SEASPAN SHIPYARDS – NORTH AMERICA'S LEADING ICEBREAKER BUILDER

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Seaspan Shipyards: Three Shipyards, One Company

4,300+ employees – The largest shipbuilding, ship design & engineering, and complex maintenance/repair company on Canada's West Coast

Vancouver Shipyards

North Vancouver

- **New shipbuilding and design – National Shipbuilding Strategy (NSS)**

Vancouver Drydock

North Vancouver

- **Commercial Repair and Overhaul**
- **Canadian Coast Guard**

Victoria Shipyards

Esquimalt

- **Royal Canadian Navy Repair and Overhaul**
- **Commercial Repair and Overhaul**

The National Shipbuilding Strategy is Working at Seaspan

NSS objectives

- **Delivering ships**
- **Generating jobs and economic benefits for Canada**
- **Investing in Canadian industry**
- **Developing the next generation of Canadian shipbuilders**

- ✓ **Delivering 5 classes of ships, all first-of-class:**
  - ✓ First complete class of vessels (OFSV) under the NSS
  - ✓ OOSV launched in August 2024, on track to deliver in Spring 2025
  - ✓ JSS1 launched in Dec 2024. 80% of JSS 2 blocks in construction, lessons learned are being incorporated
  - ✓ Polar functional design complete, detail design ongoing, and ready to cut steel in Spring 2025, 1st Heavy Icebreaker to be built in Canada in 60 years. Project is progressing steadily.
  - ✓ MPV functional design on schedule and under budget
- ✓ Generating progressively more **economic growth & jobs**
- ✓ Built **robust supply chain:** ~800 Canadian businesses
- ✓ **Developed the Canadian marine industry,** through Value Proposition and IRB obligations

OOSV Launch
August 2024

JSS1 Launch
December 2024

Polar Icebreaker Steel Cutting
February 2025

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A National Economic & Strategic Capability on the West Coast

Ready now to be an active member of the 'Ice Pact' to help confront growing challenges in the Arctic

Design and Engineering

A world-class engineering and design team built in Canada, 700 strong (employees + partners), developed through experience on 5 first-of-class ship designs.

Production and Delivery

Vancouver Shipyards is one of the most modern shipyards in North America with a team of 1,800+ highly-skilled tradespeople.

Supply Chain

Pan-Canadian supply chain of ~800 companies – most being SMEs

With more than 4,300 employees across three shipyards, Seaspan has become Canada's largest shipbuilding and repair company, and an important national security and economic asset.

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Vancouver Shipyards: Nearly $400m Invested To Date

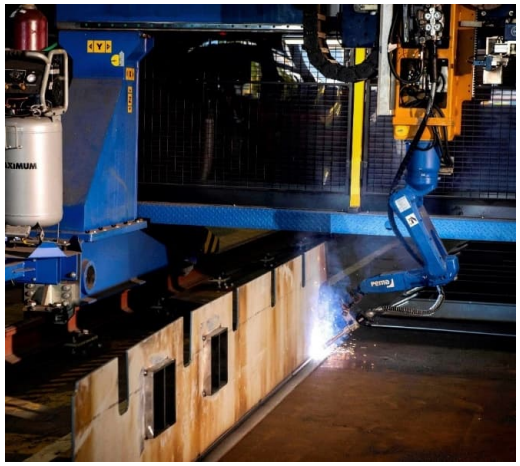
Significant private investment in expanding our facilities as part of the National Shipbuilding Strategy

Outfit Pier

- **$140 million investment in new outfitting pier**
- **Complete outfitting of new ships in North Van**

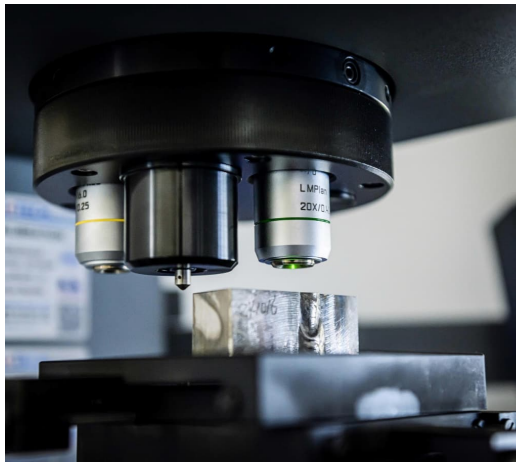
Land-Based Test Site

- **$5 million investment**
- **Electronic systems integration testing for Polar and MPV**



