

The NOAA Fleet Plan

BUILDING NOAA'S 21ST CENTURY FLEET



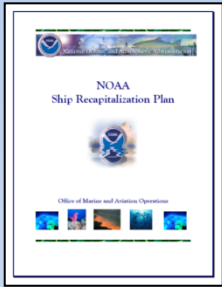
Briefing to Ocean Exploration Advisory Board

February 23, 2017



How Did We Get Here?

NOAA Ship Recapitalization Plan



2008

2013

NOAA Fleet Independent Review Team (IRT) starts

2016
JAN

MAR
2016

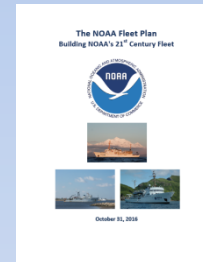
IRT Mid-term Status, Findings and Preliminary Recommendations



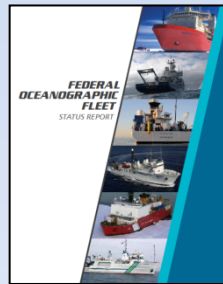
2016
JUL

OCT
2016

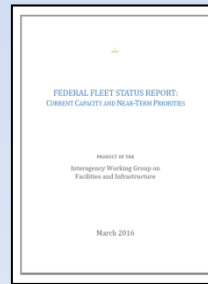
NOAA Fleet Plan



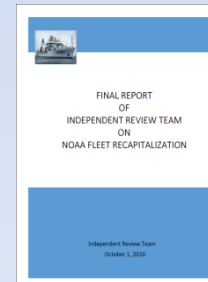
2016
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Federal Oceanographic Fleet Status Report



IWG-FI Federal Fleet Status Report



IRT Final Report



IRT

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Tiger Team

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Bottom Line Up Front

NOAA Recommends:

- Sustain capabilities with up to 8 new ships
- Start now with AGOR design: meets requirements, known platform, leverages resources and time
- Increase use of existing NOAA ships & small boats
- Increase use of charters
- Strengthen partnerships
- Integrate emerging technologies

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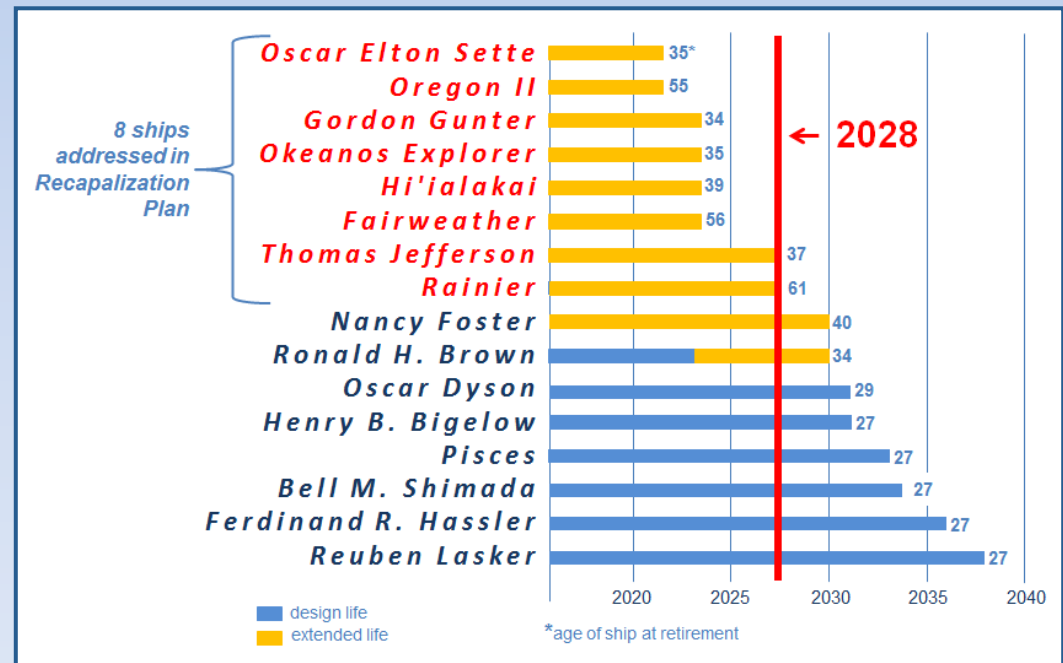
October 31, 2016



Challenges for NOAA Fleet

- Age and obsolescence
- Reduced at-sea capacity
- Expanding mission requirements
- Limited funds for modernization
- 8 ships retire by 2028

