

WEBVTT

00:00:02.440 --> 00:00:16.740

<v SPEAKER_1>In this episode of Defence Deconstructed, we make available the two keynote speeches from our September 16th, 2025 conference, Charting Canada's Digital Ambition, the Honourable Jenna Sudds and Lieutenant General Steve Boivin.

00:00:16.740 --> 00:00:36.780

<v SPEAKER_1>In their respective speeches, the two cover the current culture of government within the private sector, how the government is operating with digital transformation at its core, the status of uncertainty and rapidly evolving global security environment, as well as six of the 29 operations running out of the Canadian Joint Operations Command.

00:00:36.780 --> 00:00:51.020

<v SPEAKER_1>This conference was organized by Triple Helix, supported by the Department of National Defence's Mobilizing Insights in Defence and Security, or MINDS, program, CGAI's strategic sponsors, and conference sponsors, Dell Technologies and Microsoft.

00:00:51.020 --> 00:00:52.840

<v SPEAKER_1>Enjoy the show and happy Thanksgiving.

00:00:56.140 --> 00:01:02.920

<v SPEAKER_2>We launched this perspective to look at the intersection of emerging technology in national defence and security.

00:01:02.920 --> 00:01:08.860

<v SPEAKER_2>How those communities in Canada can better leverage technology like artificial intelligence and quantum.

00:01:08.860 --> 00:01:18.140

<v SPEAKER_2>But quite early on in that effort, it became very clear that the fundamental prerequisite to doing any of that clever computing stuff was getting our digital house in order.

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<v SPEAKER_2>So that is essentially the genesis for this conversation today.

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<v SPEAKER_2>Across government but especially in the national security and defence spheres, we need modern capability that only exists in digital form in 2025.

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<v SPEAKER_2>That's a reality that the private sector is embracing widely to this day, which to the credit of the government has been

widely recognized.

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<v SPEAKER_2>But creating that change in the national security and those defence spaces specifically is going to require a broader set of cross-government change to unlock a lot of that digital potential.

00:01:50.960 --> 00:01:56.280

<v SPEAKER_2>And that's basically the genesis for how the conference today and the discussion has been structured.

00:01:56.280 --> 00:02:10.580

<v SPEAKER_2>To that end, let me thank the people that actually did that structuring, starting with Vice Admiral Retired Ron Lloyd, who is the Chair of the Steering Committee, as well as Major General Chris Zimmer, Paul Wagner and Mark Waters for putting them together, a fantastic program.

00:02:10.580 --> 00:02:15.920

<v SPEAKER_2>And that's where you can find details about today's engagement and full program participant biographies.

00:02:15.920 --> 00:02:25.760

<v SPEAKER_2>Instead of us taking the time to read in detail, people that you generally know of already, with one exception, our keynote speaker this morning, the Honourable Jenna Suds.

00:02:25.760 --> 00:02:27.520

<v SPEAKER_3>Good morning, everyone.

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<v SPEAKER_3>Bonjour à toutes et à tous.

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<v SPEAKER_3>Really wonderful to get to start my day with you this morning before I wander back down to Parliament for today's sitting.

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<v SPEAKER_3>As was said, my name is Jenna Suds.

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<v SPEAKER_3>I have the pleasure of serving as both a member of Parliament for Canada, but also in my Parliamentary Secretary capacity, supporting Minister Joelle Lightbound on government transformation, procurement, public works, as well as the defence procurement side with the Secretary of State.

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<v SPEAKER_3>I've spent my career, both now in politics, but also before politics, advocating and championing Canadian technology

businesses.

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<v SPEAKER_3>I'm really excited about the moment that we are in and excited about the future under our Prime Minister's leadership.

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<v SPEAKER_3>And I'm particularly excited, given our government's commitment to digital by design, but also our new government by Canadian procurement policy and ambition.

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<v SPEAKER_3>For those of you who have traveled today for this conference, I hope you also get a chance to enjoy our beautiful city.

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<v SPEAKER_3>Not just the congestion on the 417 that some of us experienced this morning, but as a proud resident of Ottawa, as the seat of our government, as our nation's capital.

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<v SPEAKER_3>It's an amazing, amazing city, home to over 1900 technology companies, over 50 federal labs, has the most PhDs outside of Silicon Valley, of anywhere in North America.

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<v SPEAKER_3>And I think we've got some really impressive talent and innovation happening throughout this city.

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<v SPEAKER_3>And I mention this because of the theme of today's discussion.

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<v SPEAKER_3>Because of Canada's focus on our digital ambition, and the discussion that I know you're going to have throughout the course of today.

00:04:35.540 --> 00:04:48.200

<v SPEAKER_3>And it's important that we centre Canadians and our incredibly skilled workers at the heart of this conversation, because we need them to reach these goals.

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<v SPEAKER_3>So it's really a privilege to get to be here with all of you who I know share a vision for a truly innovative, inclusive, and digitally empowered Canada.

00:05:02.940 --> 00:05:09.360

<v SPEAKER_3>So Canada's digital transformation is not the work of

government alone.

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<v SPEAKER_3>I think we all know that here in this room.

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<v SPEAKER_3>It requires collective agency, insight and expertise of everyone in this room, and frankly throughout this country.

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<v SPEAKER_3>You are the architects, the implementers, and the champions of change, and your role in advancing this is truly critical.

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<v SPEAKER_3>I think our government's commitment is clear to build a digital-first government that puts Canadians at the centre, delivering seamless, secure, and accessible services every time.

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<v SPEAKER_3>This is not just about technology.

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<v SPEAKER_3>It is about transforming the very culture of government in partnership with the private sector.

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<v SPEAKER_3>With the creation of the role of Minister of Government Transformation, our government has signaled that digital transformation is at the core of what we are doing and what we believe in.