Robotics & Automation

- **$30 million investment**
- **Driving labour savings, efficiency and quality**



Welding Centre of Excellence

- **ISO 17025-accredited lab**
- **Research and testing crucial in preparing for Polar & MPV**

Seaspan's Work Under the National Shipbuilding Strategy

- 21 Polar Class vessels of varying capability
- Highly complex missions
- Long-range, independent ops

3 Offshore Fisheries Science Vessels (PC7)

✓ Delivered

2 Joint Support Ships

Under Construction
JSS 1 Launch in Dec. 2024
JSS 2: 80% of blocks in construction

1 Offshore Oceanographic Science Vessel (PC6)

Final Outfitting
Launched Aug. 2024
Delivery on track for Spring 2025

1 Polar Icebreaker (PC2)

In Construction Engineering
Functional Design complete
Cut Steel in Spring 2025

16 Multi-Purpose Vessels (PC4)

Initial flight (6) in Construction Engineering
Functional Design on schedule & under budget

Seaspan and the BC maritime sector are now delivering the largest, most complex ships ever built in Canada

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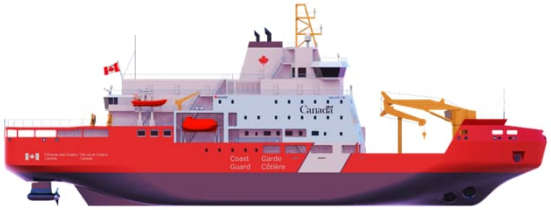
21 Polar-Class Vessels at Seaspan

OFFSHORE FISHERIES SCIENCE VESSELS (Three Ships, All Delivered)

Polar Class **7**
Polar Code – **N/A**

OFFSHORE OCEANOGRAPHIC SCIENCE VESSEL (One Ship, Deliver in 2025)

Polar Class **6**
Polar Code **Category C**



MULTI-PURPOSE VESSELS (16 Ships, In Functional Design)

Polar Class **4**
Polar Code **Category A**

POLAR ICEBREAKER (One Ship, Cut Steel In Spring 2025)

