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# Canadian General Standards Board Presentation To the CEAA

**"ISO 14001 in the federal government  
Two case studies"**

**26 September 2002**



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# Esquimalt Graving Dock, Victoria B.C.



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## Esquimalt Graving Dock



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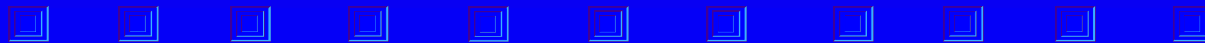
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## Background

- Built in 1926
- Largest civilian graving dock on the West Coast
- Operated and maintained by PWGSC
- Open public facility
- Some leased space



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## The West Coast Domestic Fleet

30 Major BC  
Ferries,  
(Ave. 6,512 Grt,  
119m Loa)



12 Major  
CCG/DFO  
Vessels  
(Ave. 1,172 Grt,  
52m Loa)



15 Major DND MARPAC  
Warships  
(Ave. 4,510 Dwt, 102m  
Loa)



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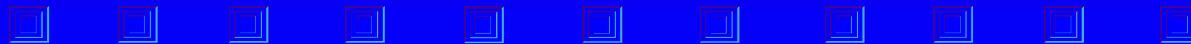


# 1999 Alaska Cruise Ship Fleet

23 Vancouver Based Vessels  
(May-October)



Average size 54,700 Grt, 232m  
Loa



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## Annual Deep Sea Vessel Traffic Near The EGD

10,196 vessels in 1998,  
including:



4748 Bulk Carriers (47%)



1169 General  
Cargo (11%)



2820 Container  
(28%)



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## Environmental Issues

- 100 years of ship building and repair
  - DND, Yarrows, EGD
- Shipyard activities
  - Pressure washing, sandblasting, coating application, mechanical repair, welding, fueling and fluid changes, hazardous material storage and handling

All of these activities have the potential to negatively impact the air, water or land.

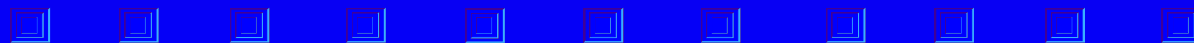


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## Environmental Impacts

- Sediment Contamination - metals (Cu, Pb, Zn, As, Hg.), Organotins, PCB, PAHs
- Soil contamination - metals, HCs, fill
- Air Emissions - Sandblasting, VOCs, ODSs, Noise



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## Esquimalt Graving Dock

### Dimensions

**Total length**

**361.48 metres**

**Width**

**41.15 metres**

**Cranes (5),**

**Electricity,**

**Communications (Telephone, Cable television ),**

**Compressed Air,**

**Water & Sewage**



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## Esquimalt Graving Dock

### Primary Users

**VICTORIA SHIPYARDS CO. LTD.**

**POINT HOPE SHIPYARD CO. LTD.**

**NANAIMO SHIPYARDS LTD.**

**JENKINS MARINE LTD.**



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## Esquimalt Graving Dock

- Unique problems
- Responsible for the facility
- Not involved in the construction
- Exert significant influence.



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## Esquimalt Graving Dock

- **Recognized the environmental issues associated with industry activities**
- **The PWGSC management and the main users agreed on an organized approach address .**
- **The task of implementing an ISO 14001 EMS**



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# Low Level Flight Training Area, Goose Bay, Labrador



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## Project Description

- **MTA 130,000 km<sup>2</sup>**
- **6000 sorties yearly (4 allied air forces)**
- **maximum 18,000 authorized**
- **30 week season (Apr-Oct)**



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## Project Description - Cont

- 70 camera target mock-ups
- flight training 100-1000 ft AGL
- terrain masking (avoid radar detection)
- no live weapons
- 4nm radius PTA



