster response, and supply chain security.

Director: Dr. Stephen M. Saideman Website: cdsn-rcds.com

Trent University

North American and Arctic Defence and Security Network (NAADSN)

NAADSN Narth American into Aretic Dafence and Sourcity Network



A returning Network, the North American and Arctic Defence and Security Network will build on previous work and continue to conduct cutting-edge research on Arctic and continental defence issues. NAADSN will test core assumptions, prompt policy innovation, and provide relevant and timely expert advice on the opportunities and threats facing Canada.

Director: Dr. Whitney Lackenbauer Website: NAADSN.ca

Transforming Military Cultures Network (TMC)

Mount Saint Vincent University

The Transforming Military Cultures Network will inform ongoing efforts to foster culture change in the Defence Team. The network's research will examine the root causes of discrimination, hateful & sexual misconduct, and systemic racism, and will provide practical policy insights by drawing on diverse perspectives, including those with lived experiences, and international lessons learned.

Director: Dr. Maya Eichler, Dr. Nancy Taber & Dr. Tammy George Website: msvu.ca/research-at-the-mount/centres-and-institutes/transforming-military-cultures-network

D - SCHOLARSHIPS

MINDS is committed to fostering the next generation of defence and security experts. In 2021-22, the MINDS Scholarship initiative and the NATO Defense College (NDC) Fellowship continued to thrive.

MINDS-SSHRC Joint Scholarships Initiative

MINDS scholarships offer research awards and supplements at the **master's, doctoral, and postdoctoral** levels to students and researchers whose work relates to the MINDS Policy Challenges. The program contributes to the development of a growing, inclusive, and diverse expert community, notably through one-year awards for **Indigenous master's students** studying defence and security issues.



55 APPLICATIONS → 21 FUNDED

Type of Research Training Award	# awards distributed	Value (\$)
MINDS Initiative Postdoctoral Fellowships (up to 2 years)	1	90,000
MINDS Initiative Doctoral Awards (up to 3 years)	2	210,000
1-year MINDS Initiative Doctoral Awards	3	105,000
MINDS Scholarship Initiative Supplements (1 year, non-renewable) - Master's	12	120,000
MINDS Master's Scholarships Indigenous Students	3	52,500
Total	21	577,500

NATO DEFENCE COLLEGE FELLOWSHIP

The NATO Defense College (NDC) Fellowship provides a unique opportunity for a Canadian researcher to work alongside experts from across allied countries at the NATO Defence College in Rome, Italy. The Fellowship contributes to Canada's commitment to NATO, and helps advance both Canada and the Alliance's strategic objectives, through forward-looking research and collaboration.



2022 NATO DEFENSE COLLEGE FELLOWSHIP



DR. ALEXANDRA GHECIU

Dr. Gheciu will apply her Canadian foreign policy and NATO expertise to cutting edge research on the opportunities and challenges facing Canada and NATO in an increasingly complex security environment.

E - RAPID RESPONSE MECHANISM

The Rapid Response Mechanism is contingency funding that enables MINDS to readily respond to new, evolving, and pressing security and defence challenges, facilitating quick access to high quality advice from external experts to support the Defence Team in making informed policy decisions.

In 2021-2022, the Vote 1 portion of this funding was utilized to support DND/CAF's ongoing culture change effort. In collaboration with the Chief Professional Conduct and Culture and key leaders from across the Defence Team, MINDS organized a series of engagement sessions with Elizabeth Broderick, Chair-Rapporteur of the UN Working Group on Discrimination against Women and Girls, and Australia's longest serving Sex Discrimination Commissioner (2007-2015).

The engagement sessions targeted key issues where DND/CAF could benefit from this external expertise, and was focused on encouraging individual and collective action, and leadership and organizational adaptation to create a more resilient, inclusive, and respectful Defence Team.

A number of projects to support this departmental priority were also funded through MINDS' Targeted Engagement Grant pillar, supplemented by Vote 10 funds from the Rapid Response Mechanism.

As part of MINDS support to culture change initiatives, two projects received \$82,000 in Rapid Response Mechanism funding to conduct research on:

- Lived experiences of sexual misconduct in CAF members of Veterans; and
- Minority stress among LGBTQ2S+ members and veterans.



THE YEAR AHEAD...

SIGNALS FROM OUR NETWORK

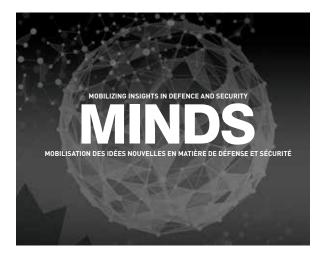
In order to maintain strategic alignment with emerging defence priorities, the MINDS program will conduct targeted internal outreach in 2022-23. In particular, the program will deepen existing and develop new relationships with the Policy Advisor (POLAD) cadre who are embedded in key stakeholder organizations or deployed outside Canada. Similarly, MINDS will work with the policymakers responsible for the Defence Policy Update and ensure we are aligned with and positioned to support the priorities identified through the process. Maintaining strong situational awareness of the range of actors and activities tackling defence policy challenges is central to MINDS' ability to deliver relevant and timely support. As such, the program will establish an Outreach and Communications Coordinator role to ensure the program is ready to respond to emerging challenges and requests for support. The Coordinator will also be responsible for maintaining the program's forthcoming newsletter, which alongside revisions to the MINDS website, will enable the Defence Team to stay well-informed of the opportunities and tools available through MINDS.

