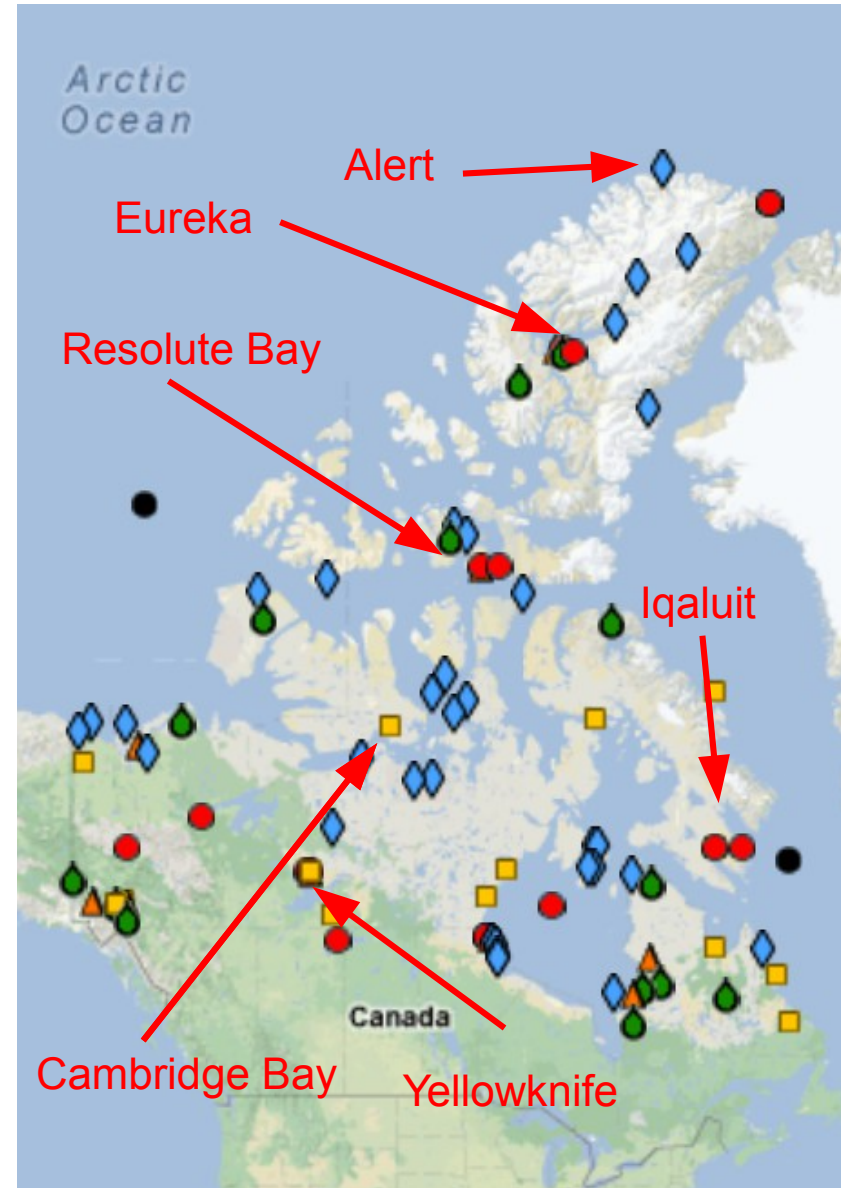


Canadian Highlights

- Canadian Network of Northern Research Operators (CNNRO) -a reality
- “Amundsen” Research cruises – 2014 plan
- CCGS “John Diefenbaker” Icebreaker – planning
- Canadian High Arctic Research Station (CHARS) - progress

Canadian Network of Northern Research Operators (CNNRO) Réseau canadien d'opérateurs de recherche nordique

- **Aim:** To ensure that Canada maintains an appropriate Northern research infrastructure.
- **Activities:** sharing information and concerns, improving efficiency and lowering costs by working collaboratively.
- **Collaborations:** Potential for further (inter)national collaborations