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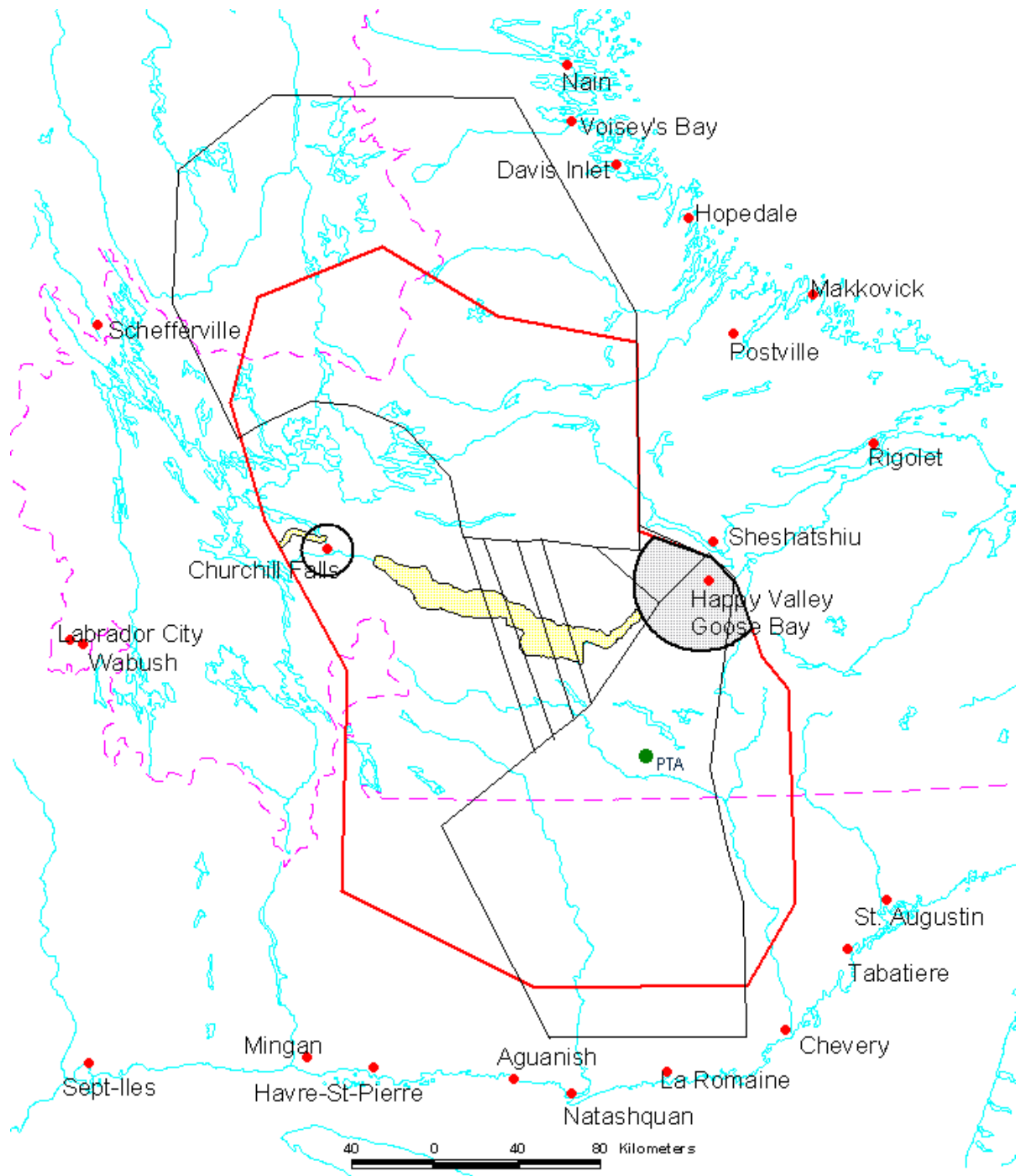
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# Military Training Area

**130,000 km<sup>2</sup>**

**(1996 reconfiguration in red)**





# Public Environmental Review

*“little evidence to suggest that the project will cause significant negative environmental social or health impact”*

Panel issued 58 recommendations...