FINDING AND FOSTERING THE NEXT GENERATION

After more than a year of deliberate and sustained outreach activities, MINDS will look to once again broaden and diversify its pool of applicants. Through a market research and gap analysis initiative, the program will take a data-driven and GBA Plus-informed approach to identify new applicant pools, potential external partners, and explore the potential barriers to prospective applicants. Lessons learned from recent improvements to the grant and network evaluation processes will be applied to the Scholarships and Young MINDS pillars, with particular attention paid to the accessibility of the application process and evaluation methods used. Leveraging in-house GBA Plus expertise and the strong partnership MINDS maintains with the Director for Gender Equity and Intersectional Analysis, the program will endeavour to do even more to support young and emerging scholars.

FIVE EYES AND BEYOND

After three years, the MINDS program is firmly established as a valuable enabler for DND/CAF and a vital means of access and support among the defence and security expert community. In the coming year, MINDS will invest in building relationships with similar research and outreach-focused entities among the Five Eyes defence organizations and in NATO. The program is already supporting the establishment of the new NATO Climate and Security Centre of Expertise, but this is only the beginning. After undertaking an environment scan and engagement planning process, MINDS will build and strengthen connections with like-minded, innovative organizations around the world.



STAY IN TOUCH! FOLLOW. SHARE. APPLY.

@CanadianForces #MINDS @NationalDefence #MINDS

MINDS@forces.qc.ca Canada.ca/Defence-MINDS

FOLLOW OUR COLLABORATIVE NETWORKS

North American and Arctic Defence and Security Network @NAADSN_RDSNAA naadsn.ca

Security-Policy Nexus of Emerging Technology Network concordia.ca/ginacody/research/spnet.html

Defence and Security Foresight Group

uwaterloo.ca/defence-security-foresight-group @DSF Group

Network for Strategic Analysis

ras-nsa.ca

@RAS_NSA

Innovative Methodologies for Defence Challenges Network aodnetwork.ca

Network for Research on Hateful Conduct in the CAF sites.ontariotechu.ca/rwe-caf/index.php @RWE_CAF_Network

Pan-Canadian Sexual Misconduct During Military Service Collaborative Network @traumamcmaster

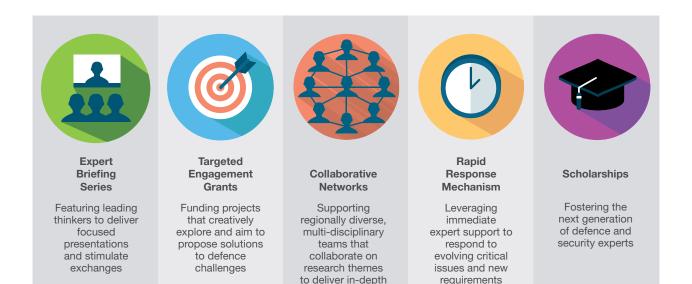
thetraumaandrecoverylab.com

Research Network on Women, Peace and Security mcgill.ca/rnwps @rn_wps

Canadian Network on Information and Security canis-network.ca

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ANNEX A: THE MINDS PROGRAM



analysis and policy recommendations

AMPLIFYING DIVERSE VOICES

MINDS has an important role to play in promoting diversity and amplifying a broad spectrum of voices in the defence and security community, including women, Indigenous peoples, youth, and other underrepresented groups. Applicants must demonstrate how they factor Gender Based Analysis Plus (GBA Plus) considerations into the design of their proposals, and are encouraged to include multiple perspectives. MINDS continued to work with DND's Directorate for Gender Equality and Intersectional Analysis and the broader expert community in that field, to ensure that the defence and security sector continues to learn, grow, and reflect the fabric and values of the Canadian population.

GOVERNANCE

The MINDS Steering Committee, composed of senior representatives from organizations across the Defence Team, serves as a high-level departmental advisory body focused on ensuring alignment, transparency, and efficiency in the management of the program. This includes supporting the development of MINDS priorities and challenges, reviewing and endorsing funding recommendations, communicating defence's needs for external expertise, and promoting the MINDS program.

ANNEX B: MINDS POLICY CHALLENGES

THEME ONE: WELL-SUPPORTED, DIVERSE, RESILIENT PEOPLE AND FAMILIES

Creative recruitment and retention models

• How can DND/CAF make a military career attractive to all who may be interested in serving? How can the CAF strengthen the appeal of a military career when competing for talent from the private and public sector?

- What are the barriers (systemic barriers, unconscious biases, etc.) to recruiting and retaining a diverse CAF within the existing recruitment and retention models, and how can these be eliminated?
- How can DND/CAF best integrate and manage a more diverse membership, including those with unique (i.e., intersectional) profiles?
- How can DND/CAF improve the retention of its experienced, mid-career members?

Innovative approaches to force mix and structure

- What is the appropriate force mix and structure for today and in the future, in light of emerging challenges like climate change?
- How can the CAF ensure flexibility, balancing individual and institutional needs, while meeting its domestic and international obligations?
- How do we maximize the output and impact of the Reserves?
- How can diversity targets support Force Posture and Readiness efforts?