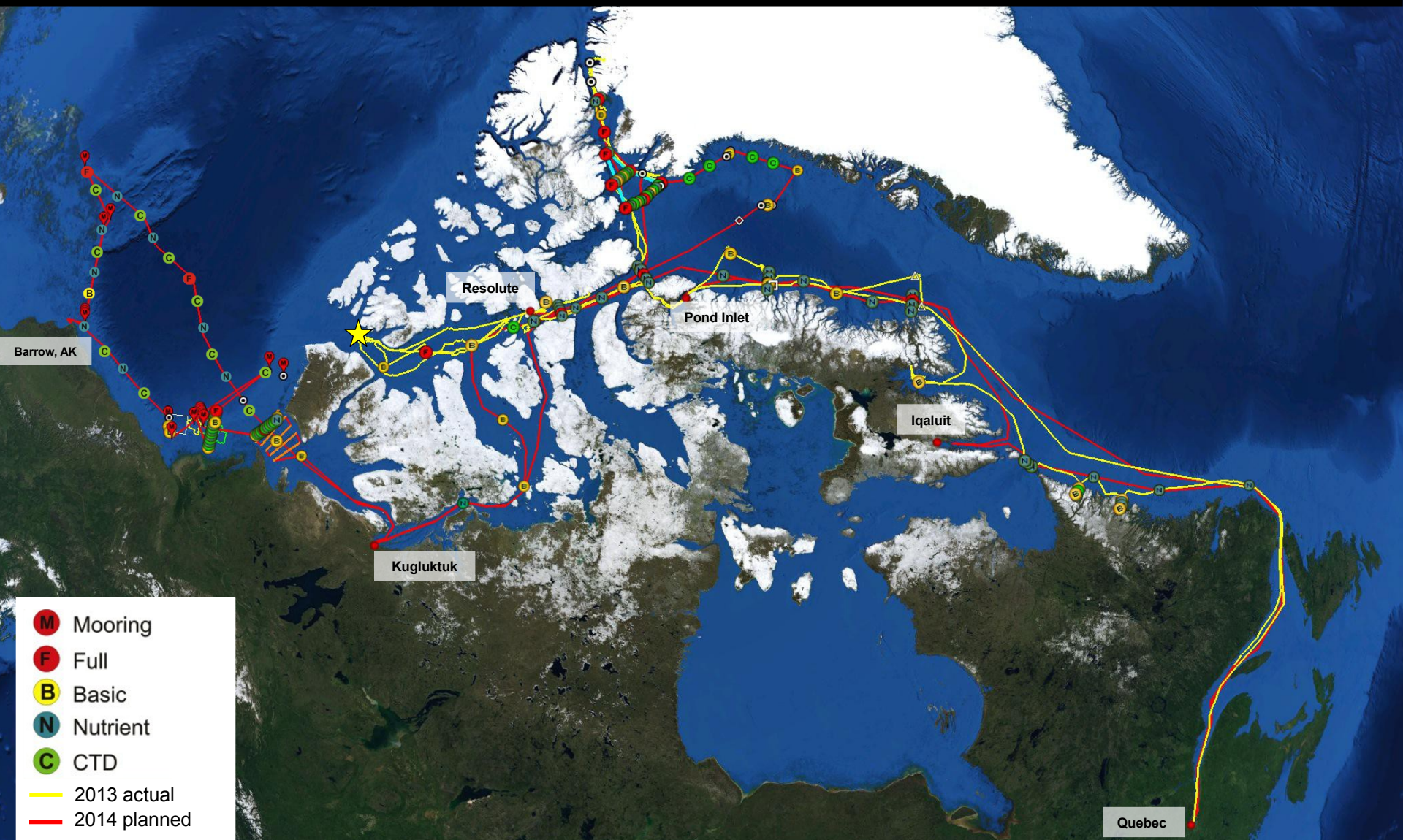
Canadian Network of Northern Research Operators (CNNRO)

Réseau canadien d'opérateurs de recherche nordique

- Provides a forum for Canadian Research Operators
 - The national equivalent of FARO
 - ~35 members - as wide as possible – 6 new members at last Board meeting – full members and Associate members
- Facilities are extremely diverse, representing
 - a wide range of research, including natural and social sciences
 - a wide range of sizes and budgets
- CNNRO is now officially incorporated
 - Secretarial support from the Canadian Polar Commission (CPC)
 - Financial support from Aboriginal Affairs and Northern Development Canada (AANDC)
 - Web-site at www.cnnro.ca
 - First election of Board December 6 2013
- Actively looking for linkages and collaborations
 - Looking to collective activities to capitalise on network
 - Seeking collective funding

CCGS AMUNDSEN

Canadian Research Icebreaker





	2013	2014
Days at sea	72	95
Participant days at sea	2266	3640
Canadian participants	100	103
International participants	9	17
Distance travelled (nm)	11783	19885
Stations sampled	110	137

Programs supported in 2014:

Canada: ArcticNet (NCE), BREA (AANDC), Netcare (NSERC), STAC (NSERC)

Japan: NIPR, JAMSTEC

France: CNRS/Takuvik

CCGS *John G. Diefenbaker* (2017)

Notional Vessel Particulars:

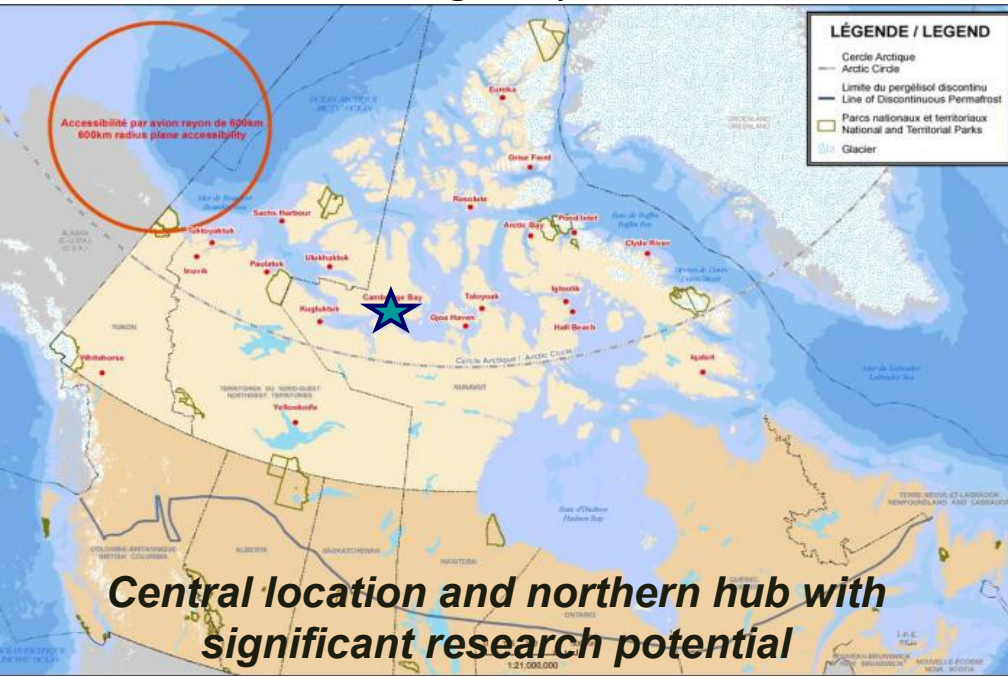
- IACS UR PC2 (Icebreaker +)
- Length approximately 149m
- Beam approximately 28m
- Displacement ~23,000 tonnes
- Fully integrated diesel electric
- Installed power of ~36 MW
- 18 knots max / 12 knots cruise / 3 knots ice
- Full power endurance of at least 25 days
- Complement of 60 crew / 40 msn personnel
- 270 days logistical endurance
- 2 x medium lift helicopters
- Extensive multi-disciplinary science outfit



CHARS: A World Class Research Facility



Location: Cambridge Bay, Nunavut



NEWS: Nunavut June 13, 2013 - 2:27 pm

Architects unveil model of Nunavut-based Arctic research station

\$188-million project expected to bring jobs, money to CamBay

JANE GEORGE

People in the western Nunavut community of Cambridge Bay got a sneak peek this week at what the Canadian High Arctic Research Station will look like: a complex of buildings designed to make the most of its location and traditional knowledge and science.

The good news: CHARS is still on target to open in July 2017, just in time for the 150th anniversary of the Canadian federation.

But, during updates from the station's architects and representatives from Aboriginal Affairs and Development Canada, it became clear again that the CHARS isn't just about building designs or research projects for people who live in Cambridge Bay.

It's also about jobs and money: Ottawa plans to spend \$188 million on CHARS and its science and technology program — a lot of cash for a town of 1,600.

For now, plans for CHARS will see 33 permanent staff and up to 150 more hired on seasonally.

But that could change. That



In this photo from the CHARS community consultation document prepared for Cambridge Bay, you can see the site for the research facility to the back of the community.



During the CHARS June 11 evening community consultation, Donald McLennon, head of monitoring science on the project, talks about the CHARS design to two of the 30-plus people who attended the session. (PHOTO BY RED SUN PRODUCTIONS)