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<v SPEAKER_3>The minister's mandate is to coordinate efforts across departments throughout government, foster innovation and ensure that we have the skills, the infrastructure and the processes in place.

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<v SPEAKER_3>So success for the minister, for all of us frankly, means a government where Canadians can complete most transactions online without a hassle.

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<v SPEAKER_3>It means that our systems are modern, are secure and interoperable.

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<v SPEAKER_3>It means public servants are empowered with the tools that they need and the training that they need to innovate and deliver for Canadians.

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<v SPEAKER_3>It means data drives decisions transparently and ethically.

00:07:05.100 --> 00:07:09.520

<v SPEAKER_3>And it means that Canada's data sovereignty is prioritized.

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<v SPEAKER_3>So, I'd like to draw your attention to a very recent example of Canada's digital ambition.

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<v SPEAKER_3>Last week when we were in Edmonton, Prime Minister Carney announced a bold step, and that was the desire to build Canadian sovereign cloud as part of the new major projects office.

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<v SPEAKER_3>This initiative is more than just a cloud infrastructure project.

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<v SPEAKER_3>It is about regaining or reclaiming control over our data sovereignty, a critical priority, I think, for protecting Canadian businesses, citizens and government operations in an era of increasing cyber threats.

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<v SPEAKER_3>So, a cyber cloud could offer a secure environment for sensitive data storage and processing, compliance with Canadian laws and regulations around privacy, and a foundation for Canadian innovation and competitiveness in cloud services.

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<v SPEAKER_3>So, I think this initiative, as one example, requires us to come together, public servants, private sector, industry leaders, researchers, all of us, to design and to implement a cloud infrastructure that's secure, that's scalable, and that reflects Canadian values.

00:08:35.360 --> 00:08:48.580

<v SPEAKER_3>So, it's an incredible opportunity, and no doubt, we will look back at this later in life, later in our lives with pride and with excitement of what we were able to achieve.

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<v SPEAKER_3>So we must also, of course, acknowledge the broader context in which transformation is happening.

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<v SPEAKER_3>Canadians have expressed strong support for increased defence spending, and not just traditional capabilities, but in cyber defence, digital resilience, etc.

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<v SPEAKER_3>And cyber security is a national security issue.

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<v SPEAKER_3>Our digital infrastructure must be resilient against sophisticated threats, and strengthening infrastructure projects, or excuse me, protects Canadians' data, of course, and ensures that government services remain trusted and reliable.

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<v SPEAKER_3>So while our government is committed and ambitious, we do face some very real challenges that require bold solutions.

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<v SPEAKER_3>Challenges like modernizing legacy systems.

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<v SPEAKER_3>There are many critical systems that are outdated and inflexible.

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<v SPEAKER_3>We need your expertise to reimagine how these systems can be rebuilt, be replaced with agile, user-friendly, user-centered solutions.

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<v SPEAKER_3>Challenges like talent and culture, recruiting, retraining, and continuously upskilling our public servants in digital skills is crucial.

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<v SPEAKER_3>Industry partnership can help create these training pathways and innovative training programs.

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<v SPEAKER_3>Challenges like the digital divide, still very real.

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<v SPEAKER_3>We need to ensure that all Canadians, regardless of where they are living, if it's rural, indigenous communities, have equitable access to digital services.

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<v SPEAKER_3>And there is a shared responsibility we have here with provinces to ensure that we deliver this.

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<v SPEAKER_3>Challenges like interdepartmental collaboration.

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<v SPEAKER_3>We're not always so great at that.

00:11:00.080 --> 00:11:10.020

<v SPEAKER_3>Breaking down the silos that exist is essential to be able to deliver seamlessly solutions and services for Canadians.

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<v SPEAKER_3>And your recommendations on governance and data sharing in this realm would be critically important.

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<v SPEAKER_3>And lastly, challenges around privacy and ethics.

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<v SPEAKER_3>Balancing innovation with privacy and ethical use of data must remain a top priority.

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<v SPEAKER_3>So thanks to efforts of many of you in this room and beyond, we have made some notable progress that we do also need to recognize.

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<v SPEAKER_3>So the GCnotify platform has sent over 90 million timely communications, showing what effective digital service can look like.

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<v SPEAKER_3>Comprehensive data strategy is starting to better guide data management across government.

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<v SPEAKER_3>And progress on digital ID frameworks promises to make online authentication simpler and safer.

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<v SPEAKER_3>So our government is ready to invest and to collaborate, but we need your ideas, your innovation, your input and your partnership to ensure that we build technology solutions that Canadians will trust and value, that our workforce is equipped to deliver and to sustain transformation, and that the digital economy thrives with Canadian leadership and sovereignty.

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<v SPEAKER_3>So in closing, the road ahead demands change.

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<v SPEAKER_3>We know that.

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<v SPEAKER_3>We feel that.

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<v SPEAKER_3>It demands creativity.

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<v SPEAKER_3>It demands collaboration.

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<v SPEAKER_3>The Sovereign Cloud and Digital Transformations are not only government projects.

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<v SPEAKER_3>They can't be.

00:13:02.780 --> 00:13:05.260

<v SPEAKER_3>These are Canadian projects.

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<v SPEAKER_3>These are Canadian priorities that require all of us to step forward.

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<v SPEAKER_3>All of you, you are at the forefront of this transformation, and your insights and your recommendations, your expertise are needed now in this moment more than ever.

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<v SPEAKER_3>We have a bold, ambitious agenda in front of us, and it requires our collective brain power, our collective energy and expertise to make sure that we can get this right for Canadians.

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<v SPEAKER_3>So I thank you.

