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Department of Defense  
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

# **Modernized Selected Acquisition Report (MSAR)**

## **T-AO 205 John Lewis Class Fleet Replenishment Oiler (T-AO 205 Class)**

FY 2025 President's Budget

Effective: December 31, 2023

Defense Acquisition Visibility Environment

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**(U) Common DoD Abbreviations**

\$B	Billions of Dollars
\$K	Thousands of Dollars
\$M	Millions of Dollars
ACAT	Acquisition Category
Acq O&M	Acquisition-Related Operations and Maintenance
ADM	Acquisition Decision Memorandum
APA	Additional Performance Attribute
APB	Acquisition Program Baseline
APPN	Appropriation
APUC	Average Procurement Unit Cost
BA	Budget Authority or Budget Activity
Blk	Block
BY	Base Year
CAE	Component Acquisition Executive
CAPE	Cost Assessment and Program Evaluation
CARD	Cost Analysis Requirements Description
CCE	Component Cost Estimate
CCP	Component Cost Position
CDD	Capability Development Document
CLIN	Contract Line Item Number
CPD	Capability Production Document
CY	Calendar Year or Constant Year
DAB	Defense Acquisition Board
DAE	Defense Acquisition Executive
DAES	Defense Acquisition Executive Summary
DAVE	Defense Acquisition Visibility Environment
DoD	Department of Defense
DSN	Defense Switched Network
EMD	Engineering and Manufacturing Development
EVM	Earned Value Management
FD	Full Deployment
FDD	Full-Deployment Decision
FMS	Foreign Military Sales
FOC	Full Operational Capability
FRP	Full-Rate Production
FY	Fiscal Year
FYDP	Future Years Defense Program
ICD	Initial Capabilities Document
ICE	Independent Cost Estimate
Inc	Increment
IOC	Initial Operational Capability
IT	Information Technology
JROC	Joint Requirements Oversight Council
KPP	Key Performance Parameter
KSA	Key System Attribute

LRIP	Low-Rate Initial Production
MDA	Milestone Decision Authority
MDAP	Major Defense Acquisition Program
MILCON	Military Construction
N/A	Not Applicable
O	Objective
O&M	Operations and Maintenance
O&S	Operating and Support
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense
PAUC	Program Acquisition Unit Cost
PB	President's Budget
PE	Program Element
PEO	Program Executive Officer
PM	Program Manager
POE	Program Office Estimate
R&MF	Revolving and Management Funds
RDT&E	Research, Development, Test, and Evaluation
SAR	Selected Acquisition Report
SCP	Service Cost Position
T	Threshold
TBD	To Be Determined
TY	Then Year
U.S.	United States
U.S.C	United States Code
UCR	Unit Cost Reporting
USD(A&S)	Under Secretary of Defense (Acquisition and Sustainment)