Addressing and Preventing Sexual Misconduct

- What promising and emerging practices can the CAF support and/or implement to improve outcomes for those affected by sexual misconduct, in all aspects of their experience?
- What further efforts can the CAF take to prevent sexual misconduct?
- What can be done to encourage those affected, including men, to seek assistance when needed and to report their experiences?
- How can the CAF increase its understanding of those individuals who commit sexual misconduct and the situational and individual risk factors which may lead to such incidents?

Addressing and Preventing Hateful Conduct and Radicalization

- How can the CAF adapt institutional measures such as personnel generation, including recruitment and training, to ensure that it recruits the right people and continuously promotes a culture free from hateful attitudes and conduct?
- What best practices exist to identify individuals who may be susceptible to radicalization or already hold hateful attitudes and how can these methods be applied to prospective, currently-serving, or veteran members?
- Does the CAF's unique indoctrination (basic training, wearing of uniforms, etc.), traditions, and uniformity play a role in either perpetuating or removing hateful conduct and views? Do these factors differ across the Regular and Reserve Forces?
- Is the DND/CAF's policy suite sufficiently comprehensive to address hateful conduct and radicalization? What are the other options (culture, training, etc.) by which this form of misconduct could be addressed?

THEME TWO: A CHANGING SECURITY ENVIRONMENT

The Rise of Grey Zone Conflict: Below Threshold Tactics and Hybrid Warfare

• What does the rise of grey zone conflict, below threshold tactics, and hybrid warfare mean for policies/capabilities at the strategic, operational, and tactical levels? What policies need to be in place in order to adapt to the challenges posted by these threats?

• What is the role for DND/CAF and other government departments? Who should have the authorities and what is the appropriate governance structure?

• How do the U.S. and other allies and adversaries define and approach below threshold tactics and hybrid warfare? How are Canada's allies and partners responding, with a particular focus on models/ lessons learned/best practices for Canada?

• Should DND/CAF apply traditional deterrence concepts to below threshold threats? If so, how? What is the relationship and interplay between deterrence in the conventional and below threshold spheres?

The Evolving Role of Major Powers

• How has the US's role in the international system changed and what does that mean for Canada and its place in the world?

• What can Canada and DND/CAF do as a middle power to advance international peace and security?

• What is the role of Defence in promoting, developing, and implementing whole-of-government responses?

• What are the threats to and opportunities for DND/ CAF and Canada in a time of great power competition?

Climate Change as a Growing Threat to National Resilience

• How can CAF planning, operations and forcereadiness evolve to improve its ability to anticipate and support to climate-related emergency response domestically and internationally? • As compared to commitments in the SSE, DEES, and the Greening Government Strategy, what additional and innovative measures are Allies taking related to greening defence?

• What are the impacts of climate change on ongoing and future peacekeeping and stabilization missions, including as a driver of conflict?

• How is climate change expected to affect DND/ CAF infrastructure, supply chains, and procurement; how can climate change resilience be built into these fundamental pillars of CAF operations?

THEME THREE: GLOBAL DEFENCE ENGAGEMENT

National Resilience and Continental Defence National

• What are the emerging threats against Canada and North America and the associated gaps in continental defence?

• What capabilities and infrastructure are required to respond to these threats?

• What is the best use of Canadian resources and assets to fill identified gaps? How can Canada best contribute, cooperate and coordinate within NORAD to address them?

• What changes to Canadian policy or practice may be required to strengthen the defence of Canada and North America?

Defence Role in Pandemic Preparedness and Recovery

• How has COVID-19 changed the geopolitical landscape? What are the likely short- and long-term impacts of the pandemic on international relations, defence and security issues, political economy and society?

• What lessons can DND/CAF learn from Canada and other countries' ongoing response to COVID-19?

• How can DND/CAF contribute to Canada's global health engagement, in anticipation of health security becoming a larger problem in the future?

• How can DND/CAF and investments in defence support Canadian domestic resilience and post-pandemic recovery?

Canada's Defence Relationships

- How does the breakdown of the international rulesbased order affect defence relations?
- How can Canada and its allies act to prevent future armed conflicts?

• What is the future of NATO in an era of great power competition?

• What are the opportunities and challenges to defence and security cooperation?

THEME FOUR: APPROACH TO DEFENCE: ANTICIPATE

Anticipating Future Challenges

• How will the following domains evolve over the next 10, 20, 50 years?

- o Security Environment
- o Defence Investment and Burden Sharing
- o Geopolitical issues, alliances and partnerships
- o Stabilization and peacekeeping
- o Capabilities
- o Technology / Information

• Are current capabilities broad and adaptable enough to meet an evolving security domain? If not, what force structure is the most applicable to meet any future challenge in a joint or combined environment?

THEME FIVE: APPROACH TO DEFENCE: ADAPT

Cyber, Space, and Information as Operational Domains

• How can DND/CAF maximize the use of these domains, especially in the context of great power competition?

• How should DND/CAF research, develop, test and employ these capabilities in light of strategic, operational, legal and ethical considerations? How can the CAF operate in these domains while still maintaining the trust of the Canadian people?