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<v SPEAKER_3>I thank you for your dedication.

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<v SPEAKER_3>I look forward to the outcomes from today's discussion.

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<v SPEAKER_3>I wish I could stay and absorb it all, but duty calls up the street, so I will have to wander back shortly.

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<v SPEAKER_3>But my sincere thanks, and I wish you all a very productive day.

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<v SPEAKER_3>And thank you in advance for contributing to our digital agenda.

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<v SPEAKER_3>Thank you.

00:14:06.760 --> 00:14:09.800

<v SPEAKER_3>Please join me in welcoming Lieutenant General Steve Boivin.

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<v SPEAKER_4>All right.

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<v SPEAKER_4>Good afternoon, everyone.

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<v SPEAKER_4>Bon après-midi à tous.

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<v SPEAKER_4>Let me begin by acknowledging our hosts, the Canada's Global Affairs Institute, the conference sponsors, our partners across government, industry, practitioners, and leaders of digitalization.

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<v SPEAKER_4>You are shaping Canada's future in terms of digital.

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<v SPEAKER_4>It's actually a privilege to speak with all of you today.

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<v SPEAKER_4>Buck talked about what I've been trying to do at CanSoft.

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<v SPEAKER_4>I'm passionate by digitalization, by the requirement for the CAF to move from an analog to a digital force by design.

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<v SPEAKER_4>So, allow me to start by thanking our others, thanking the leaders of the conference, and recognizing our government partners, industry, and practitioners of digitalization.

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<v SPEAKER_4>It's a privilege to speak with you today.

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<v SPEAKER_4>So, as Commander of the Canadian Joint Operations Command, I have the pleasure to lead that team that is responsible for the planning, the execution, and the command and control of Canadian Armed Forces' conventional operations, and that's both at home and abroad.

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<v SPEAKER_4>Our mission is very clear at the Canadian Joint Operations Command.

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<v SPEAKER_4>We are to conduct operations in order to defend Canada and North America, and to promote peace and security abroad.

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<v SPEAKER_4>As the global integrator for Canadian military operations, SeaJock continues to deploy sailors, soldiers, and aviators into contested and more and more complex environments, delivering decisive operational effects.

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<v SPEAKER_4>Now, our mission success relies on our ability to, one, sense our environment, so understand the environment that we are operating in, to command and then to act decisively at every level, from tactical to strategic and horizontal across the different domains.

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<v SPEAKER_4>In order to do that, modern and optimized C4ISR systems are critical.

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<v SPEAKER_4>So what do I mean when I refer to C4ISR systems?

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<v SPEAKER_4>I refer to the capabilities that are actually enabling organizations, as I said, from tactical to strategic level, to sense and understand their environment, so to collect data and understand that environment, to decide upon that understanding, so for commanders at every level to be able to decide, make decisions upon that understanding, and therefore to ultimately act on those decisions, and achieve operational outcomes.

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<v SPEAKER_4>It's an integrated network of technologies and procedures, process to enhance situational awareness, and support decision making.

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<v SPEAKER_4>My aim today, as I engage with you, is to provide an

operational perspective on digital transformation, so I can't miss the opportunity here to talk about the operating environment, the operations as we conduct them, and talk about how important it is to digitalize our force for that environment.

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<v SPEAKER_4>So moving on to the agenda.

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<v SPEAKER_4>In order to do that, I'll begin by outlining the current complex operating environment.

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<v SPEAKER_4>I'm going to move on to CAF operational priorities.

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<v SPEAKER_4>And then I'll discuss the pan-domain force employment concept.

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<v SPEAKER_4>Our framework for integrated operations across the domains, maritime, land, air, cyber, and space.

00:18:12.940 --> 00:18:16.000
<v SPEAKER_4>The integration of those five domains.

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<v SPEAKER_4>Rolling then into an operational vignette.

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<v SPEAKER_4>And I've taken a domestic operation as an operational vignette on how digitalization can enable us to sense and decide.

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<v SPEAKER_4>And finally, I'll conclude by sharing some thoughts on what I think are the conditions for success.

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<v SPEAKER_4>At least within the Canadian Armed Forces and potentially across our department and government.

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<v SPEAKER_4>So those foundational elements that we must build on in order to ensure mission success in the digital age.

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<v SPEAKER_4>So moving on to the global operating environment.

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<v SPEAKER_4>We live and operate in a globally contested environment,

where the rules-based international order is increasingly under threat.

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<v SPEAKER_4>In my years of service, and as Buck said, I'm at 34 this summer, I've never seen a global security environment that is as uncertain and chaotic as the one that our troops face on operations today.

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<v SPEAKER_4>The operating environment is rapidly evolving.

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<v SPEAKER_4>The Ukrainian land invasion by Russia and its expansionist war obviously has repercussions on Ukraine itself.

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<v SPEAKER_4>But I personally believe that these repercussions also concern other countries in the region, as well as NATO.

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<v SPEAKER_4>The air raid in Poland last September is an obvious example of why NATO must be affected by the Russian invasion in Ukraine.

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<v SPEAKER_4>Secondly, the tensions in the Indo-Pacific region are leading to a trajectory of crisis or even conflict that is causing a lot of concern.

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<v SPEAKER_4>The ongoing conflict between Israel and the Hamas destabilizes the Middle East, a region that obviously doesn't need to be affected by the pandemic.

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<v SPEAKER_4>The September 8 strike shows the uncertainty and the fragility that we see in the region every day.

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<v SPEAKER_4>Now, closer here at home, what does it mean for Canadians?

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<v SPEAKER_4>The operating environment is characterized by a range of domestic, sorry, of domain-specific threats.

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<v SPEAKER_4>So by domain, in the maritime domain, strategic competition in the Arctic, marked by joint Russia and China sales,

conducting dual-purpose activities.