**(U) Program Description****Full Name**

T-AO 205 John Lewis Class Fleet  
Replenishment Oiler

**PNO**

452

**Lead Component**

Department of the Navy

**Joint Program**

No

**Adaptive Acquisition Pathway**

Major Capability Acquisition

**Acquisition Category**

IB

**Acquisition Status**

Active Acquisition

**Short Name**

T-AO 205 Class

**Milestone Decision Authority**

Component Acquisition Executive

**Program Executive Office**

PEO Ships

**Acquisition Type**

Major Defense Acquisition Program

**Acquired Systems**

T-AO 205 Class

**Mission**

The JOHN LEWIS (T-AO 205) Class Fleet Replenishment Oiler program will recapitalize the T-AO 187 Class for a total of 20 ships. The United States requires military forces that can operate for long periods of time around the globe. The Navy can provide sustained military presence and operations far from the Continental United States (CONUS) with little or no reliance on host governments for basing and logistics in the immediate vicinity of operations. Such operations rely primarily on the ships of the Navy's Combat Logistics Force (CLF) for the resupply of fuel, food, ammunition, repair parts, and other consumables during underway (at-sea) replenishment events. A critical supply item provided by the CLF, in both peace and war, is fuel to power the ships and aircraft of the Fleet. All of the Navy's CLF ships can provide fuel to Navy ships. However, the CLF's 15 T-AO 187 Class, because of their capacity and their numbers, are the backbone of the fuel delivery system. The existing CLF consists of 29 ships: two Fast Combat Support Ships (T-AOE 6 Class) built primarily to service aircraft carriers and their accompanying surface combatants; 12 Dry Cargo/Ammunition Ships (T-AKE 1 Class) built to replace the Navy's single product ammunition ships and dry cargo ships; and 15 T-AO 187 Class ships. The T-AO 187s represent about half of the number of CLF ships, but account for 75 percent of the CLF's at-sea refueling capacity.

**(U) Responsible Office****Program Executive Officer**

PEO Ships

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## (U) Executive Summary

### Program Highlights Since Last Report

#### Acquisition:

The Navy issued a Block Buy RFP for T-AO 214 -221 (Ships 10-17) to General Dynamics - NASSCO Division who submitted a proposal in response; negotiations are progressing.

#### Low Rate Initial Production:

- T-AO 206, the second of twenty T-AO 205 program inventory objective ships, delivered
- Start of T-AO 210 construction
- Aviation Dynamic Interface Testing: Defined permissible wind envelopes for various aircraft types
- Class Aviation Certification
- Total Ship Survivability Trial; major TEMP Live Fire Test & Evaluation event
- 9 of 23 Initial Operational Test & Evaluation (IOT&E) at-sea Mission Demonstrations while successfully executing fifteen Underway Replenishment at Sea (UNREP) operations in total

Defense Cost and Resource Center (DCARC) Cost and Software Data Reporting Compliance

Rating: GREEN: No open CSDR compliance issues.

There are no significant software-related issues with this program.

### (U) History of Significant Developments Since Program Inception

Date	Description
May 2024	T-AO 207, the third of the twenty T-AO 205 program inventory objective ships, delivered to the Navy.
October 2023	T-AO 208 was christened and launched on October 28, 2023.
August 2023	Keel laying for T-AO 208 was held on August 08, 2023.
August 2023	GD NASSCO submits Detailed Design and Construction (DD&C) cost proposal for T-AO 214 - T-AO 221 (ships 10-17 of the program).
July 2023	T-AO Program Total Ship Survivability trial was conducted / completed.
July 2023	T-AO 206, the second of the twenty T-AO 205 program inventory objective ships, delivered to the Navy.
May 2023	The Navy exercised a contract option with GD-NASSCO for T-AO 213 (9th ship in program).
April 2023	Start of T-AO 205 Initial Operational Test & Evaluation (IOT&E) at sea demonstrations.
March 2023	Start of construction for T-AO 210.
February 2023	The Navy issued a sole source RFP to GD-NASSCO for T-AO program ships 10-17.
January 2023	T-AO 207 was christened on January 21, 2023.
October 2022	Start of Integrated and Operational Post Delivery Test and Trials for T-AO 205 was approved at PEO Ships/COMOPTEVFOR Test Readiness Review on October 6, 2022. Start of construction for T-AO 209 commenced October 21, 2022. T-AO 207 launch occurred on October 28, 2022.
August 2022	FY 2022 Full Funding for the seventh and eighth ships, T-AO 211, and T-AO 212, was awarded on August 4, 2022.
July 2022	T-AO 205 delivered to the Navy on July 26, 2022.
June 2022	Per a Navy (Research, Development, and Acquisition) ASN (RD&A) ADM dated 21 June

