

NAV CANADA ► PROPRIETARY

IFATSEA JUNE 2025

# Operational Cybersecurity

A Candid Conversation

**Tom Bornais**

Chief Information Security Officer



Serving a world in motion  
[navcanada.ca](https://navcanada.ca)





# Our Mission

*To ensure no cybersecurity event results in a significant operational safety incident!*



## But...

We are also concerned about:

- Reputational Harm
- Service Disruption
- Private and Sensitive Information
- Resiliency and Recovery







# Three Key Concepts

1. Business and Operational Convergence
2. Risk Based Approach
3. Cyber Is A Team Sport



# Challenges

1. Original Intent
2. Lifespan
3. Inter-connectivity
4. Complexity
5. Asset Management
6. Authentication
7. Monitoring
8. Time To Mitigation
9. Traditional Controls May Not Apply



# Threats

1  <b>Ransomware Attacks</b>	2  <b>Internet of Things (IOT) Vulnerabilities</b>	3  <b>Social Engineering and Phishing Attacks</b>	4  <b>Supply Chain Attacks</b>	5  <b>AI-Powered Cyber Threats</b>
6  <b>Advanced Persistent Threats (APTs)</b>	7  <b>Zero-Day Exploits</b>	8  <b>Cloud Security Risks</b>	9  <b>Mobile Malware and Vulnerabilities</b>	10  <b>Insider Threats</b>
11  <b>Artificial Intelligence (AI) Misuse</b>	12  <b>Data Breaches and Privacy Violations</b>	13  <b>Advanced Phishing Techniques</b>	14  <b>Nation-State Cyber Attacks</b>	15  <b>Cryptocurrency-Related Threats</b>





# What We See

## Top Four:

- Ransomware
- Denial Of Service
- Malware
- Human Error



# Strategic Focus

- Privileged Password Management
- Access and Authentication
- Patch Management
- Next Gen Perimeter Security
- DevLan 2.0
- Endpoint Detection and Response
- Secure Remote Management
- Improved Monitoring and Detection
- Awareness and Training



# Program

- Penetration Testing
- Vulnerability Assessments
- Awareness / Training
- Incident Response
- Risk Assessments
- Security Operations
- Threat Intelligence
- Policy and Standards
- External Collaboration

# THANK YOU IFATSEA !



Serving a world in motion  
[navcanada.ca](http://navcanada.ca)

