# Report of the
# Ad Hoc Subcommittee on the
# U.S. Antarctic Program's Research Vessel Procurement
# August 14, 2019

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https://www.nsf.gov/geo/opp/opp_advisory/meeting_docs/may2019/RV%20Subcommittee%20final%20report%2014AUG2019.pdf

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# Science Mission Requirements Addressed by the Subcommittee:

- Accommodations
- Habitability
- Icebreaking
- Endurance & Range
- Speed
- Sea keeping
- Station keeping
- Track line following
- Ship control
- Underwater radiated noise
- Helicopter support
- Off vessel support for field work & logistics
- Over the side handling
- Winches & Wire
- Cranes
- Towing, trawls, ice-clearing stern
- ROV support
- Unmanned aerial vehicle support
- Working deck area
- Laboratories
  - Layout & construction
  - Electrical
- Vans
- Storage
- Science load
- Workboats
- Masts
- Geotechnical drilling
- On deck incubations
- Marine mammal & bird observations
- Navigation
- Data network and onboard computing
- Real time data acquisition system
- Communications – internal
- Communications – external
- Scientific seawater system
- Acoustic systems
- Support for seismics
- Project science system installation and power
- Discharges
- Green ship considerations
- ADA considerations
- Maintainability, operability & life cycle costs

This task was addressed in detail (87 pages), and provides important info re future ship specifications.

James H. Swift, 01 MAY 2019

# *Outcomes*

There is significant US scientific community interest in Antarctic (and Arctic) science that would best be supported via an icebreaking research ship with enhanced operational and science capabilities over those of the NBP.

Should the USAP “build low” and seek partnerships with more capable polar ships (USA or other nations), or, instead, find a way to “join the Bigger Ship club”?

Ultimately NSF, working with the community, Congress, and the executive branch, faces that decision.

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