Plateau site in Cambridge Bay selected February 27, 2013

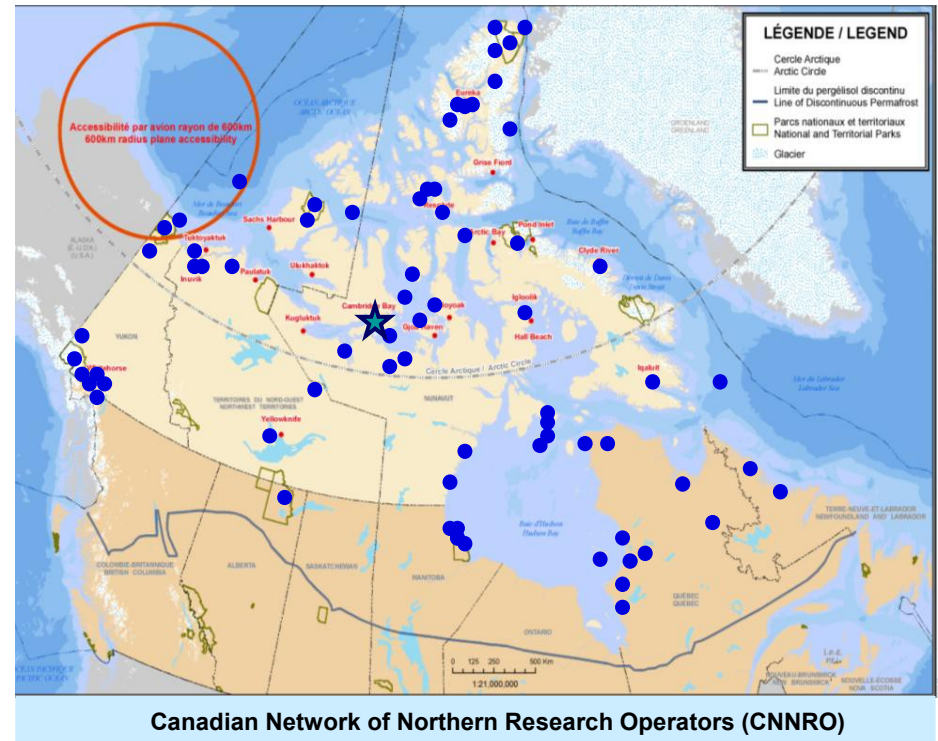
Population: 1477
(80% Inuit)

A Strong Research Presence for CHARS:

Engaging Networks

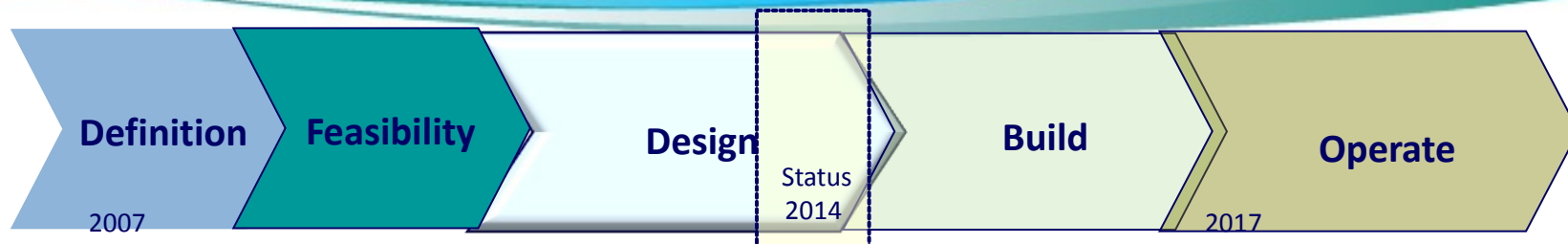


- Canadian Science-based departments and agencies
- Territories and Northern organisations
- Industry and private sector
- Canadian Aboriginal Organisations
- Academia: Universities, Colleges, Researcher Networks
- International organisations & Networks



Building partnerships across S&T, infrastructure and Northern domains is essential for the ongoing success of CHARS

CHARS Delivery Phases: Design



Infrastructure Design:

- What capabilities must the infrastructure have?
- What are the risks for construction?
- What are the costs of delivering the infrastructure?
- What is the best site in the community for this facility?
- How best can Northerners be engaged?

S&T Plan Design:

- What are the short-term S&T priorities?
- How will the S&T plan be delivered to drive results towards solutions?
- How will the program relate to the infrastructure?
- How can the program link and engage the broader network?
- How will the program and ongoing operations be managed?

Results:

- Announcement of **funding** for **construction**, phase-in for **S&T program**, and **on-going** program and operations (Aug 2012)
- Announcement of successful design consultant team – **FGMDA and NFOE et associés architectes** (Aug 2012)
- Approval for **Science & Technology Plan** (June 2013)
- **Plateau site** selected for the construction of CHARS in Cambridge Bay, Nunavut (Feb 2013)
- The **EllisDon Corporation in joint venture with NCC Dowland Construction Ltd.** was awarded the contract to provide advisory services for the design and construction of CHARS (June 2013)

Canadian High Arctic Research Station:

A new world-class facility



“To ensure Canada remains a global leader in Arctic science, the Government of Canada committed to establish a new world-class research station in the High Arctic.”

Canada's Northern Strategy

CHARS' Mandate

1. World-class facility that is a hub for Canadian and international Arctic S&T

2. Cutting-edge science and technology that delivers excellence and relevance

3. Strong research presence across Canada's vast and diverse North

