

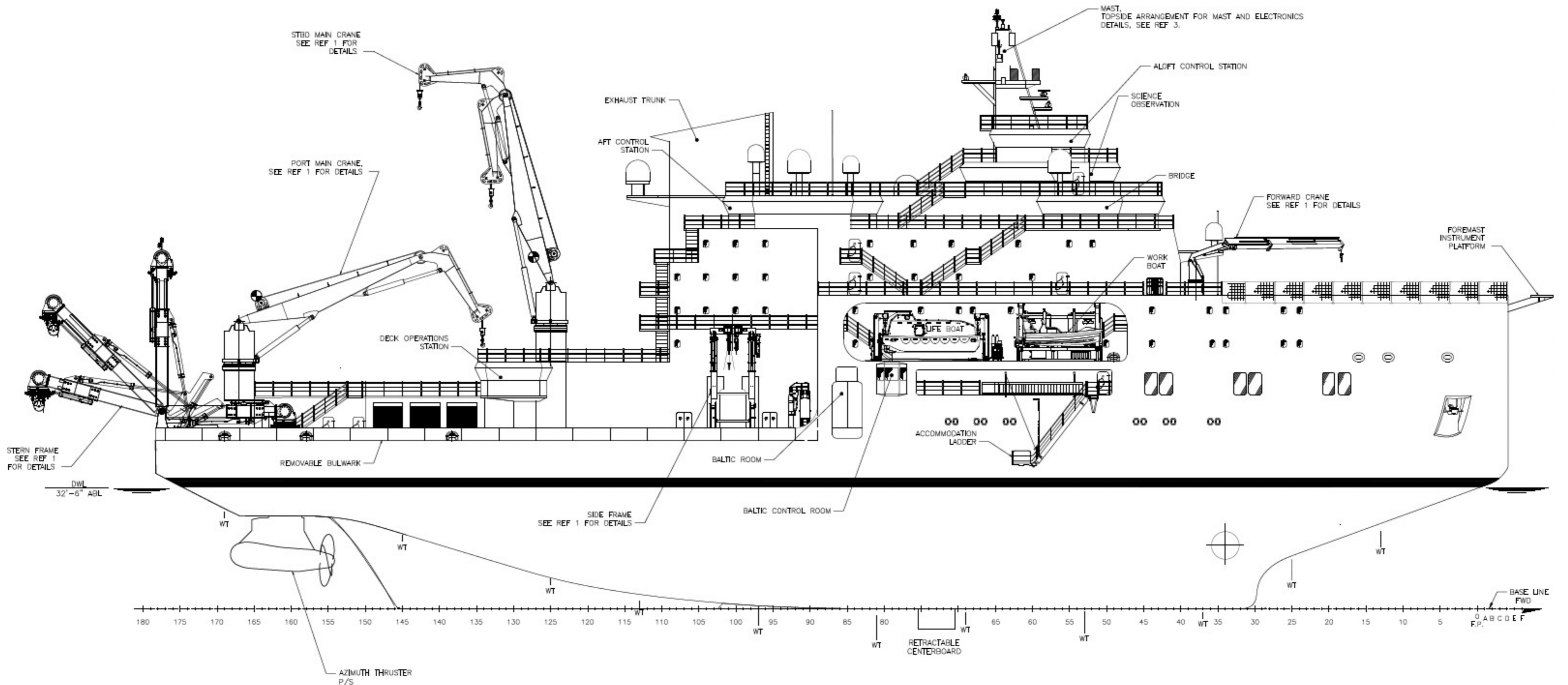


# ANTARCTIC RESEARCH VESSEL

<https://future.usap.gov/arv/>



## Preliminary Design



### Calendar

#### Final Design Phase

Late 2024 – Late 2026

#### Final Design Review (FDR)

Spring/Summer 2026

#### Construction Stage

(If funds appropriated)

Late 2026 – Early 2032

#### Construction starts/Keel Laying

~ October 2027

#### Vessel Delivered to NSF

~ December 2030

#### End of Warranty Period

Final Acceptance

~ December 2031

#### Begin 40 years of Science

Operations

Early 2032

### Classification

ABS A1

Oceanographic

AMS

ILM

ACCU

BWT+

Unrestricted service

CCO-Polar

HAB++(WB)

ENVIRO

ESS-LIBATTERY

HYBRID IEPS

ILM

UWILD

Ice Class

PC3

NIBS

DPS 1

CS 2

### Dimensions

Length, Overall  
111 M (365.0 ft)

Beam, Overall  
24M (80.0ft)

Draft, Maximum  
10M (32.5.ft)

### Performance

Open Water  
Cruise 11kt - 12kt  
Max 15 kt

Range  
31,485 km (17,000 nm)

