

APPENDIX V

	Arctic Research Vessel	USCG Healey
Science Support		
Baltic Rooms	Yes	No
Specialized equipment (Multibeam, CTD, etc.)	Yes	No
Laboratories	Larger	Smaller
Deck Layout	Better	Two decks, poorly arranged
Heated Decks	Yes	No
Open Deck Space	More and better	Less
Technical Assistance	Yes	Maybe
Crew Experience	Longer term	< 2 or 3
Crew Attitude	Better	O.K.
Scientist Capacity	36	Up to 50?
Vessel Capabilities		
Ice Capability	Good, up to 4 feet	Very good, > 4 feet
Ice Channel Aft Clear	Yes	No
Ice Milling	No	Yes
Slamming	Maybe	No
Endurance	90 days	65 days
CASPPR	Yes	???
Days available for science	270/year	144/year
Organizational Factors		
Scheduling	Excellent	Poor
Long Range Planning	Yes	Yearly
Memory	Yes	No
Costs		
To NSF	\$33,000/day	\$20,000/day
To taxpayer	\$33,000/day	\$108,000/day
Total Cost over 30 years	\$387,300,000 (8100 days)	\$858,000,000 (4320 days)

Why is the Arctic Research Vessel (ARV) Better Than Healey?

Science Support

- Equipment -
 - (Multibeam system. etc.)
- Technical Assistance
- Crew Attitude
- Crew Experience
- Laboratories
 - Larger
 - Better layout (See ARV Preliminary Design); Healey has labs over 2 decks

- No Baltic rooms on Healey
- Open deck space

Organizational Factors

- Scheduling (Repeated cruises rather than one time USCG expeditions)
- Long Range Planning
- Memory

Costs

- Approximately 25% of the cost of the Healey

Why is Healey better than the ARV?

Science Support

- Can carry more scientists
- Is more ice capable? (Would still require an ice escort in multi-year ice)

Costs

- Cost to NSF would be approximately \$20,000/day (Actual costs?)

The U.S. Coast Guard has provided a [rebuttal](#) of this presentation.