

APPENDIX H

OMAO Ship Construction/Purchases, Upgrades and Modifications

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- 1 **Purpose of Document.** The purpose of this document is to provide specify CWIP policies and procedures that apply to OMAO Ship Construction/Purchases, Upgrades and Modifications. This document supplements, rather than supplants, NOAA CWIP procedures found in the NOAA CWIP Policy and Procedures.
- 2 **Background of OMAO Ship Construction/Purchases, Upgrades and Modifications**
 - 2.1 FSVs. OMAO is in the process of constructing a series of major vessels and aircraft to support NOAA's scientific mission. The Fisheries Survey Vessel (FSV) Authorization Act of 2000 authorized six vessels to support fisheries research. The FSV primary mission is to conduct living marine resource research and oceanographic research operations in support of the NOAA ecosystem goal. Vessels in this series continue to be constructed. Additional marine vessel acquisitions are under consideration by the Department of Commerce, OMB and Congress.
 - 2.2 Construction Phases. The following outlines the multiple steps involved in bringing a vessel to a form suitable for its intended use.
 - 2.2.1 *Pre CWIP*
 - 2.2.1.1 Pre construction design and requirements definition
 - 2.2.2 *CWIP*. These steps may not occur in this order.
 - 2.2.2.1 Contracting. Contract design and detailed design.
 - 2.2.2.2 Construction. Building of the vessel by the contractor with oversight by OMAO.
 - 2.2.2.3 Trials. Display of ship and system functionality by contractor leading to preliminary acceptance by government.
 - 2.2.2.4 Delivery. Government takes preliminary acceptance of ship and commanding officer and commissioning crew takes responsibility for ship. Deficiencies are covered by warranty.
 - 2.2.2.5 Warranty. A 9 month period of protection against defects.
 - 2.2.2.6 Post Delivery Availability and Load Out. A 30 day dockside period for the contractor to address additional government requirements and for final installation of equipment.
 - 2.2.2.7 Shakedown. Initial operation of ship by crew focused on drills, maneuvering, and establishing a normal watch routine.
 - 2.2.2.8 Mission Trials. Formal demonstration of ship's mission capabilities. Demonstrates all mission systems.
 - 2.2.2.9 Trial Mission Projects. Execution of NOAA projects on a trial basis. Focus is on correcting safety and other deficiencies in vessel.
 - 2.2.2.10 Final Contract Trials. The final opportunity to discover and demonstrate warranty defects.
 - 2.2.2.11 Commissioning. Depending on availability of officials, the commissioning ceremony may occur any time from the completion of mission trials to after final contract trials. The vessel becomes PP&E and depreciation begins with commissioning.
 - 2.2.2.12 Post Shakedown Availability. Period to address new or revised government requirements and to make needed enhancements to improve

ship capability and efficiency after the initial design has been tested through missions.