Polar Class **2**
Polar Code **Category A**

Multi Purpose Vessels

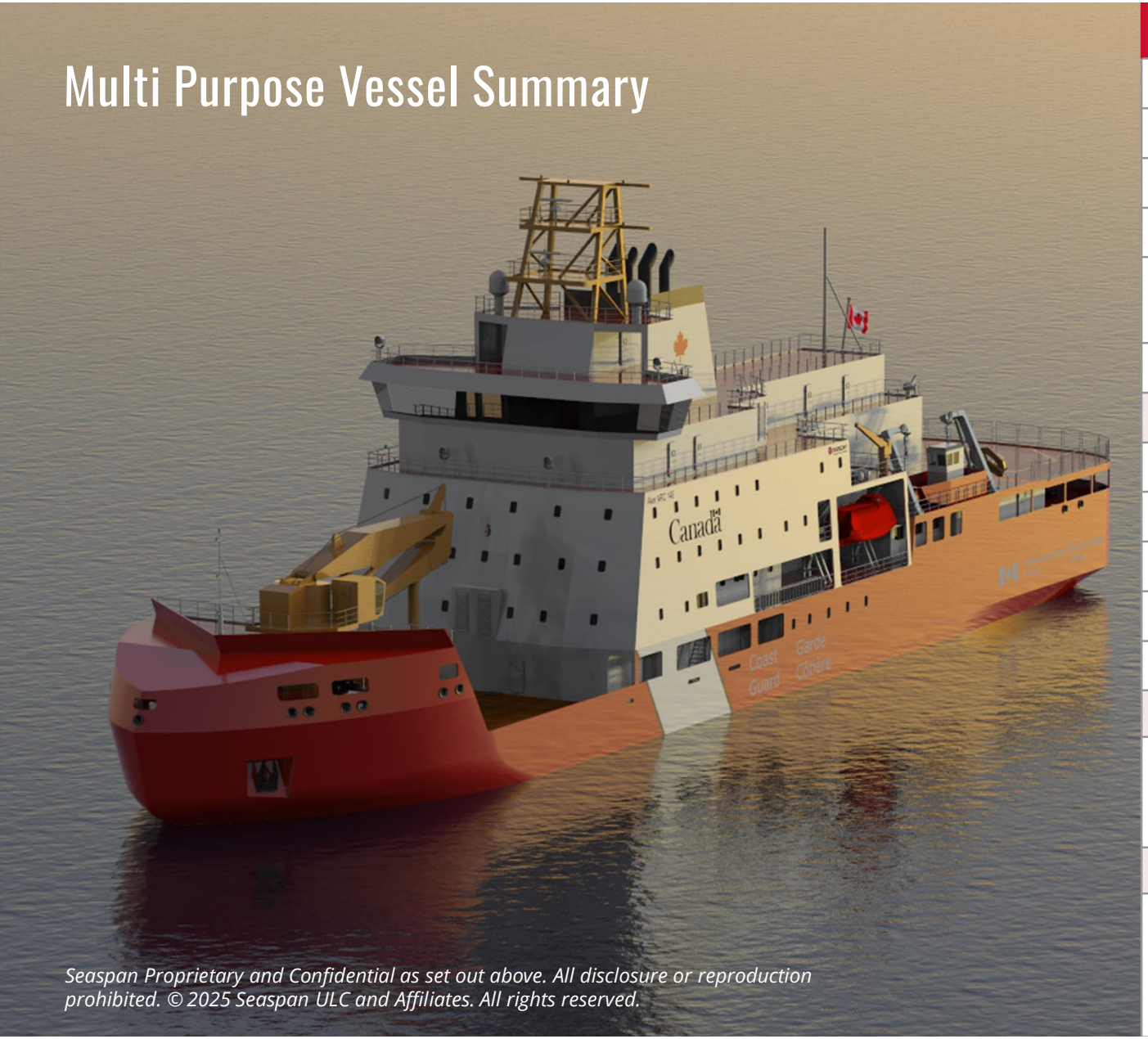
The backbone of the Canadian Coast Guard's future maritime capability

Flight 1 – 6x ships
Cut steel April 2027
- Longest range
- High Icebreaking Capability
- Full Aviation Facility