Date	Description
	2022, increase the LRIP quantity from 8 to 12 ships.
January 2022	FY 2022 Long Lead Time Material Funding for the seventh and eighth ships, T-AO 211, and T-AO 212, was awarded on June 28, 2022.
November 2021	T-AO 206 launch occurred on November 6, 2021.
October 2021	GD NASSCO submitted cost proposal for the Detailed Design and Construction (DD&C) of T-AO 211 & T-AO 212.
May 2021	Start of construction for T-AO 208 commenced May 21, 2021.
January 2021	Start of construction for T-AO 207 commenced December 8, 2020.
December 2020	Start of construction for T-AO 207 commenced December 8, 2020.
March 2020	FY2020 Full Funding for the fifth ship, T-AO 209 and for the sixth ship, T-AO 210 was awarded on March 12, 2020. COVID-19 impacts began in March 2020, resulting in approximately 15% average reduction of workforce on-site and delays in ship construction.
February 2020	Keel laying for T-AO 206 was held on February 20, 2020.
February 2020	T-AO 205 program APB revision issued increasing inventory objective from 17 to 20 ships and setting new cost and performance baseline threshold/objective values.
December 2019	Start of construction for T-AO 206 commenced December 9, 2019.
December 2018	FY 2019 Full Funding for the third and fourth ships, T-AO 207 and T-AO 208, and FY 2019 AP for the fifth ship, T-AO 209, was awarded on December 27, 2018.
September 2018	Start of construction for T-AO 205 commenced September 19, 2018.
May 2018	Per a Navy (Research, Development, and Acquisition) ASN (RD&A) ADM dated May 16, 2018, add two ships to existing contract and increase the LRIP quantity from 6 to 8 ships.
March 2018	FY 2018 Full Funding for the second ship, T-AO 206 awarded on March 28, 2018.
February 2018	DoN FY19 30 Year Shipbuilding Plan submitted to Congress documenting long range Fleet force structure including increase of T-AO 205 program inventory objective from 17 to 20.
December 2017	FY 2018 AP for the third ship, T-AO 207 was awarded on December 5, 2017.
September 2017	The T-AO 205 Class combined Milestone B/C approval ADM was signed by ASN (RDA) on September 22, 2017.
June 2017	FY 2017 Advance Procurement (AP) for the second ship, T-AO 206 awarded on June 5, 2017.
June 2016	The Navy awarded a competitive, block buy contract for six ships to General Dynamics, National Steel and Shipbuilding Company (GD NASSCO) on June 30, 2016. The Lead Ship, T-AO 205 was awarded on June 30, 2016.
September 2015	Per a USD(AT&L) Memorandum dated September 11, 2015, the MDA for the T-AO 205 program will be the Assistant Secretary of the Navy (Research, Development, and Acquisition) ASN (RD&A).
July 2015	Per a USD(AT&L) Memorandum dated June 18, 2015, the Navy received approval to release the Request for Proposals and pursue a combined Milestone B/C.
June 2015	The CDD was approved and validated by the Chief of Naval Operations and Joint Requirements Oversight Council (JROC) on June 16, 2015
April 2013	An Acquisition Decision Memorandum was signed by USD (AT&L) on April 5, 2013, which approved T-AO 205 Program entry at Milestone B.
October 2012	On October 10, 2012, the Navy Gate 3 Review approved the T-AO 205 Class threshold capabilities.
May 2012	At the Navy Gate 2 Review, held May 2, 2012, the Navy approved development of a Capability Development Document (CDD) and recommended a class of 17 ships based on



Date	Description
	a new design T-AO 205 Class with capabilities similar to the T-AO 187 Class.

**(U) Schedule****(U) Schedule Events**

Events		APB Change 1 (Current) 2/5/2020 Objective / Threshold		Current Estimate 12/31/2023	Actual
Detail Design and Construction (DD&C) Award	Other	Jun 2016	Dec 2016	-	30 Jun 2016
Milestone B	MS B	Sept 2017	Mar 2018	-	22 Sept 2017
Milestone C	MS C	Sept 2017	Mar 2018	-	22 Sept 2017
Delivery - Hull 16-01*	Other	Jun 2021	Dec 2021	-	26 Jul 2022*
IOT&E Complete - Hull 16-01	Other	Jun 2022	Dec 2022	Jul 2024*	-
IOC - Complete Hull 16-1*	IOC	Aug 2022	Feb 2023	Dec 2024*	-
FOC Complete	Other	Jan 2040	Jul 2040	Jan 2040	-

\* Baseline Deviation

**Notes**

IOT&E - Initial Operational Test and Evaluation

IOC Definition: The program will reach Initial Operational Capability (IOC) after the completion of Lead Ship Post Shakedown Availability (PSA) and the completion of IOT&E.