3 Policy

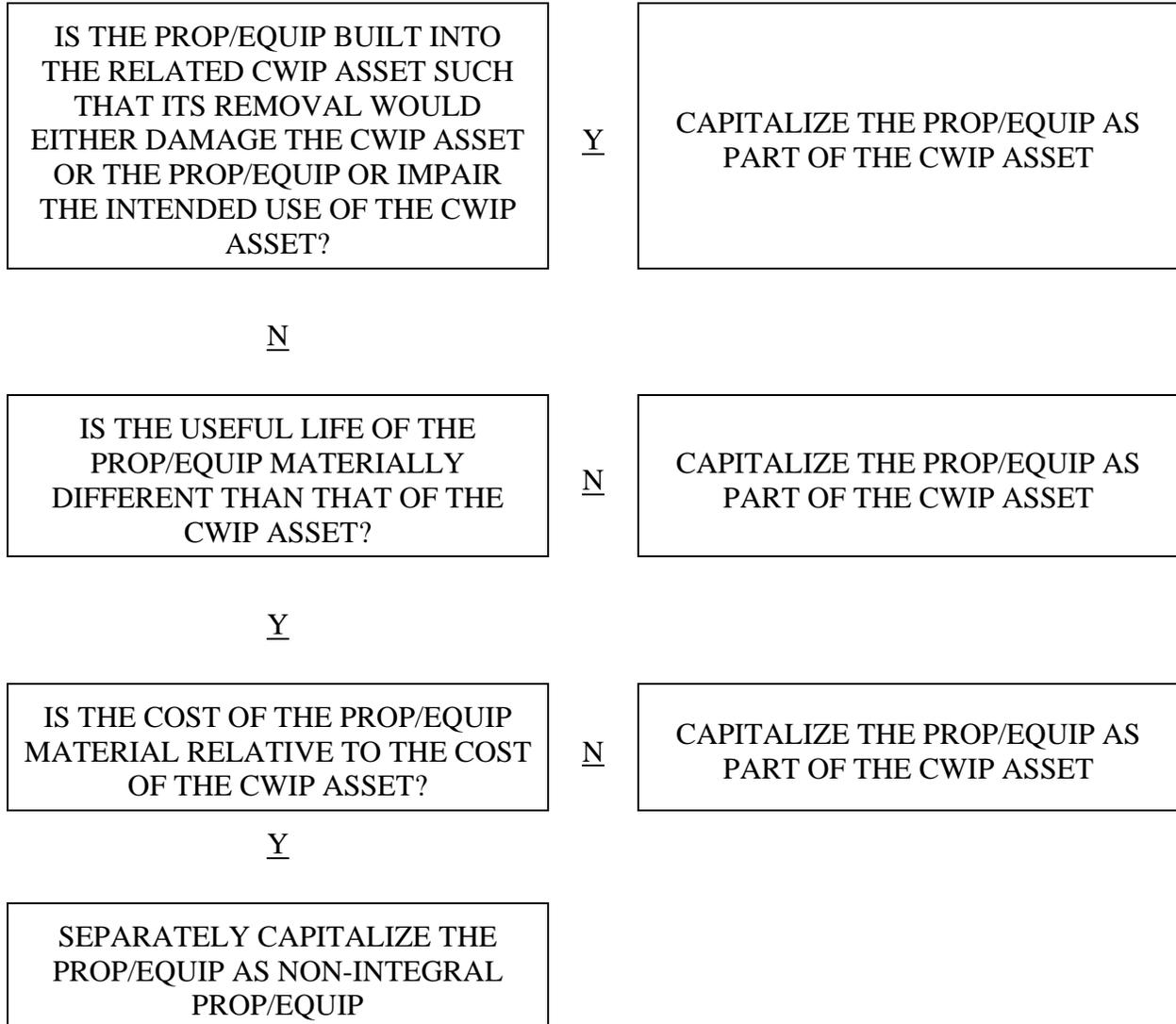
3.1 Vessels as PP&E. In general, all costs incurred after the concept development/feasibility stage that are required to bring a vessel to the required form and location of its intended use are considered part of the vessel's cost. This includes design costs and all other costs stated in SFFAS 6¹. NOAA vessels are large, complex structures composed of many pieces of equipment. The intended use of most OMAO vessels is scientific data gathering. Therefore for those vessels with a stated scientific mission, such as the series of FSVs described previously, the cost of the vessel will include costs incurred to bring the vessel to the form of its scientific mission. The cost of OMAO marine vessels which do not have a primary scientific mission, but have a more generic intended use, such as generic small boats that serve multiple uses, will include costs incurred to bring the vessel to the form of its more generic intended use.

3.1.1 *Integral Property and Equipment*. Property and equipment that supports the vessel's intended use is considered to be integral to the vessel and should be included in the cost of the vessel. Please refer to the decision tree diagram below to determine if property and equipment is integral to a CWIP asset.

¹ Statement of Federal Financial Accounting Standards 6: Accounting for Property, Plant and Equipment, Federal Accounting Standards Advisory Board, Original Pronouncements, Statements of Federal Financial Accounting Concepts and Standards, as of June 30, 2007, ¶ 26, p. 504.

**DECISION TREE FOR DETERMINING WHETHER AN ITEM OF
PROPERTY/EQUIPMENT IS INTEGRAL (AND SHOULD BE CAPITALIZED AS
PART OF THE CWIP ASSET) OR NON-INTEGRAL (AND SHOULD BE
SEPARATELY CAPITALIZED) TO THE RELATED CWIP ASSET**