Flight 2 – 5x ships
- Likely smaller
- Shorter Range
- No Aviation

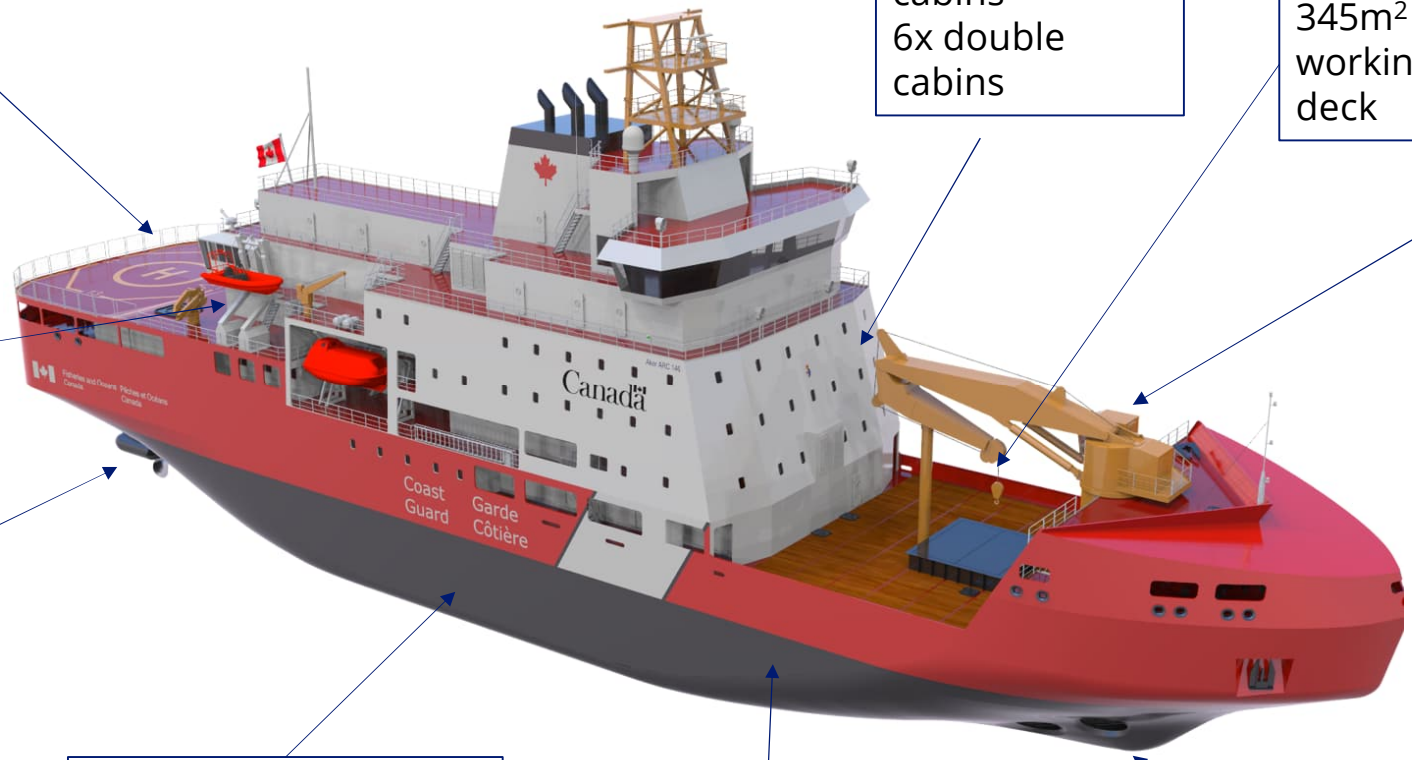
Flight 3 – 5x ships
- Similar to batch 1
- Major technology upgrades including decarbonisation

Multi Purpose Vessel Summary



MPV	
Length	99.92m
Breadth	20.3m
Displacement	~9000 tonnes
Installed Power	10,100 kW
Propulsion	2x3600kW Azimuth Thrusters
Complement	50
Performance	
Speed (Open Water)	16.4 knots
Speed (1.0m Ice)	3.8 knots
Range	12,000 nautical miles
Dynamic Positioning	<10m radius SS4
	<100m radius SS6
Class Notations	
✠100A1 *IWS Ice Class PC4, Icebreaker(+), Winterisation D (-30) ✠LMC UMS DP(AM) NAV1 IBS PSMR CAC3	
Missions	
• Aids to Navigation • Ice Breaking • Search and Rescue	• Conservation & Protection • Arctic Resupply • Pollution Response