• How must domestic and international legal and policy frameworks change in order to compete with, contest, confront, and – when necessary – combat our nation's adversaries within the information domain?

• How will adversaries use and/or exploit these domains? What does their official and unofficial policies with regard to them indicate for future developments or postures?

The Role of Artificial Intelligence

• What are the strategic and military implications of AI and autonomy?

• How can the CAF be better positioned to leverage continuous developments and uses of AI and autonomy?

• What legal/ethical considerations should the CAF be aware of during the development, testing, and use of AI applications and systems with high levels of autonomy? How do you reduce the potential for imbedding biases as a result of machine learning?

• How will adversaries use AI and autonomy to challenge the DND/CAF?

Emerging Technology and Military Application

• What are the strategic, operational and tactical implications of emerging technologies such as AI, quantum, robotics, human modification, biotech, cloud computing, big data, blockchain and additive manufacturing/3D printing?

• How are Canada's allies and potential adversaries addressing emerging technologies for defence and security purposes?

• How can DND/CAF work with the private sector and academia to raise awareness and mitigate risk?

• What are relevant or notable examples where military or dual-use technology was acquired from the private sector by a foreign state, and what lessons can be learned from these cases?

Defence Role in the Arctic

• Beyond the military domain, what threats exist in the Arctic? What are the foreign economic and military interests in Canada's North?

• DND/CAF works closely with partners (e.g. government, other Canadian partners, other Arctic countries, NATO, non-Arctic partners) in the Arctic. How can these relationships be more effective at delivering benefits and services?

• What is/will be the role of land, sea, air, and/or special operations forces in demonstrating Canadian sovereignty and exercising deterrence against activities undermining Canadian interests in the North? How do we operate in this environment to achieve these effects?

• How should Canada strengthen its leadership as an Arctic nation and relationships with key partners?

Defence Procurement

• How can DND/CAF improve defence procurement?

• What does the model look like?

• What policy changes, if any, are required to implement a new model?

• What are the advantages/disadvantages of capability-based planning versus threat-based planning? Is there a hybrid option?

THEME SIX: APPROACH TO DEFENCE: ACT

The Future of Capacity Building

• How should capacity building evolve?

• What are the implications of hybrid warfare on capacity-building?

• How do we best measure the tactical, operational, and strategic benefits and effects of CAF capacity-building activities?

• How do DND/CAF, recipients, and Canada as a whole benefits from capacity-building engagements?

ANNEX C: VIRTUAL EXPERT BRIEFING SERIES

Chris O'Dea

April 2021 Bridging the Gap: China's Infrastructure Imperialism

• Christopher O'Dea delivered a briefing on China's acquisition of economic infrastructure through stateowned enterprises in an effort to increase its global influence and political power. Mr. O'Dea spoke to the conclusions found in his MINDS-funded report, entitled Security Implications of Commercial Infrastructure in an Era of Gray-Zone Conflict with China.

Indigenous Awareness Week

May 2021

Indigenous Forces: Indigenous Identity, Inclusion, and Community in the CAF

• MINDS hosted a panel discussion as part of Indigenous Awareness Week featuring Chief Warrant Officer Joel Pedersen, Chief Petty Officer 2nd Class (ret.) Debbie Eisan, and Captain Dustin Lebel, and moderator Dr. P. Whitney Lackenbauer.

David Morin and Marie-Ève Carignan

June 2021

From Mistrust to Misinformation: Conspiratorial thinking and its potentially violent effects in Canada

• David Morin and Marie-Ève Carignan delivered a briefing on the causes and consequences of conspiracies surrounding the coronavirus in Canada, focusing in on how this may result in violent outcomes. They shared the results of their MINDSfunded study of Canadian conspiracy theories and actors that have been active on social media since the beginning of the pandemic.

International Crisis Group (ICG) July 2021

Rising Tensions in the Eastern Mediterranean

• In partnership with MINDS, the International Crisis Group hosted a virtual roundtable on tension in the Eastern Mediterranean. The event covered the objectives and strategies of Turkish, European, and Middle Eastern actors involved, and fostered discussion on the synthesis of practical policy options for stakeholders to support de-escalation, and nudge regional players towards cooperation rather than brinkmanship.

Timothy Choi

September 2021 Beneath the Surface: The Future of Canada's Submarine Fleet

• Timothy Choi, a doctoral candidate at the University of Calgary's Centre for Military, Security and Strategic Studies, delivered a briefing and participated in a roundtable on the capabilities and future of Canada's submarine fleet.

Joana Cook

October 2021

Women and Counter-Terrorism: 20 years after 9/11

• Dr. Joana Cook, an Assistant Professor of Terrorism and Political Violence at Leiden University, delivered an expert briefing and participated in a roundtable on the roles of women and gender in counterterrorism in the 20 years after 9/11. Dr. Cook spoke to the conclusions found in her MINDS-funded report entitled Women and Counter-Terrorism: 20 Years after 9/11.

Dina Esfandiary

October 2021

Shifting Sands: The Gulf Cooperation Council and Security Trends in the Middle East

• Dr. Dina Esfandiary, a Senior Advisor on the Middle East and North Africa with the International Crisis Group, delivered a briefing and participated in a roundtable on emerging security trends in the Middle East.