START



- 3.1.1.1 *Materiality² Relative to Useful Life.* For the purposes of NOAA marine vessels an integral item of property or equipment will be identified for materiality consideration relative to the useful life of the vessel if the useful life of the property or equipment is **less than** 2/3 of the useful life of the vessel. (See Figure 1 for an example of the application of materiality.) For items identified during this process, OMAO will consult with the NOAA Finance Office to determine if the property and equipment will be considered material relative to useful life.
- 3.1.1.2 *Materiality Relative to Cost.* For the purposes of NOAA marine vessels an integral item of property or equipment will be identified for materiality consideration relative to the cost of the vessel if the value of the property or equipment is **greater than** 5% of the total CWIP cost of the vessel or \$1 million whichever is greater. For items identified during this process, OMAO will consult with the NOAA Finance Office to determine if the property and equipment will be considered material relative to cost.
- 3.1.1.3 *Documentation to Support Materiality.* Since current OMAO contracts for construction of new vessels do not require separate invoices for those items that may be determined to be material, a copy of the vendor's purchase order for the item will be deemed suitable documentation to support the materiality determination.
- 3.1.2 *Non-integral Items.* Equipment and other items that do not support the vessel's intended use or are not integral based on the above decision tree, will be treated according to their own nature. The cost of non-integral property or equipment is not included in the cost of the vessel. An example of a non-integral piece of equipment is a non-dedicated portable winch.
- 3.2 *Initial Outfitting List (IOL) and Spare Parts.* These items will be treated according to their own nature. Any individual item on the IOL or Spare Parts List which meets the accountable property or capitalized property definition, will be treated as a stand alone asset.
- 3.3 *Maintenance and Repair Versus Enhancement* (See Figure 2 for example.)
- 3.3.1 *Maintenance and Repair.* If an integral component of the vessel which was originally purchased with that vessel is replaced by a component that provides the vessel with similar functionality and does not extend the useful life of the vessel, the cost associated with that replacement will be treated as a maintenance and repair expense.
- 3.3.2 *Enhancement.* If an integral component of a vessel which was originally purchased with that vessel is replaced by an integral component that enhances the functionality of the vessel, that cost will be added to the value of the original PP&E and reflected in adjusted depreciation for the remainder useful life of the

² Kohler's Dictionary for Accountants (sixth edition) defines materiality as "The relative importance, when measured against a *standard of comparison*, of any item included in or omitted from *books of account* or *financial statements*, or of any procedure or change in procedure that conceivably might affect such statements. Certain items become material through law, administrative regulation, directors' resolution, or other fiat...."

PP&E. If the upgrade of the original component extends the useful life of the PP&E, the value of the improvement shall be added to the PP&E's remaining Net Book Value and depreciated over the new useful life of the PP&E.

4 **Planning Steps.** These planning steps supplement the process description in NOAA CWIP Procedures and cover those steps specific to OMAO. In addition to these steps, all the steps outlined in NOAA's CWIP POLICY & PROCEDURES will be followed.

4.1 Allotments. When OMAO Resource Management Division provides allotments to its Financial Management Centers – Headquarters, Commissioned Personnel Center, Marine Operations Center, and Aircraft Operations Center they will identify any project which has the potential to be a Construction Work-in-Progress.

4.2, Responsibility. The FMC will identify the manager who will be responsible for the project. That Project Manager will consider how the project is to be completed. If the project meets the four criteria for CWIP, the FMC will also name a CWIP Activity Manager. The CWIP Project Manager provides construction management support and required CWIP documentation to the CWIP Activity Manager. The CWIP Activity Manager collects, records, and verifies all costs associated with the CWIP project. The CWIP Project Manager and Activity Manager will follow the other steps outlined for them in NOAA CWIP Policy and Procedures.

4.3 Determination Memorandum. The CWIP Project Manager will prepare the CWIP Project Determination Memorandum. In preparing the Determination Memorandum the CWIP Project Manager will define the “intended use” of the vessel. In addition the Project Manager will think through the major components of the vessel and identify those item(s) which are non-integral as defined in Section 3. The Determination Memorandum will include a brief description of the vessel, a statement of its intended use, and a list of any items not on the IOL or Spare Parts List determined to be non-integral.

5 **Cost Matrix.** The following matrix identifies costs and the applicable accounting treatments (capitalize or expense). CWIP project codes are used to capture the cost of constructed capitalized items; non-CWIP project codes are used for the expensed items.