- support DND proposal to reconfigure training area to minimize overlap with most sensitive wildlife areas
- establish Institute to conduct independent effects research and build bridges
- support DND proposed levels of activity, related mitigation plans and residual impact predictions

## Responsibility Areas

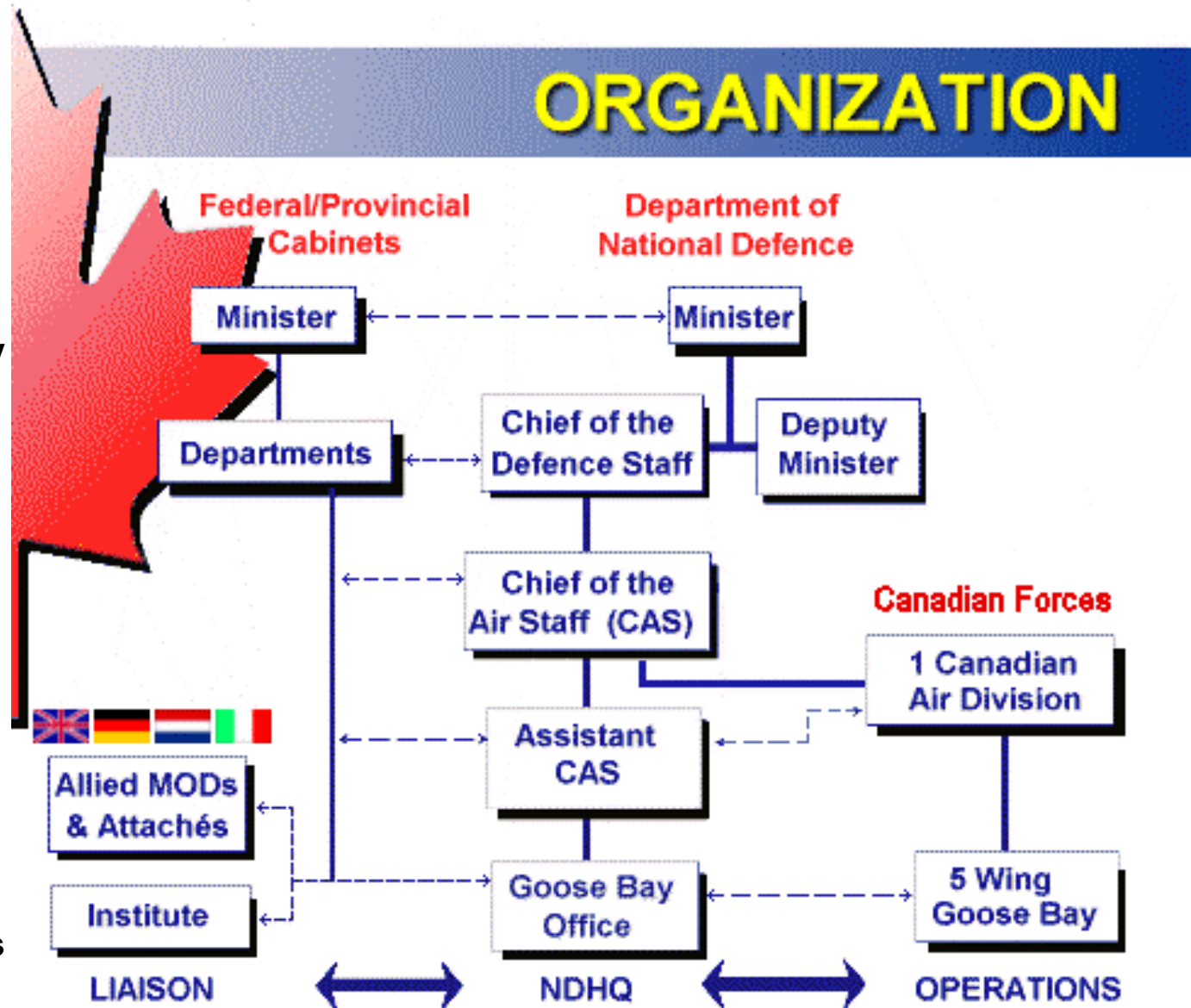
### Goose Bay Office Ottawa - NDHQ

- National OPI foreign military training activity
- International agreements
- Intergovernmental liaison
- aboriginal relations
- environmental management system (training activity)