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<v SPEAKER_4>So yes, some academic research, but also collection of data to better understand the environment.

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<v SPEAKER_4>All of that must be of collective concern.

00:21:10.180 --> 00:21:27.440

<v SPEAKER_4>In the air domain, the recent increase in incursions into NORAD's Air Defence Identification Zone, or ADIS, to include Russian long-range bombers, continue to test our bi-national detection and veterans capabilities.

00:21:28.980 --> 00:21:48.280

<v SPEAKER_4>In the cyber domain, state and non-state-sponsored cyber intrusions, targeting critical infrastructure like power grids, satellites, and military networks that are critical to our ability to command and control our forces are all destabilizing.

00:21:49.780 --> 00:22:01.320

<v SPEAKER_4>In addition, information operations based on cyber operations that distort facts cause confusion and discord erode societal trust.

00:22:02.620 --> 00:22:08.640

<v SPEAKER_4>Our vulnerabilities as a nation in this new digital landscape are growing.

00:22:10.020 --> 00:22:28.060

<v SPEAKER_4>And in the space domain, the employment of concerning technologies that disrupt space-based communications, navigation systems, and ISR capabilities making us realize how reliant we are on the space domain, are all threatening the integrity of that domain.

00:22:30.160 --> 00:22:41.860

<v SPEAKER_4>Now, all of these threats differ in nature and are listed by domain, but they share as a common team that they're most of the time digitally enabled.

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<v SPEAKER_4>And this threat trajectory is growing exponentially.

00:22:48.180 --> 00:23:00.440

<v SPEAKER_4>Our adversaries are aggressively leveraging technologies, networks, data, automation, and AI to pursue their strategic advantage.

00:23:02.280 --> 00:23:26.120

<v SPEAKER_4>They operate without any regard for the ethical and moral guideposts and policies that we value with regards to open and transparent government, data, privacy, and protection, and they have little concern for the international rule of law and the many trade and treaty considerations that we respect as a Western nation.

00:23:27.780 --> 00:23:44.340

<v SPEAKER_4>To remain operationally effective in this environment, we must build a resilient digital C4 ISR system that will allow us to stay ahead in sensing and commanding to our own strategic advantage.

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<v SPEAKER_4>That system must be delivered at the pace of relevance, so we must rethink our delivery model.

00:23:54.020 --> 00:24:01.240

<v SPEAKER_4>A delivery model that must be thought towards effectiveness, speed, and agility.

00:24:03.320 --> 00:24:10.740

<v SPEAKER_4>Now, following that orientation to the operating environment, let me cover our Canadian Armed Forces operational priorities.

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<v SPEAKER_4>In this environment, the Canadian Armed Forces remains focused on four core operational priorities.

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<v SPEAKER_4>Number one, the defence of Canada in a North American context, including the Arctic.

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<v SPEAKER_4>Number two, the defence of the Euro-Atlantic through NATO with our allies.

00:24:33.400 --> 00:24:41.120

<v SPEAKER_4>Number three, the implementation of the Indo-Pacific strategy and advancing Canada's interests in the Indo-Pacific.

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<v SPEAKER_4>And number four, the response to global contingencies or the catch-all, where everything else fits in.

00:24:50.080 --> 00:24:54.940

<v SPEAKER_4>Taking those priorities one at a time, I'm going to cover some of our major operations.

00:24:54.940 --> 00:25:09.220

<v SPEAKER_4>We have 29 ongoing current operations led from the

Canadian Joint Operations Command, and I'm only going to cover six or some of the major ones to give you context to then transition to the digital space.

00:25:09.260 --> 00:25:11.220
<v SPEAKER_4>So, starting at home.

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<v SPEAKER_4>Operation LENTUS is our national operation, supported by the federal government and provincial and territorial governments.

00:25:22.400 --> 00:25:26.320
<v SPEAKER_4>Operation LENTUS aims to protect Canadians from natural disasters.

00:25:29.220 --> 00:25:34.640
<v SPEAKER_4>The demand for Canadian forces has increased exponentially in the last ten years.

00:25:34.640 --> 00:25:37.100
<v SPEAKER_4>Some data to support this statement.

00:25:37.100 --> 00:25:44.260
<v SPEAKER_4>In 2023, we have been carrying out, during the summer of 2023, support for forest fires and floods.

00:25:44.320 --> 00:25:56.900
<v SPEAKER_4>131 days in a row of Lantus operations in terms of unit, so with between 600 and 800 people deployed at all times.

00:25:56.940 --> 00:25:59.880
<v SPEAKER_4>This summer, in 2025, the numbers are a little smaller.

00:25:59.880 --> 00:26:07.400
<v SPEAKER_4>We are currently at 847 members deployed for 115 days in a row.

00:26:07.440 --> 00:26:17.480
<v SPEAKER_4>These two summers in 2023 and 2025 are number 1 and 2 in terms of operational tempo on our data.

00:26:17.480 --> 00:26:20.820
<v SPEAKER_4>And it's started to increase exponentially over the last ten years.

00:26:20.820 --> 00:26:30.200
<v SPEAKER_4>What concerns me more and more in relation to the Lantus operation is the need to use equipment at low density.

00:26:30.440 --> 00:26:47.620

<v SPEAKER_4>I will give you an example, the use of the Chinook helicopter that we did in Outrance this summer for the evacuation of villages in the north of Manitoba for all the good reasons, but based on the fact that we could not use our 630 because of too short landing tracks for the needs of a 630.

00:26:47.620 --> 00:26:59.620

<v SPEAKER_4>So the Lantus operation, as I said, made for all the good reasons, pushes us to use more and more of our capabilities that are at a low density inside the Canadian Armed Forces.