### Accommodations

Ship's Crew : 29

Science including Techs  
55 with one ADA Stateroom

Multiple Common Space  
Lounges, Library, Gym & Sauna

Individual Workspaces  
Private Offices near labs & staterooms

### Key Performance Parameters (KPPs)

- Polar Class 3, 1.4 m (4.5 ft) ice @ 3 kts
- 90-day Endurance
- 55 Science/Technical Personnel

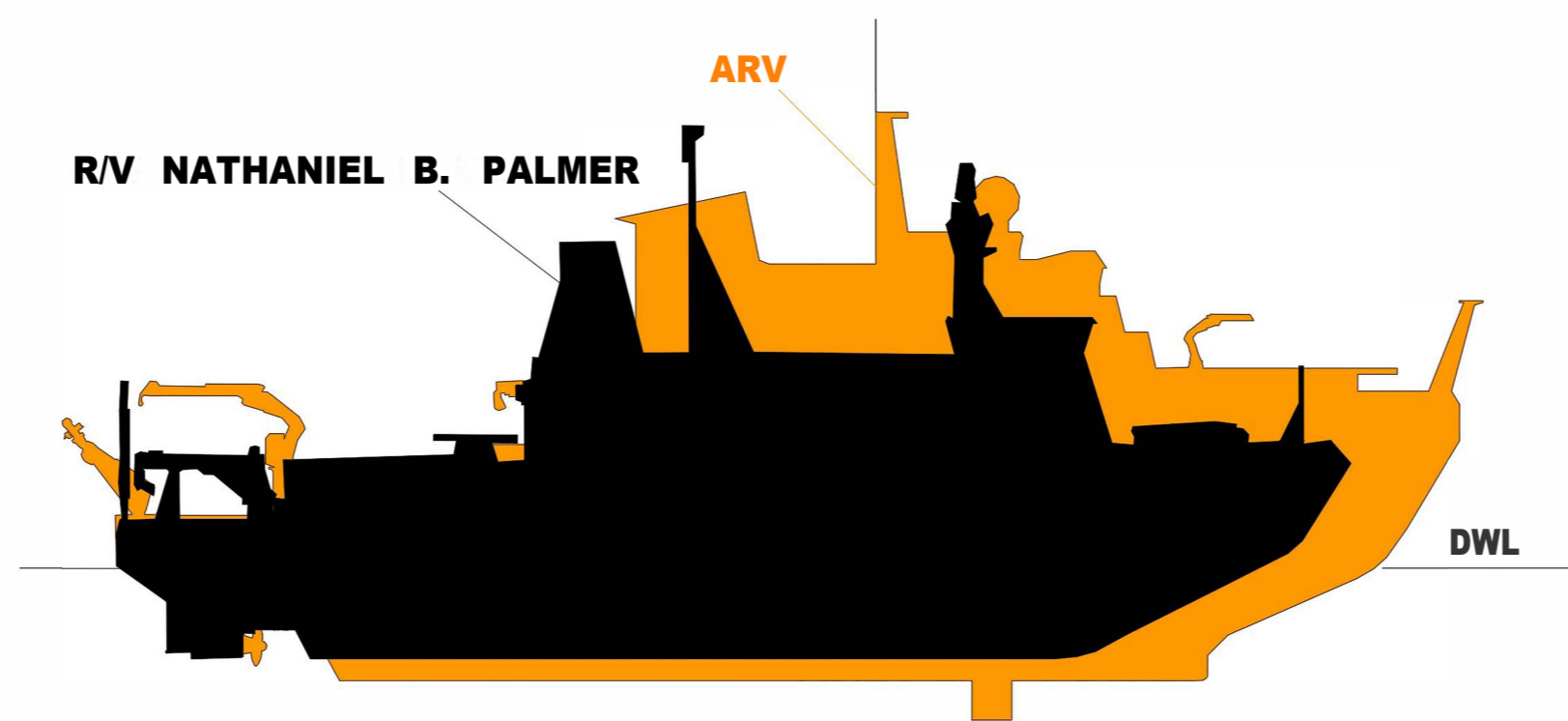
### Capability

- 40m – 50m Piston Coring System
- Coring and Oceanographic Traction Winches
- Primary and Secondary Hydrographic Winches
- CTD Launch and Recovery System (LARS)
- 27 metric ton Stern and Starboard A-Frames
- 650 m<sup>2</sup> (7,000+ ft<sup>2</sup>) Aft Working Deck
- 52 m (170 ft) open Stb Deck
- 743<sup>2</sup> m (8,000+ ft<sup>2</sup>) Main Deck Lab space