### 5 Wing Goose Bay

- Provide services to allies
- command & control
- implement plans & orders
- infrastructure & operations

## ORGANIZATION



## Environmental issues

- **Noise disturbance to sensitive wildlife and human annoyance**
- **Visual stimuli**
- **Airborne contaminants**
- **Ground contamination at PTA**



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## Mitigation Program

- funded by allied nations (\$ 1.5m annually)
- dedicated mitigation measures
- involves consultation and participation with resource
- managers / stakeholders and independent Institute
- established in 1990 to address potential impacts
- includes compliance monitoring of flight activity



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## **Primary Components of 2001 Mitigation Program**

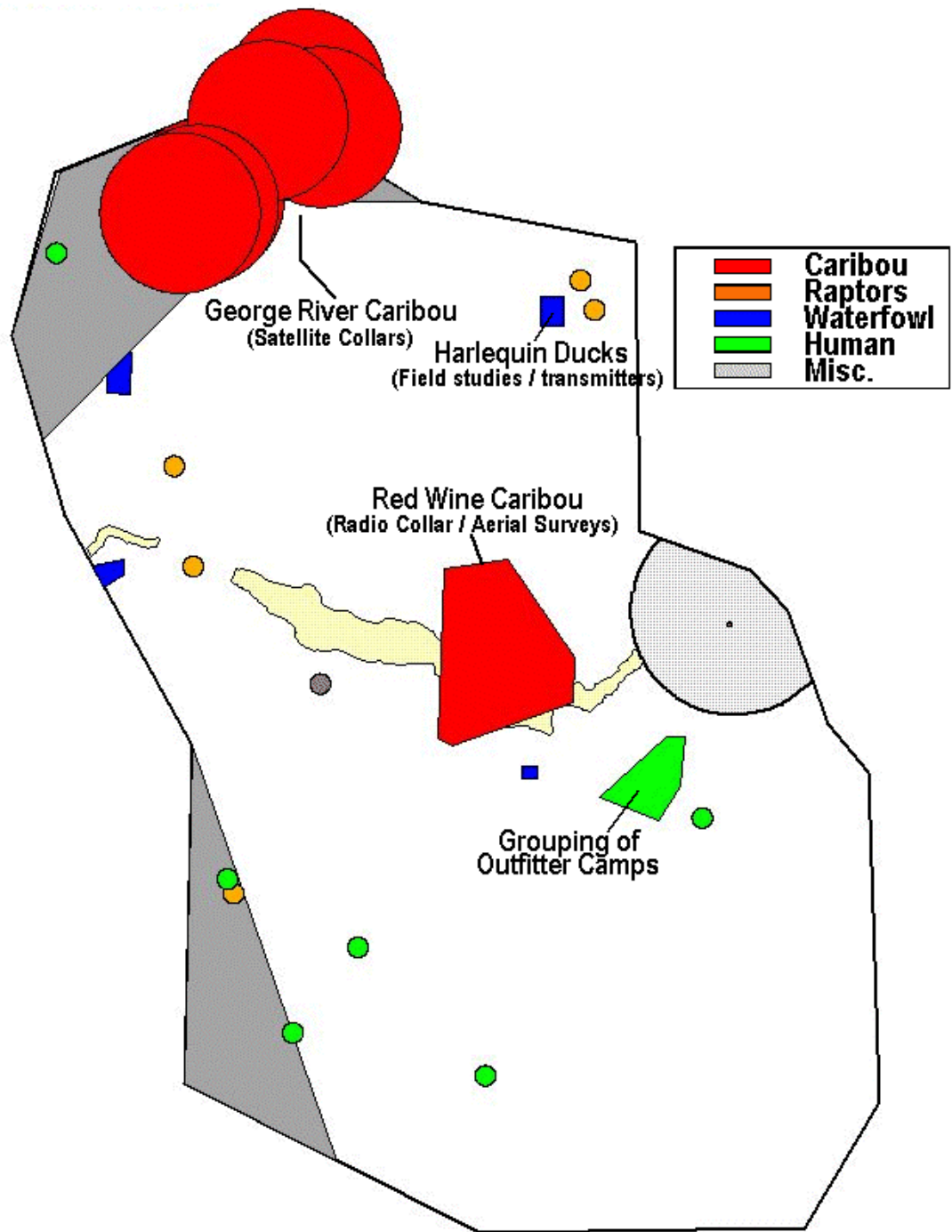
**\$ks**

<b>George River Caribou (telemetry and census)</b>	<b>205</b>
<b>George River Caribou (telemetry validation)</b>	<b>150</b>
<b>Red Wine Caribou (telemetry census and noise monitoring)</b>	<b>120</b>
<b>Waterfowl (staging &amp; behavioural)</b>	<b>115</b>
<b>Verification surveys</b>	<b>20</b>
<b>Raptors / Harlequin Ducks</b>	<b>190</b>
<b>Airborne contaminants and fuel dump monitoring</b>	<b>80</b>
<b>Community contact</b>	<b>20</b>
<b>Lac Joseph /other resident caribou</b>	<b>75</b>
<b>Noise investigation /modeling</b>	<b>160</b>
<b>Flight Track Compliance Monitoring</b>	<b>80</b>
<b>Moose Wintering</b>	<b>20</b>
<b>ISO 14000 preparation</b>	<b>50</b>
<b>Minor activities, consultation, contingency, &amp; general admin</b>	<b><u>245</u></b>
	<b>1,530</b>

