

NOAA's Office of Marine and Aviation Operations Needs to Improve the Planning and Governing of Its Ship Fleet Recapitalization Effort

FINAL REPORT NO. OIG-20-006-A

NOVEMBER 12, 2019



U.S. Department of Commerce
Office of Inspector General
Office of Audit and Evaluation



November 12, 2019

MEMORANDUM FOR: Dr. Neil Jacobs
Assistant Secretary of Commerce for Environmental Observation
and Prediction, performing the duties of Under Secretary of
Commerce for Oceans and Atmosphere
National Oceanic and Atmospheric Administration

A handwritten signature in black ink, appearing to read "Frederick J. Meny, Jr.".

FROM: Frederick J. Meny, Jr.
Assistant Inspector General for Audit and Evaluation

SUBJECT: NOAA's Office of Marine and Aviation Operations Needs to Improve
the Planning and Governing of Its Ship Fleet Recapitalization Effort
Final Report No. OIG-20-006-A

Attached for your review is our final report on the audit of the National Oceanic and Atmospheric Administration (NOAA) Office of Marine and Aviation Operations (OMAO) ship fleet recapitalization effort. Our objective was to determine whether NOAA OMAO performed effective acquisition planning for its construction of new ships.

Based on our review, we found that the initial acquisition planning for two Class A ships was not adequate. Specifically, we found the following:

- I. Schedule slippages have delayed ship construction and increased costs.
- II. NOAA's ship fleet acquisition planning was not effectively governed.
- III. OMAO did not provide adequate oversight of fleet recapitalization funds.

On September 23, 2019, OIG received NOAA's response to the draft report's findings and recommendations, which we have included within the attached final report as appendix D. NOAA concurred with all seven of our recommendations and noted actions it is/will take to address them.

Pursuant to Department Administrative Order 213-5, please submit to us an action plan that addresses the recommendations in this report within 60 calendar days. The final report will be posted on OIG's website pursuant to sections 4 and 8M of the Inspector General Act of 1978, as amended (5 U.S.C. App., §§ 4 & 8M).

We appreciate the cooperation and courtesies extended to us by your staff during our audit. If you have any questions or concerns about this report, please contact me at (202) 482-1931.

Attachment

cc: Rear Admiral Tim Gallaudet, Ph.D., USN Ret., Assistant Secretary of Commerce
for Oceans and Atmosphere and Deputy NOAA Administrator, NOAA
Benjamin Friedman, Deputy Under Secretary for Operations, NOAA
Rear Admiral Michael J. Silah, Director of OMAO and NOAA Corps, NOAA
Greg Raymond, Chief of Staff, NOAA OMAO
Rhonda Lawrence, Audit Liaison, NOAA



Report in Brief

November 12, 2019

Background

The National Oceanic and Atmospheric Administration (NOAA) Office of Marine and Aviation Operations (OMAO) currently operates 16 ships to conduct hydrographic, oceanographic, atmospheric, and fisheries research. According to OMAO, its fleet is expected to decrease from 16 to 8 active ships by fiscal year (FY) 2028, as ships are withdrawn from service because they have surpassed their usable life. As a result, NOAA plans to replace ships in its aging fleet. In 2013, NOAA finalized its *Fleet Composition Report*, which recommended that NOAA acquire multiple ship classes. In May 2014, OMAO entered into an interagency agreement valued at \$1.5 billion with the U.S. Navy to acquire multiple vessels.

In 2016, NOAA released *The NOAA Fleet Plan: Building NOAA's 21st Century Fleet*, which outlines NOAA's long-term fleet recapitalization strategy to replace vessels. The plan states that the design and construction of two Class A ships is the first step of the recapitalization strategy. From FY 2016 to FY 2019, OMAO received \$300.05 million for new ship construction. In addition, OMAO requested in its 2020 budget outyear funding of \$75 million each year through 2024 for new ship construction.

Why We Did This Review

The objective of this audit was to determine whether NOAA OMAO performed effective acquisition planning for its construction of new ships.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOAA's Office of Marine and Aviation Operations Needs to Improve the Planning and Governing of Its Ship Fleet Recapitalization Effort

OIG-20-006-A

WHAT WE FOUND

We found that the initial acquisition planning for these ships was not adequate. Specifically:

1. Schedule slippages have delayed ship construction and increased costs. As a result of the 39-month delay in completion and delivery—and based on a revised cost estimate from the Navy—the two Class A ships will cost at a minimum \$11.9 million more to complete than originally estimated.
2. NOAA's ship fleet acquisition planning was not effectively governed. OMAO (a) transferred funds to the Navy without obtaining proper approvals, (b) failed to notify proper approval authorities of its intent to deviate from the approved *2016 Fleet Plan*, (c) did not alert Congress to a major shift in its fleet acquisition strategy, (d) did not obtain proper authorization indicating that key metrics were met to satisfy Milestone I, and (e) did not properly execute and implement interagency agreement (IAA) actions with the Navy.
3. OMAO did not provide adequate oversight of fleet recapitalization funds. The agency performed inadequate payment reviews, and payments were made with expired funds.

WHAT WE RECOMMEND

We recommend that the Director of NOAA Corps and OMAO do the following:

1. Develop a detailed contingency plan to reduce the risks associated with delays. The plan should address (a) capability and capacity gaps and (b) the cost of maintaining aging ships and utilizing alternatives.
2. Establish a reporting mechanism to notify Congress and other key stakeholders proactively of significant updates or changes to the current fleet recapitalization plan.

We recommend that the Under Secretary of Commerce for Oceans and Atmosphere and Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA Administrator do the following:

3. Develop a detailed plan of program governance, which (a) delineates how OMAO will comply with applicable acquisition requirements, (b) clearly defines roles and responsibilities, (c) identifies stakeholder communication needs, and (d) defines a formal evaluation, approval, and decision follow-up process.
4. Assign a qualified project officer and alternate who are both properly certified for the total program dollars and tasked with effectively monitoring all activities and deliverable progress (e.g., invoice review and approval) that are contained in each IAA order.
5. Reinforce proper certification and training for the project officer and alternate.
6. Provide a reconciliation report of the \$3,387,714 unsupported costs to OIG.

We recommend that the Director of NOAA Corps and OMAO do the following:

7. Create a centralized file maintaining all required documentation for all orders placed under the current IAA between NOAA and the Navy for recapitalization of NOAA's ship fleet.

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Cover: Herbert C. Hoover Building main entrance at 14th Street Northwest in Washington, DC. Completed in 1932, the building is named after the former Secretary of Commerce and 31st President of the United States.

Introduction

The National Oceanic and Atmospheric Administration (NOAA) Office of Marine and Aviation Operations (OMAO) currently operates 16 ships to conduct hydrographic, oceanographic, atmospheric, and fisheries research. According to OMAO, its fleet is expected to decrease from 16 to 8 active ships by fiscal year (FY) 2028, as ships are withdrawn from service because they have surpassed their usable life. Most ships in the NOAA fleet were constructed with a design service life of 20 to 25 years. The current fleet of 16 ships were commissioned between 1967 and 2012, with an average ship age of more than 30 years—3 of them already more than 50 years old. As a result, NOAA plans to replace ships in its aging fleet to maintain scientific data collection capabilities and associated data collection requirements.

In 2013, NOAA finalized its *Fleet Composition Report*,¹ addressing the research needs and capabilities of its fleet from 2012 to 2027, and recommending that NOAA acquire multiple ship classes to maintain core mission capabilities. In May 2014—utilizing interagency acquisition² procedures—NOAA OMAO entered into an interagency agreement (IAA) valued at \$1.5 billion with the U.S. Navy to acquire multiple vessels.