**Schedule Baseline Deviation Explanation**

1. Delivery: In November 2021, a Program Deviation Memorandum was submitted to document the Lead Hull schedule breach, thus impacting IOT&E and IOC. The delay is due to the following impacts: 1) the July 2018 Graving Dock incident required reschedule of yard-wide production efforts, 2) late delivery of subcontractor outfitting, main engines, and other components, 3) first of class complexity issues, and 4) COVID-19 pandemic related impacts to workforce availability and productivity as well as vendor delivery schedules.
2. IOT&E Completion: Insufficient Fleet assets available to complete Test & Evaluation Master Plan (TEMP) required at sea operational Underway Replenishment at Sea (UNREP) / Vertical Replenishment (VERTREP) / Connected Replenishment (CONREP) demonstrations in original timeframe. The Operation Test Agency (OTA) and Director, Operational Test and Evaluation (DOT&E) have determined the remaining UNREP events are required for completion of IOT&E and are planned to be completed on T-AO 205 and/or T-AO 206. Jul 2024 estimate contingent on Fleet availability of needed ship types identified in the TEMP.
3. IOC: See deviation explanation No. 2.

**(U) Current Significant Schedule Risks and Risks Identified at Milestones/Decisions**

Event	Date	Description
Other	12/31/2023	If the adequacy NASSCO of production and labor workforce size and skill mix

		do not achieved recruiting and retention objectives, then the production workforce will remain the biggest risk to achieving the OTS millstones for the seven remaining undelivered ships under contract.
Other	12/31/2022	If NASSCO performance issues continue, then there will be yard wide risks to NASSCO's ability to meet schedule. Delays across the shipyard will have a cascading impact to T-AO schedules Driver: COVID-19 impact affecting U.S. job marketplace. Mitigation: Joint (NASSCO, T-AO/ESB) schedule working group to monitor yard wide schedule risks and evaluate if current plan is executable.

**(U) Performance****(U) Performance Attributes**

Training			KPP
Current Estimate 12/31/2023		Crew familiarization training on ship- specific systems and equipment to be provided by Contractor MSC will provide training based on CIVMAR) Competency Matrices. Training will occur at MSC- sponsored facilities and at other facilities to include Navy training sites, other Government agencies, maritime schools, and other commercial vendors.	
Demonstrated Performance -		Crew familiarization of ship specific systems and equipment completed by NASSCO prior to each ship delivery. In parallel, MSC completes training for each commissioning crew prior to their arrival at ship delivery.	
APB Change 1 (Current)  2/5/2020	Objective	Crew familiarization training on ship-specific systems and equipment to be provided by Contractor MSC will provide training based on CIVMAR) Competency Matrices. Training will occur at MSC-sponsored facilities and at other facilities to include Navy training sites, other Government agencies, maritime schools, and other commercial vendors.	
	Threshold	(T=O) Crew familiarization training on ship-specific systems and equipment to be provided by Contractor MSC will provide training based on CIVMAR) Competency Matrices. Training will occur at MSC-sponsored facilities and at other facilities to include Navy training sites, other Government agencies, maritime schools, and other commercial vendors.	
Energy			KPP
Current Estimate 12/31/2023		Unrefueled range of 6,000 Nautical Miles at 20 knots while consuming no more than 14,000 barrels of fuel	
Demonstrated Performance -		Endurance and Fuel Consumption CalculationsDI-095- 05, 571-342-7143.01 Rev B22 July 2022	
APB Change 1 (Current)  2/5/2020	Objective	Unrefueled range of 6,000 Nautical Miles at 20 knots while consuming no more than 14,000 barrels of fuel	
	Threshold	(T=O) Unrefueled range of 6,000 Nautical Miles at 20 knots while consuming no more than 14,000 barrels of fuel	
Survivability			KPP
Current Estimate 12/31/2023		Vulnerability: Built to commercial standards and meet OPNAVINST 9070.1. The ship will comply with ABS SVR Classification and USCG certification. Vessel will be double-hulled.	
Demonstrated Performance -		ABS and USCG issued Regulatory Body Certificates at delivery of the ship in July of 2022 including ABS Class and Certificate of Inspection General Arrangement DI-089, 571-341-7008 Rev P22 July 2022	
APB Change 1	Objective	Vulnerability: Built to commercial standards and meet	