International Crisis Group (ICG)

October 2021

Russia's aims, strategies and policy in the European Neighbourhood and beyond

• In partnership with MINDS, the International Crisis Group hosted a virtual roundtable on Russia's aims, strategies, and motivations in its region; how domestic considerations and geopolitical rivalries affect Russia's actions in Ukraine and Nagorno-Karabakh; the drivers behind the Russia-U.S. standoff; and to identify potential areas of de-escalation or collaboration.

International Crisis Group (ICG) November 2021

Russia's aims, strategies and policy in Syria

• In partnership with MINDS, the International Crisis Group hosted a virtual roundtable on Russia's aims, strategies, and policy in Syria. The discussion sought to generate the actionable policy-thinking required to consolidate existing ceasefires, alleviate the ongoing humanitarian crisis, and pave the way for more substantive efforts to secure Syria's future.

Mary Donohue

November 2021 Digital Wellness in the New Normal: Improving Communication in the Hybrid Workplace

• Dr. Mary Donohue, CEO of the Digital Wellness Centre and Columbia Business School Lang Centre Innovation Fellow, delivered an expert briefing on digital communication and adapting to remote work. Dr. Donohue spoke to her extensive research on "digital fatigue" and outlined tools to improve employee well-being and performance.

Peter Singer

December 2021 Ex Machina: Emerging Technology in Great Power Competition

• Dr. Peter W. Singer, Principal at Useful Fiction LLC and Strategist at New America delivered a briefing and participated in a roundtable on emerging technology in the context of great power competition and the future of conflict.

International Crisis Group (ICG)

December 2021 Simmering Rivalries in the South China Sea

• In partnership with MINDS, the International Crisis Group hosted a virtual roundtable on simmering territorial rivalries in the South China Sea. This event fostered an in-depth discussion on the aims, strategies, and motivations of rival claimants, underlined how present U.S.-China frictions could lead to a potentially dangerous escalation, and identified ways to reduce tensions in the absence of a solution to the sovereignty dispute.

Simon Thibault, Colette Brin, and Jean-Christophe Boucher

January 2022

Digital resilience: Disinformation and social fractures

• Jean-Christophe Boucher, Colette Brin, and Simon Thibault presented a briefing on the information environment, social media, disinformation and misinformation.

The Dallaire Institute for Children, Peace, and Security

January 2022

Youth in Conflict: Children, Peace, and Security

• Members of the Dallaire Institute for Children, Peace, and Security presented a briefing on strategies for preventing the recruitment and use of child soldiers; to advance a more nuanced understanding of children in conflict; and to develop new mechanisms for supporting child protection around the world.

Andy Knight, Huda Mukbil, and Shree Paradkar February 2022

Systemic Racism in Canadian Defence and Security

• Dr. Andy Knight, Huda Mukbil, and Shree Paradkar, participated in a panel discussion and roundtable on addressing systemic racism in Canadian society, and within the Canadian security and defence community. The panelists provided insights into the challenges associated with institutional culture change and the elimination of systemic and structural racism.

Stanley McChrystal

February 2022 *Risk: A User's Guide*

• Gen. (ret.) Stanley A. McChrystal presented a briefing on his latest book Risk: A User's Guide, discussing where and how we fail to understand risk and how we can reorient our focus to better recognize threats and address our vulnerabilities in an increasingly uncertain future.

Jonathan Berkshire-Miller

February 2022

NATO Strategic Concept Seminar

• The MINDS program funded Jonathan Berkshire Miller's participation in the NATO Strategic Concept Seminar in The Hague, Netherlands and his delivery of a speech on NATO's evolving vision of partnerships in the context of the Indo-Pacific.

Space Strategies Consulting

March 2022 Canada's Critical Space Dependencies

• Experts from Space Strategies Consulting Ltd. presented a briefing and participated in a roundtable on Canada's critical space dependencies, discussing how space-derived capabilities are critical to modern society, what vulnerabilities can affect them, and how Canada can respond to the challenges and reap the benefits associated with the space domain.

Dr James Acton and Dr Seva Gunitsky

March 2022

War in Ukraine: Trajectories and Risks of Escalation

• Dr. James Acton and Dr. Seva Gunitsky delivered an expert briefing and participated in a roundtable on Russia's invasion of Ukraine, the conditions for and potential of escalation, the possible trajectories of the conflict, and the pathways to resolution.

The Stimson Center

March 2022 Hostile Waters: North Korea's Maritime Sanctions Evasion

• Members of the Stimson Center delivered an expert briefing and participated in a roundtable on North Korea's maritime sanctions evasion tactics, including ship-to-ship transfers. The event outlined the challenges associated with addressing sanctions evasion and discussed potential strategies.

Elizabeth Broderick

March 2022 Delivering Lasting Culture Change

• Elizabeth Broderick of the UN Working Group on Discrimination Against Women and Girls delivered an expert brief and participated in a roundtable on delivering lasting culture change. The brief explored culture as a precondition for inclusion, respect, and resilience in the workplace, and as an enabler of recruitment, retention, and operational effectiveness.

ANNEX D: FUNDING RESULTS FOR TARGETED ENGAGEMENT GRANTS

NOTE: DUE TO COVID-19 SOME OF THESE EVENTS AND PROJECTS MAY NOT HAVE OCCURRED ON THE DATES INCLUDED BELOW.

