# Global Class Research Vessel Fleet Capacity

- Demand for Global Class Research Vessels is at an all time high
- Capacity has diminished since the retirement of RVs *Knorr* and *Melville*
- The next decade will see end of service life for RVs *Atlantis, Revelle,* and *Thompson*
- The US Navy has no formal build plan for new Global Class Research Vessels

→ **The FIC recommends the procurement of new Global Class Research Vessels to replace retiring ships AND expand our capacity**

Global Class Fleet Capacity

- High demand, cruise back-log not shrinking
- Formed subcommittee (S. D'Hondt, M. Tominaga, A. White) in spring to investigate and make recommendations
- Retirementment of Knorr and Melville (Globals) replaced with Armstrong and Ride (Ocean)
    - Reduction in berths
    - Reduction in size
    - Reductions in ??
- Alice compiled table: https://docs.google.com/spreadsheets/d/1FKNCojseWNLFrub-5_efzX90_VlDxV7E/edit?usp=sharing&ouid=100352615962899146562&rtpof=true&sd=true
- Requested global class but sailed on intermediate/ocean class:

    Before 2018:   ~5 cruises/year (KM most common)
    Since 2018:   >10 cruises/year (Sally Ride most common)
- What next?
- Contact Chief Scientists on table and survey? Needs to be carefully worded not to lead them into answers …

Global to Non-Global Reschedules
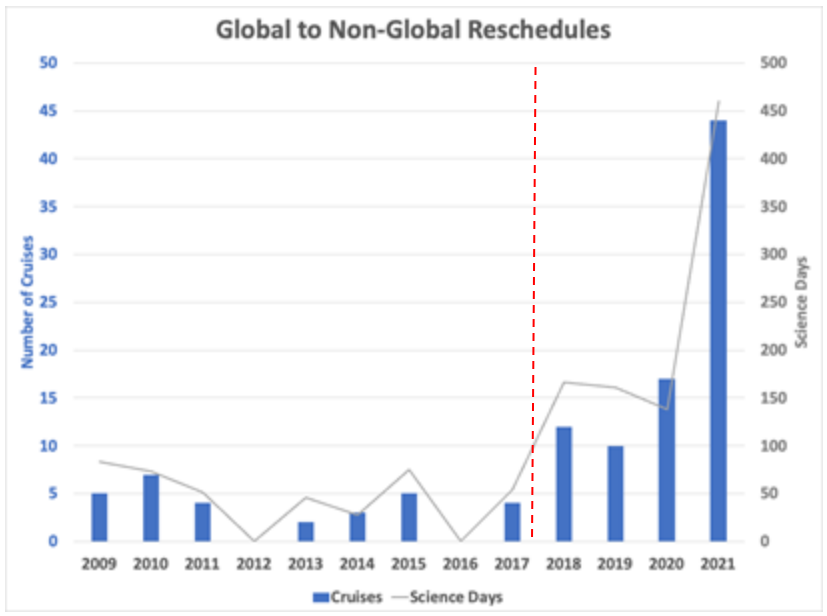
HOW might the ARF look in the coming decade?

- **Autonomy will be commonplace as technology becomes robust**
  - Never a replacement for people on ships
  - Enhance footprint, provide endurance, sample dangerous conditions
- **Finding the right composition of research vessels**
  - Global class RVs are oversubscribed
  - Coastal/Local class RVs are underutilized
- **Polar Research**
  - Antarctic Research Vessel (2031 - unfunded currently)
  - USCG Arctic Surface Capability Science Mission Requirements
- **Greening of the Fleet**
  - Net-zero emissions from overall federal operations by 2050, including a 65 percent emissions reduction by 2030

EXPORTS; Seigel et al. 2021