00:27:00.740 --> 00:27:06.780

<v SPEAKER_4>Moving on to Operation Nanook, our signature operation in the north and the Arctic.

00:27:06.780 --> 00:27:09.800

<v SPEAKER_4>We have an established presence.

00:27:09.800 --> 00:27:14.360

<v SPEAKER_4>So we have a permanent Canadian Armed Forces presence in the Arctic.

00:27:14.360 --> 00:27:18.720

<v SPEAKER_4>Up Nanook is our near persistent operation in the Arctic.

00:27:18.720 --> 00:27:32.980

<v SPEAKER_4>So permanent presence, near persistent operation, that we have revamped over the last 12 months in order to detect threats, to deter adversaries, and to be ready to defend if and when required.

00:27:34.660 --> 00:27:47.680

<v SPEAKER_4>We're currently expanding up Nanook beyond the current 10 to 11 months of near persistent operation, and we're currently coordinating in order to bring in some of our allies to work with us in Canada's Arctic.

00:27:49.640 --> 00:27:54.860

<v SPEAKER_4>On search and rescue is something that Canadians need to know more about.

00:27:54.860 --> 00:27:57.860

<v SPEAKER_4>Our personnel and aircrafts are postured 24-7.

00:27:59.380 --> 00:28:07.560

<v SPEAKER_4>Around the country, ready at a moment's notice to launch in order to support fellow Canadians in distress.

00:28:07.560 --> 00:28:22.520

<v SPEAKER_4>In 2024 alone, the JRCC or the Joint Rescue Coordination Centres have registered and resolved 8,400 cases of which the Canadian

Armed Forces directly supported, contributed to 629.

00:28:23.600 --> 00:28:37.180

<v SPEAKER_4>So that's two a day of search and rescue operations that the Canadian Armed Forces is involved in, let alone is involved in sorting out.

00:28:37.180 --> 00:28:39.980

<v SPEAKER_4>And we're training towards the same numbers in 2025.

00:28:41.380 --> 00:28:52.540

<v SPEAKER_4>Moving on to Europe, Operation Reassurance, which is our biggest ongoing operation, we maintain our contribution to NATO's deterrence and defence measures.

00:28:52.540 --> 00:29:05.880

<v SPEAKER_4>As the framework nation in Latvia, we lead 13 other sending nations, so 14 nations coming together in order to force generate our multinational brigade Latvia.

00:29:05.880 --> 00:29:15.540

<v SPEAKER_4>We have approximately 2500 Canadian Armed Forces members deployed to Latvia with tanks, helicopters, artillery, amongst other equipment.

00:29:16.600 --> 00:29:32.980

<v SPEAKER_4>We'll validate the war fighting capability and readiness of that multinational brigade this November through Exercise Resolute Warrior 25, and we will bring it to full operating capability as for our commitment by the summer of 2026.

00:29:32.980 --> 00:29:40.680

<v SPEAKER_4>We already know that we will be operating in Latvia and commanding the brigade as a framework nation at least until 2029.

00:29:42.240 --> 00:30:00.580

<v SPEAKER_4>On Operation Unifier, our other main operation in Europe, which is the CAF's military training mission in support of Ukraine, we've trained 45,000 people since 2014, up until 2022, the additional invasion from Russia.

00:30:02.060 --> 00:30:23.260

<v SPEAKER_4>Since 2022, we've trained an additional 12,000 AFU members on various capabilities, basic training, engineer training, medical combat training, M777 operations and maintenance, Leopard main battle tank operations and battalion staff training.

00:30:23.260 --> 00:30:30.340

<v SPEAKER_4>So looking at fully enabling the Ukrainian armed forces in order for them to defend their country.

00:30:32.020 --> 00:30:44.560

<v SPEAKER_4>In the Indo-Pacific region, thanks to Operation Horizon, the Canadian Inter-Armed Operations Command plays an essential role in promoting Canada's strategic interests in the region.

00:30:47.780 --> 00:30:49.040

<v SPEAKER_4>Each year, we deploy three warships.

00:30:49.040 --> 00:31:02.300

<v SPEAKER_4>HMCS-Ville de Québec is currently in redeployment, while HMCS-Max Bernays is deploying from an operation in the Arctic, from Operation Nanook, to Operation Horizon in the Pacific.

00:31:02.300 --> 00:31:06.820

<v SPEAKER_4>And I mention this to give you an example of how our troops are subjected to a high tempo.

00:31:07.600 --> 00:31:15.820

<v SPEAKER_4>We are talking about a ship that is already in an operation, that we are not bringing back to reconstitution, but that we are deploying directly on another operation.

00:31:15.820 --> 00:31:20.860

<v SPEAKER_4>This is the tempo that we are asking our personnel in the Canadian Armed Forces at the moment.

00:31:22.720 --> 00:31:29.800

<v SPEAKER_4>And I'll wrap up with global contingencies where CJAWC maintains readiness to respond to sudden global contingencies.

00:31:29.800 --> 00:31:40.520

<v SPEAKER_4>For example, non-combatant evacuation operations, disaster assistance response teams, all of that at very short notice, and around the globe.

00:31:41.580 --> 00:31:47.620

<v SPEAKER_4>So that concludes the orientation to the operating environment and CAF operations.

00:31:47.620 --> 00:31:56.300

<v SPEAKER_4>I'll now move on to the pan-domain force employment concept, or how we force employ across the Canadian Armed Forces.

00:31:56.300 --> 00:32:07.320

<v SPEAKER_4>So to be successful on those operations, and in this operating environment, the CAF is working to adjust, to adapt, how we operate.

00:32:07.320 --> 00:32:09.960

<v SPEAKER_4>So starting with what?