In 2016, NOAA released *The NOAA Fleet Plan: Building NOAA's 21st Century Fleet*³ (hereafter referred to as the *2016 Fleet Plan*), which outlines NOAA's long-term fleet recapitalization strategy to replace vessels that will meet the end of their service lives through 2028. The *2016 Fleet Plan* contains details on four different ship classes, each with primary and secondary missions (see table 1). The *2016 Fleet Plan* states that the design and construction of two Class A ships is the first step of the recapitalization strategy. The acquisition of the two Class A ships is a two-phased approach: phase I – planning and preliminary design, and phase II – detailed design and construction.

¹ National Oceanic and Atmospheric Administration, May 23, 2013. *NOAA Fleet Composition: 2012–2027* (Pre-Decisional Draft). Silver Spring, MD: NOAA.

² According to Federal Acquisition Regulation (FAR) 2.101, *interagency acquisition* is “a procedure by which an agency needing supplies or services (the requesting agency) obtains them from another agency (the servicing agency), by an assisted acquisition or a direct acquisition.”

³ NOAA, October 31, 2016. *The NOAA Fleet Plan: Building NOAA's 21st Century Fleet*. Silver Spring, MD: NOAA. Available at www.oma.noaa.gov/sites/default/files/documents/The%20NOAA%20Fleet%20Plan_Final_31OCT.pdf [accessed October 2, 2019].

Table I. Ship Classes and Missions

Ship Class	Number of Ships to be Built	Primary Mission	Second Mission(s)
Class A	2	Oceanographic Monitoring, Research and Modeling	<ul style="list-style-type: none"> Assessment and Management of Living Marine Resources (no trawl^a) Chartering and Surveying
Class B	3	Chartering and Surveying	<ul style="list-style-type: none"> Assessment and Management of Living Marine Resources (no trawl) Oceanographic Monitoring, Research and Modeling
Class C	2	Assessment and Management of Living Marine Resources (trawl-capable, shallow-draft)	<ul style="list-style-type: none"> Chartering and Surveying
Class D	1	Assessment and Management of Living Marine Resources (trawl-capable, near-shore and deep ocean, longer endurance)	<ul style="list-style-type: none"> Chartering and Surveying Oceanographic Monitoring, Research and Modeling

Source: 2016 Fleet Plan, figure 2-1, p. 8

^a Trawls are commercial size bottom and pelagic trawl nets, gear, and sampling systems to meet fisheries survey requirements.

From FY 2016 to FY 2019 NOAA OMAO received \$300.05 million for new ship construction.⁴ In addition, OMAO requested in its 2020 budget outyear funding of \$75 million each year through 2024 for new ship construction to fund its recapitalization efforts with estimated cost to complete to be determined at a later date.

See appendix B for further details on NOAA OMAO's ship fleet recapitalization plan, IAA, current fleet plan, and acquisition approach.

⁴ OMAO's new ship construction program includes funding for ship acquisition, instrumentation, and service life extensions. These activities support the proper oversight of ship acquisition and instrumentation activities including (1) a rigorous analysis of mission requirements, (2) current fleet service life assessments, (3) detailed design and construction, and (4) supplemental options to meet prioritized requirements.

Objectives, Findings, and Recommendations

The objective of this audit was to determine whether NOAA OMAO performed effective acquisition planning for its construction of new ships. Specifically, we assessed the initial acquisition planning and its impact on the schedule, cost, and performance of NOAA's ship fleet recapitalization effort. We focused our audit on the acquisition of Class A ships, which NOAA identified as the first step of its ship fleet recapitalization strategy.

OMAO has encountered problems in constructing its two Class A ships. We found that the initial acquisition planning for these ships was not adequate. Specifically:

- I. Schedule slippages have delayed ship construction and increased costs.
- II. NOAA's ship fleet acquisition planning was not effectively governed.
- III. OMAO did not provide adequate oversight of fleet recapitalization funds.

See appendix A for further details on the objective, scope, and methodology of our audit.

I. Schedule Slippages Have Delayed Ship Construction and Increased Costs

As of the second quarter, FY 2019, OMAO is 39 months behind schedule for completion of the Class A ships. The lead ship,⁵ originally scheduled to be completed in May 2020, is currently scheduled for completion in August 2023. The follow-on ship⁶ is scheduled to be completed 6–12 months afterwards. Table 2 shows the schedule slippage associated with key acquisition milestones.

Table 2. Ship Classes and Missions

Key Acquisition Milestones	Original Schedule	Current Schedule	Schedule Slippage (months)
Contract Awards—Phase I (Preliminary Design)	March 2016	January 2019 ^a	34
Contract Award—Phase II (Detailed Design and Construction)	June 2017	June 2020	36
Ship Construction Complete	May 2020	August 2023	39

Source: NOAA's budget estimates in the U.S. Department of Commerce's FY 2016 Congressional Budget Justification and OMAO

^a Phase I Preliminary Design contracts were awarded January 22, 2019.

⁵ The *lead ship* is the first ship of a particular set of ships, typically grouped as a class.

⁶ *Follow-on ship(s)* refer to the remaining ship(s) in a class. Follow-on ships are typically less expensive to construct than lead ships because shipbuilders gain efficiencies from constructing the lead ship.

The 39-month delay occurred primarily because—despite multiple requests from Congress—OMAO did not provide legislators with an updated fleet recapitalization plan that included a strategic timeline detailing when OMAO intended to retire current ships and to construct new ships. As a result, Congress notified OMAO on June 16, 2015, that FY 2016 new ship construction funds would not be released until an updated fleet recapitalization plan was provided. Because of the uncertainty surrounding FY 2016 funding, OMAO directed the Navy on July 1, 2015, to stop work. Prior to the work stoppage, OMAO and the Navy had spent nearly 1-1/2 years (i.e., May 2014–September 2015) developing and preparing documents regarding plans, requirements, and specifications.

On October 31, 2016, OMAO provided Congress with an updated fleet recapitalization plan. Congress released the funds to OMAO at the end of November 2016 and work resumed in February 2017. However, OMAO and the Navy had to spend significant time reworking and updating the planning, requirements, and specification documents that were previously developed and prepared.

As a result of the 39-month delay in completion and delivery—and based on a revised cost estimate from the Navy—the two Class A ships will cost at a minimum \$11.9 million more to complete than originally estimated. These are funds that potentially could be put to better use if there had not been a delay (see appendix C). According to the Navy, the increase in cost to construct the two Class A ships is primarily due to cost escalation factors, such as shipbuilder labor rates and material cost that increased over time.

The Navy estimates that the lead ship will cost approximately almost \$5.2 million more than originally quoted. Additionally, the Navy estimates that the follow-on ship will cost approximately \$6.7 million more than originally estimated (see table 3). If OMAO experiences further schedule slippage or delays, these amounts will likely increase.

Table 3. Cost Difference Between the July 2015 and January 2018 Estimates

Class A Ships	Additional Cost
Lead Ship	\$5,167,000
Follow-On Ship	\$6,728,000
Totals	\$11,895,000

Source: (1) Naval Sea Systems Command memorandum to NOAA, July 10, 2015, “Navy Service Cost Position for the National Oceanic Atmosphere Administration (NOAA);” and (2) U.S. Department of the Navy. “NOAA AGOR Variant (NAV) Estimate Update.” Presentation, June 7, 2018.

Furthermore, because of the 39-month delay, OMAO will lose the added mission capability and capacity that the two new Class A ships would have provided during that 39 months; the result will be additional strain on an already aging fleet. The two new Class A ships, capable of

performing a variety of additional missions⁷ and at-sea-activities (see table 4 for examples), will not be available to relieve the strain.

