

Maritech 2010 Montreal

Andrew Robertson

Presents:

TC Marine Engineer Training

- ✓ Where are we NOW?
- ✓ Where do we go
from here?

Based on:

- **A STUDY OF CANADA'S MERCHANT MARINE POST-SECONDARY EDUCATION AND TRAINING REGULATORY REQUIREMENTS FOR MERCHANT MARINE CREW**
- by
- **Andrew Richard Robertson**
- Chief Engineer, B. Naut. Sci. (Canadian Coast Guard College),
- Master of Education, Provincial Instructor Diploma (BC)
-
- A thesis submitted to the School of Graduate
- Studies in of **Memorial University of Newfoundland** for the degree of
- Master of Education

Why Train?

- ✓ **Increased Safety**
- ✓ **Improved fleet operation**
- ✓ **Reduced maintenance costs**

Training Costs:

Time



MONEY



Not Training

COSTS:

SHIPS



LIVES



ENVIRONMENT



The Response?

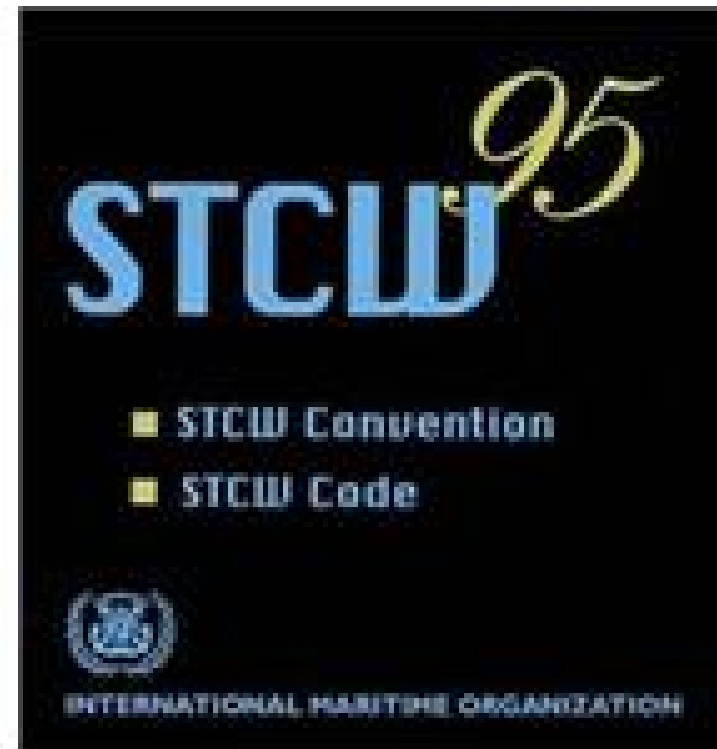
Develop
and
Provide:

TC-Approved Training:



Conforms to:

IMO **STCW 95**



8 TC-Approved Marine Colleges

- Marine Institute of MUN
- Institut maritime du Quebec
- Georgian College-Owen Sound Campus
- Canadian Coast Guard College
- Pacific Marine Training Campus
- NSCC Nautical Institute
- Holland College PEI
- NBCC St. Andrews Campus

WHO PAYS...



...For Marine Training?



All of us.



Who's "Us" ?

- The Engineer as trainee (self-sponsored)
- Federal Funding (Coast Guard College)
- Provincial Funding (Community Colleges)
- Employers (Scholarships and "In-House ")
- Private scholarships
- OTHER SOURCES

It's the
SMART INVESTMENT!



Expectations

- **Vessel Owner/Operators REQUIRE:**
 - Experienced TC-certificated 2nd and 1st Class Marine Engineers.
- **Trainees NEED:**
- Cost-effective, **TC/ICSTCW-approved training**
- Entry-level employment (Cadet/Junior Engineer).
- Career long training for:
 - *TC-required **currency**.
 - ***career development**.

The Canadian Challenge

- ***Fewer*** ships
- ***Smaller*** crews
- ***Longer*** hours of work
- High levels of ***training demanded***:
 - for TC certification
 - for specific employment skills
- ***Competition*** from highly-competitive offshore labor sources also holding ICSTCW certification

The Paradox

- Reduced crew sizes **hides** increased demand for higher-levels of training and TC-Certification.
- Reduced crew size **reduces opportunities** for “Entry –level” and trainee positions.
- **Fewer available Canadian Engineers** means too few TC-Engineers to man Canadian ships.
- Hence: Canadian companies risk **looking outside of Canada** to find **non-TC-Certificated** Ships Engineers.