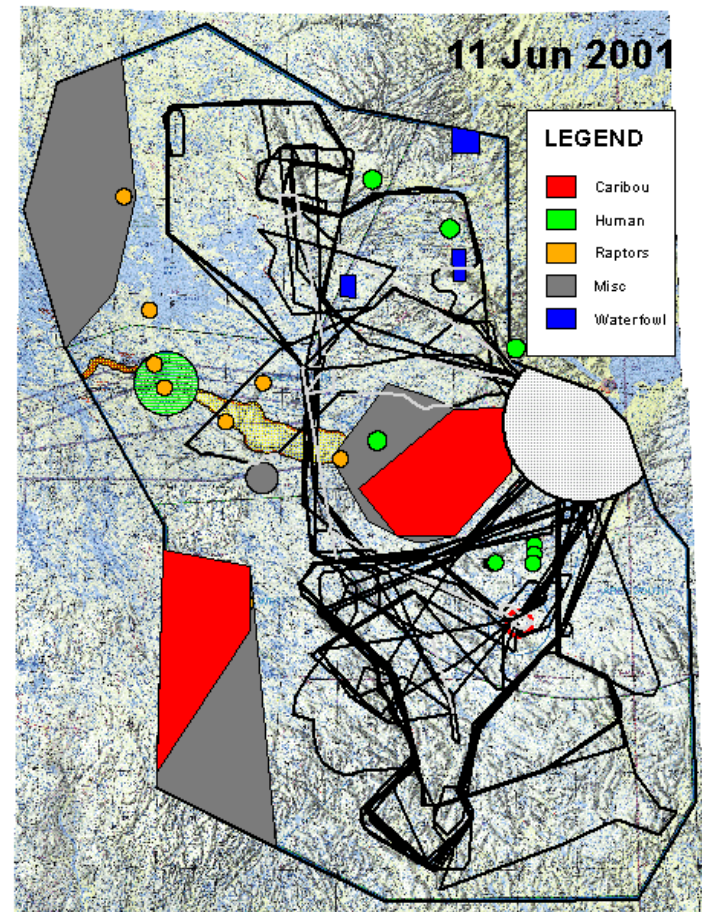
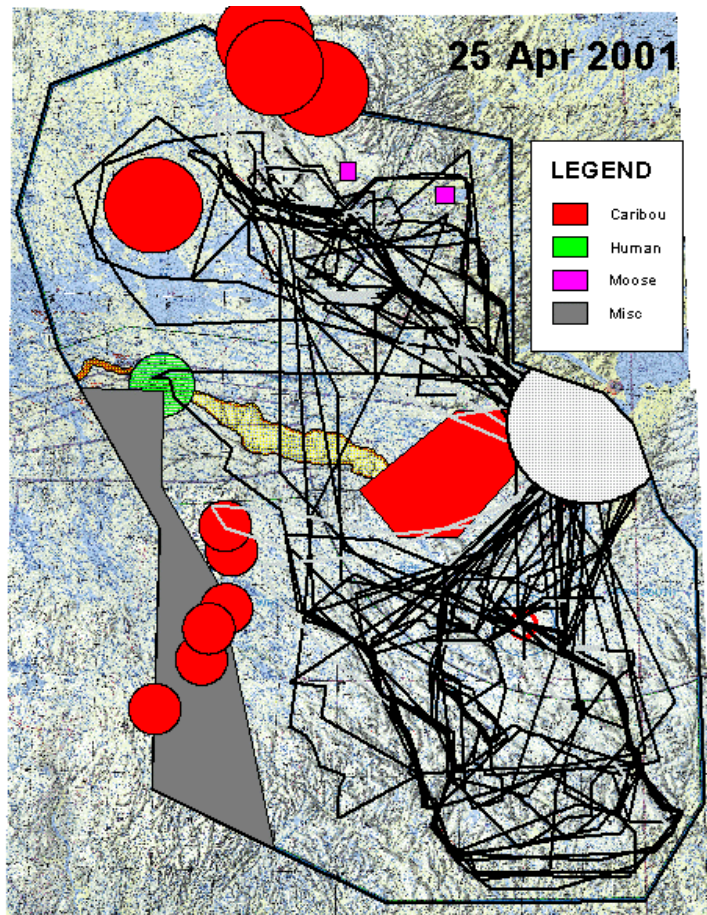


