

In Brief

Smithsonian Institution's Controls Over the National Air and Space Museum Revitalization Project's Contract Modifications Process

OIG-A-24-08, September 26, 2024

Background

The Smithsonian Institution (Smithsonian) is currently conducting a multi-year renovation of its National Air and Space Museum (NASM), known as the NASM Revitalization Project.

The Smithsonian contracted with a joint venture to provide Construction Manager as Constructor (CMc) services. The project is divided into two phases; Phase 1 was completed in October 2022, and Phase 2 is due to be completed by December 2024.

A contract modification is an agreement to modify a contract to change its price, schedule, or scope. On this contract, the Smithsonian used Proposed Change Orders (PCOs) to track work conditions that had the potential to exceed the base contract. The Smithsonian typically incorporated approved PCOs into a single contract modification monthly.

What OIG Did

The Office of the Inspector General contracted with Sikich CPA LLC (Sikich) to determine whether the contract modifications for the NASM Revitalization Project were reasonable, necessary, within the scope of the contract, and effectively awarded and administered.

What Was Found

Sikich found that the Smithsonian did not consistently award and administer contract modifications in accordance with its own policies and procedures and its contract with the CMc. Specifically:

- **Double Counting of Costs.** For 18 of the 54 sampled PCOs, the Smithsonian allowed the CMc and subcontractors to expense supervision and material as direct costs. However, according to the contract, these costs were already recovered as part of the CMc's and subcontractors' overhead markup. Therefore, based on the OIG contractor's calculations, the Smithsonian may have overpaid the CMc and its subcontractors a total of \$137,522.
- **Noncompliance with Smithsonian's Change Order Procedures.** The Smithsonian did not consistently follow the requirements of the NASM Change Management Plan (CMP) for the review and approval of PCOs. According to the CMP, changes with a dollar amount of more than \$50,000 or an impact of greater than 14 days required approval from the Change Control Board (CCB), and all changes needed to be documented on a Change Request Form (CRF). The Smithsonian could not provide (1) evidence of CCB approvals for any of the 41 sampled PCOs meeting the approval threshold or (2) CRFs for any of the 54 sampled PCOs.
- **Accuracy of Credits Owed to the Smithsonian.** For three PCOs, the Smithsonian may have recovered up to \$7,915 less from subcontractors than it should have. This occurred because the Smithsonian did not determine whether subcontractors applied the appropriate overhead and profit markups to credited amounts owed to the Smithsonian.
- **Approved Markups in Excess of Contract Amounts.** In two PCOs, the Smithsonian approved \$3,468 in overhead and profit markups applied to equipment rentals that exceeded the amount allowed by the contract. According to the contract, overhead and profit markups on modifications were to be held to 6 percent, but Smithsonian allowed an excess of this percentage in some instances.

What Was Recommended

Sikich made 10 recommendations to improve the Smithsonian's process for reviewing and approving contract modifications. These recommendations will help ensure that the Smithsonian obtains appropriate documentation before approving PCOs for future CMc construction contracts. Management concurred with all of the recommendations.

For a copy of the full report, visit <https://oig.si.edu>



Date: September 26, 2024

To: Ron Cortez, Under Secretary for Finance & Administration
Thomas Dempsey, Director, Office of Contracting & Personal Property Management (OCon&PPM)
Derek Ross, Director, Office of Planning, Design, and Construction (OPDC)

Cc: Meroë S. Park, Deputy Secretary and Chief Operating Officer
Craig Blackwell, Chief of Staff, Office of the Deputy Secretary and Chief Operating Officer
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From: Nicole Angarella, Inspector General

A handwritten signature in black ink, appearing to read "Nicole Angarella", written over the printed name.

Subject: *Smithsonian Institution's Controls Over the National Air and Space Museum Revitalization Project's Contract Modifications Process (OIG-A-24-08)*

This memorandum transmits the final audit report of Sikich CPA LLC (Sikich), on the Smithsonian Institution's (Smithsonian) controls over the National Air and Space Museum (NASM) Revitalization Project's contract modifications process.

Under a contract monitored by this office, the Office of the Inspector General engaged Sikich, an independent public accounting firm, to perform the audit. Sikich found that the NASM Revitalization Project team did not consistently award and administer contract modifications in accordance with Smithsonian policy and the contract terms. Sikich made 10 recommendations for Smithsonian management to improve controls over the contract modifications process. Management concurred with all 10 recommendations.

Sikich is responsible for the attached report and the conclusions expressed in the report. We reviewed Sikich's report and related documentation and interviewed their representatives. Our review disclosed no instances in which Sikich did not comply, in all material respects, with the U.S. Government Accountability Office's *Government Auditing Standards*.

We appreciate the courtesy and cooperation of all Smithsonian management and staff during this audit. If you have any questions, please contact me or Joan Mockeridge, Assistant Inspector General for Audits.



**PERFORMANCE AUDIT OF THE
NATIONAL AIR AND SPACE MUSEUM REVITALIZATION PROJECT'S
CONTRACT MODIFICATIONS**

**SUBMITTED TO THE
SMITHSONIAN INSTITUTION
OFFICE OF THE INSPECTOR GENERAL**

SEPTEMBER 26, 2024

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	2
II.	OBJECTIVES, SCOPE, AND METHODOLOGY.....	3
III.	BACKGROUND	4
IV.	INTERNAL CONTROLS	6
V.	AUDIT RESULTS.....	6
	FINDING #1: THE NASM REVITALIZATION PROJECT TEAM APPROVED DIRECT COSTS IN 18 PROPOSED CHANGE ORDERS (PCOs) THAT WERE ALREADY INCLUDED IN CONTRACTUAL MARKUPS.	8
	FINDING #2: THE NASM REVITALIZATION PROJECT TEAM DID NOT CONSISTENTLY FOLLOW ITS POLICIES AND PROCEDURES FOR PROPOSED CHANGE ORDERS.....	10
	FINDING #3: THE NASM REVITALIZATION PROJECT TEAM APPROVED PCOs WITHOUT DETERMINING WHETHER CREDIT AMOUNTS OWED TO SI INCLUDED MARKUPS FOR OVERHEAD AND PROFIT.....	13
	FINDING #4: THE NASM REVITALIZATION PROJECT TEAM APPROVED PCOs THAT CONTAINED INAPPROPRIATE MARKUPS FOR SUBCONTRACTORS' EQUIPMENT RENTALS.	15
	APPENDIX A: SUMMARY OF FINDING #1 QUESTIONED COSTS.....	18
	APPENDIX B: SAMPLE CHANGE REQUEST FORM	20
	APPENDIX C: CRITERIA	21
	APPENDIX D: MANAGEMENT'S RESPONSE	25

**PERFORMANCE AUDIT OF THE NATIONAL AIR AND SPACE MUSEUM REVITALIZATION PROJECT'S
CONTRACT MODIFICATIONS
SMITHSONIAN INSTITUTION OFFICE OF THE INSPECTOR GENERAL**

I. EXECUTIVE SUMMARY

The Smithsonian Institution (SI) is currently conducting a multi-year renovation of its National Air and Space Museum (NASM) in a project known as the "NASM Revitalization Project." To complete the project, SI contracted with a joint venture of three construction companies to provide Construction Manager as Constructor (CMc) services.¹ The Project consists of a preconstruction phase and two construction phases (i.e., Phase 1 and Phase 2). Completion of Phase 1 led to the west wing of NASM reopening in October 2022. The Phase 2 renovation of the east wing is ongoing; the CMc is scheduled to complete its work in December 2024, thus allowing for the east wing to reopen in 2025.

