Small Navies and NCW:
Is there a role?

Canada and CVBG Deployments

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Outline

- Introduction
- Nature of Network Centric Warfare (NCW)
- Information Voids
- Case study: Canadian interaction with USN CVBGs
- Conclusion

Introduction

- I am not a technician or an engineer
- Literature is largely American
- Little consideration of implications of coalition warfare (i.e. of politics)
- Canadian operations are a unique test case
- Most serious challenges will come from the policy arena, not the technical one

Nature of NCW

- Info sharing in navies is old hat
- Where am I; What is the nature of the environment; Where is my enemy
- Enhanced awareness → competitive advantage

Characteristics of NCW Ops

- Predictive planning and pre-emption
- Integrated force management
- Execution of time critical missions

Nascent NCW technology

- Co-operative Engagement Capability (CEC)
- Secret Internet Protocol Routing Network (SIPRNET)
- Video Teleconferencing (VTC)

Dynamism and “Battle Rhythm”

- Rapid introduction of new warfighting concepts
- Ships, personnel, technology
- Exercises

Time	Event
05:00	Receive Unit Operational Reports
08:00	Brief Battlegroup Commander
09:00	Brief JTF Commander
10:00	Warfare Commander's Co-ordination Board
13:00	Planning Cell Meetings
18:00	Release Commander's Intentions and Situational Report Messages
20:00	Units Receive Commander's Intentions Messages
00:00	Units Release Operational Reports

“…not being interoperable means that you are not on the net; so you are not in a position to derive power from the information age.”

VAdm. Cebrowski

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Recent History

- Difficulties in passing “high fidelity data”
- Addressed through some technology transfer
- “Changing railway gauges”
- Hostage to the slowest units

"Full interoperability between forces would depend upon integrated collaborative planning based on the maintenance of a common operating picture and common intelligence inputs. Without appropriate digital communications, this would not be practical, ***and made all the more unlikely because the US SIPRNET is NOFORN."***

MGen . John Kiszely, British Army

Conflicting concepts

- NCW : Efficiency
- Coalition Operations : Scarcity
- Information Release Policy : National Security

"How do they get these national communication and information needs and fit them into a coalition environment? The bottom line is we are generally operating two different networks at two different security levels. We run our networks at a coalition releaseability level that's basically unclassified."

BGen. Gary Salisbury, Director C^3 Systems, USEUCOM

Trust and Security

- Willingness to assume risk and be vulnerable
- Similar to national command of forces
- US unlikely to jeopardize its "competitive advantage"

"As close as our Canadian and British allies are in common interests and objectives, there will always be limits to sharing the most highly classified information with these nations."

LCol. William R. Pope

Will NCW Shape Coalitions?

- Information is the cornerstone of NCW
- Networked forces have an inherent advantage
- Stay at home or stay out of the way

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Canadian Participation in CVBGs

MARPAC

1995	HMCS *Calgary*	50 days as independent ship in Maritime Interdiction Force
1997	HMCS *Regina*	Surface Action Group
1998	HMCS *Ottawa*	USS *Abraham Lincoln* battle group, *Ottawa* fully integrated
1999	HMCS *Regina*	USS *Constellation* battle group, *Regina* replaces US ship in the BG
2000	HMCS *Calgary*	Surface Action Group
2001	HMCS *Winnipeg*	USS *Constellation* battle group, *Winnipeg* on scene commander has TACON of all BG assets during 17-24 July'95
2001	HMCS *Vancouver*	USS *John C. Stennis* battle group

MARLANT

2001	HMCS *Charlottetown*	USS *Harry S. Truman* battle group

Positive Impacts of Canadian Ships

- US
  - Frigate/Destroyer Shortages
  - Coalition Mindset
- Canada
  - Large task group operations
  - Unfamiliar assets (SSNs, CVNs, LHAs)
  - Access
  - Operational experience

Mutual Vulnerabilities

- Canada
  - Value of frigate inversely disproportionate to its contribution to CVBG
  - Dangerous mission
- US
  - Possibility of a liability

"We need to be ready to go on game day – and when we play, every day is game day."

RAdm. Mark Fitzgerald, CO *Theodore Roosevelt* CVBG

Canadian Preparation

- Same training as USN ships
- Technology up-grades

- Long-term commitment of asset
- Technical legacy systems

- Professionalism not technology is the driver

Integration Stressors

- Close but not seamless
- SIPRNET/CWAN interoperability
- Limited depth to information

"I was not confident that I could (be kept) fully informed on something other than a voluntary basis. … (The US) has nothing other than what the US is willing to give and what he is willing to give is based on what your relationship was."

Canadian Naval Officer

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There are NO technical solutions

- Other nations have NOFORN networks as well
- Releasability software is not an open gateway
- Information protocols must be frequently re-brokered

Positive indications

- Despite technical differences, effective co-operation is possible
- Canadian integration with USN may permit greater coalition interoperability
- "Gateway C^4ISR"

Negative Indications

- Canada/US relationship based on decades of trust built through frequent operations
- Still significant impediments to integration (not seamless)
- Increased concern for information security?
- The bar will be high

Conclusions

- Technology is not a panacea
- Interoperability will ultimately be determined by policy
- In some situations, interoperability may be “too hard to do”
- NCW may be a stimulus for unilateralism

Questions