Table 4. Missions and At-Sea-Activities

Missions		
Oceanographic Monitoring, Research, and Modeling	Assessment and Management of Living Marine Resources— No Trawl	Chartering and Surveying
At-Sea-Activities		
<ul style="list-style-type: none"> Climate Research Weather and Chemistry Ocean, Coastal, and Great Lakes Research 	<ul style="list-style-type: none"> Protected Resources, Science, and Management Fisheries Science and Management Habitat Conservation and Restoration 	<ul style="list-style-type: none"> Navigation, Observation, and Positioning Coastal Science and Assessment

Source: 2016 Fleet Plan

The two new ships would have provided NOAA with a maximum of 1,755 days at sea (DAS)⁸ during the duration of the delay.

Table 5. Maximum Lost Days at Sea – New Ships (days)

Planned DAS	Year 1	Year 2	Year 3	Year 4 Quarter 1	Totals
Ship 1	270	270	270	67.5	877.5
Ship 2	270	270	270	67.5	877.5
Total DAS	540	540	540	135	1,755

Source: NOAA Office of Marine and Aviation Operations, March 17, 2015. *Capability Development Document for NOAA Ocean Survey Vessel (FOUO)*. Silver Spring, MD: NOAA OMAO, 7

Mission-essential work may be significantly impacted in the future because OMAO could begin decommissioning ships prior to commissioning new ships.⁹ According to its *2016 Fleet Plan*, OMAO plans to decommission two ships in 2022 and an additional four more in 2024. This would potentially reduce total DAS capacity by 37.50 percent from 3,676 DAS annually to

⁷ NOAA’s mission requirements are met with guidance from a fleet allocation council comprised of a representative from each NOAA line office with mission requirements. The council approves annually a Fleet Allocation Plan (FAP), which utilizes days at sea (DAS) for each ship in the fleet.

⁸ OMAO defines DAS as any day in which a ship is at sea for at least 1 hour during a 24-hour period in support of an assigned project. OMAO estimates that the 2 new vessels will operate up to 270 DAS per year.

⁹ According to OMAO management, it takes approximately 1 year for a ship to be fully operational. This is because ships need to go through testing and the crew needs training.

2,298 DAS annually.¹⁰ As a result, OMAO may incur additional costs by having to utilize alternatives in order to maintain and meet NOAA's at-sea capabilities and requirements. These alternatives would likely consist of

- extending the service life of existing ships, which can be costly; and
- increasing the use of charters,¹¹ which poses other challenges (such as availability of ships at a specific time and place, varying levels of crew experience, and limited ship capabilities).

Recommendations

We recommend that the Director of NOAA Corps and OMAO do the following:

1. Develop a detailed contingency plan to reduce the risks associated with delays. The plan should address (a) capability and capacity gaps and (b) the cost of maintaining aging ships and utilizing alternatives.
2. Establish a reporting mechanism to notify Congress and other key stakeholders proactively of significant updates or changes to the current fleet recapitalization plan.

II. NOAA's Ship Fleet Acquisition Planning Was Not Effectively Governed

We found that OMAO often operated outside of the established Departmental governance framework, failing to meet stakeholder needs or to instill confidence in its capability to effectively manage large acquisitions. OMAO does not have a plan of program governance¹² to ensure that communication with stakeholders is timely and accurate or that Departmental guidance is followed. Appropriate governance and oversight would provide OMAO with a structured process to support its ship construction investment decisions while promoting accountability, due diligence, and the efficient and economic delivery of services. Without effective governance processes, negative results can occur, such as investments that do not: (1) align with the mission, goals, or objectives; (2) satisfy stakeholder needs; and (3) meet cost, schedule, or performance expectations.

¹⁰ According to the *2016 Fleet Plan*, total capacity for 16 ships is 3,676 DAS annually (which is 229.75 DAS/ship). If 6 ships are taken offline and decommissioned, the annual DAS maximum capacity would be reduced from 3,676 to 2,298 DAS.

¹¹ *Charters* are a NOAA program that contracts for a private ship that is crewed and operated by a contractor; NOAA then provides the science party and, in some instances, the observational equipment.

¹² Office of Management and Budget (OMB), June 25, 2018, *Improving the Management of Federal Programs through Implementing the Program Management Improvement Accountability Act*, M-18-19. Washington, DC: OMB. OMB memorandum M-18-19 uses the term "governance" throughout. Specifically, it states "[s]everal laws, regulations, and policies have provided direction for acquisition program management, including provisions in the Federal Acquisition Streamlining Act (FASA), the Clinger-Cohen Act, OMB's Capital Programming Guide, and Part 34 of the Federal Acquisition Regulation (FAR). Agencies have developed detailed policies and procedures to implement these requirements, but too often, this guidance has not been reflected adequately in agency governance structures and protocols." *Id.* at appendix 5, p. 11.

In its 2008 *NOAA Ship Recapitalization Plan*,¹³ NOAA first presented a need to replace aging ships in its fleet through the acquisition of new vessels. Preliminary acquisition activities for the first two ships, which are the largest, have been ongoing since at least January 2014. OMAO estimates that the full effort could take 14 years and cost approximately \$1.5 billion for the construction of up to eight new vessels. Clear communication and consistent, meaningful information about cost, schedule, and capability expectations is imperative to effectively minimize risks and govern this high value multi-year acquisition.

The *Commerce Acquisition Manual (CAM)*¹⁴ requires IAAs over \$75 million to be submitted to the Department's Investment Review Board, within the Office of Acquisition Management (OAM),¹⁵ for formal review. However, our review noted several instances where OMAO regularly undertook major acquisition actions without first informing OAM or obtaining approval from the proper authorities.

For example, OMAO did not:

- obtain proper approvals for transferring funds to the Navy;
- notify proper approval authorities of its intent to deviate from the approved *2016 Fleet Plan*;
- alert Congress to a major shift in its fleet acquisition strategy;
- obtain proper authorization indicating that key metrics were met to satisfy Milestone I;¹⁶ and
- properly execute and implement IAA actions with the Navy.

A. *OMAO transferred funds to the Navy without obtaining proper approvals*

In November 2017, OMAO executed an IAA modification to transfer \$141 million to the Navy prior to OAM reviewing the action. In April 2018, OMAO also issued requests for proposals (RFPs) to shipyards without notifying OAM. OMAO stated that the Navy required full funding to be transferred up front to show interested shipyards that funding was available and guaranteed. However, OMAO did not request approval from OAM prior to the transfer of funds or issuance of RFPs. In fact, OAM did not learn about the \$141 million transfer or RFP issuance until both actions were already complete. In the August

¹³ NOAA OMAO, June 19, 2008. *NOAA Ship Recapitalization Plan*. Silver Spring, MD: NOAA OMAO. According to NOAA's *Recapitalization Plan*, the agency has been aware—since as early as 2008—of the need to replace its aging fleet. In its *2016 Fleet Plan*, NOAA updates its strategy for the design and construction of up to eight new ships to replace vessels that will meet the end of their service lives between 2017 and 2028.

¹⁴ U.S. Department of Commerce, April 2, 2010. *Commerce Acquisition Manual—Department of Commerce Interagency Acquisitions*, CAM 1317.570. Washington, DC: DOC, § 3.6.5.a. In accordance with CAM 1317.570, agreements that are more than \$75 million (or those less than this threshold specifically designated by the Deputy Secretary) must be submitted to the DOC Investment Review Board for review.

¹⁵ OAM is the Department's acquisition program and project management oversight body, established in Department Administrative Order (DAO) 208-16, *Acquisition Project Management*.