To determine whether the contract modifications² for the NASM Revitalization Project were reasonable, necessary, within the scope of the contract, and effectively awarded and administered, the SI Office of the Inspector General (OIG) engaged Sikich³ to conduct a performance audit. Based on our audit, we found that the NASM Revitalization Project team:

- Inappropriately approved direct costs that the CMc and subcontractors had already recovered through contractual markups on Proposed Change Orders (PCOs) requests.⁴
- Did not consistently follow its policies and procedures for the review and approval of PCO requests.
- Approved PCOs without obtaining sufficient detail to determine whether credit amounts owed to SI included markups for overhead and profit.
- Approved PCOs that contained markups in excess of the amounts allowed by the contract.

We communicated the results of our audit and the related findings and recommendations to SI and the OIG.

¹ A CMc functions as one entity that assumes the role of a contractor and construction manager and takes control over the construction work through direct contracts with subcontractors.

² A contract modification is an agreement by the parties involved to modify the contract to change the price, schedule, and/or scope of an existing contract.

³ Effective December 14, 2023, we amended our legal name from "Cotton & Company Assurance and Advisory, LLC" to "Sikich CPA LLC" (herein referred to as "Sikich").

⁴ A PCO is a tentative or informal Change Order created to track a work condition that has potential to be over and above the base contract. A PCO does not create a legal and binding contract between the owner of the project and contractor. Depending on the number of PCOs processed in a month and if funding is available, SI usually incorporates approved PCOs into a contract modification monthly.

II. OBJECTIVES, SCOPE, AND METHODOLOGY

Objective

The objective of this performance audit was to determine whether contract modifications for the NASM Revitalization Project were reasonable, necessary, within the scope of the contract, and effectively awarded and administered.

Scope

The scope of this performance audit included contract modifications to the construction contract for the NASM Revitalization Project (Contract No. F17CC10103) that were issued between January 9, 2017, and November 15, 2022.

Methodology

We reviewed SI's policies and procedures on contracts for goods and services, the NASM Revitalization Project's Project Management Plan, and the executed contract between SI and the CMC. We also interviewed personnel from SI's NASM Revitalization Project team to obtain an understanding of the review and approval process for PCO requests.

As of November 15, 2022, SI approved 54 contract modifications consisting of 901 PCOs⁵. The contract modifications represented an absolute value of \$58,858,277 and increased the Guaranteed Maximum Price by \$47,848,831, from \$480,236,337 to \$528,085,168. We reviewed the PCO details included in the modifications and the PCO log provided by the NASM Revitalization Project team (e.g., description of work, PCO amount, number of PCOs in modification) and selected a judgmental sample of 54 PCOs with an absolute value of \$27,073,642 from 35 contract modifications issued within the audit scope. The resulting sample represented 6 percent of the total PCO population and 46 percent of the absolute dollar value of the changes.

We chose our sample judgmentally to ensure that a variety of PCOs and higher risk PCOs were represented in our testing. We determined that higher risk characteristics included (1) high dollar PCOs, (2) any credit or deductive PCOs, (3) high number of PCOs included in the contract modification and (4) PCO description that did not appear to directly benefit the project. Because we judgmentally selected the sample, the results of this audit cannot be projected to the population of contract modifications to the construction contract for the NASM Revitalization Project.

We conducted this performance audit in Washington, D.C., from November 2022 through August 2023, in accordance with generally accepted government auditing standards (per the 2018 revision of the Government Accountability Office's *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.

⁵ This represents the number of PCOs which impacted the contract value (i.e., PCOs that impacted the scope of work without impacting the contract value are not included in the total).

III. BACKGROUND

The Smithsonian Institution and the National Air and Space Museum

SI is the world's largest museum, education, and research complex, inclusive of 21 museums and the National Zoo. SI was founded in 1846 with funds provided by Englishman James Smithson (1765–1829), according to his wishes: *"to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge..."*

In 1946, President Harry Truman signed a bill establishing SI's National Air Museum to memorialize the development of aviation; to collect, preserve, and display aeronautical equipment; and to provide educational material for the study of aviation. In 1966, President Lyndon Johnson signed a law that changed the name of the National Air Museum to the National Air and Space Museum, to memorialize the development of both aviation and spaceflight. Funding to construct a new building on the National Mall between Fourth and Seventh Streets SW in Washington, DC was approved in 1971. Groundbreaking took place on November 20, 1972; in early 1975, the task of filling the building with air- and spacecraft began. The goal of opening during America's bicentennial year was met, and the building was inaugurated on July 1, 1976.

The NASM Revitalization Project

On January 9, 2017, SI awarded a Guaranteed Maximum Price contract with an original value of \$480,236,337 to a joint venture of three construction companies to provide CMc services. NASM's 7-year renovation began in 2018 and includes redesigning all 23 exhibitions and presentation spaces, complete refacing of the exterior cladding, replacement of outdated mechanical systems, and other repairs and improvements. The project consists of a pre-construction phase and two construction phases (i.e., Phase 1 and Phase 2). Phase 1 is complete, which led to the west wing of NASM reopening in October 2022. The Phase 2 renovation of the east wing is ongoing; the CMc is scheduled to complete its work in December 2024, thus allowing for the east wing to reopen in 2025.

The project is led by SI's NASM Revitalization Project team, which consists of representatives from the Office of Planning, Design, and Construction and the Office of Contracting and Personal Property Management. The Office of Planning, Design, and Construction is responsible for all aspects of the revitalization and construction of all Smithsonian facilities, whereas the Office of Contracting and Personal Property Management has the authority to enter into contracts and provides assistance to all SI units regarding contracting and procurement requirements and policies and procedure compliance. Representatives from both offices are part of the Change Management Board (CMB), which is the final approval authority for all change requests in excess of \$50,000 or changes that impact the project schedule by more than 14 days.