Additional Challenges

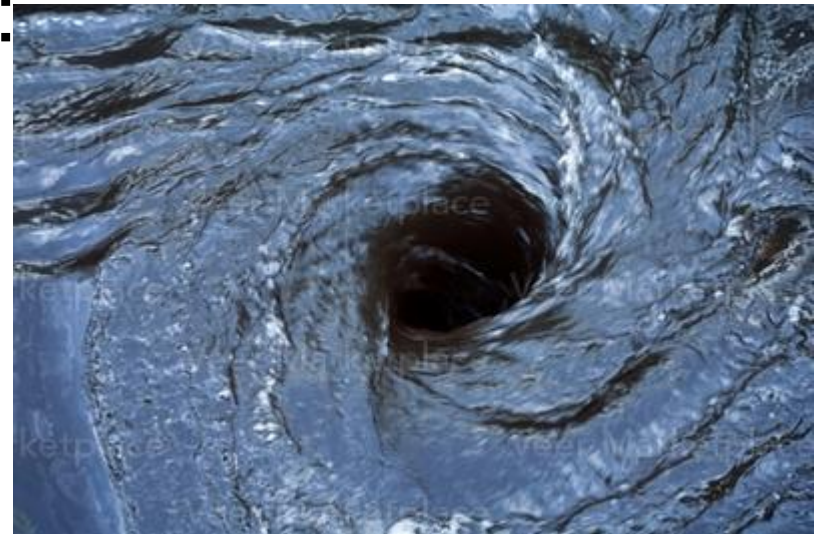
- **Lack of public awareness!!**

- ...creates...

Lack of political support

...resulting in...

Risk of Downwards Spiral:



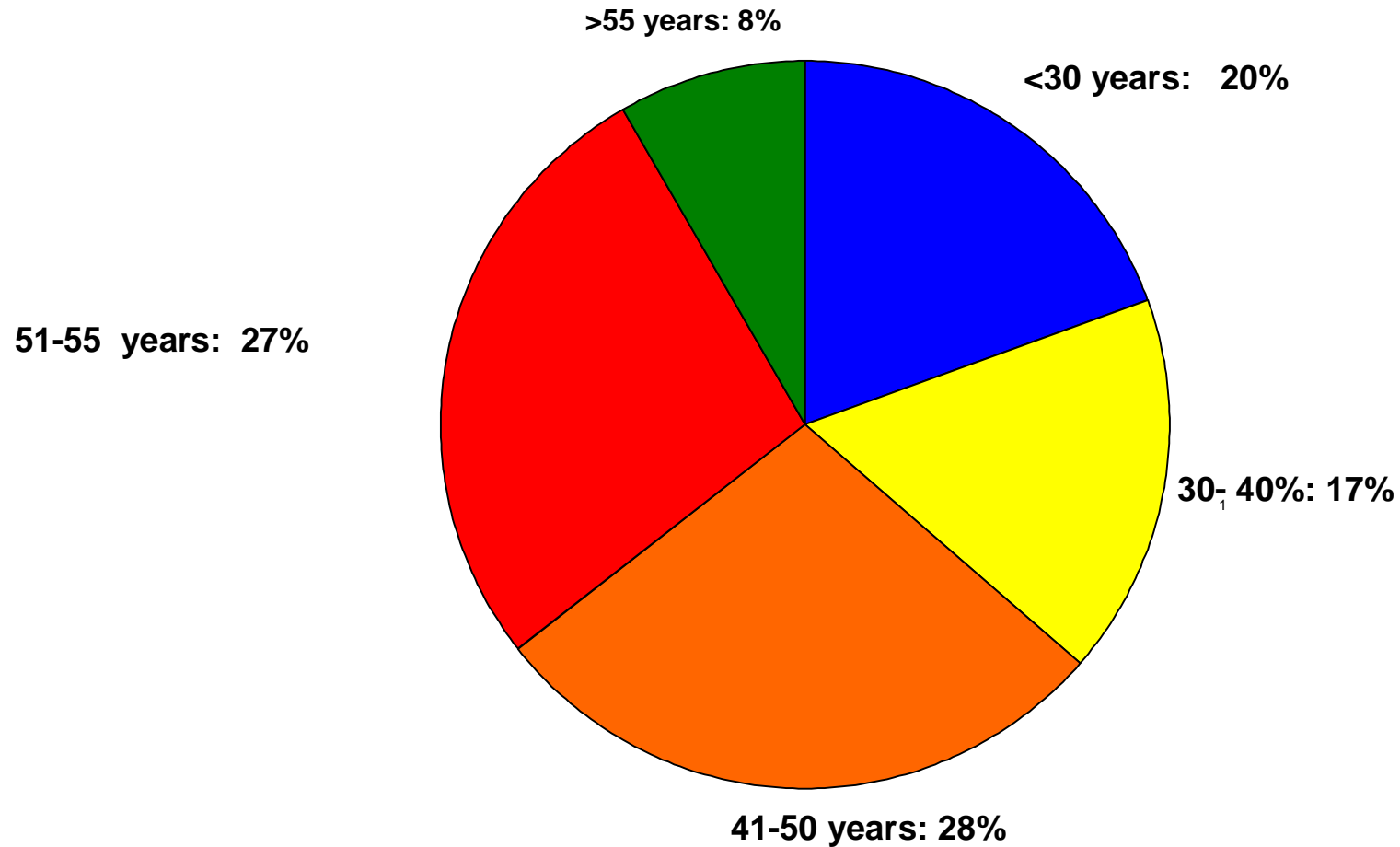
Where are we

NOW

?