¹⁶ DAO 208-16 describes Milestone I as the Department's formal approval for project initiation.

2018 Milestone review, the Milestone Review Board¹⁷ noted that proper approval was not obtained, in part, because OMAO did not follow its own acquisition strategy.

B. OMAO failed to notify proper approval authorities of its intent to deviate from the approved 2016 Fleet Plan

In the fourth quarter of FY 2018, OMAO deviated from the *2016 Fleet Plan* by bidding on used ships at auction. OMAO stated the auction presented a unique opportunity to obtain vessels at a reduced cost, and an approval was obtained from the Department's Office of the Secretary as well as the (then) acting NOAA Administrator. OMAO, however, neglected to notify OAM in accordance with DAO-208-16.¹⁸ OAM remained unaware of OMAO's plan change until after the bids were made, resulting in a missed opportunity to provide counsel or input. These actions led to an increased potential for errors and oversights, which may have resulted in wasted effort, misused funding, or damage to the public trust. Ensuring regular and complete communication with the appropriate Department acquisition management personnel can reduce the potential for negative outcomes while promoting Departmental buy-in and support for continued program funding.

C. OMAO did not alert Congress to a major shift in its fleet acquisition strategy

In FY 2016, OMAO requested \$147 million for new ship construction funding, but only received approximately \$80 million. According to OMAO, its leadership at the time was concerned that they would not receive adequate funds for construction of a large ocean class ship and decided to construct a smaller less expensive regional ship instead, without first notifying Congress. Congress did not learn of the change in acquisition strategy until the next year's budget submission included the request to construct smaller vessels instead of the large ocean class ships OMAO had received funding to construct. Upon learning of this change, Congress was critical,¹⁹ stating that the smaller ship had no initial design, no supporting operational requirements, and no immediate path for construction. Moreover, Congress pointed out that OMAO already had a baseline design for the larger ocean class ship; funding of \$80 million that Congress provided in FY 2016; and assurances from Congress of no less than \$75 million in new ship construction funding, each year going forward, to complete the recapitalization effort. In February 2017, OMAO decided to change course again back to the original plan of constructing a large ocean class ship and resumed the acquisition that originally began in May 2014.

¹⁷ DOC, August 31, 2015. *DOC Scalable Acquisition Project Management Guidebook*, Version 1.2. Washington, DC: DOC, 19. The guidebook defines the acquisition project management phases and major decision milestones required to manage the progression of those phases. The Milestone Review Board (MRB) reviews each of these milestones.

¹⁸ DAO 208-16 § 6.03 requires the operating unit to report costs, schedule, or performance baseline deviation of 20 percent or more to the MRB Secretariat. OAM is the designated Milestone Review Board Secretariat.

¹⁹ U.S. Congress. Senate. Committee on Appropriations. *Departments of Commerce and Justice, Science, and Related Agencies Appropriations Bill, 2017*. 114th Cong., 2d sess., 2016. S. Rep. 114-239, page 46. Available at www.congress.gov/congressional-report/114th-congress/senate-report/239/1 [accessed October 2, 2019].

D. OMAO did not obtain proper authorization indicating that key metrics were met to satisfy Milestone I

According to the CAM,²⁰ IAAs identified as high profile acquisition programs will be reviewed by the Milestone Review Board (MRB).²¹ In order to proceed with the proposed acquisition, OMAO was required to develop and obtain approval for early program and project planning. However, documentation showing that Milestone I was satisfied was missing proof that OMAO obtained proper authorization. For example, OMAO claimed that the sponsor commitment letter, signed only by the OMAO Director, was complete and did not require additional signatures because that individual was in an acting capacity as the Deputy Under Secretary for Operations. However, OMAO could not provide evidence of that individual's formal appointment to that acting role. Furthermore, even if signing in an acting capacity as the Deputy Under Secretary for Operations, the Under Secretary of Commerce for Oceans and Atmosphere's signature was still required, but missing.

E. OMAO did not properly execute and implement IAA actions with the Navy

The Economy Act (31 U.S.C. § 1535), authorizes agencies to enter into agreements to obtain supplies or services from another agency. The Federal Acquisition Regulation (FAR)²² requires that each Economy Act-based order to obtain supplies and services by interagency acquisition must be supported by a determination and findings (D&F). OMAO created three IAA orders with the Navy without executing a D&F with each order.²³ As shown in table 6, OMAO only executed one D&F despite the agency placing multiple orders.

Specifically, NOAA executed a D&F for IAA Order 00001—approximately 4 months prior to the order finalization—which did not reflect the same information. After the D&F was approved, changes were made to the funding amount and actions for this order. However, OMAO did not provide evidence of the contracting officer's further review of the changes reflected in the IAA. Furthermore, IAA Order 00002 and the subsequent modification, both of which obligated additional funding, did not contain D&Fs as required by the FAR²⁴ and CAM.

²⁰ DOC, October 1, 2017. *Commerce Acquisition Manual—Department of Commerce Interagency Acquisitions*, CAM 1307.1. Washington, DC: DOC, § 6.2.4.a. CAM 1307.1 § 6.2.4.a. states that agreements identified as high-profile acquisition programs or projects—as defined in DAO 208-16—will be reviewed by the MRB.

²¹ The MRB is the authorizing body for approval of an identified Departmental high-profile acquisition program or project to proceed from one phase of the acquisition to the next.

²² U.S. General Services Administration. *Federal Acquisition Regulation – Procedures*, FAR § 17.502. Washington, DC: GSA, § 17.502-2(c)(1).

²³ FAR § 1.701, *Determinations and Findings*, defines *determination and findings* as a special form of written approval by an authorized official that is required by statute or regulation as a prerequisite to taking certain contract actions.

²⁴ FAR § 17.502-2(c)(1) ([e]ach Economy Act order to obtain supplies or services by interagency acquisition shall be supported by a" D&F).

Table 6. Summary of IAA Orders and Executed D&Fs

IAA Order Number	D&F	All Required Approvals ^a	Action
00001	Yes	No ^a	Initial funding of \$3.7 million (the D&F was for \$4.575 million)
00002	No	No ^b	Increased funding of \$11 million; no D&F executed
0002 Mod 001	No	No ^b	Increased funding of \$141 million; no D&F executed

Source: OIG analysis

^a CAM 1317.570 § 3.6 states “At a minimum, the following routing and approvals shall be employed for each interagency acquisition or subsequent modification/amendment prior to execution:” Contracting Office, Office of General Counsel for Finance, Office of General Counsel Administration, Finance Offices, Review Boards.

^b Though required, there was no evidence of complete routing and approval on IAA orders.

OMAO stated that by following the Department’s *Agreements Handbook*²⁵ it was not necessary to create any additional D&Fs other than the initial D&F. However, in addition to the FAR and CAM requirements, the question and answer section in the *Agreements Handbook* specifically states that a separate D&F is needed for each amendment to an Economy Act agreement unless the base agreement includes a D&F that covers the entire duration of the agreement, including amendments. In this case, the only D&F supplied to our office was for IAA Order 00001.

Execution of an IAA without a D&F that ensures all levels of authority have adequate review increases the risk of violations of law and Department policies. With no documented plan for program governance, OMAO has taken several acquisition actions that are out of compliance with Departmental standards. This led OMAO to operate with a general lack of clarity as to who holds which responsibilities. As such, levels of communication, accountability, complete recordkeeping, and regulatory compliance are all diminished.