	<i>Type of Cost</i>	<i>Treatment</i>
1	Planning activities not resulting in final design	Expense
2	Personal property equipment constructed for prototypes or experimental research and development	Expense
3	Ordinary administrative supplies	Expense
4	Amounts paid to vendors ¹	Capitalize
5	Transportation charges to point of initial use ¹	Capitalize
6	Handling and storage costs ¹	Capitalize
7	Labor and other direct or incidental production costs ¹	Capitalize

	<i>Type of Cost</i>	<i>Treatment</i>
8	Engineering, architectural, and other outside services for designs, plans, specifications, and surveys ¹	Capitalize
9	Fixed equipment and related installation costs ¹	Capitalize
10	Direct costs of inspection, supervision, and administration of construction contracts and construction work ¹	Capitalize
11	Legal and recording fees and damage claims ¹	Capitalize
12	Fair value of facilities and equipment donated to the government ¹	Capitalize
13	Material amounts of interest costs paid ¹	Capitalize
14	Electronic systems built into a vessel which meet the definition of “integral”	Capitalize as part of vessel
15	Replacement of “integral” electronic system originally built into a vessel which maintains the functionality of the vessel	Expense as maintenance and repair cost
16	Replacement of “integral” electronic system originally built into a vessel which enhances the functionality of the vessel or which extends vessel useful life	Value of replacement added to value of vessel
17	Initial outfitting list ²	Expense or capitalize separately from the vessel (see footnote)
18	Spare parts ²	Expense or capitalize separately from the vessel
19	Property or equipment which is integral to the PP&E ³	Capitalize as part of the vessel
20	Property or equipment not an integral part of the PP&E ⁴	Expense or capitalize separately from the vessel (see footnote)

Notes:

¹ Costs incurred between preplanning, predesign and acceptance that are required to bring the PP&E to a form and location of its intended use. Concept studies will be expensed until a determination is made as to whether or not the study leads to further development within the project. Studies that become part of the project will be capitalized. Software developed by the project that is integral to the PP&E and is not considered to be “stand alone software” is part of the PP&E.

² Individual items will be treated based on their own nature. Any individual item which meets the accountable property or capitalized property definition will be treated as a stand alone asset. An item that qualifies as accountable, not capitalized, property would be expensed. An item that qualifies as capitalized property would be capitalized based on its useful life.

³ Illustrative examples of items which may qualify as integral are sonar systems and their associated parts, VSAT systems and their associated parts.

⁴ An item that qualifies as accountable, not capitalized, property would be expensed. An item that qualifies as capitalized property would be capitalized based on its useful life.

Figures

- 1 OMAO Constructed Vessel
- 2 Treatment of Maintenance and Repair Vs. Enhancement of Integral Component

Figure 1

OMAO CONSTRUCTED VESSEL	
Total Cost:	\$30,000,000
Acceptance Date:	10/1/2009
Useful Life in Years:	30
CWIP	
<u>Vessel</u>	
Cost	\$26,250,000
Acceptance Date:	10/1/2009
Useful Life in Years	30
Accounting Treatment:	Capitalized & depreciated over 30 yr. useful life
"NON INTEGRAL" EQUIPMENT	
<u>Launch</u>	
Cost	\$1,750,000
Acceptance Date:	10/1/2009
Useful Life in Years	15
Accounting Treatment:	To be discussed with Finance Office for potential capitalization separate from CWIP asset.
INITIAL OUTFITTING LIST & SPARE PARTS (No single item cost over \$200,000)	
Cost	\$2,000,000
Acceptance Date:	NA
Useful Life in Years	NA
Accounting Treatment:	Expensed

Figure 2

TREATMENT OF MAINTENANCE AND REPAIR VS. ENHANCEMENT OF INTEGRAL COMPONENT

	Cost	Orig. Useful Life	Salvage Value		
Vessel	\$50,000,000	30	0		
Integral Component Replacement in year 11	\$800,000				
Expense each year:	Years 1-10	Year 11	Years 12-30	Years 31-35	Total
Example 1: Replacing integral component, maintaining similar function of vessel with same useful life					
Vessel depreciation expense	\$1,666,667	\$1,666,667	\$1,666,667		\$50,000,000
Maintenance & repair expense		\$800,000			\$800,000
<i>Total Cost</i>	\$1,666,667	\$2,466,667	\$1,666,667	\$0	\$50,800,000
Example 2: Replacing integral component, enhancing function of vessel with same useful life.					
Vessel depreciation expense	\$1,666,667	\$1,706,667	\$1,706,667		\$50,800,000
Maintenance & repair expense		\$0			\$0
<i>Total Cost</i>	\$1,666,667	\$1,706,667	\$1,706,667	\$0	\$50,800,000
Example 3: Replacing integral component, enhancing function of vessel and extending useful life by 5 years.					
Vessel depreciation expense	\$1,666,667	\$1,365,333	\$1,365,333	\$1,365,333	\$50,800,000
Maintenance & repair expense		\$0			\$0
<i>Total Cost</i>	\$1,666,667	\$1,365,333	\$1,365,333	\$1,365,333	\$50,800,000