Multi Purpose Vessel Summary



Helideck, hangar and workshop

38x individual cabins
6x double cabins

345m^2 working deck

Offshore crane, 20 tonnes @ 19m in SS5

7.5m RHIB and 9.5m Barge

2x Azimuth Thrusters

2x ~3.5MW engines
2x ~1.5MW engines

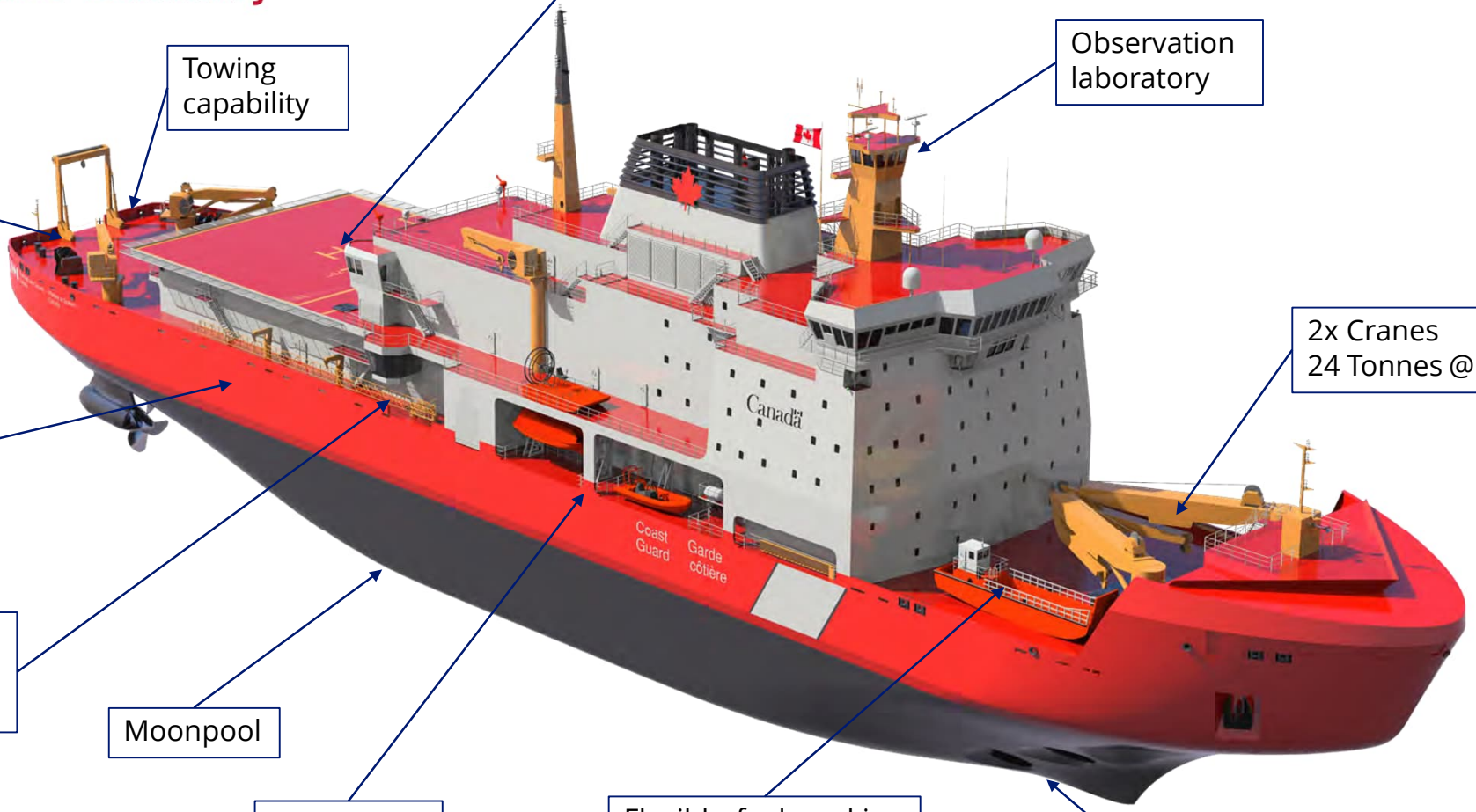
980m^3 cargo hold

2x Bow Thrusters

Polar Icebreaker Summary

Polar Icebreaker	
Length	158m
Breadth	28m
Displacement	~26,036 tonnes
Installed Power	~46 MW
Propulsion	~ 34 MW
Complement	100
Performance	
Speed (Open Water)	18 knots
Speed (2.5m Ice)	3 knots
Range @ 12 knots	20,000 nautical miles
Class Notations	
✠100A1 Icebreaker(+), Ice Class PC 2, LA, Winterization H(-50) D(-50) ✠LMC, NAV 1, IBS, DP(AM), UMS, CCS, ICC, PSMR	
Missions	
• Year round high and sub-Arctic presence • High Arctic science research support • Search and Rescue • Ice Breaking	• Canadian Sovereignty • Support to Northern communities • Arctic maritime emergency response • Pollution & Environmental Response