Recommendation

We recommend that the Under Secretary of Commerce for Oceans and Atmosphere and Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA Administrator do the following:

3. Develop a detailed plan of program governance, which (a) delineates how OMAO will comply with applicable acquisition requirements, (b) clearly defines roles and responsibilities, (c) identifies stakeholder communication needs, and (d) defines a formal evaluation, approval, and decision follow-up process.

²⁵ DOC, November 2011. *Agreements Handbook*, section B question 2. Washington, DC: DOC, 36.

III. OMAO Did Not Provide Adequate Oversight of Fleet Recapitalization Funds

The *Agreements Handbook*²⁶ outlines program office responsibilities, which include monitoring performance and progress under the IAA to ensure that agreement activities are being performed as scheduled. In addition, program offices are responsible for tracking all relevant costs, including labor, overhead, and any other identifiable costs associated with activities performed under an agreement. Program offices are also required to maintain a complete file for each agreement, including all related documentation. We noted during our review that OMAO did not perform adequate payment reviews while making payments using expired funds, and did not maintain proper documentation to support these payments, resulting in approximately \$3.4 million of unsupported costs (see appendix C).

A. OMAO performed inadequate payment reviews

OMAO did not provide evidence that adequate financial reviews were performed prior to approving payments on approximately \$3.4 million under the IAA from May 2014 to February 2018 (see table 7).

Table 7. Total IAA Payments to the Navy by Order^a

IAA Order Number	Period of Performance	Fund Type	Amount Paid to Navy ^b
00001	May 15, 2014–September 30, 2015	3-year	\$2,084,000
00002	February 1, 2017–September 30, 2020	No year	\$1,303,000
0002 Mod 001	February 1, 2017–September 30, 2024	No year	\$0
<i>Total</i>			\$3,387,000

Source: Commerce Business System

^a See appendix C for a detailed analysis of these funds.

^b Totals include any corrections as of the third quarter of FY 2018.

The CAM²⁷ requires there to be a qualified designated project officer or alternate to oversee the everyday status of the IAA. The project officer is required to have achieved the appropriate level certification under the Federal Acquisition Certification-Contracting Officer Representative (FAC-COR) in accordance with Department requirements. OMAO did not properly designate a qualified project officer or alternate to oversee the \$1.5 billion agreement, as required. OMAO stated that, as a monthly practice, the project office only reviews total dollars submitted by the Navy and that there is no further review unless the project officer deems it necessary.

²⁶ Ibid, section IV.C.1.viii & ix.

²⁷ In accordance with CAM 1317.570 § 3.5.1.b.

OMAO did not provide support to show that invoices were reviewed prior to payment submission. According to OMAO, there is no centralized IAA file to obtain those records and history of work progress. When we requested OMAO to provide evidence to support the review and approval of invoices, OMAO often referred us to the Navy to obtain the documentation. The Navy also did not provide clear information from retained records, but instead requested contractors to provide electronic transactions reports. These reports contained categories that could only be reconciled with contract line items. The descriptions in the line items were general and included several other ship designs. The reports supplied do not provide stakeholders sufficient information to reconcile payments with the work completed. Neither NOAA nor the Navy have provided any support showing what work (including work required to shut down after NOAA instructed the Navy to stop work) was accomplished for the amounts billed.

OMAO has not properly followed Department procedures, which increases risk to NOAA's mission and the recapitalization efforts. The absence of a properly trained project officer or alternate to monitor IAA performance resulted in OMAO being unable to support approximately \$3.4 million in approved payments. The lack of a centralized file, as required, has caused a weakness in transparency and historical transactions retention. In addition, weak internal control may have caused unauthorized payments of expired funds and unsupported costs that have potential monetary impact (see appendix C).

B. Payments were made with expired funds

OMAO paid \$660,701 to the Navy using expired funds from IAA Order 00001. The payments occurred after the funds and the period of performance of this order had expired on September 30, 2015. The payments continued regularly through the course of a 28-month period from October 2015 to February 2018 (see table 8).

Table 8. Payments Made Using Expired Funds^a

Month	Calendar Year	Payment(s)	Month	Calendar Year	Payment(s)
October	2015	\$225,295	October	2016	\$39
November	2015	\$97,754	November	2016	\$321
December	2015	\$38,569	February	2017	\$269
February	2016	\$25,117	June	2017	\$432
March	2016	\$12,400	July	2017	\$148,660
April	2016	\$8,610	September	2017	\$12,480
May	2016	\$8,832	November	2017	\$1,376
June	2016	\$21,866	February	2018	\$56,459
July	2016	\$2,222	Total		\$660,701

Source: Commerce Business System

^a Totals include any corrections as of the third quarter of FY 2018

In July 2015, OMAO requested that the Navy plan to complete all funded efforts on IAA Order 00001 by September 30, 2015. OMAO continued to pay the Navy invoices until February 2018 without any inquiry or review of what deliverables it was receiving for the payments. After several requests by our office throughout the audit, OMAO did not provide a description of what service deliverables it received for these payments made after September 30, 2015. In addition, the Navy was also non-responsive when we asked them to supply a timesheet for work completed on the last payment OMAO made to them in February 2018 for \$56,459.

Recommendations

We recommend that the Under Secretary of Commerce for Oceans and Atmosphere and Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA Administrator do the following:

4. Assign a qualified project officer and alternate who are both properly certified for the total program dollars and tasked with effectively monitoring all activities and deliverable progress (e.g., invoice review and approval) that are contained in each IAA order.
5. Reinforce proper certification and training for the project officer and alternate.
6. Provide a reconciliation report of the \$3,387,714 unsupported costs to OIG.

We recommend that the Director of NOAA Corps and OMAO do the following:

7. Create a centralized file maintaining all required documentation for all orders placed under the current IAA between NOAA and the Navy for recapitalization of NOAA's ship fleet.

Summary of Agency Response and OIG Comments

In response to our draft report, NOAA concurred with all seven of our recommendations. We are encouraged that steps have already been initiated by NOAA to address our recommendations. We look forward to NOAA's action plan that will provide details on the corrective actions to be taken. See appendix D for NOAA's complete response. Despite concurring with our recommendations, NOAA's management raised several concerns about two of our findings. Specifically:

I. Finding I: Schedule Slippages Have Delayed Ship Construction and Increased Costs

NOAA disagreed with OIG's finding that NOAA's fleet recapitalization effort is 39 months behind schedule for the completion of the Class A ships. Instead, NOAA states that OMAO is approximately 6 months behind. While we recognized that OMAO has progressed in its current acquisition efforts, OIG stands by the schedule in table 2 in the report. NOAA asserted that OIG used the fleet recapitalization plan as the "provisional schedule." However, we did not use the fleet recapitalization plan as our basis. Our source was NOAA's budget estimate in the U.S. Department of Commerce's FY 2016 Congressional Budget Justification.

NOAA stated, "*This provisional schedule was predicated on Congress providing full funding of \$147M necessary to build the ship in 2016, which it chose not to do.*" NOAA, however, failed to address why the delay in funding occurred. As noted in the report, Congress did not immediately fully fund the agency's FY 2016 request because NOAA did not provide an updated fleet plan as Congress requested. After numerous requests from Congress, as noted in the Senate Appropriations Committee Reports for FYs 2013, 2014, 2015, and 2016; Congress notified OMAO that FY 2016 new ship construction funds would not be released until an updated fleet recapitalization plan was provided.