NOAA's current fleet service life



Days-at-Sea Required & Allocated

			Capacity (DAS)			
			Total User Requirements (FY 17)	Allocated		Total Allocated (NOAA and Charter)
				NOAA (FY 17)	Charter (FY 14 - FY 16 average)	
Totals			8,063	3,096	2,320	5,416
Missions & At-Sea Activities	Charting & Surveying	Navigation, Observations & Positioning	1,110	630	610*	1,240
		Coastal Science & Assessment	276	115	56	171
	Assessment & Management of Living Marine Resources	Protected Resources, Science & Management	959	299	53	352
		Fisheries Science & Management	3,036	962	864	1,826
		Habitat Conservation & Restoration	1,838	598	9	607
	Oceanographic Monitoring, Research & Modeling	Climate Research	716	248	472	720
		Weather & Air Chemistry	41	3	0	3
		Ocean, Coastal & Great Lakes Research	87	97	256	353
	Emergency Response		As required			
	Mission Support	OMAO Mission Support	N/A	144	N/A	144

*610 DAS is approximate equivalent for data purchased by contract



Long-Term Recapitalization

Design and Construct New Ships

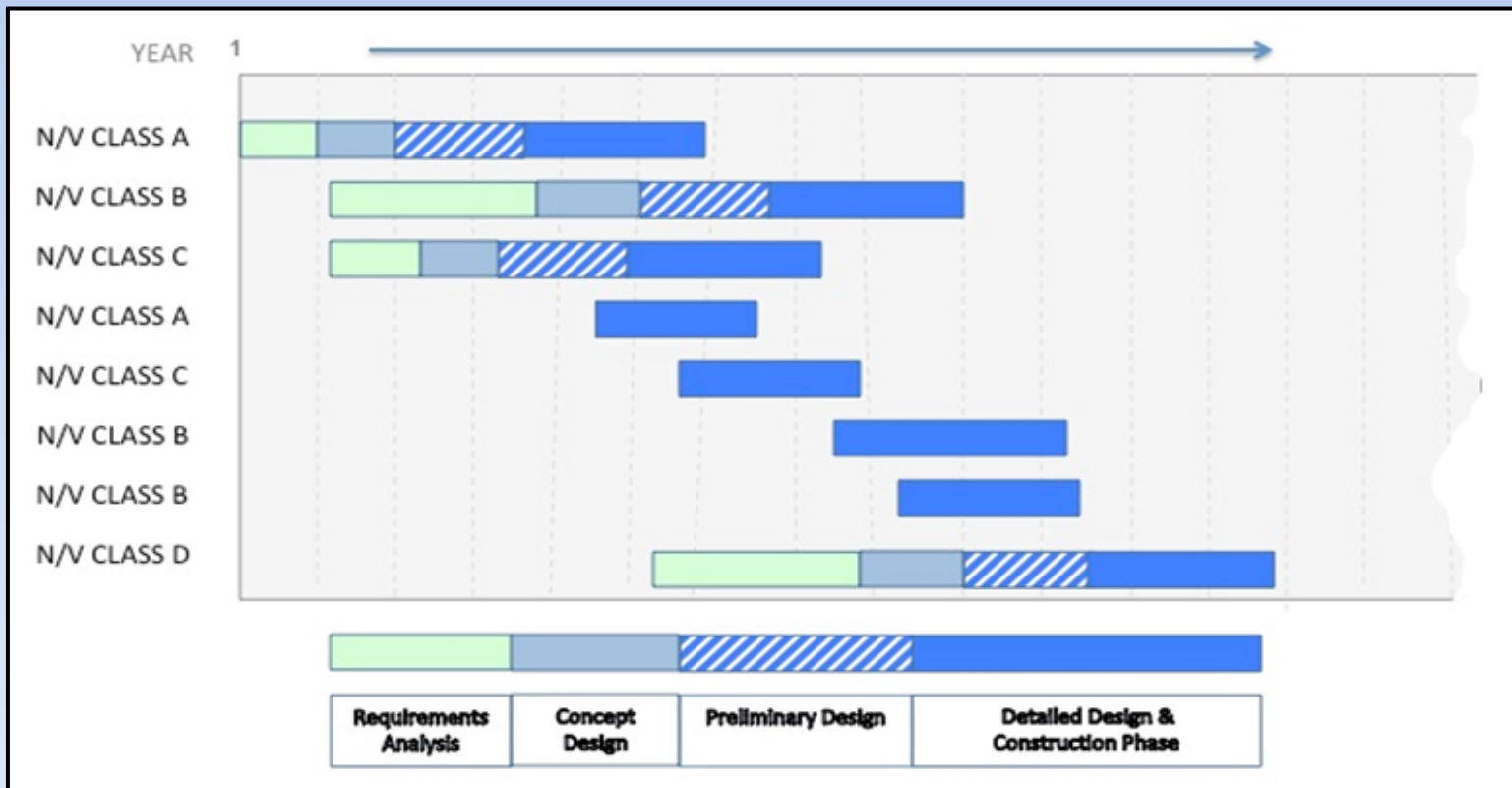
future NOAA ships and missions

Ship	Primary Mission	Secondary Mission(s)
N/V CLASS A	Oceanographic Monitoring, Research & Modeling	Assessment and Management of Living Marine Resources (no trawl), Charting and Surveying
N/V CLASS B	Charting and Surveying	Assessment and Management of Living Marine Resources (no trawl), Oceanographic Monitoring, Research & Modeling
N/V CLASS C	Assessment and Management of Living Marine Resources (trawl-capable, shallow-draft)	Charting and Surveying
N/V CLASS D	Assessment and Management of Living Marine Resources (trawl capable, near-shore and deep ocean, longer endurance)	Charting and Surveying, Oceanographic Monitoring, Research & Modeling



Long-Term Recapitalization

Design and Construct New Ships



Notional Schedule

Fleet Management Best Practices

- ❖ **Extend Service Life of NOAA Ships**
- ❖ **Increase Use of Current NOAA Fleet**
- ❖ **Increase Use of Charters**
- ❖ **Increase Use of Small Boats**
- ❖ **Integrate New Technology**
- ❖ **Leverage Partnerships**
- ❖ **Establish Ship Acquisition Expertise**
- ❖ **Is executable under a stable, continuous annual recapitalization funding profile**



Degradation of the Fleet by 2028

		Regions							