(Current)  2/5/2020		OPNAVINST 9070.1. The ship will comply with ABS SVR Classification and USCG certification. Vessel will be double-hulled.
	Threshold	(T=O) Vulnerability: Built to commercial standards and meet OPNAVINST 9070.1. The ship will comply with ABS SVR Classification and USCG certification. Vessel will be double-hulled.
Net-Ready		KPP
Current Estimate 12/31/2023		Perform Logistics and Combat Services: 0.999 Supply Operational Forces: 0.999 Synchronize Supply of Fuel in Joint Operations Area: 0.999 Transmit/Receive Bandwidth between ship and external network: Unclassified (NIPR), Classified (SIPR), and Coalition Network 3.36 Mbps Situational Information; Movement Procedures: Moderate (1-10 sec.) Distribution Data; Transport Data Coordination Data; Delivery Information: Moderate (1-10 sec.)
Demonstrated Performance -		JTIC report intended to provide independent assessment of Net Ready KPP achievement delayed from July 2023 to 3QFY24 with the expectation that the report will certify attainment of a conditional net ready capability. Completion of coalition network net ready testing planned for FY24 should enable unconditional net ready certification.
APB Change 1 (Current)  2/5/2020	Objective	Perform Logistics and Combat Services: 0.999 Supply Operational Forces: 0.999 Synchronize Supply of Fuel in Joint Operations Area: 0.999 Transmit/Receive Bandwidth between ship and external network: Unclassified (NIPR), Classified (SIPR), and Coalition Network 3.36 Mbps Situational Information; Movement Procedures: Moderate (1-10 sec.) Distribution Data; Transport Data; Coordination Data; Delivery Information: Moderate (1-10 sec.)
	Threshold	Perform Logistics and Combat Services: 0.99 Supply Operational Forces: 0.99 Synchronize Supply of Fuel in Joint Operations Area: 0.99 Transmit/Receive Bandwidth between ship and external network: Unclassified (NIPR), Classified (SIPR), and Coalition Network 0.889 Mbps Situational Information; Movement Procedures: Slow (10 sec. to 10 min.) Distribution Data; Transport Data; Coordination Data; Delivery Information: Up to 60 min. (10 min. to 60 min.)
Sustainment		KPP
Current Estimate 12/31/2023		Materiel Availability: 0.74 (Note: Equivalent to 270 Days RFT per year) Operational Availability: 0.95 (Note: Operational AOCF resulting in C4 CASREPS
Demonstrated Performance -		Reliability, Availability, and Maintainability Assessment Report DI-48-03, 571-631-8041 Rev H22 July 2022
APB Change 1 (Current)  2/5/2020	Objective	Materiel Availability: 0.74 (Note: Equivalent to 270 Days RFT per year) Operational Availability: 0.95 (Note: Operational AOCF resulting in C4 CASREPs
	Threshold	(T=O) Materiel Availability: 0.74 (Note: Equivalent to 270 Days RFT per year) Operational Availability: 0.95 (Note: Operational AOCF resulting in C4 CASREPs