Additionally, NOAA stated, "*Initiating a ship acquisition before the ship was fully funded would have been contrary to appropriations law, and would not have been permitted under the agreement NOAA has with the Navy, which requires full funding obligation.*" Upon receiving the June 16, 2015, notice from Congress that funds would not be released until an updated fleet plan was provided, OMAO directed the Navy on July 1, 2015, to stop work. Although Congress did not immediately fully fund the agency's FY 2016 request, it provided funds for OMAO to support the work necessary for preliminary design contracts and to maintain the project management support that is needed for a construction award for an ocean-going survey vessel. Therefore, there was not an urgent need to cease all work on the ship recapitalization effort because OMAO had funds available to support work needed for the preliminary design contracts. Once NOAA provided the updated fleet plan to Congress in October 2016, the funds were released to OMAO at the end of November 2016 and work resumed in February 2017. As it stands, the current schedule and milestones now show a newly constructed vessel to be delivered in 2023 thus creating a delivery slippage of over 3 years.

2. Finding II: OMAO failed to notify proper approval authorities of its intent to deviate from the approved *2016 Fleet Plan*

NOAA specifically disagreed with OIG's finding that OMAO failed to notify proper approval authorities of its intent to deviate from the approved *2016 Fleet Plan* by bidding on used ships at auction. NOAA stated that it does not believe that bidding on the United States Maritime Administration (MARAD) ship was a deviation from its fleet recapitalization plan. NOAA stated that bidding on the ship was within the parameters of the plan and a justifiable management decision. In addition, NOAA stated that it believes OMAO provided all of the notifications required for this decision because OMAO sought approval to bid on the MARAD ship from OAM—as well as the Department's Office of Budget, Office of Policy, and Office of Legislative Affairs—and the Deputy Secretary approved NOAA's decision to proceed.

As noted in the report, OMAO deviated from the 2016 recapitalization plan, which does not include the purchase of used ships as newly constructed replacement vessels. OAM is the designated MRB Secretariat and bidding on the MARAD ships was a significant baseline deviation from the approved plan to acquire newly constructed vessels. When requested, NOAA did not and has not provided OIG with any formal reprogramming documentation that was approved by the MRB Secretariat (OAM) prior to bidding on the ships. Although we do not fault OMAO on its ingenuity to add to the ship fleet, the results of our review remains unchanged. As stated in the report, without effective governance processes, negative results can occur such as investments that do not: (1) align with the mission, goals, or objectives; (2) satisfy stakeholder needs; and (3) meet cost, schedule, or performance expectations.

Appendix A: Objective, Scope, and Methodology

The objective of this audit was to determine whether NOAA OMAO performed effective acquisition planning for its construction of new ships. Specifically, we assessed the initial acquisition planning and its impact on the schedule, cost, and performance of NOAA's ship fleet recapitalization effort. To accomplish our objective, we did the following:

- Reviewed the IAA between NOAA and the Navy and all associated orders and modifications.
- Reviewed IAA acquisition planning documents and documents submitted to the MRB.
- Conducted site visits in March and August of 2018 to OMAO headquarters located in Silver Spring, Maryland. The purpose of the site visits were to meet with OMAO management officials in order to gain an understanding of NOAA's ship fleet recapitalization efforts and to discuss the ship construction and delivery schedule and costs. We interviewed the following key officials from OMAO:
 - Director of NOAA Corps and OMAO;
 - Deputy Assistant Administrator for Programs and Administration;
 - Chief Financial Officer; and
 - Acting Director Platform Acquisition Division.

We also interviewed the acquisition program manager from the Navy.

- Conducted a site visit in August 2018 to Department of Commerce headquarters in Washington, DC. The purpose of the site visit was to meet with OAM officials in order to obtain their perspective on the status of the ship fleet recapitalization effort.
- Reviewed and examined the *Agreements Handbook* and relevant sections of the *CAM* and *FAR*, as they pertain to interagency acquisitions. We also reviewed and examined *DAO 208-16* and the *DOC Scalable Acquisition Project Management Guidebook*, which govern high-profile acquisitions.
- Obtained and reviewed the initial and current ship construction and delivery schedules to determine if NOAA encountered schedule slippage or delays.
- Reviewed Congressional budget documents and Senate Appropriations Committee reports to obtain information pertaining to funding associated with ship fleet recapitalization.
- Obtained and analyzed IAA obligation and expenditure data from the Commerce Business System.
- Consulted with our internal Office of Counsel to obtain legal opinions pertaining to IAAs issued under the Economy Act.

We gained an understanding of internal control significant within the context of the audit objective by (1) interviewing OAM, NOAA, and OMAO officials and (2) reviewing documentation for evidence of internal controls. While we identified and reported on internal control deficiencies, no incidents of fraud, illegal acts, or abuse were detected within our audit. We identified control

weaknesses regarding management's oversight of new vessel construction funds. We assessed the reliability of computer-generated data by interviewing agency officials knowledgeable about the data and by obtaining corroborating evidence. We determined that the data were sufficiently reliable for the purposes of this report.

We conducted this performance audit from January 2018 to February 2019 under the authority of the Inspector General Act of 1978, as amended (5 U.S.C. App.), and DOO 10-13, dated April 26, 2013. We performed our fieldwork at Department headquarters in Washington, DC, and at OMAO headquarters in Silver Spring, Maryland.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendix B: Summary of Key NOAA OMAO Ship Fleet Recapitalization Acquisition Planning Efforts

2008 Fleet Plan. NOAA first presented its intent to replace aging ships through the acquisition of new vessels.

Fleet Composition Report. In 2013, OMAO developed the *Fleet Composition Report*, which recommended that NOAA acquire multiple ship classes to maintain core mission capabilities. In addition, the report identified that a partnership between NOAA and the Navy to design and construct ships would be advantageous, as it could reduce cost and schedule risks while increasing the potential for sharing research platforms across the government.

Interagency acquisition. In May 2014, OMAO entered into an overarching IAA with the Navy to acquire ships. The IAA requires the Navy to provide technical, program management, and planning activities needed to acquire ships adapted to meet NOAA's at-sea scientific needs. The IAA estimated amount is \$1.5 billion with an agreement period from May 1, 2014, through December 30, 2028. Currently, OMAO has issued two orders and one modification against the IAA, specifically:

- In May 2014, OMAO issued IAA Order 00001 for \$3.7 million to the Navy. The purpose of the order was for the Navy to perform project management services and acquisition planning for the first ship (Ocean Survey Vessel).
- In February 2017, OMAO issued IAA Order 00002 for \$11 million to the Navy. The purpose of the order was for the Navy to update the acquisition planning documents from IAA Order 00001.
- In November 2017, OMAO issued a modification to IAA Order 0002. The purpose of the modification was to provide funding of \$141.16 million to the Navy for the construction of the first ship.

In addition to its *Fleet Composition Report*, NOAA's *2016 Fleet Plan* outlines the current plan to bolster its fleet through 2028.

Current 2016 Fleet Plan. The *2016 Fleet Plan* outlines NOAA's long-term fleet recapitalization strategy for the design and construction of up to eight new ships to replace vessels that will meet the end of their service lives between 2017 and 2028.

The *2016 Fleet Plan* states that design and construction of two Class A ships is the first step of the recapitalization strategy. According to NOAA, the ships will meet their most immediate at-sea requirements and minimize the impact of loss of fleet capacity and capability. In addition, the *2016 Fleet Plan* states that NOAA intends to use the existing Navy Auxiliary General Purpose Oceanographic Research ship design that, NOAA estimates, will save them 4 years of time and \$10 million. The acquisition of two Class A ships is a two-phased approach: phase I – planning and preliminary design, and phase II – detailed design and construction.

Acquisition approach. The phase I portion consists of acquisition project planning and the issuance of preliminary design contracts to multiple shipyards. A key element to this approach is that shipyards will develop ship designs, tailored specifically to each shipyards' internal design and manufacturing processes, while still meeting the overall program requirements. In January 2019, OMAO awarded three preliminary design contracts. Each contract has an estimated value of \$1.5 million.