Guidance Related to the Contracting and Contract Modification Processes

Several documents outline SI's contracting and contract modification processes for the NASM Revitalization Project. Specifically:

- Smithsonian Directive 314 provides guidance to the personnel responsible for awarding and managing SI contracts. It outlines the different types of contracts, details document retention policies, and provides other similar information.
- The NASM Revitalization Project's Project Management Plan lays out project-specific guidelines, including a Change Management Plan, which establishes how changes will be proposed, accepted, monitored, and controlled throughout the life of the project.
- The Guaranteed Maximum Price contract's changes clause, and the clauses on "Delays and Extension of Time" and "Smithsonian Institution's Right to Stop or Suspend the Work" contain information relevant to changes to the period of performance and scope of work.

The Contract Modification Process

According to the NASM Revitalization Project team, the change process varies depending on the type of PCO involved (i.e., client-requested, differing site conditions), as outlined below.

For client-requested changes, the NASM Revitalization Project team uses a Change Request Form (CRF), which requires preparing a statement of work and estimating scheduling and financial exposure to the overall Project. Once complete, the team submits the CRF and any accompanying documentation to the Change Control Board (CCB) for approval. If the CCB approves the change, then the Construction Manager or Contracting Officer's Technical Representative (COTR) assigns a Proposed Change Number and submits the package to the CMc for pricing.

If the PCO request is generated by the subcontractor or CMc, the subcontractor or CMc submits a Request for Information. The CMc and subcontractors use the Request for Information process to request clarification about project documents, specifications, or other project conditions. A PCO request is initiated if the clarification provided to a Request for Information differs from the process, scope, or specifications defined in the contract. According to the NASM Project team, if PCO requests fall below \$100,000 and do not have an impact of greater than 14 days on the Project, then the NASM Revitalization Project team internally reviews the PCO for reasonableness. If the PCO requests are in excess of \$100,000 or have an impact of greater than 14 days, then they would submit the PCO to the CCB for review and approval.

PCO requests in excess of \$100,000 are accompanied by an Independent Government Estimate. Depending on the complexity of the PCO request and availability of SI personnel, Independent Government Estimates may be either outsourced or prepared internally at SI by Facility Investment and Cost Engineering, a department under the Office of Planning, Design, and Construction. According to the Construction Manager, the NASM Revitalization Project team usually follows up with the CMc or the subcontractor if the difference between the Independent Government Estimate and the proposed costs is greater than 10 percent. The NASM Revitalization Project team is also responsible for reviewing each proposal submitted for a PCO to ensure proposed direct costs are allowable under Federal Acquisition Regulation Part 31, as required by the contract.

Work related to a PCO can proceed once it is approved; however, approval of a PCO does not establish a contract modification. Once PCOs are approved and entered into the change order log, they are sent to the Contracting Officer for a final review. Depending on the number of PCOs approved each month and funding, the Contracting Officer bundles PCOs into a contract modification. For example, SI issued contract modification number 46 in November 2021, which

increased the contract value by \$311,650 for 6 PCOs, and it issued contract modification number 47 in December 2021, which increased the contract value by \$520,740 for 7 PCOs. As of November 15, 2022, 901 PCOs had been incorporated into the contract through 54 contract modifications.

IV. INTERNAL CONTROLS

GAGAS requires auditors to obtain an understanding of internal controls that are significant within the context of the audit objectives. For such internal controls, auditors should assess whether the internal controls have been properly designed and implemented, as well as perform procedures designed to obtain sufficient and appropriate evidence to support their assessment about the effectiveness of those controls. Auditors should also plan and perform audit procedures to assess internal controls to the extent necessary to address the audit objectives.

We reviewed internal controls to obtain an understanding of the SI NASM Revitalization Project team's process for reviewing and approving contract modifications. We obtained our understanding by reviewing SI's policies for contracting, the NASM Project Management Plan, and contract requirements, as well as by interviewing SI NASM Revitalization Project team members. This allowed us to determine whether controls were properly implemented and working as designed, individually or in combination with other controls. We determined that the controls over the review and approval process for NASM Revitalization Project contract modifications were generally sufficient; however, we noted four exceptions, which we describe in detail in the **Audit Results** section of this report.

V. AUDIT RESULTS

We determined that the NASM Revitalization Project team did not consistently award and administer contract modifications in accordance with SI policies and procedures and its contract with the CMc. Specifically, the NASM Revitalization Project team:

- Approved direct costs that the CMc and subcontractors had already recovered through contractual markups applied to change orders.
- Did not consistently follow its policies and procedures for the review and approval of PCO requests.
- Approved PCOs without obtaining sufficient detail to determine whether credit amounts owed to SI included markups for overhead and profit.
- Approved PCOs that contained markups in excess of the amounts allowed by the contract.

First, of the 54 PCOs sampled for this audit, SI accepted direct costs in 18 PCOs that were already included in contractual markups. The construction contract allows the CMc and subcontractors to apply a combined markup of 21 percent to its direct costs for overhead and profit. The contract describes the type of costs included in these markups. Specifically, the markup for overhead covers costs related to project management, supervision, mobilization, and miscellaneous material expenses. However, when these costs were listed as direct costs in PCOs rather than as overhead costs, SI did not question or remove them prior to approving the PCOs.

Next, SI did not consistently follow its policies and procedures related to the review and approval of PCOs, as detailed in the NASM Change Management Plan. According to the

Change Management Plan, changes with a dollar amount of more than \$50,000 and/or impact of greater than 14 days required approval from the CCB, and all changes must be accompanied by a CRF. SI did not maintain documentation of CCB approvals for any PCOs or CRFs for the sampled PCOs because according to the NASM project team, policies and procedures in the Change Management Plan were overruled by the CCB. However, SI was unable to provide any documentation confirming the applicable CCB decisions.

Additionally, SI policies and procedures require that any deduction or credit changes include applicable overhead and profit. We identified three instances where the documentation provided by the subcontractors did not include sufficient detail to determine whether the credit amounts owed to SI included markups for overhead and profit.

Finally, the construction contract allows the CMc and subcontractors to recover a 6 percent markup for overhead and profit on equipment rentals; however, we identified 2 instances where the PCO contained overhead and profit markups of 15 to 21 percent.

In response to these findings, we made 10 recommendations to improve how the NASM Revitalization Project team reviews, approves, and monitors contract modifications. Additionally, we recommend that SI recover \$148,905 in questioned costs, composed of (1) \$137,522 in direct costs that were also recovered as overhead and profit, (2) \$7,915 for credits owed to SI that were potentially provided without the application of the overhead and profit markup and (3) \$3,468 from inappropriate markups of equipment rentals.

Finding #1: The NASM Revitalization Project Team Approved Direct Costs in 18 Proposed Change Orders (PCOs) That Were Already Included in Contractual Markups.

Condition

The NASM Revitalization Project team approved direct costs in 18 of 54 (33 percent) sampled PCOs that were also recovered by the CMc and subcontractors through contractual markups.