		Northeast	Mid-Atlantic	Southeast Atlantic	Gulf of Mexico	Tropical Atlantic & Caribbean	West Coast	Alaska & Western Arctic	Pacific Islands & Tropical Pacific
Mission & At-Sea Activities	Charting & Surveying	Navigation, Observations & Positioning	Orange	Orange	Orange	Orange	Green	Red	Red
		Coastal Science & Assessment	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red
	Assessment and Management of Living Marine Resources	Protected Resources, Science & Management	Yellow	Yellow	Yellow	Red	Red	Green	Red
		Fisheries Science & Management	Yellow	Green	Yellow	Orange	Green	Green	Red
		Habitat Conservation & Restoration	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Red
	Oceanographic & Modeling Monitoring, Research	Climate Research	Yellow	Orange	Yellow	Yellow	Yellow	Yellow	Orange
		Weather & Air Chemistry	Yellow	Orange	Yellow	Yellow	Yellow	Yellow	Orange
		Ocean, Coastal and GL Research	Yellow	Orange	Yellow	Yellow	Yellow	Yellow	Orange

● = 90 – 100% capability loss
● = 60 – 89% capability loss
● = 59 – 30% capability loss
● = 0 – 29% capability loss

Degradation of the Fleet from 2017-2028

The NOAA Fleet Plan resources the agency's highest at-sea mission needs as supported by the IRT.

At-Sea Capacity		NOAA At-Sea Capacity (DAS) 2017 – 2028				
		2017	2022	2024	2028	
Number of Ships		16	14	10	8	
Totals		3,096	2,707	2,000	1,668	
Missions & At-Sea Activities	Charting & Surveying	Navigation, Observations & Positioning	630	630	453	150
		Coastal Science & Assessment	115	115	115	95
	Assessment & Management of Living Marine Resources	Protected Resources, Science & Management	299	168	94	94
		Fisheries Science & Management	962	763	687	687
		Habitat Conservation & Restoration	598	573	252	252
	Oceanographic Monitoring, Research & Modeling	Climate Research	248	228	218	218
		Weather & Air Chemistry	3	3	1	1
		Ocean, Coastal & Great Lakes Research	97	97	83	83
	Emergency Response	Various	As required	As required	As required	As required
	Mission Support	OMAO Mission Support	144	130	97	88



Conclusion

- **NOAA will lose 8 ships by 2028**
- **Construction of new ships is NOAA's best long-term strategy**
- **NOAA recommends commencing fleet recapitalization in FY 2017**

The NOAA Fleet Plan Building NOAA's 21st Century Fleet



October 25, 2016