Upon completion of phase I designs, the shipyards will submit proposals to compete for the phase II portion, which is referred to as "Detailed Design and Construction" (DD&C). OMAO plans to review the proposals received from the shipyards and select a single shipyard for DD&C of the lead ship by June 2020. Because two ships are planned, phase II will include an option for construction of a follow-on ship.

Appendix C: Potential Monetary Benefits

	Questioned Costs	Unsupported Costs	Potential Funds to Be Put to Better Use
Finding I and Recommendation I			\$11,895,000 ^a
Finding III and Recommendation 6		\$3,387,714 ^b	

^a This amount represents funds that could be put to better use if ship construction was not delayed by 39 months.

^b This amount represents \$3,387,714 in payments that OMAO did not sufficiently review or for which it did not maintain adequate support. These payments were made on IAA orders 00001 (\$2,084,264) and 00002 (\$1,303,450) from May 2014 to March 2018. This amount also includes the payments made using expired funds under an expired IAA (\$660,701).


Appendix D: Agency Response



UNITED STATES DEPARTMENT OF COMMERCE
The Deputy Under Secretary for Operations
Washington, D.C. 20230

September 23, 2019

MEMORANDUM FOR: Frederick J. Meny, Jr.
Assistant Inspector General for Audit and Evaluation

FROM: Ben Friedman
Deputy Under Secretary for Operations
National Oceanic and Atmospheric Administration 

SUBJECT: Comments on the Draft Report Entitled, *"NOAA's Office of Marine and Aviation Operations Needs to Improve the Planning and Governing of Its Ship Fleet Recapitalization"*

This memorandum responds to the draft report from the Office of Inspector General (OIG), entitled "NOAA's Office of Marine and Aviation Operations Needs to Improve the Planning and Governing of Its Ship Fleet Recapitalization" (the report) issued on August 21, 2019. We want to thank the OIG for its important work reviewing NOAA's Fleet Recapitalization Plan. Recapitalizing NOAA's aging ship fleet is one of the Agency's highest priorities and is essential to meet NOAA's ever-growing scientific requirements. NOAA welcomes the OIG's independent oversight of its efforts.

NOAA's detailed response to the draft report is attached. Please contact me if you have further questions or comments.

Attachments

cc: Rear Admiral Tim Galludet, Ph.D., USN Ret., Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA Administrator, NOAA
Rear Admiral Michael J. Silah, Director, NOAA Corps and Office of Marine and Aviation Operations
Greg Raymond, Chief of Staff, NOAA OMAO
Rhonda Lawrence, Audit Liaison, NOAA



Department of Commerce
National Oceanic and Atmospheric Administration
Comments to the OIG Draft Report Entitled
NOAA's Office of Marine and Aviation Operations Needs to Improve the Planning and
Governing of Its Ship Fleet Recapitalization
August 2019

NOAA is in the process of recapitalizing its aging ship fleet, a multi-year effort that is one of the highest priorities for the Agency. With the support of Congress, NOAA has made significant progress in this effort – to date, NOAA has transferred funds to the Navy to build two new Class A scientific research vessels, which it anticipates being completed in 2023 and 2024, respectively. NOAA expects to begin procurement action for a third ship in the next two years. We appreciate the work done by the Office of Inspector General (OIG) to review NOAA's progress in recapitalizing its fleet, and the recent OIG report entitled "NOAA's Office of Marine and Aviation Operations Needs to Improve the Planning and Governing of Its Ship Fleet Recapitalization" (the report).

The Office of Marine and Aviation Operations (OMAO) concurs with many of the findings, and all of the recommendations, of the OIG report. As is set forth more fully below, however, OMAO does not concur with two of the report's findings: (1) that there is a 39-month schedule slippage in NOAA's Fleet Recapitalization Plan; and (2) that OMAO failed to notify appropriate approval authorities concerning its intent to bid on a ship during a 2018 United States Maritime Administration (MARAD) auction.

Notably, in July 2017 OMAO contracted with an independent Standing Review Board (SRB), whose members are top experts in the field and have extensive expertise in shipbuilding, federal acquisitions, and Congressional appropriations. For reference, we have attached the SRB charter and biographies of its members. For more than two years, the SRB has met regularly to evaluate the progress of NOAA's Fleet Recapitalization Plan, and several members were involved directly in the issues examined by the OIG. After regular and detailed examination of NOAA's recapitalization efforts, the SRB recently provided a positive report on NOAA's progress. (See report from SRB to Dr. Neil Jacobs, attached.) NOAA's ship recapitalization plan is moving forward apace, and NOAA is confident that it is working within Congress's and the public's expectations of efficiently and successfully addressing its need to recapitalize its aging fleet.

NOAA's Response to the Findings of the Office of Inspector General

I. NOAA Concurrs With Most Findings of the OIG Report

NOAA concurs with most of the findings of the OIG report. Specifically, NOAA agrees that:

A. OMAO Transferred Funds to the Navy Without Obtaining Proper Department of Commerce Approvals

OMAO acknowledges that it failed to secure approval from the Office of Acquisition Management (OAM) at the Department of Commerce (DOC or the Department) before transferring funds to the Navy for the first Class A ship. OMAO has been working closely with the Department to ensure that proper approvals are obtained going forward. In fact, earlier this month DOC conducted a Milestone 2/3 Review for the second Class A vessel and noted "significant progress" in the ship recapitalization program, while approving the transfer of funding to the Navy for the ship. (See attached Memorandum from Karen Dunn Kelley, Deputy Secretary of Commerce, to Dr. Neil Jacobs, Assistant Secretary of Commerce for Environmental Observation and Prediction, Performing the Duties of Under Secretary of Commerce for Oceans and Atmosphere.)

B. OMAO Did Not Alert Congress to a Major Shift in its Fleet Acquisition Strategy

OMAO acknowledges that it needs to notify Congress of any shift in its fleet acquisition strategy, and has been working closely with Congress to ensure members are regularly updated as to progress on the fleet recapitalization plan. NOAA is deeply appreciative that Congress has recognized the public benefit of an updated scientific fleet by providing assured funding for NOAA's fleet recapitalization plan, and fully intends to carry out the plan according to Congressional expectations and with Congressional oversight.

C. OMAO Did Not Obtain Proper Authorization Indicating That Key Metrics Were Met to Satisfy Milestone 1

OMAO recognizes that it did not obtain proper authorization from the NOAA Under Secretary for Oceans and Atmosphere or the NOAA Deputy Under Secretary for Operations for documentation indicating that metrics for Milestone 1 were satisfied. OMAO has made changes to its processes to ensure that such authorizations are obtained in the future, and is in the process of hiring additional team members for its Platform Acquisition Division (PAD) so that all procurement requirements are met.

D. OMAO Did Not Properly Execute and Implement IAA Actions with the Navy

OMAO acknowledges that interagency agreement orders with the Navy did not meet certain requirements of the Federal Acquisition Regulation or the Commerce Acquisition Manual (CAM). While the Director of NOAA's Acquisition and Grants Office (AGO) signed the

initial determination and finding (D&F), OMAO failed to obtain D&Fs for the subsequent order and its modification. OMAO will ensure that all future IAAs and subsequent modifications/amendments receive proper review and approval in accordance with the CAM 1317.570.

E. OMAO Performed Inadequate Payment Reviews

OMAO acknowledges the lack of adequate payment reviews with the Navy Interagency Agreement. As noted above, OMAO is working to hire qualified personnel as quickly as possible for its PAD, which will provide further oversight of this process.