FINDING: We are Getting Older and Fewer!

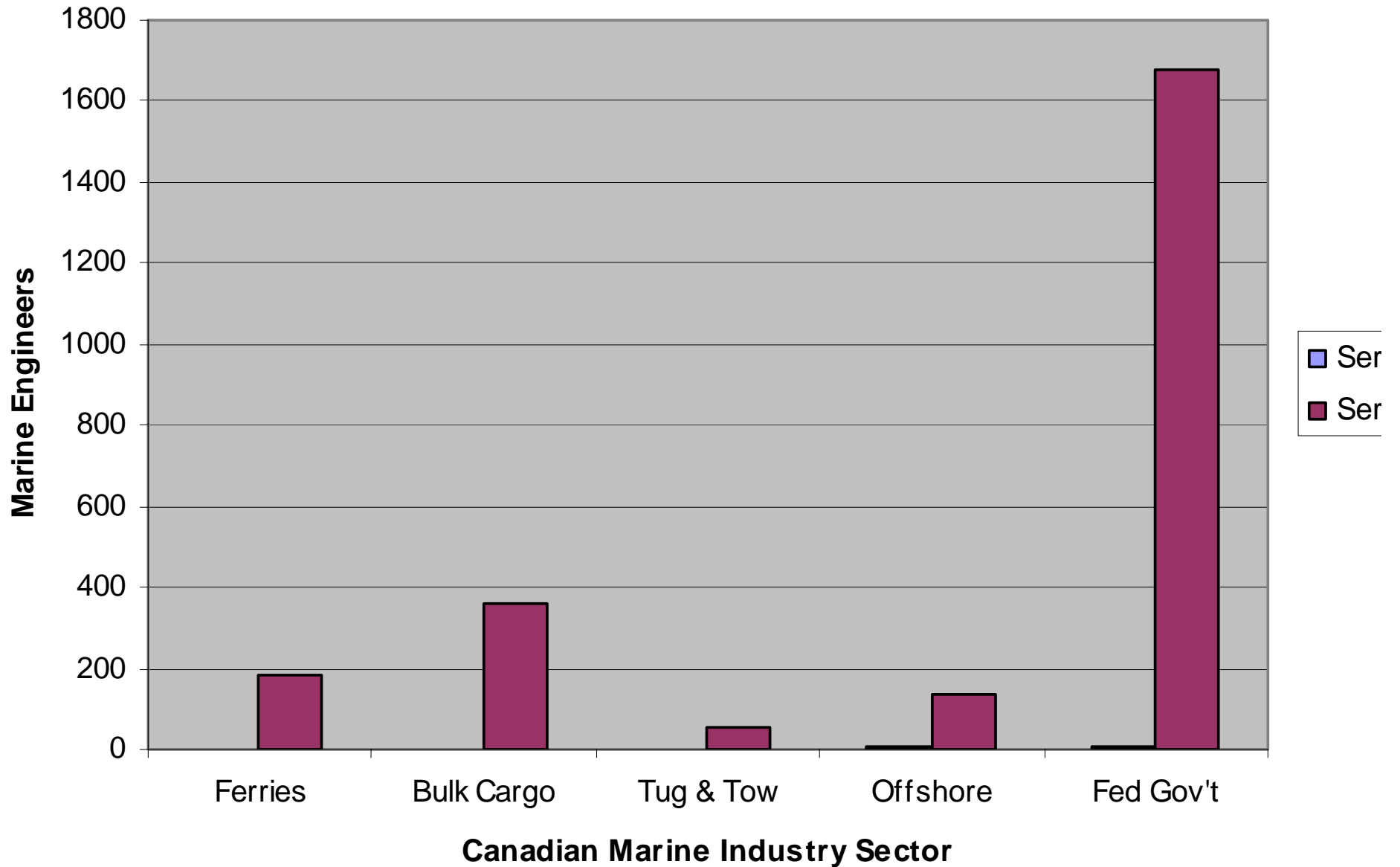
-by 2013:



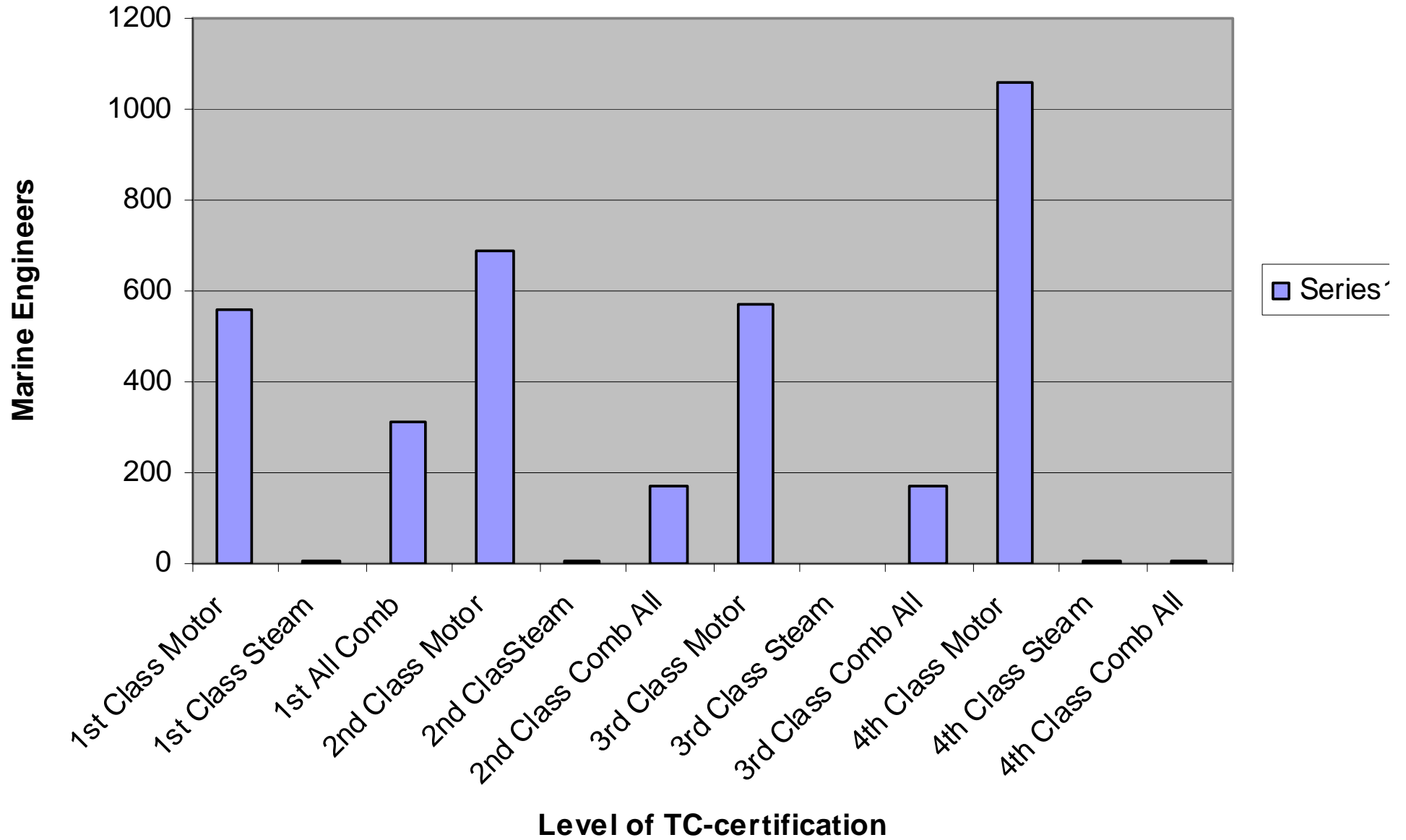
“Where is my relief?”



Marine Engineers Employed by Canadian Marine Industry Sector



TC-certificated Marine Engineers



Finding: We NEED young TC college Marine Engineer Graduates



Finding: Marine Training must be *increased!*



Opportunity: Great Lakes Shipping



Opportunity: *Canadian* Offshore



Opportunity: Canadian-built ships



Opportunity: Canadian Ferries



Opportunity: Canadian Coast Guard Fleet



NEEDS

- **DIALOGUE** amongst stakeholders:
- Employers
- TC-approved Marine Colleges
- TC Marine Safety Examiners
- The Public
- Our elected representatives

Recommendations

- ✓ Build public awareness for our own Canadian maritime industries.
- ✓ **Lobby** our elected representatives.
- ✓ **Educate our youth** of Attractive **OPPORTUNITIES** for **THEM** in our own Canadian Maritime Industry:

➤ **Careers with a FUTURE!**

BUILD NOW for Canada's Future