Polar Icebreaker Summary



Aviation facility

Towing capability

Observation laboratory

Aft working deck, multiple cranes & flexible load out

2x Cranes
24 Tonnes @ 16m

Vehicle garage with ice access P&S

Extensive "over the side" science handling capability

Moonpool

Multiple small boats

Flexible fwd working deck with cargo hold below

2x Bow Thrusters

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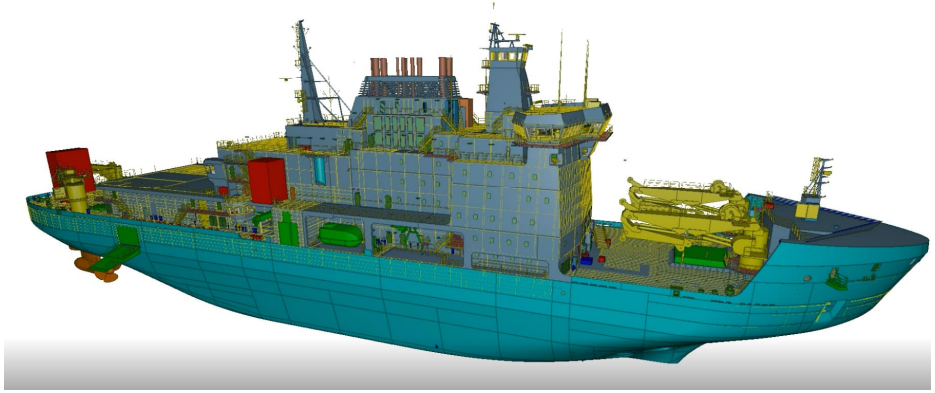
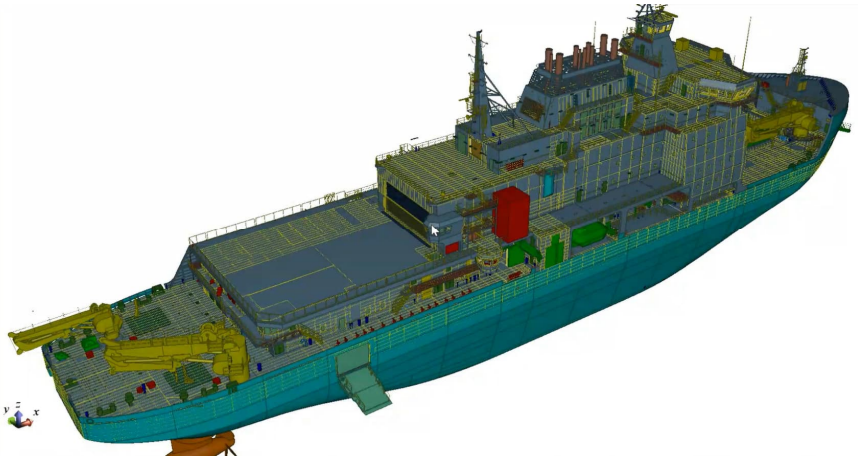
To Meet Critical Mission Requirements, the Polar's Capabilities Have Evolved

Critical Benefits to Canada	Baseline Capability	Current Capability
Year-round, full Arctic operations	9-Month Operational Cycle	Year-Round Operational Cycle
Year-round, full Arctic operations	Polar Service Temperature: -35°C	Polar Service Temperature: -50°C
Wider range of heavier lift missions	2x Medium Lift Helicopters (6,400kg)	2x Heavy Lift Helicopters (12,000kg)
Better life extension capability	Service Life Allowance: 500mT (3.0%)	Service Life Allowance: 943mT (5.0%)
Safer, more redundant operations	Older Propulsion System	Modern Propulsion System
Reduced risk of flooding	Partial Double Hull	Full Double Hull

Length has grown by 5% to 158m





Comparison to Ongoing Icebreaker Programs

USCG PSC	
Length	140m
Breadth	27m
Displacement	~22,900 Te
Ice Class	PC 2
Propulsion Arr.	2x Azi. Thrusters, 1x CL Shaft
Complement	186

Polar Icebreaker	
Length	158m
Breadth	28m
Displacement	~26,036 Te
Ice Class	PC 2
Propulsion Arr.	2x Azi. Thrusters, 1x CL Shaft
Complement	100