ROUND 1

Queen's University – Centre for International Defence Policy

Leveraging Behavioural Science Research to Support the CAF's Recruitment Efforts

Kingston, ON \$43,120

Funding will support a series of social experiments aimed at better understanding how women react to various recruitment campaigns in an effort to help the Defence Team improve diversity and inclusion efforts, as well as reach the 25% target for women in the Canadian Armed Forces.

Avascent

Highlighting Canada's Collaborative Defence Innovation Opportunities with the United States

Ottawa, ON; Washington, D.C. \$50,000

Funding will support a survey and analysis of efforts by the US Department of Defense (DOD) to promote innovation in technology development and adoption, in an effort to draw on new commercial technologies with military application.

Queen's University – Centre for International Defence Policy

Meeting the Pan-Domain Challenge: Comparing Canada and its Allies

Kingston, ON \$49,945 Funding will support a study of the Canadian Armed Forces' pan-domain force employment concept and compare it to what allies and partners are doing. Its objective is to see how the Canadian Armed Forces' can better integrate traditional domains of operations, with emerging domains (i.e. space, cyber and information.)

Valens Global and Organization for the Prevention of Violence

Blind Sided: Reframing Use of Emerging Technologies in the Grey Zone Environment Through Application of Evolutionary Theory

Raleigh, NC, USA; Edmonton, AB \$49,564

Funding will support a study of grey zone influence operations using evolutionary theory focusing on how grey-zone mobilizations can disproportionately impact identity communities.

Leiden University

A Comparative Study of Non-State Violent Drone Use: Implications for Canadian Security Operations

The Hague, Netherlands \$49,942

Funding will support research on the use of drones by non-state actors, with particular attention to terrorist groups.

Project Ploughshares

Beyond norms: military restraints for enhanced security in outer space

Ottawa, ON \$45,675 Funding will support research on pathways to arms control and military restraint in outer space. The research process will include workshops and consultations with Department of National Defence & Canadian Armed Forces, civil society organisations, and academic experts.

University of Waterloo

Opportunities and Challenges? Understanding NATO's Role in the U.S.-China Rivalry

Brussels, Belgium \$42,357

Funding will support a two-day workshop and interviews examining the North Atlantic Treaty Organization (NATO) in the context of US-China rivalry, in particular how NATO has approached the security challenges posed by China thus far; what goals it should have in relation to China; and how it can best realise those goals given the diverse views and threat perceptions of its membership.

National School of Public Administration

Understanding misinformation and disinformation about the Arctic region and the Canadian Arctic

Gatineau, QC \$30,940

Funding will support research on how cyberspace is used to carry out information campaigns (notably by Russia and Canada) in the Arctic, and how Canada can navigate them in the future.

Asia Pacific Foundation of Canada

Canada, Asia, & Arctic

Vancouver, BC \$49,992

Funding will support the establishment of a Canada-Japan mechanism for research, dialogue, and policy outreach to analyze and improve Canada's engagement with and understanding of the Asian non-Arctic States, including Russia as an Asian actor.

Université de Québec à Montréal

War on the Rocks en français

Montréal, QC \$50,000

Funding will support the creation of a francophone website featuring short and practical analyses for French-speaking Canadian and non-Canadian defense professionals (academics and practitioners).

NATO Association of Canada

NATO and The Indo-Pacific Conference

Toronto, ON \$7,165

Funding will support a one-day conference in August, 2021 on the Indo-Pacific. Seven high profile speakers, including the Minister of National Defence, would be brought in to discuss the various strategic views of the North Atlantic Treaty Organization (NATO), Canada and United States on NATO engagement in the Indo-Pacific.

University of Victoria

Climate change in the Arctic: forecasting the preparedness of the Department of National Defence into 2070

Victoria, BC \$12,176

Funding will support a study of the effects of climate change on Canadian Armed Forces operations in the Arctic, including an examination of the physical impacts on the Arctic and the organizational structure required to meet these climate challenges.

University of Stellenbosch, Queen's University

COVID-19: Comparing Domestic Military Operations

Kingston, ON; South Africa \$49,783

Funding will support a study of the military's role in supporting civilian national authorities, particularly for domestic emergency response. The project intends to identify lessons learned and best practices for the Department of National Defence & Canadian Armed Forces, through comparative case studies examining the domestic operations of militaries in 19 allied or partner countries with comparable federal systems to Canada, including as part of responses to COVID-19.

University of Victoria

Canada, Southeast Asia, and the Indo-Pacific: Engaging a Critical Region Victoria, BC \$40,630

Funding will support a series of in-person roundtables in Victoria, B.C. on the role of Southeast Asia in great power competition in the Indo-Pacific region.

Archipelago of Design

Canadian Initiative for Democratic Resilience

Ottawa, ON \$50,000

Funding will support a study of efforts within the Government to protect democratic institutions, including the federal electoral process, against misinformation and cyber-attacks.

Université Saint Paul

Methods of preventing intolerance and discrimination in organizations: Canadian Armed Forces Practice Assessment Tools

Ottawa, ON \$49,417

Funding will support research into methods of preventing hateful behavior and radicalization with the goal of equipping the Canadian Armed Forces, to succeed.