00:32:09.960 --> 00:32:15.840

<v SPEAKER_4>We will continue to prepare for competition, crisis and conflict.

00:32:15.840 --> 00:32:20.080

<v SPEAKER_4>We'll focus on operations in a multi-domain threat environment.

00:32:21.200 --> 00:32:26.080

<v SPEAKER_4>We'll coordinate our actions with other instruments of national power.

00:32:26.080 --> 00:32:32.960

<v SPEAKER_4>And finally, we'll align closely with Five Eyes members, NATO allies and regional partners.

00:32:32.960 --> 00:32:34.080

<v SPEAKER_4>Now the how?

00:32:34.080 --> 00:32:36.040

<v SPEAKER_4>How can we do this?

00:32:36.040 --> 00:32:42.300

<v SPEAKER_4>So first of all, we're reinvesting in some specific and required domain capabilities.

00:32:42.300 --> 00:32:55.740

<v SPEAKER_4>In the maritime domain, we're investing in the river-class destroyers, submarines and uncrewed surface and subsurface systems that will greatly enhance our agility in that domain.

00:32:55.740 --> 00:33:05.220

<v SPEAKER_4>On land, we're investing in land systems, UAS fleets and looking at upgrading our long-range precision fire systems.

00:33:05.220 --> 00:33:16.540

<v SPEAKER_4>In the air, upgrading to a fifth generation fighter capability, airborne early warning aircrafts, modern maritime patrol aircrafts and unmanned systems.

00:33:16.540 --> 00:33:22.720

<v SPEAKER_4>So that's very specific to the domains, but those platforms alone are not enough.

00:33:26.800 --> 00:33:34.200

<v SPEAKER_4>Their true power when you really look at those platforms lies in how they are digitally integrated.

00:33:35.940 --> 00:33:46.200

<v SPEAKER_4>How they share and fuse data, how they enable decision making, and how they operate as part of a cohesive multi-domain force.

00:33:49.040 --> 00:33:58.380

<v SPEAKER_4>That digitalization and integration is what will allow us to optimize the use of modern systems.

00:33:59.460 --> 00:34:13.700

<v SPEAKER_4>At the end of the day, a Generation 5 fighter is not optimized to its full potential if it is not integrated into the mission web in order to gather, share, and receive data.

00:34:14.680 --> 00:34:27.880

<v SPEAKER_4>And that's probably my most important message today, the integration of those platforms in an all-domain command and control system for the sum to be much greater than the sum of the parts.

00:34:29.420 --> 00:34:52.400

<v SPEAKER_4>So the CAF, in order to do that, requires a fully integrated C4ISR architecture that enables real-time situational awareness across domains, empowering timely, trusted, and fused intelligence to decide and act decisively with an emphasis on interoperability with allies and partners.

00:34:52.400 --> 00:35:01.160

<v SPEAKER_4>C4ISR must be designed to interface with all of government partners, also enabling our crisis response operations.

00:35:02.200 --> 00:35:04.580

<v SPEAKER_4>So PFAC as a whole is not an idea.

00:35:05.680 --> 00:35:14.100

<v SPEAKER_4>It's a blueprint of how we must operate and win in the digital age.

00:35:14.100 --> 00:35:29.580

<v SPEAKER_4>It means integrated all domain operations nationally and in coalition settings, leveraging digital tools to optimize capabilities, understand our environment, and obtain best decision making.

00:35:31.480 --> 00:35:36.520

<v SPEAKER_4>Digitalization, in my mind, is not optional for the Canadian Armed Forces.

00:35:36.520 --> 00:35:41.060

<v SPEAKER_4>It's now a prerequisite for success on modern operations.

00:35:42.620 --> 00:35:47.640

<v SPEAKER_4>It's a force multiplier to prevail in this operating environment.

00:35:48.840 --> 00:36:02.880

<v SPEAKER_4>In other terms, digitalization provides situational awareness, supports decision making, delivers speed and precision to outpace adversaries and build our own strategic advantage.

00:36:02.880 --> 00:36:13.340

<v SPEAKER_4>It sets conditions for modern informational interoperability across the all-domain force with other government departments and with coalition forces.

00:36:13.340 --> 00:36:21.180

<v SPEAKER_4>And it allows to build resilience with cyber security and redundancy in contested environments.

00:36:22.700 --> 00:36:26.920

<v SPEAKER_4>Now you're probably asking, so where are we today?

00:36:27.880 --> 00:36:32.360

<v SPEAKER_4>From a Canadian Armed Forces point of view, let me be candid.

00:36:33.680 --> 00:36:35.960

<v SPEAKER_4>We've got some work to do.

00:36:35.960 --> 00:36:53.440

<v SPEAKER_4>As I look at the Canadian Joint Operations Command and how I see to today, how I command and control operations for the CAF, there's been some progress but not enough progress versus how it was done by a lot of my predecessors going back 20 years.

00:36:57.180 --> 00:37:04.300

<v SPEAKER_4>Day one interoperability with allies and partners, so in a fight tonight scenario, is at risk.

00:37:04.300 --> 00:37:09.940

<v SPEAKER_4>With digital evolution being exponential, we risk losing interoperability.

00:37:11.720 --> 00:37:17.880

<v SPEAKER_4>Today, the status quo risk in my mind is higher than the risk of transformation.

00:37:17.880 --> 00:37:20.740

<v SPEAKER_4>There is a risk associated with any transformation.

00:37:21.660 --> 00:37:34.420

<v SPEAKER_4>As we speak today, the risk of status quo, of not

digitalizing our force, of continuing to operate the way we are now, understanding the operating environment, is greater than the status quo.