According to contract clauses 52.243-S0044 Equitable Adjustments (a) (2) and (3) (see Appendix C for Criteria excerpts), the CMc and subcontractors may recover a combined markup of 21 percent for overhead and profit on work performed using their own labor and materials. Contract clauses 52.243-S0044(a) (2), (3) and (9) (see Appendix C for Criteria excerpts) describe the various items that are covered under the overhead and profit markup. These items include, but are not limited to:

- Insurance, except workers' compensation and general liability.
- Field and office supervisors.
- Use of small tools.
- General home office expenses.
- Office equipment and supplies.

The Change Management Plan requires proposals submitted for PCOs to be evaluated for accuracy and reasonableness. However, of the 54 sampled PCOs, the NASM Revitalization Project team approved 18 PCOs containing 27 direct costs that were also covered by the overhead markup. As a result, SI overpaid \$104,801 in direct costs. The CMc and subcontractors added \$32,721 to the unallowable direct costs for overhead and profit markups, resulting in a total overpayment of \$137,522 (see Appendix A: Summary of Finding #1 Questioned Costs). The questioned costs related to miscellaneous materials, and supervision and coordination, as shown in Table 1.

Description	Direct Cost	Overhead and Profit Markups	Total
Supervision and Coordination	\$102,344	\$31,995	\$134,339
Miscellaneous Materials	2,457	726	3,183
Total	\$104,801	\$32,721	\$137,522

The NASM Revitalization Project team provided the following response for approving such costs:

Supervision, project management, coordination, and some other indirect costs as it relates to change orders to the project are evaluated and sometime (sic) awarded in addition to markups on a case by case basis. This is in accordance with Contract Modification #8 GMP [Guaranteed Maximum Price] Clarifications item #37.

However, Guaranteed Maximum Price clarifications item #37 does not appear to be applicable. It states:

The contractor and its subcontractor will be reimbursed for drafting, detailing, printing cost and associated coordination time and project management staff as it relates to

change orders to the project and to be evaluated on a case by case basis. The aforementioned costs are not part of the allowable contract mark-ups and/or commissions.

Additionally, according to the NASM Revitalization Project team, it allows subcontractors and the CMc to recover items included under the profit and overhead markup as direct costs when (1) the markup requested is lower than the contractual markup limit of 21 percent or (2) the scope of work may result in additional costs for items covered by the profit and overhead markup. However, the contract for the NASM Revitalization Project defines the type of costs covered by the overhead rate, which is a typical practice in the construction industry. In our experience, it is unusual for an owner (in this case, SI) to award any costs as direct costs that are contractually included in an overhead rate. Doing so pays the contractor twice for the same cost.

Furthermore, with regard to the \$134,339 in questioned costs for supervision and coordination, the NASM Revitalization Project team stated that certain subcontractors used the term "supervision" for work actually performed by a "foreman". Supervision is classified as an indirect cost because it includes personnel who oversee work performed by multiple crews, at an entire site, or even on multiple projects that might not be directly related to a change. Costs for foremen, on the other hand, are classified as direct costs, as these individuals oversee work performed by a crew for a particular scope of work. Therefore, subcontractors and the CMc can request funding for "foreman" in PCOs, as these costs are not covered by the markups for overhead and profit. However, the NASM Revitalization Project team was unable to provide any documentation to support that the questioned costs were in fact related to "foreman" instead of "supervision".

Cause

The NASM Revitalization Project team relied on the Guaranteed Maximum Price clarifications item #37, even though it was not applicable, to accept costs covered by contractual markups. Additionally, the NASM project team did not document its rationale for allowing the recovery of direct costs covered by contractual markups.

Effect

SI paid \$137,522 for direct costs already covered by markups for overhead and profit, essentially paying these costs twice.

Recommendations

We recommend that the Director, Office of Planning, Design, and Construction, and the Director, Office of Contracting & Personal Property Management:

Recommendation 1

For future projects using the CMc delivery method, strengthen the PCO review policies and procedures to ensure that the Cost Engineer properly reviews the details included in subcontractor and CMc proposals submitted for PCOs so that they do not allow the reimbursement of costs that are covered by contractual markups. Additionally, the policies and procedures should be modified to ensure that the Cost Engineer documents the review of proposals.

Recommendation 1 – SI Comment (See Appendix D)

We concur. We will modify and strengthen the PCO review policies and procedures to ensure no reimbursement of costs that are covered by contractual markups are included in the PCO and the review process is documented.

Target for completion: December 16, 2024

Recommendation 1 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Recommendation 2

Determine, and document, the allowability of the questioned costs of \$137,522 for direct costs that were also covered by contractual markups, and recover any amount determined to be unallowable.

Recommendation 2 – SI Comment (See Appendix D)

We concur. We will determine, and document, the allowability of the questioned costs as indicated above. We have completed our initial review and at this time, believe these costs were allowable.

Target for completion: December 16, 2024

Recommendation 2 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Finding #2: The NASM Revitalization Project Team Did Not Consistently Follow Its Policies and Procedures for Proposed Change Orders.***Condition***

The NASM Revitalization Project team did not consistently follow the policies and procedures outlined in the NASM Revitalization Change Management Plan for PCOs. Specifically, the NASM Revitalization Project team could not provide:

- Documentation indicating that the Change Control Board (CCB) approved any of the 41 of 54 sampled PCOs that exceeded the thresholds requiring approval. The remaining 13 sampled PCOs did not meet or exceed the threshold for approval.
- Completed Change Request Forms (CRFs) for any of the 54 PCOs in our audit sample.

The Change Management Plan (see Appendix C for Criteria excerpts) requires the CCB to approve change order requests in excess of \$50,000 and/or schedule impacts of greater than 14 days. However, the CCB did not approve any of the 41 of 54 PCOs in our sample that met these thresholds.

Furthermore, the Change Management Plan assigns responsibility to the NASM Revitalization Project team for submitting all change requests to the CCB through a CRF (See Appendix B for a copy of the CRF and Appendix C for Criteria excerpts). CRFs help ensure that the team can address questions regarding change requests and provide feedback on the impact of proposed changes. The CRF is intended to document:

- Who initiated the requested change.
- A unique identifiable number for each requested change, so that the requested change can be tracked in the construction management system.
- The type of requested change (e.g., unknown site conditions, owner requested, design deficiency, etc.)
- A description of the requested change, along with estimated costs and time.
- The Construction Manager's evaluation of the requested change.
- The resolution of the requested change (i.e., accepted or rejected).
- If applicable, when the proposed work was completed and who completed it.

We requested CRFs for all 54 PCOs in our audit sample, but the NASM Revitalization Project team was only able to provide three incomplete CRFs. None of them contained sufficient detail to allow us to tie them to the sampled PCOs.