Fueling at Sea			KPP
Current Estimate 12/31/2023		Cargo Fuel Capacity: 162,164 barrels	
Demonstrated Performance -		T&S Booklet DI- 093.1, 571-341-7012 Rev E22 July 2022	
APB Change 1 (Current)  2/5/2020	Objective	Cargo Fuel Capacity: 156,000 barrels	
	Threshold	(T=0) Cargo Fuel Capacity: 156,000 barrels	
Space, Weight, Power, and Cooling (SWaP-C)			KPP
Current Estimate 12/31/2023		Specific SWaP-C margins for future (non- contiguous) installations of self-defense systems to include: -CIWS or SeaRAM - ATTDs - ADC Weight: 68,000 lbs. Space: 500 sq. ft. - above deck space 500 sq. ft. - below deck space Power: 100kW Cooling: 40kW	
Demonstrated Performance -		General ArrangementDI-089, 571-341-7008 Rev PQWR22 July 2022	
APB Change 1 (Current)  2/5/2020	Objective	Specific SWaP-C margins for future (non-contiguous) installations of self-defense systems to include: -CIWS or SeaRAM -ATTDS -ADC Weight: 68,000 lbs. Space: 500 sq. ft. - above deck space 500 sq. ft. - below deck space Power: 100kW Cooling: 40kW	
	Threshold	(T=0) Specific SWaP-C margins for future (non-contiguous) installations of self-defense systems to include: -CIWS or SeaRAM -ATTDS -ADC Weight: 68,000 lbs. Space: 500 sq. ft. - above deck space 500 sq. ft. - below deck space Power: 100kW Cooling: 40kW	
Force Protection			KPP
Current Estimate 12/31/2023		Protect Personnel: Permanent crew- served weapon mounts and ready service lockers for use by on-watch EST Secure stowage for weapons and ammunitions when ship's force security teams and ESTs are not on watch PPE as routinely provided to MSC crews to include Force Protection and CBR PPE for a minimum of 125 personnel	
Demonstrated Performance -		General ArrangementDI-089, 571-341-7008 Rev P22 July 2022	
APB Change 1 (Current)  2/5/2020	Objective	Protect Personnel: Permanent crew-served weapon mounts and ready service lockers for use by on-watch EST Secure stowage for weapons and ammunitions when ship's force security teams and ESTs are not on watch PPE as routinely provided to MSC crews to include Force Protection and CBR PPE for a minimum of 125 personnel	
	Threshold	(T=0) Protect Personnel: Permanent crew-served weapon mounts and ready service lockers for use by on-watch EST Secure stowage for weapons and ammunitions when ship's force security teams and ESTs are not on watch PPE as routinely provided to MSC crews to include Force Protection and CBR PPE for a minimum of 125 personnel	

(U) Requirement Source:  
Sponsor(s): None

**1. Document Type Not Provided**

Notes: JROC reviewed and validated the CDD for the Fleet Replenishment Oiler on June 16, 2015.  
CNO approved updated CDD on February 14, 2017.

**Notes****Acronyms/Abbreviations**

ABS SVR -American Bureau of Shipping Steel Vessel Rules

AOCF - Operational Availability based on Critical Failures

ATTDS-ADC - Anti-Torpedo Torpedo Defense System - Acoustic Device Countermeasures

C4 CASREPs - Category 4 Casualty Reports See comment above at the Sustainment KPPCBR -

Chemical, Biological and Radiological

CIVMAR Civil Service Mariner

CIWS - Close-in Weapon System

EST - Expeditionary Security Team

kW - kilowatt

lbs. - pounds

Mbps - Megabits per second

MSC - Military Sealift Command

NIPR - Non-Classified Internet Protocol Router

O -Objective

OPNAVINST - Office of the Chief of Naval Operations Instruction

PPE - Personal Protective Equipment

RFT - Ready for Tasking

sec. - second(s)