F. Payments Were Made with Expired Funds

OMAO acknowledges that payments may have been made by the Navy using expired funds. NOAA has passed on the contracting responsibilities for building its ships to the Navy, and does not have control over Navy contract execution. To determine if expired funds were used, the Navy would need to provide the relevant details associated with the invoices in question. OMAO will work with the Navy to establish additional controls to better identify, track and correct these issues.

II. *NOAA Does Not Concur with Two Findings in the Report*

Although NOAA agrees with many of the OIG Report's findings, there are two findings that it disagrees with:

A. *Schedule Slippages Have Delayed Ship Construction and Increased Costs*

NOAA does not concur with the OIG's finding that NOAA's fleet recapitalization plan is 39 months behind schedule. In determining this figure, we believe that the OIG erroneously focused on NOAA's "original schedule," which was never funded by Congress and therefore was impossible to meet. Instead, NOAA asserts that it began recapitalization of its fleet when Congress fully funded the project, allowing NOAA to move forward. Under the Congressionally approved schedule, NOAA is within six months of its program targets.

The OIG uses NOAA's "original schedule" to formulate its findings – a provisional plan that would have allowed NOAA to begin building its first ship (the AGOR Variant) in February 2015, assuming full funding in line with the fiscal year 2016 Congressional Budget Justification. This provisional schedule was predicated on Congress providing full funding of the \$147M necessary to build the ship in 2016, which it chose not to do.

Instead, Congress appropriated \$80M for the AGOR Variant ship in fiscal year 2016, and did not provide the remaining balance necessary to initiate procurement of the ship until fiscal year 2017. Nonetheless, the OIG report indicates that under NOAA's "schedule" it was supposed to have completed a Request for Proposals and Contract Award in fiscal year 2016.

Initiating a ship acquisition before the ship was fully funded would have been contrary to appropriations law, and would not have been permitted under the agreement NOAA has with the Navy, which requires full funding obligation.

In fact, the NOAA Fleet Recapitalization Plan relied upon by the OIG purposely did not include a schedule because it was sent to Congress in October 2016 to support funding discussions. Only after Congress accepted this plan did OMAO develop a detailed schedule for the AGOR Variant acquisition. The approved schedule, which was delivered to Congressional appropriators on February 27, 2017, calls for completion of the AGOR Variant (or “Class A” Ship) in quarter two of fiscal year 2023, with a second ship to be completed in quarter four of fiscal year 2023. Under this schedule (the only one approved by Congress), OMAO is approximately six months behind in its efforts. Notably, all of this six-month delay resulted from setbacks that occurred over two years ago. There have been no delays under current OMAO leadership.

B. OMAO Failed to Notify Proper Approval Authorities of its Intent to Deviate from the Approved 2016 Fleet Plan

The report also criticizes OMAO for not notifying DOC’s OAM of its intent to “deviate from the approved 2016 Fleet Plan” when it decided to bid on a ship that was put up for auction by MARAD in 2018. NOAA does not believe that bidding on the MARAD ship was a deviation from its fleet recapitalization plan. Regardless, OAM was specifically briefed on this decision, as was the entire Department of Commerce senior leadership team.

NOAA’s fleet plan allows for flexibility and the ability to take advantage of opportunities that are in the organization’s best interest – it was never meant as a rigid plan that did not allow for changing circumstances or new contingencies. Accordingly, NOAA does not believe that it “deviated” from its plan when bidding on the MARAD ship. The auction of the MARAD ship arose unexpectedly and created an opportunity to acquire a new ship much more quickly than, and at a fraction of the cost of, building a new ship under the plan. Bidding on the ship was within the parameters of the plan and was a justifiable management decision.

Regardless, OMAO discussed and sought approval to bid on the MARAD ship from OAM, as well as the Department’s Office of Budget, Office of Policy, and Office of Legislative Affairs. The Department’s Deputy Secretary, Director of OAM, and Budget Director, were all briefed at length on this decision, and the Deputy Secretary approved NOAA’s decision to proceed. NOAA further briefed the Office of Management and Budget (OMB) and Congress before proceeding. NOAA believed that it provided all of the notifications required for this decision, including to OAM, and accordingly, NOAA respectfully disagrees with the OIG’s finding to the contrary.

OIG Recommendations

As outlined below, NOAA agrees with all of the recommendations outlined in the OIG report:

I. Schedule Slippages Have Delayed Ship Construction and Increased Costs

We recommend that the Director of NOAA Corps and OMAO do the following:

- 1. Develop a detailed contingency plan to reduce the risks associated with the delays. The plan should address (a) capability and capacity gaps and (b) the cost of maintaining aging ships and utilizing alternatives.**

OMAO concurs with this recommendation. Although OMAO asserts that it is only six months behind schedule, even small delays have an impact on NOAA's stakeholders and are unacceptable. Accordingly, by the first quarter of fiscal year 2020, OMAO will provide a detailed contingency plan to reduce the risks of any delays. This plan will address capability

and capacity gaps as well as the cost of maintaining aging ships and utilizing alternatives.

- 2. Establish a reporting mechanism to notify Congress and other key stakeholders proactively of significant updates or changes in the current fleet recapitalization plan.**

OMAO concurs with this recommendation. For two years, OMAO leadership has held quarterly meetings with DOC leadership to brief leadership on all updates and changes to the NOAA Fleet Recapitalization Plan. Similar meetings have been held with OMB, Senate Appropriations Staff, and House Appropriations Staff. These meetings are in line with the OIG's recommendation, and will continue as planned.

II. NOAA's Ship Fleet Acquisition Planning Is Not Effectively Governed

We recommend that the Under Secretary of Commerce for Oceans and Atmosphere and Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA Administrator do the following:

- 3. Develop a detailed plan of program governance, which (a) delineates how OMAO will comply with applicable acquisition requirements, (b) clearly defines roles and responsibilities, (c) identifies stakeholder communication needs, and (d) defines a formal evaluation, approval, and decision follow-up process.**

We concur with this recommendation. NOAA will develop a plan of program governance in line with evaluation and approval criteria under current DOC

acquisition requirements, and which is consistent with ongoing stakeholder communication schedules and SRB reviews.

III. OMAO Did Not Provide Adequate Oversight of Fleet Recapitalization Funds

We recommend that the Under Secretary of Commerce for Oceans and Atmosphere and Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA Administrator do the following:

4. Assign a qualified project officer and alternate who are both properly certified for the total program dollars and tasked with effectively monitoring all activities and deliverable progress (e.g., invoice review and approval) that are contained in each IAA order.

We concur with this recommendation. In July 2019, a new Deputy Director of OMAO's PAD was hired. The Deputy Director is serving as the Acting Director of the Division until a new Director is hired. OMAO is working with the Office of Human Capital Services to recruit and hire staff as expeditiously as possible to support the Acting Director.

5. Reinforce proper certification and training for the project officer and alternate.

We concur with this recommendation. The personnel in PAD now have COR Level 3 certification. We will continue to ensure that project officers and any alternates have proper certification and training.

6. Provide a reconciliation report of the \$3,387,714 unsupported costs to OIG.

We concur with this recommendation. A report and documentation will be supplied to the OIG by the first quarter of fiscal year 2020 to clarify and explain these costs.

We recommend that the Director of NOAA Corps and OMAO do the following:

7. Create a centralized file maintaining all required documentation for all orders placed under the current IAA between NOAA and the Navy for recapitalization of NOAA's ship fleet.

OMAO concurs with this recommendation. OMAO has already created a centralized file for all orders placed under the current IAA between NOAA and the Navy for recapitalization of NOAA's ship fleet.