00:37:36.420 --> 00:37:39.580

<v SPEAKER_4>A short vignette to expose you to this.

00:37:39.580 --> 00:37:53.840

<v SPEAKER_4>At CJOC, we are doing what we can to move with a digital transformation of our Joint Operations Centre, in support of decision making, and that's both at the operational and strategic level.

00:37:53.840 --> 00:37:59.440

<v SPEAKER_4>So let me cover this vignette to talk a little bit about some of the initiatives.

00:37:59.440 --> 00:38:12.040

<v SPEAKER_4>So the vignette illustrates the Canadian Joint Operations Command Joint Ops Centre, and powered by a nascent, and I emphasize a nascent digital C4ISR system.

00:38:13.880 --> 00:38:17.720

<v SPEAKER_4>This system can evolve, the CAF's response to domestic forest fires.

00:38:17.720 --> 00:38:21.800

<v SPEAKER_4>So this vignette is specific to Operation Lantus.

00:38:21.800 --> 00:38:34.980

<v SPEAKER_4>It's a simple vignette based on that operation, but quite frankly the same principles apply to any other operation, whether it's an operation in Europe, Indo-Pacific, or a global contingency.

00:38:36.040 --> 00:38:50.280

<v SPEAKER_4>As forest fires erupt across portions of the country in the spring, the urgency results in the necessity for a coordinated federal response in support of provincial territorial governments.

00:38:51.740 --> 00:39:15.160

<v SPEAKER_4>With the 24-7 jock that we have stood up, enabled by a proper C4SR system, C-Jock integrates a developing forest fire picture with feeds from space-based satellites, UAVs, ground sensors, other government departments' information, and any nodes that we are tapped in.

00:39:15.160 --> 00:39:21.220

<v SPEAKER_4>All the way down to every individual that pushes information on our nets.

00:39:21.220 --> 00:39:24.100

<v SPEAKER_4>This enables the build up of a common operating picture.

00:39:25.620 --> 00:39:28.520

<v SPEAKER_4>And it enables all-domain awareness.

00:39:29.540 --> 00:39:36.600

<v SPEAKER_4>Digitalization is then used in order to automate some of our processes.

00:39:36.600 --> 00:39:42.660

<v SPEAKER_4>Battle rhythm briefings, tasking order production, reporting requirements.

00:39:42.660 --> 00:39:54.800

<v SPEAKER_4>All of that relieving pressure from our small staffs in order to allow them to focus on analysis of the situation, resource allocation, and coordination.

00:39:54.800 --> 00:40:09.420

<v SPEAKER_4>The stuff that I really need my staff to be focused on, that we need people with 20, 25 years of experience in order to understand and develop the options that can be presented to commanders.

00:40:09.420 --> 00:40:13.500

<v SPEAKER_4>AI tools must also be used to filter incoming data.

00:40:13.500 --> 00:40:22.160

<v SPEAKER_4>As we sit in 2025, we ingest way more data than we can process with the small staff that we have.

00:40:22.160 --> 00:40:30.220

<v SPEAKER_4>It's simply beyond our human capacity to process all of it, and we must use available tools for initial triage.

00:40:30.220 --> 00:40:34.240

<v SPEAKER_4>Now through data fusion, we gain a real information advantage.

00:40:34.240 --> 00:40:40.680

<v SPEAKER_4>Identifying gaps, managing resources, and anticipating needs before they arise.

00:40:40.680 --> 00:40:45.660

<v SPEAKER_4>Decision support tools can help us simulate outcomes and assess risk.

00:40:45.660 --> 00:40:52.520

<v SPEAKER_4>This enables staff to build and provide data-driven options and recommendations for commanders at all levels.

00:40:52.520 --> 00:41:01.540

<v SPEAKER_4>And when I say commanders at all levels, I'm talking from the tactical to the strategic levels, from our deployed task force commanders, all the way up to the CDS.

00:41:01.540 --> 00:41:12.300

<v SPEAKER_4>The idea being that we all have the same picture, and we push decision authority as far forward as we can in order to be more agile than ever.

00:41:13.320 --> 00:41:27.680

<v SPEAKER_4>This vignette exemplifies our digital modernization and C4ISR integration provides an operational advantage, this one in a domestic environment, but as I said, that can be applied, those principles are applied to any operation.

00:41:29.020 --> 00:41:46.640

<v SPEAKER_4>In the fullness of time, and based on historical data and further digitalization, we must be able to integrate weather predictions to conduct our own predictive analysis and forecast personal and equipment requirements as part of the full range of decisions.

00:41:46.640 --> 00:41:54.860

<v SPEAKER_4>And we're on that path for the summer of 2026, starting to look at some digitalization tools to help us do this.

00:41:56.360 --> 00:42:02.080

<v SPEAKER_4>Having said that, I'm going to wrap up the address with some conditions for success.

00:42:02.080 --> 00:42:08.340

<v SPEAKER_4>As in my mind, success on the digitalization journey requires three things.

00:42:08.340 --> 00:42:17.100

<v SPEAKER_4>Number one, and likely the most important one, leadership, unified understanding, and a clear vision.

00:42:18.320 --> 00:42:28.060

<v SPEAKER_4>Success hinges on a clear and shared CAF vision for the Canadian Armed Forces, which galvanizes the community of practice, everyone that's involved.

00:42:30.740 --> 00:42:39.780

<v SPEAKER_4>And this vision must be set for us to move from an analog to a digital force by design, not by chance.

00:42:39.780 --> 00:42:42.380

<v SPEAKER_4>It must be command-led.

00:42:42.380 --> 00:42:49.160

<v SPEAKER_4>Leaders, like me, must state what they want, and how they need to digest information.

00:42:49.160 --> 00:42:51.220

<v SPEAKER_4>That's at all levels.