Cause

The NASM Revitalization Project team could not provide documentation indicating that the CCB approved the PCOs requiring approval due to two main reasons. First, according to the NASM Revitalization Project team, the CCB changed the dollar threshold requiring it to approve change order requests from \$50,000 to \$100,000, even though the NASM Revitalization Project team could not locate any records documenting this decision. Assuming the CCB did change the threshold, seven of the 41 PCOs would not have been considered by the CCB because they resulted in changes over \$50,000 but under \$100,000. Second, the NASM project team did not provide documentation indicating that the CCB approved the remaining 34 PCOs because the team does not have a process for maintaining documentation of the CCB's approvals.

Furthermore, the Construction Manager did not complete CRFs for any of the 54 PCOs in our audit sample because according to the NASM Revitalization Project team, the CCB decided that CRFs were only required for changes requested by NASM. However, the team was unable to provide any documentation for the CCB's decision or the PCOs requested by NASM.

Effect

The NASM Revitalization Project potentially provided funds to contractors and subcontractors that the CCB could have disallowed, had it reviewed PCOs in excess of \$50,000.

Furthermore, not completing CRFs for the NASM Revitalization Project's PCOs means that valuable information will not be documented that might be helpful in resolving future issues or claims on the project. For instance, the CRF requires the Construction Manager to evaluate

each PCO's potential impact on the project's budget, schedule, scope, quality, and risk. Not documenting such information could be viewed as evidence that the NASM Revitalization Project team did not communicate potential impacts to the contractor known at the time that the PCO was evaluated internally. This assertion could be used to support the contractor's argument for additional funds through a claim.

Recommendations

We recommend that the Director, Office of Planning, Design, and Construction, and the Director, Office of Contracting & Personal Property Management:

Recommendation 3

Update the Change Management Plan for situations where the CCB's decisions or directives overrule current guidance.

Recommendation 3 – SI Comment (See Appendix D)

We concur. While we don't believe increasing the threshold for change management created additional risk, we will update policies and procedures on how to document and complete change management plans as part of our continuous learning process.

Target for completion: December 16, 2024

Recommendation 3 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Recommendation 4

Document and complete CRFs as required by the Change Management Plan for future projects using the CMc delivery method.

Recommendation 4 – SI Comment (See Appendix D)

We concur. We will update the Change Management Form to address this concern.

Target for completion: December 16, 2024

Recommendation 4 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Finding #3: The NASM Revitalization Project Team Approved PCOs Without Determining Whether Credit Amounts Owed to SI Included Markups for Overhead and Profit.

Condition

Before approving three of the 54 sampled PCOs, the NASM Revitalization Project team did not determine whether subcontractors applied the appropriate overhead and profit markups to credited amounts owed to SI, as shown in Table 2. In accordance with contract clause 52.243-S0044 Equitable Adjustments (Jun 2000) (a) (12) (see Appendix C for Criteria excerpt), this determination is important to ensure that the contractor or subcontractor returns to SI the total amount initially awarded, including overhead and profit markups, for revised or deleted scopes of work. The NASM Revitalization project team was unable to provide documentation to demonstrate whether the markup was included in the amount originally proposed by and awarded to the subcontractor. Therefore, we applied the contractual rate of 21 percent to calculate the potential credit due to SI.

Table 2. PCOs for Which SI Did Not Determine Whether Markups Were Included in Credit Amounts				
Description	Proposal Reference	Credit Amount	Potential Credit at 21%	Description
PCO No. 810082	P1.1 & P2.1	\$12,428	\$2,610	Delete waterproofing repair under existing slabs
PCO No. 810228	ZB1160-001	15,344	3,222	Delete AP-5/FB-11 fabric panels at the hanging ceiling clouds
PCO No. 810310	CO 28 - ASI 071	9,920	2,083	Concrete landing credit
Total		\$37,692	\$7,915	

Cause

The NASM Revitalization Project team did not obtain proposals for PCOs that were detailed enough to determine whether subcontractors applied the overhead and profit markups to credits owed to SI because it determined that the credits resulting from the changes were too small.

Effect

SI could be credited less than it is entitled to if the NASM Revitalization Project team does not determine whether the CMc and/or subcontractors included overhead and profit markups in credit amounts owed to SI. As shown in Table 2, the CMc and subcontractors credited SI an estimated \$7,915 less than SI was entitled to.

Recommendations

We recommend that the Director, Office of Planning, Design, and Construction, and the Director, Office of Contracting & Personal Property Management:

Recommendation 5

For the questioned PCOs and future projects using the CMc delivery method, require the COTR to request the supporting documentation for proposed credits owed to SI that contains sufficient detail to determine whether the CMc and/or subcontractor applied overhead and profit markup used for their proposed price.

Recommendation 5 – SI Comment (See Appendix D)

We concur. We will modify and strengthen the PCO review policies and procedures to ensure proper supporting documentation with sufficient details show subcontractors' credits including overhead and profit markup.

Target for completion: December 16, 2024

Recommendation 5 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Recommendation 6

Determine, and document, the allowability of the questioned costs of \$7,915 (or less if the proposed price used a markup that was less than 21 percent) in overhead and profit markup costs from the CMc and/or subcontractors that were not included in the \$37,692 in credits from PCOs 810082, 810228 and 810310, and recover any amount determined to be unallowable.

Recommendation 6 – SI Comment (See Appendix D)

We concur. We will determine, and document, the allowability of the questioned costs as indicated above. We have completed our initial review and at this time, believe these costs were allowable.

Target for completion: December 16, 2024

Recommendation 6 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Recommendation 7

Determine whether to modify existing directives that will authorize the COTR or Contracting Officer to allow the CMc and/or subcontractors to retain a certain amount of profit from credits on future projects using the CMc delivery method, depending on the size or complexity of the change.

Recommendation 7 – SI Comment (See Appendix D)

We concur. We will revisit existing directives regarding the application of credit profit(s) and update policies and procedures as required.

Target for completion: December 16, 2024

Recommendation 7 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Finding #4: The NASM Revitalization Project Team Approved PCOs that Contained Inappropriate Markups for Subcontractors' Equipment Rentals.

Condition

The NASM Revitalization Project team approved PCOs that contained markups for equipment rentals in excess of the amounts allowed by the contract. According to 52.243-S0044 Equitable Adjustments (a) (3) (see Appendix C for Criteria excerpt), subcontractors and the CMc may recover a 6 percent overhead and profit markup on equipment rental. However, several proposals submitted for PCOs approved by SI contained an overhead and profit markup in excess of that rate. Specifically, in 2 instances, subcontractors requested a markup ranging from 15 percent to 21 percent for equipment rentals. As shown in Table 3, the NASM Revitalization Project team approved a total of \$3,468 in markups for equipment rentals that exceeded the 6 percent rate.