USCGC Polar Star	
Length	122m (399ft)
Breadth	25m (83.5ft)
Displacement	~13,800 Te
Ice Class	Approx PC 3/4
Propulsion Arr.	3x Shaft
Complement	145

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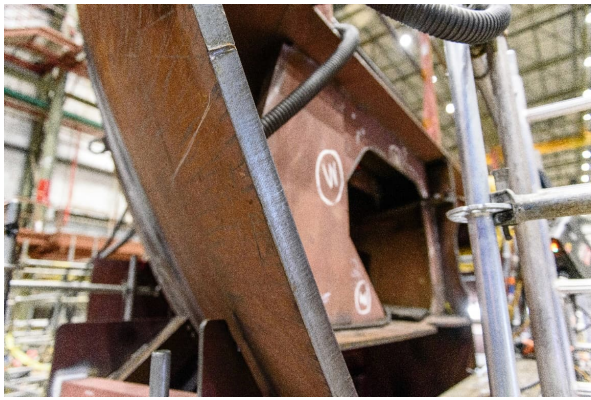
Ready to Build Icebreakers

Partnering with industry-leading design agents

- Seaspan in-house engineering and design team worked with Finnish partners Aker Arctic, Elomatic, ABB, Steerprop, and Wärtsilä
- Functional design of Polar completed directly in 3D model using new Cadmatic 3D design tools
- Genoa Design & Elomatic completing detailed 3D modeling for Polar



Preparing for a successful build phase

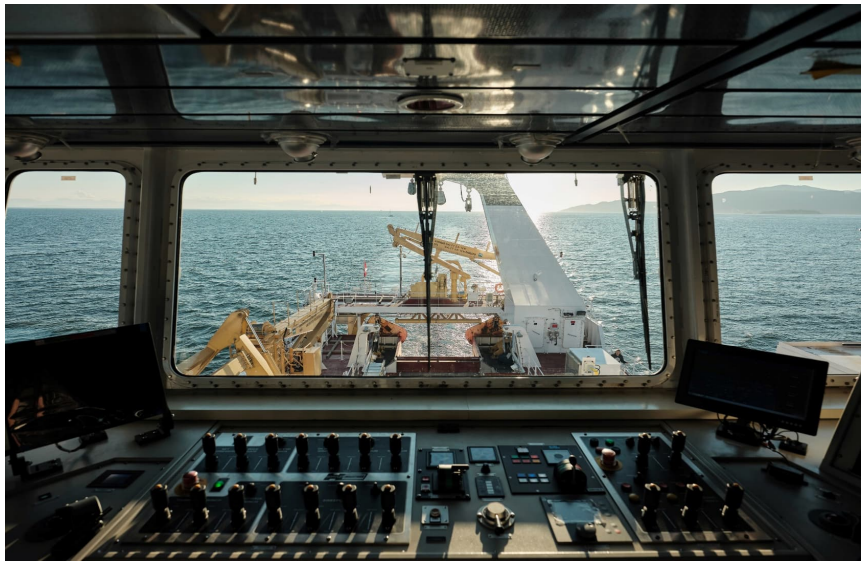
- Completed prototype block to de-risk construction, resulting in hundreds of lessons learned
- Floating drydock upgraded to handle increased weight at launch

Solidifying our icebreaker design and build capabilities

- MPV design completed in-house through lessons learned on previous ships
- Built Canada's largest design and engineering team – focused on icebreakers
- ISO certification of Seaspan's Welding Centre of Excellence
- Recruiting efforts underway for build phase
- Commission of Land-Based Test Site

A Decade in NSS-Key Takeaways & Lessons

- **Lock down requirements early/Sell off majority in design**
- **Vet ship owner requirements thoroughly before selecting any parent craft design**
- **Get major suppliers under contract early (in basic or functional design)**
- **Have a mature design before you start construction**
- **Canada should take a portfolio view of the NSS (not project by project)**
  - Leverage the expertise, capabilities, and capacity of all three large-vessel shipyards in Canada
  - Design, construction, supply chain
- **Maximize value for money for Canada by using a common functional design for Canada's Polar Icebreakers**
- **Stay the course with NSS to make sure the shipbuilding capability in Canada continues to develop**



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QUESTIONS