00:42:51.220 --> 00:42:59.420

<v SPEAKER_4>They must personally push the speed of digital transformation, with a clear articulation of the end state.

00:43:00.940 --> 00:43:08.280

<v SPEAKER_4>This allows them decentralization of execution, which allows us to gain time, speed.

00:43:08.280 --> 00:43:18.780

<v SPEAKER_4>In a time of growing defence investments, and with the innovative pace of the digital enterprise, we must push those authorities at the lowest possible level.

00:43:18.820 --> 00:43:27.000

<v SPEAKER_4>The second condition for success is the adaptation of a digital culture and prioritization.

00:43:27.000 --> 00:43:41.420

<v SPEAKER_4>So a culture of innovation must promote experimentation, quick learning, and commanders must be ready to seize ideas or initiative that should not be pursued while reinforcing the successful ones.

00:43:41.460 --> 00:44:00.740

<v SPEAKER_4>And Buck talked about our Cansoftcom initiative that we stood up in 2018, and we went on a numerous path that we're not leading where we wanted to go, and we were quick to discard them and actually reinforce success where we needed to be.

00:44:01.820 --> 00:44:11.800

<v SPEAKER_4>Digital transformation must be owned and prioritized by the chain of command, in the CAF, and by senior executives in the public service.

00:44:11.800 --> 00:44:18.060

<v SPEAKER_4>Accountability and risk of acceptance must be with commanders, not staffs.

00:44:18.060 --> 00:44:26.920

<v SPEAKER_4>Otherwise, the result is we get what the staff can get versus what the commanders need to make decisions.

00:44:26.920 --> 00:44:33.900

<v SPEAKER_4>So leaders must champion change, set expectations, and must collectively operate at the speed of trust.

00:44:33.900 --> 00:44:35.700

<v SPEAKER_4>What do I mean by the speed of trust?

00:44:36.080 --> 00:44:41.620

<v SPEAKER_4>A culture of trust is needed to empower leaders, not to empower a process.

00:44:43.460 --> 00:44:52.520

<v SPEAKER_4>So from tactical operators to strategic planners, we must prioritize digital transformation and promote digital fluency as a core competency.

00:44:53.660 --> 00:44:59.080

<v SPEAKER_4>And the third aspect in terms of conditions for success are policies.

00:44:59.080 --> 00:45:07.340

<v SPEAKER_4>Our traditional process-based procurement models are too slow for the pace of digital innovation.

00:45:07.340 --> 00:45:18.220

<v SPEAKER_4>Collectively, we must advocate for outcome-based modular and rapid acquisition pathways like continuous capability evolutions.

00:45:18.220 --> 00:45:20.260

<v SPEAKER_4>Data must be trusted.

00:45:20.260 --> 00:45:30.200

<v SPEAKER_4>It requires clear policies on data ownership, stewardship, and sharing, especially in joint and coalition environments.

00:45:31.660 --> 00:45:50.340

<v SPEAKER_4>On that, small-piece policies that were put in place in some cases decades ago must be reviewed for us to have the right security classification framework, up-to-date information technology security risk management, and procurement policies that provide flexibility.

00:45:50.340 --> 00:45:58.260

<v SPEAKER_4>Those policies are what actually guide leaders like me in how much risk they can take in digitalizing our force.

00:46:01.240 --> 00:46:09.440

<v SPEAKER_4>In closing, let me wrap up by telling you that I don't

see digital transformation as a buzzword.

00:46:09.440 --> 00:46:13.440

<v SPEAKER_4>It's an operational and institutional imperative.

00:46:13.440 --> 00:46:19.200

<v SPEAKER_4>Too often within D&D CAF we focus on its institutional aspect.

00:46:19.260 --> 00:46:20.120

<v SPEAKER_4>It is both.

00:46:20.120 --> 00:46:31.040

<v SPEAKER_4>It's, yes, an institutional enabler, but it's a key operational enabler to be successful on our operations in the current operating environment.

00:46:31.040 --> 00:46:47.460

<v SPEAKER_4>Our sailors, soldiers, aviators and special force operators that we deploy every day on operations and ask a lot from deserve every competitive advantage that we can give them in order to enable them to deliver success on operations.

00:46:48.360 --> 00:46:55.340

<v SPEAKER_4>So, from my point of view, this is the moment to align ourselves from an economic, sovereignty and defence point of view.

00:46:55.340 --> 00:47:00.780

<v SPEAKER_4>Canada, I know, has talent, technology and ambition.

00:47:00.780 --> 00:47:18.200

<v SPEAKER_4>It is purely a question of gathering our forces to generate a unique digital capacity, a gathering office, and common digital actions to place the Canadian forces at the forefront of digital actions and to be well positioned for success in operations.

00:47:18.200 --> 00:47:19.440

<v SPEAKER_4>This concludes my address.

00:47:19.440 --> 00:47:22.060

<v SPEAKER_4>Thank you, thank you very much.

00:47:22.060 --> 00:47:24.260

<v SPEAKER_2>Thanks for listening to Defence Deconstructed.

00:47:24.260 --> 00:47:29.740

<v SPEAKER_2>For more of our work, go to cgai.ca or follow us on LinkedIn, Twitter, Instagram or Facebook.

00:47:29.740 --> 00:47:36.320

<v SPEAKER_2>If you like what we do and want to keep us going, think of donating to us at cgai.ca slash support.

00:47:36.320 --> 00:47:38.940

<v SPEAKER_2>Defence Deconstructed is brought to you by our team in Ottawa.

00:47:38.940 --> 00:47:42.580

<v SPEAKER_2>Music credits go to Drew Phillips and this episode was produced by Jordyn Carroll.