Table 3. Summary of Questioned Costs Related to Inappropriate Markups of Equipment Rentals					
PCO	Proposal Reference	Markup in Excess of 6%	Additional First Tier Subcontractor Markup	CMc Markup	Total Questioned Costs
810113	RFI 554	\$1,819	\$45	\$131	\$1,995
810336	8007-035	1,376	0	97	1,473
	Total	\$3,195	\$45	\$228	\$3,468

Cause

The NASM Revitalization Project team erroneously interpreted the allowable markup for equipment rentals. According to team members, some of the questioned markups were related to subcontractor-owned equipment, and they claimed that the subcontractor may be allowed to collect a 21 percent markup on such equipment. However, this assertion is inconsistent with 52.243-S0044 Equitable Adjustments (Jun 2000) (a) (2) and (3) of the contract (see Appendix C for Criteria excerpts), which allows a 21 percent markup on labor and materials only.

Furthermore, the contract did not clearly address company-owned equipment. Incorporating language from Federal Acquisition Regulation (FAR) 31.105(d)(2)(i)(A) would have clarified the treatment of such equipment. This regulation states that "Actual cost data shall be used when such data can be determined for both ownership and operations costs for each piece of equipment, or groups of similar serial or series equipment, from the contractor's accounting records. When such costs cannot be so determined, the contracting agency may specify the use of a particular schedule of predetermined rates or any part thereof to determine ownership and operating costs of construction equipment."

Effect

As a result, SI paid the CMc and subcontractors \$3,468 in overhead and profit on equipment rentals that was in excess of the amount allowed by the contract.

Recommendations

We recommend that the Director, Office of Planning, Design, and Construction, and the Director, Office of Contracting & Personal Property Management:

Recommendation 8

Determine, and document, the allowability of the questioned costs of \$3,468 in unallowable overhead and profit markups related to equipment rentals, and recover any amount determined to be unallowable.

Recommendation 8 – SI Comment (See Appendix D)

We concur We will determine, and document, the allowability of the questioned costs as indicated above. We have completed our initial review and at this time, believe these costs were allowable.

Target for completion: December 16, 2024

Recommendation 8 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Recommendation 9

Communicate to the CMc and the NASM Revitalization Project team the contract requirements for markups on equipment rentals for future projects using the CMc delivery method.

Recommendation 9 – SI Comment (See Appendix D)

We concur. We will communicate the contract requirements for markups on equipment rentals.

Target for completion: December 16, 2024

Recommendation 9 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Recommendation 10

Consider incorporating FAR 31.105(d)(2)(i)(A) or similar language into construction and architect-engineer contracts to address company-owned equipment on future projects using the CMc delivery method.

Recommendation 10 – SI Comment (See Appendix D)

We concur. We will revisit adding FAR 31.105(d)(2)(i)(A) or similar language into construction policies and procedures to address company-owned equipment on future projects using the CMc delivery method as required.

Target for completion: December 16, 2024

Recommendation 10 – OIG Comment

We recognize SI's concurrence with the recommendation. SI's planned actions appear to be responsive to the recommendation. Therefore, the recommendation is considered resolved but open. The recommendation will be closed upon completion and verification of the proposed actions.

Sikich CPA LLC

September 26, 2024

APPENDIX A: SUMMARY OF FINDING #1 QUESTIONED COSTS

PCO Number	Proposal Reference	Issue	Direct Costs	Second Tier Subcontractor Markup (Overhead, Profit, and Bond)	First Tier Subcontractor Markup (Overhead, Profit, and Bond)	Contractor Markup (General Operating Costs, Bond General Liability, Builder's Risk and Profit)	Total Questioned Costs
810310	4R-1	Miscellaneous Materials	\$2,457	\$0	\$516	\$210	\$3,183
		Subtotal	\$2,457	\$0	\$516	\$210	\$3,183
810002	W281D-601.R3	Supervision and Coordination	\$2,462	\$0	\$517	\$210	\$3,189
810118	010331	Supervision and Coordination	10,738	2,255	1,299	1,007	15,299
810118	18-052-039	Supervision and Coordination	1,224	0	190	100	1,514
810189	CO # 7 Revised	Supervision and Coordination	3,700	0	574	301	4,575
810228	W281D-627	Supervision and Coordination	1,231	0	258	105	1,594
810228	8007-015 R3	Supervision and Coordination	6,922	0	1,621	602	9,145
810228	CO # 9	Supervision and Coordination	877	0	195	76	1,148
810283	8007.09.025	Supervision and Coordination	7,225	0	1,692	629	9,546
810284	8007-024 R3	Supervision and Coordination	1,608	0	386	141	2,135
810336	8007-035	Supervision and Coordination	1,415	0	331	123	1,869
810391	10900 E 212R3	Supervision and Coordination	11,696	0	2,598	1,007	15,301
810411	CO # 6-R1	Supervision and Coordination	2,118	0	0	149	2,267
810452	10900 E 263R1	Supervision and Coordination	4,157	0	923	358	5,438

PCO Number	Proposal Reference	Issue	Direct Costs	Second Tier Subcontractor Markup (Overhead, Profit, and Bond)	First Tier Subcontractor Markup (Overhead, Profit, and Bond)	Contractor Markup (General Operating Costs, Bond General Liability, Builder's Risk and Profit)	Total Questioned Costs
810622	8007-086	Supervision and Coordination	3,357	0	705	286	4,348
810650	W281D-697.1	Supervision and Coordination	2,574	0	578	222	3,374
810650	CO # 25	Supervision and Coordination	1,010	0	112	79	1,201
810735	W281D-737	Supervision and Coordination	2,833	0	636	244	3,713
810909	W281D-733.2	Supervision and Coordination	6,941	0	1,458	592	8,991
810909	CO # 41	Supervision and Coordination	6,877	0	1,527	592	8,996
810909	8007-149(A)	Supervision and Coordination	9,563	0	2,182	828	12,573
810909	CP # 65	Supervision and Coordination	3,971	615	333	347	5,266
810949	CP # 85	Supervision and Coordination	1,387	215	80	119	1,801
811110	8007-125	Supervision and Coordination	3,402	0	797	296	4,495
811110	CP # 52	Supervision and Coordination	1,331	237	78	116	1,762
811138	CO # 30	Supervision and Coordination	2,480	0	551	214	3,245
811138	P1.147	Supervision and Coordination	1,245	0	207	102	1,554
		Subtotal	<u>\$102,344</u>	<u>\$3,322</u>	<u>\$19,828</u>	<u>\$8,845</u>	<u>\$134,339</u>
		Total	<u>\$104,801</u>	<u>\$3,322</u>	<u>\$20,344</u>	<u>\$9,055</u>	<u>\$137,522</u>

APPENDIX B: SAMPLE CHANGE REQUEST FORM

Project Information									
Project Title						Project Number			
Construction Manager									
Section 1: Change Request									
Requestor Name:			Date of Request			Change Request Number (Issued by CM)			
Requestor Email:									
Item to be Changed						Priority			
						RFI/PCO/ASI#:			
Change Category: Unknown Condition / SI Program Req't / Design Deficiency / Client Request									
Description of Change									
Estimated Cost & Time									
Section 2: Change Evaluation									
Evaluated by:			Work Required:						
What is Affect:									
Impact to Budget, Schedule, Scope, Quality & Risk:									
Section 3: Change Resolution									
Accepted/Rejected	Approved by:			Signature			Date		
Comments									
Section 4: Change Tracking									
Completion Date	Completed By:			Signature:			Date		
My signature above indicates that the project documentation has ben updated to accuratley and comprehensiveley reflect the approved changes.									