Crosstech, Ltd.

Leveraging Canadian Influence with Emerging Technologies to Enhance International Peace and Stability Operations

Vancouver, BC \$49,417

Funding will support a survey of existing dual-use technologies in the Canadian defence sector that could be leveraged as part of capacity building activities to improve partner forces' effectiveness in peace support operations, while bolstering Canada's defence relationships.

Conference of Defence Associations Institute

The Youth Climate Security Summit

Ottawa, ON \$25,000

Funding will support a two-day, in-person Youth

Climate Security Summit in Ottawa. The summit serves to bring together student leaders from across Canada and connect them with academics, practitioners, government, and Canadian Armed Forces officials.

ROUND 2

École nationale d'administration publique and Université Laval

Analyse du risque politique associé au plateau continental arctique

Gatineau, QC \$31,200.00

Funding will support a study to determine whether the establishment of the Arctic continental shelf and the overlapping claims of Russia, Canada, and Denmark could lead to conflict between these countries.

University of Calgary

Inclusivity in the Canadian Armed Forces

Calgary, AB \$50,000.00

Funding will support public surveys to examine issues of public perception related to diversity and inclusion in the Canadian Armed Forces. The project will explore how diversity and inclusion issues affect how Canadians perceive the military, its leadership, and its embodiment of Canada's multiculturalism.

Carleton University

The Year Ahead 2022: An International Security, Intelligence, and Defence Outlook

Ottawa, ON \$47,500.00

Funding will support the 2022 installment of 'The Year Ahead' conference in Ottawa, assembling academics, practitioners, and subject matter experts to discuss the most significant defence and security challenges facing Canada in the coming year.

Trent University

Arctic Defence and Security Priorities: Insights from Inuit Nunangat

Otterville, ON \$50,000.00

Funding will support a study of the intersections of Inuit interests and priorities and DND/CAF objectives pertaining to the Arctic, continental defence, and climate change, focused on operational effectiveness and partnerships.

Queen's University and Carleton University

Investigating Recruitment and Retention in the CAF Primary Reserve

Kingston, ON \$43,872.00

Funding will support a study on how unit-level dynamics and initiatives affect recruitment and retention in Ontario Primary Reserve Units with a particular focus on local community demographics and the implementation of culture change initiatives.

British American Security Information Council

Risky Resources in the Arctic

London, United Kingdom \$49,466.12

Funding will support the use of foresight scenarios to forecast challenges to a stable and peaceful Arctic posed by competition over strategic resources and sea routes made accessible by climate change. The project will also explore strategies for mitigating the risks arising from these scenarios.

British American Security Information Council

Risks to Human Security in the Arctic

London, United Kingdom \$49,755.03

Funding will support the application of foresight and futures approaches to assessing the risks produced in the Arctic by two significant emerging factors in the region: climate change and increasing great power competition.

British American Security Information Council

Canadian Submarine Recapitalization within the Context of Climate Change

London, United Kingdom \$49,097.63

Funding will support a study of the impact of climate change on Arctic underwater warfare requirements to inform the Royal Canadian Navy's efforts to replace the Victoria-class submarine fleet.

St. Francis Xavier University

Arctic Maritime Partnerships: Options and Opportunities in the North American Arctic

Antigonish, NS \$20,000.00

Funding will support a two-day workshop in 2022 with participants from Canada, the United States, and Denmark, to identify common North American Arctic defence and security concerns and develop recommendations enabling cooperation between allies.

McMaster University

Uncovering the Neural Correlates of Minority Stress in LGBTQ2S+ Military Members and Veterans in Canada

Hamilton, ON \$50,000.00

Funding will support a study adopting an intersectional perspective in assessing how chronic experiences with discrimination, violence, and microaggressions impact brain function among LBGTQ2S+ CAF members and veterans.

McMaster University

The impact of military sexual misconduct in male Canadian Armed Forces members and Veterans

Hamilton, ON \$50,000.00

Funding will support a study on the impact of sexual misconduct on male and male-identifying survivors with emphasis given to the mental and physical health, careers, and personal lives of CAF veterans across Canada.

Mount Saint Vincent University

How a revised masculinity can help foster cultural change in the Canadian Armed Forces

Halifax, NS \$32,903.50

Funding will support a series of dialogues to develop new insight into the role of masculinity in military culture and how a revised understanding of masculinity in a military context can foster culture change.

Université du Québec à Montréal and Université Laval

Sa prémunir contre le pire : Vers une guerre sinoaméricaine pour Taiwan ?

Montreal, QC \$49,993.25

Funding will support a symposium exploring the position of Taiwan within the US-China rivalry; participants will also discuss Canada's role in the region and how to navigate a potential conflict over Taiwan.

Carleton University

The 19th Canada-Korea Forum

Ottawa, ON \$49,460.00

Funding will support the organization and hosting of the 19th Canada-Korea Forum, assembling experts and practitioners from Canada and the Republic of Korea to discuss pressing policy challenges facing both countries.

McMaster University

Exploring the experiences of LGBTQ2S defence members who have served in the Canadian Armed Forces

Hamilton, ON \$50,000.00

Funding will support a series of interviews with current and former LGBTQ2S+ members of the CAF to provide insights into the unique challenges affecting recruitment, retention, and upward mobility within this community.