## Examples of Avoidance Closures

based on ongoing DND  
monitoring programs



# FlightTrack Compliance Monitoring





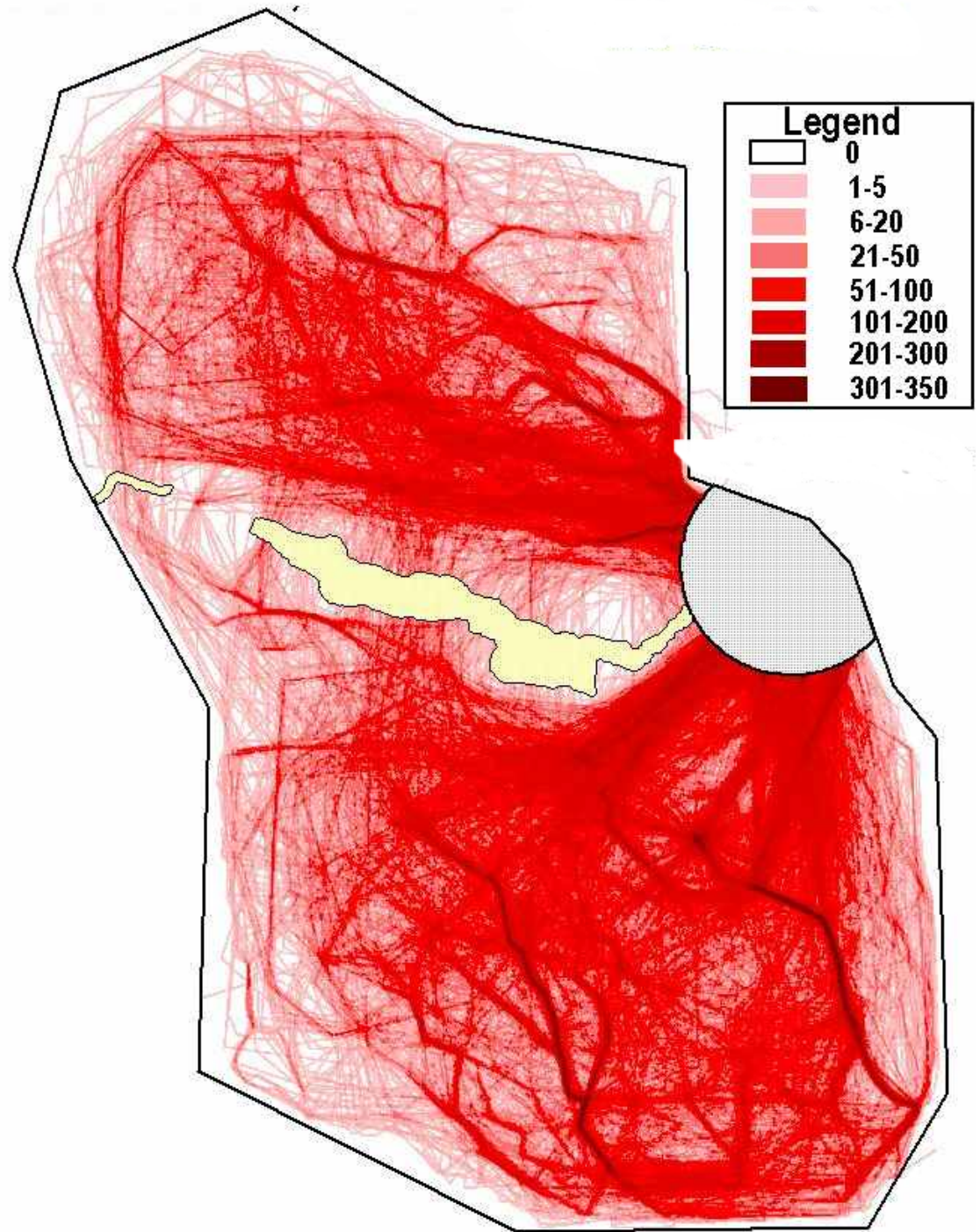
## Low Level Flight Track Intensity Map

**Compilation of all flight track  
data for entire season**

**Individual shades indicate  
total number of overflight events  
at every location**

### **Approximately**

- 4500 sorties flown over 150 days
- 95% of area < 1 event per day
- maximum 3- 4 events per day  
affecting < 2% of training area



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## ISO 14001 Certification

- Opted to “register” – public profile of project
- To ensure the Environmental Management System (EMS) continues to achieve objectives and remains focussed
- Registration audit expected summer 2003



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# Institute Mandate & Operation

- established by Government of Canada in 1996 (EARP)
- unique (& only) model in federal project EIA follow-up
- *Mandate* - conduct independent research on effects of allied training in Goose Bay and “ build bridges ”
- funded by DND through annual \$1.12M grant
- Board of Directors composed of regional stakeholders and federal-provincial representatives
- Chair reporting directly to Ministers
- includes Scientific Review Committee
- no independent research results to date
- reviewed/confirmed DND effects research findings
  - “no adverse effects” (osprey & waterfowl)
- central to project’s Sustainable Development approach

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*Thank you*

*&*

*Merci*



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## QUESTIONS ?



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