APPENDIX C: CRITERIA

Finding	Source	Criterion	Description
1	F16SOL10024	52.243-S0044 Equitable Adjustments (Jun 2000) (a) (2)	The portion of the proposal [submitted for a PCO] relating to labor, whether by the CMc's forces or the forces of any of its Subcontractors, may include reasonably anticipated wages of Job Site labor, including foreman, who will be directly involved in the Change, plus payroll costs (including premium costs of overtime labor, if overtime is anticipated, Social Security, Federal or State Unemployment insurance taxes, workers compensation insurance, general liability insurance, and fringe benefits required by collective bargaining agreements entered in connection with such labor) and up to twenty-one percent (21%) of said anticipated wages and payroll costs, as overhead and profit on anticipated wages and payroll costs, for the CMc or any Subcontractor. Said overhead and profit to include all mobilization and supervision costs except foreman as applicable. Job Site labor for changes customarily is on site labor to include foreman. Project management or supervision cost, unless specified otherwise by Smithsonian project management, is considered to be included in the contractor's and each involved Subcontractor's overhead costs.
1, 4	F16SOL10024	52.243-S0044 Equitable Adjustments (Jun 2000) (a) (3)	The portion of the proposal [submitted for a PCO], with unit quantities and unit costs, relating to materials may include the reasonably anticipated costs, whether procured by the CMc or its Subcontractors, of materials to be purchased for the Change plus transportation and applicable sales or use taxes and up to twenty-one percent (21%) of the said direct material costs, but not applicable sales or use taxes, as overhead and profit for the CMc or any such Subcontractor, such overhead and profit to include all small tools and miscellaneous material expenses. The proposal may further include the CMc's and Subcontractor's reasonably anticipated rental costs in connection with the Change in the Work, plus up to six percent (6%) thereof as overhead and profit for the CMc or any such Subcontractor as applicable.
1	F16SOL10024	52.243-S0044 Equitable Adjustments (Jun 2000) (a) (9)	No overhead and profit will be paid by the S.I. on account of a Change in the Work except as specifically provided in this Construction Contract Clause. Overhead and Profit, as allowed under this Construction Contract shall be deemed to include all costs and expenses which the CMc or any of its Subcontractors may incur in the performance of a Change in the Work and which are not otherwise specifically recoverable by them pursuant to this Construction Contract Clause. Overhead, profit and CMc's or Subcontractor's commission percentages shall be considered to include, unless specified by S.I. project management; insurance except workers compensation and general liability, field and office supervisors, engineers and their assistants, watchman, use of small tools, incidental job burdens and general home office expenses, and no

Finding	Source	Criterion	Description
			separate allowance will be made therefore. The term "Assistants" includes all clerical, stenographic and general office help. Incidental job burdens include, but are not necessarily limited to, office equipment and supplies, temporary toilets, telephone and conformance to OSHA requirement. Items such as, but not necessarily limited to, review and coordination, estimating and expediting relative to contract changes are associated with field and office supervision and, are therefore, considered to be included in the CMc's or Subcontractor Overhead, Profit and/or Commission percentage.
3	F16SOL10024	52.243-S0044 Equitable Adjustments (Jun 2000) (a) (12)	If the Change in the Work will result in a decrease in the Contract Price, the COTR may request a quotation by the CMc of the amount of such decrease for use in preparing a Change Order. The CMc's quotation shall be forwarded to the COTR within (10) days of the COTR's request and, if acceptable to the C.O., shall be incorporated in the Change Order. If not acceptable, the parties shall make every reasonable effort to agree as to the amount of such decrease, which may be based on a properly itemized proposal [submitted for a PCO] as specified by this Construction Contract Clause, or on such other basis as the parties may mutually determine. If the parties are unable to agree, the amount of such decrease shall be the total of the estimated reduction in actual cost of the Work, as determined by the C.O.'s judgment, plus up to twenty-one percent (21%) thereof for Overhead and Profit.
1	SI Project Management Plan	Appendix D. Change Management Plan	The Federal Acquisition Regulation (FAR) requires that goods and services purchased with Federal funds be obtained at fair and reasonable prices. The Cost Engineer evaluates whether proposals [submitted for PCOs] are fair and reasonable by comparison with government estimates or by detailed, item-by-item evaluation, and makes recommendations to the CCB regarding issuance of modifications. All proposed changes above the amount of \$100k are required to be accompanied by an Independent Government Estimate (IGE). The IGE and contractor estimate will be compared for alignment within a 10% bracket. The review of the contractor estimate will focus on: format, scope of work, material quantities, labor quantities, unit prices, mathematical accuracy, mark-ups, and time extension requests.
2	SI Project Management Plan (PMP)	Purpose	Appropriate criteria will be specified herein to allow the progress of the project to be continually monitored and measured against the established criteria. By adhering to these guidelines, successful execution of the project's scope, schedule, and budget can be obtained. This PMP is a dynamic, living document that will be regularly updated as deemed necessary by the project core team. Significant changes to the plan will be addressed by an amended PMP.

Finding	Source	Criterion	Description
2	SI Project Management Plan	Appendix D. Change Management Plan	<p>Change Control Board: The Change Control Board (CCB) is the approval authority for all proposed change requests pertaining to the project in excess of \$50K and/or schedules impacts greater than 14 days. The purpose of the CCB is to review these change requests, determine their impacts on the project risk, scope, cost, and schedule, and to approve or deny each change request. Changes that are less than \$50k, which also have schedule impacts less than 14 days, will be adjudicated by the CM and reported to the CCB.</p>
2	SI Project Management Plan	Appendix D. Change Management Plan	<p>Change Control Process: Any project team member can submit a change request to the CM. When the need for a change to the approved baseline is identified, the change will be clearly defined using the Change Request Form (CRF). A sample CRF can be found in Appendix A. The requestor completes Section 1 of the CRF and submits it to the CM for review. The CM records the request in the Change Order Log and assigns a Proposed Change Number (PCN) which will be used to track the change in all subsequent documentation. PCNs will be stored on the Kahua Project Management Software file directory for tracing purposes. The CM will assign a project team member to complete Section 2 of the CRF, which details the work to complete the change and the impact of the change to the project and deliverables. The CM will determine if the request is viable, in consultation with the PM, DM and NASM, and decide whether the request merits consideration by the CCB.</p> <p>Once the impact of the change has been recorded, the CM forwards the CRF to the CCB Co-Chair to be included in the CCB meeting agenda. The CCB divides and addresses proposed changes based on one of two categories: mandatory changes and user requested changes.</p> <p>Mandatory changes are issues, such as unforeseen conditions or design corrections issued through RFIs/PCOs, that must be addressed in order for the project to progress, e.g., additional ACM. The initiator, or person whom identifies the change, will provide justification on the CRF and will provide it to the CM in a timely manner and prior to the performance of any associated work. The CM will coordinate the completion of the CRF prior to the CCB meeting and conduct any preliminary research required to inform the CCB, such as cost estimating, scope analysis, etc.</p> <p>User Request Changes are changes initiated by SI personnel in an effort to improve the efficiency or effectiveness of a project deliverable or to alter the final presentation of the deliverable in an effort to align with NASM's mission. The requestor will coordinate the change request with the CM and will compile the CRF in the same</p>