Canadian Global Affairs Institute

Reconciling Great Power Competition and Socioeconomic Imperatives in Canadian Defence Procurement

Ottawa, ON \$50,000.00

Funding will support a series of engagements examining strategic capability considerations and socioeconomic objectives in Canadian defence procurement emerging from the resumption of great power competition.

Centre for International Governance Innovation

The Nexus of Space-Cyber: A Rising Challenge for Canada's Defence Strategy

Waterloo, ON \$34,200.00

Funding will support an analysis of the policy gaps and challenges facing Canada in intersections of two increasingly vital defence and security domains: cyberspace and outer space.

Valens Global

Sleeping Giants: A Simulated Study of Modern Great Power Competition

Duluth, MN \$49,951.75

Funding will support the organization and facilitation of a war-game titled "Sleeping Giants," providing key insight into the evolving role of major powers through a lens of sub-state proxies, the information environment, national resilience, and the capabilities of middle powers.

Institute for Peace and Diplomacy

2nd Annual Middle East Strategy Forum 2022

Toronto, ON \$50,000.00

Funding will support the organization and facilitation of the second installment of the Middle East Security Forum: a hybrid conference on the geopolitics of the Middle East and Canadian defence policy in the region.

Conference of Defence Associations Institute

Les formations militaires à l'étranger et le multilatéralisme canadien

Ottawa, ON \$15,800.00

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Funding will support a seminar and papers on the causes, dynamics, and implications of military training abroad with an aim to provide the CAF with tools for improving Canada's approach to developing defence relationships around the world.

Conference of Defence Associations Institute

Assessing the dialogue: evaluating the health of the civil-military relationship in Canada today

Ottawa, ON \$23,300.00

Funding will support a study on the state of civilianmilitary relations in Canada, drawing on an analytical approach centred around "second order" indicators including culture, recruitment, procurement, and jointness, among others.

Conference of Defence Associations Institute

90th Annual Ottawa Conference on Security and Defence

Ottawa, ON \$50,000.00

Funding will support a three-day international forum for thought leaders and senior government officials from around the world to inform Canadian decisionmakers and provide a platform for Canada's defence and security community to share its perspectives with a global audience.

Canadian Global Affairs Institute

Defending the Continent: A pan-Canadian and pandomain Arctic approach

Ottawa, ON \$50,000.00

Funding will support a series of webinars and research papers exploring the modernization of North American defence in a context defined by resurgent great power competition and the rise of powerful new operational domains.

Archipelago of Design

Mobilizing Role Playing Game Design for Anticipating Future Challenges

Ottawa, ON \$50,000.00

Funding will support the creation of a play-based foresight capability for DND/CAF which facilitates scenario planning through a role-playing game approach to war-gaming.

YOUNG MINDS

McGill University

Hacking the Hackers: A Hackathon to Propose Responses to Grey Zone Attacks

Montreal, QC \$10,000.00

Funding will support a hackathon to inspire new thinking on how to respond to grey-zone threats facing Canada. The event will bring together analysts, CAF members, and students to identify creative and innovative solutions to predetermined challenges.

Université de Montréal

Guerre informationnelle à la russe : le conflit en Ukraine

Montreal, QC \$6,488.78

Funding will support an analysis of Russia's motivations for conducting cyber-attacks in the context of the hybrid war unfolding in Ukraine, exploring avenues for international and domestic prevention and capacity building.

Bishop's University

The New Bipolarity: Where Does Canada Fit in the US-China Rivalry?

Laval, QC \$10,000.00

Funding will support a conference on the emerging US-China rivalry and its impact on Canadian interests, assembling experts with diverse perspectives to identify strategies Canada can adopt in the years ahead to pursue its interests in an increasingly contested political landscape

ANNEX E: FUNDING RESULTS FOR COLLABORATIVE NETWORKS

Network Directors: Jean-Christophe Boucher and Erin Gibbs van Brunschot, University of Calgary

Canadian Network on Information and Security Calgary, AB

Defence Policy Challenges Addressed: Cyber, Space, and Information as Operational Domains; Anticipating Future Challenges; and, the Rise of Grey Zone Conflict

The Network will examine the impact of the domestic and international information environments on Canadian national defence and security through four lenses: political/military, cognitive/behavioural, technological, and legal/ethical.

Network Director: Margaret McKinnon, McMaster University

Pan-Canadian Sexual Misconduct during Military Service Collaborative Network Hamilton, ON

Defence Policy Challenge Addressed: Addressing and preventing sexual misconduct

The Network will build upon an existing multi-disciplinary community of practice to advance research on sexual misconduct into actionable outcomes for National Defence, in addition to supporting policy changes to address sexual misconduct and improve services for survivors.

Network Director: Jennifer Welsh, McGill University

Research Network on Women, Peace, and Security Montreal, QC

Defence Policy Challenges Addressed: Climate Change as a Growing Threat to National Resilience; Canada's Defence Relations; and, Anticipate Future Challenges

Using a GBA+ lens, this bilingual Network will study Canada's future defence and security threats and with particular emphasis on the Women, Peace and Security agenda.