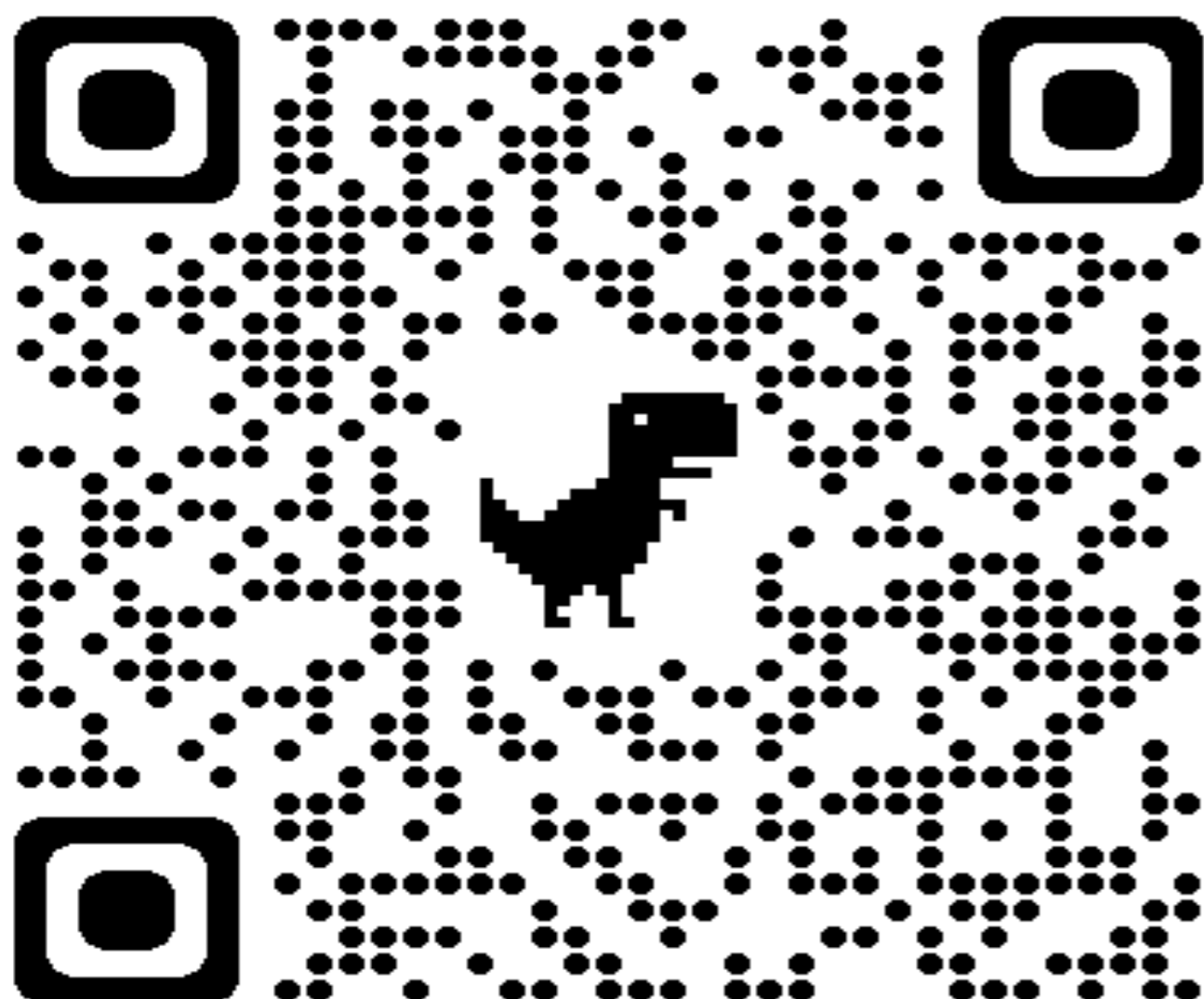
### Characteristics

- Large Configurable Labs
- Science Sea Water System
- Baltic Room – CTD Operations
- Science Staging Bay – Back Deck Operations
- UAV/Aviation Deck and forward Hanger
- Elevated Science Observation Deck (enclosed)
- Science Container Hold (8 x 20' ISO containers)
- 12 x 20' ISO containers on deck
- Box Keel sonars w/ Ice Windows
- Retractable Center Board (Drop Keel)
  - sonars w/o Ice Windows
- Science Support Small Boats (4)
- Hybrid Diesel Electric Power Plant (22.3 MW)

### Size Comparison NBP to ARV



### Website



### Contact

NSF Program Manager: Tim McGovern  
 tmcgover@nsf.gov  
 NSF Project Manager: Mike Prince  
 jprince@nsf.gov

### 3D Rendering