Finding	Source	Criterion	Description
			<p>manner as a mandatory change. The CM, PM, and DM will review the change request to establish validity, to verify the estimate cost and schedule impacts and identify the proper funding channel.</p> <p>The CCB will deliberate and decide what actions to take for the change, whether that be to hold the change for further review/information, approve the change, deny the change, or combine the change with another piece of work. Once the CCB decision is final, the PM will complete Section 3 of the CRF, notifying the CM of the intent to move forward. The CM will initiate the contract modification process. If the change is rejected by the CCB, the CM will update the Change Order Log and respond in writing to the requestor as to the findings of the CCB. All documentation affected by the approved changes will be updated by the CM Team and disseminated to the project team.</p> <p>In the case the CCB cannot come to an agreement on the final disposition of the change, the package will move forward to the Project Executive Committee for review. The Change Order Log will be updated to reflect the Project Executive Committee decision and the change will follow the remainder of the process outlined above.</p> <p>The CM will maintain the Change Order Log in coordination with the contractor. Once the work associated with the change is complete, the CM will fill in Section 4 of the CRF, file it appropriately, update the Change Order Log, and notify the CCB.</p>

APPENDIX D: MANAGEMENT'S RESPONSE

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**Smithsonian***Office of the Under Secretary for Finance and Administration***Memorandum**

TO: Nicole Angarella, Inspector General
Joan Mockeridge, Assistant Inspector General for Audits

FROM: Ronald S. Cortez, Under Secretary for Finance & Administration/CFO

CC: Derek Ross, Director, Office of Planning, Design & Construction
Thomas Dempsey, Director, Office of Contracting & Personal Property Management
Catherine Chatfield, Program Manager, Enterprise Risk Management and OIG Liaison

DATE: September 9, 2024

SUBJECT: OIG Formal Draft – Audit of Contract Modifications for the National Air and Space Museum (NASM)

Thank you for providing the Office of the Inspector General (OIG) formal draft audit report for the NASM Revitalization Project's Contract Modifications Process. We appreciate the attention to detail in this audit and understand the need to focus on NASM expenditures, given the level of funding allocated to this high-profile project.

Section 1: Response to Recommendations

We recommend that the Director, Office of Planning, Design, and Construction, and the Director, Office of Contracting & Personal Property Management:

1. For future projects using the CMc delivery method, strengthen the Proposed Change Order (PCO) review policies and procedures to ensure that the Cost Engineer Properly reviews the details included in subcontractor and CMc proposals submitted for PCOs so that they do not allow the reimbursement of costs that are covered by contractual markups. Additionally, the policies and procedures should be modified to ensure that the Cost Engineer documents the review of proposals.

We concur: We will modify and strengthen the PCO review policies and procedures to ensure no reimbursement of costs that are covered by contractual markups are included in the PCO and the review process is documented.

Target date for completion: December 16, 2024

2. Determine, and document, the allowability of the questioned costs of \$137,522 for direct costs that were also covered by contractual markups, and recover any amount determined to be

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unallowable.

We concur: We will determine, and document, the allowability of the questioned costs as indicated above. We have completed our initial review and at this time, believe these costs were allowable.

Target date for completion: December 16, 2024

3. Update the Change Management Plan for situations where the CCB's decisions or directives overrule current guidance.

We concur: While we don't believe increasing the threshold for change management created additional risk, we will update policies and procedures on how to document and complete change management plans as part of our continuous learning process.

Target date for completion: December 16, 2024

4. Document and complete CRFs as required by the Change Management Plan for future projects using the CMc delivery method.

We concur: We will update the Change Management Form to address this concern.

Target date for completion: December 16, 2024

5. For the questioned PCOs and future projects using the CMc delivery method, require the COTR to request the supporting documentation for proposed credits owed to SI that contains sufficient detail to determine whether the CMc and/or subcontractor applied overhead, and profit markup used for their proposed price.

We concur: We will modify and strengthen the PCO review policies and procedures to ensure proper supporting documentation with sufficient details show subcontractors' credits including overhead and profit markup.

Target date for completion: December 16, 2024

6. Determine, and document, the allowability of the questioned costs of \$7,915 (or less if the proposed price used a markup that was less than 21 percent) in overhead and profit markup costs from the CMc and/or subcontractors that were not included in the \$37,692 in credits from PCOs 810082, 810228 and 810310, and recover any amount determined to be unallowable.

We concur: We will determine, and document, the allowability of the questioned costs as

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indicated above. We have completed our initial review and at this time, believe these costs were allowable.

Target date for completion: December 16, 2024

7. Determine whether to modify existing directives that will authorize the COTR or Contracting Officer to allow the CMc and/or subcontractors to retain a certain amount of profit from credits on future projects using the CMc delivery method, depending on the size or complexity of the change.

We concur: We will revisit existing directives regarding the application of credit profit(s) and update policies and procedures as required.

Target date for completion: December 16, 2024

8. Determine, and document, the allowability of the questioned costs of \$3468 in unallowable overhead and profit markups related to equipment rentals, and recover any amount determined to be unallowable.

We concur: We will determine, and document, the allowability of the questioned costs as indicated above. We have completed our initial review and at this time, believe these costs were allowable.

Target date for completion: December 16, 2024

9. Communicate to the CMc and the NASM Revitalization Project team the contract requirements for markups on equipment rentals for future projects using the CMc delivery method.

We concur: We will communicate the contract requirements for markups on equipment rentals.

Target date for completion: December 16, 2024

10. Consider incorporating FAR 31.105(d)(2)(i)(A) or similar language into construction and architect-engineer contracts to address company-owned equipment on future projects using the CMc delivery method.

We concur: We will revisit adding FAR 31.105(d)(2)(i)(A) or similar language into construction policies and procedures to address company-owned equipment on future projects using the CMc delivery method as required.

Target date for completion: December 16, 2024



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Section 2: General Response to the Audit

We know that our programs will improve from these insights. We appreciate the significant level of effort expended on this audit as well as the dialog to clarify expectations.

With appreciation,

DocuSigned by:

44E76D74C8354CB

Ron Cortez