SIPR - Secret Internet Protocol Router

sq. ft. - square feet

SWaP-C - Space, Weight, Power and Cooling

T - Threshold

**Performance Deviation Explanation**

None

## (U) Acquisition Budget Estimate

### (U) Total Acquisition Estimates and Quantities

Category (\$M) Base Year: 2016	APB Change 1 (Current) 2/5/2020 CY\$ obs Objective / Threshold		Current Estimate PB 2025 CY\$ obs / TY\$ obs	
RDT&E	67.6	74.4	65.3	65.6
Procurement	11,290.2	12,419.2	12,405.6	17,455.6
MILCON	0.0	0.0	-	-
O&M	0.0	0.0	-	-
R&MF	-	-	-	-
Total Acquisition	11,357.8	-	12,470.9	17,521.2
Program Acquisition Unit Cost	567.890	624.679	623.543	876.058
Average Procurement Unit Cost	564.510	620.961	620.278	872.780
Program End-Item Quantity				
Development	0		-	
Procurement	20		20	
O&M-Acquired	-		-	

### Budget Notes

- Then Year Budget estimates and appropriation requests supporting continued T-AO 205 program LRIP since the last SAR are increasing principally due to nationwide inflation / escalation. Then Year budget impacts due to the cascading impacts of NASSCO graving dock failure have largely been accounted in prior budget requests.
- Program inventory objective of twenty T-AO 205 program ships has remained unchanged since Feb 2020 APB submission which documented DoN force structure contained in Appendix 3 of FY19 30 Year Shipbuilding Plan submitted to Congress in February 2018.

### Quantity Notes

None

### Cost Baseline Deviation Explanation

None

### (U) Risk and Sensitivity Analysis

Current Procurement Estimate Risks (12/31/2023)



1	GD-NASSCO production labor workforce size and skill mix have not achieved recruiting / retention objectives. The adequacy of the NASSCO production labor workforce remains the greatest risk to achieving the Over Target Schedule (OTS) milestones and the cascading / compounding impacts of schedule delays would have on each ship's level of effort (LOE) labor cost performance on overall Base Year program cost.
Current Baseline Risks (2/5/2020)	
Current baseline estimate reflects schedule delays, procurement profile changes, revised labor rates and overhead assumptions, material based on fact finding and actuals, and impact of the NASSCO Graving Dock failure on yard-wide production schedules.	
Original Baseline Risks (9/15/2017)	
Target overhead cost assumed future commercial work, lack of future commercial work may result in an increase in cost..	

**(U) Unit Costs****(U) Current Estimate Compared with Current Baseline**

Category (CY\$M) Base Year: 2016	Current Baseline 02/05/2020	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	11,357.8	12,470.9	
Program Quantity	20	20	
PAUC	567.890	623.543	9.80%
Average Procurement Unit Cost			
Procurement Cost	11,290.2	12,405.6	
Procurement Quantity	20	20	
APUC	564.510	620.278	9.88%

**(U) Current Estimate Compared with Original Baseline**

Category (CY\$M) Base Year: 2016	Original Baseline 09/15/2017	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	8,543.5	12,470.9	
Program Quantity	17	20	
PAUC	502.559	623.543	24.07%
Average Procurement Unit Cost			
Procurement Cost	8,475.9	12,405.6	
Procurement Quantity	17	20	
APUC	498.582	620.278	24.41%

**(U) Cost Growth Details****Impacts of Schedule Changes on Unit Cost**

GD-NASSCO production labor workforce size and skill mix have not achieved recruiting / retention objectives. Based on the PB25 T-AO procurement profile, the adequacy of the NASSCO production labor workforce remains the greatest risk to achieving the OTS milestones and the cascading / compounding impacts of schedule delays would have on each ship's level of effort (LOE) labor cost performance on overall Base Year program cost. If T-AO procurement profiles are extended, then each ship under contract will likely experience increased overhead allocation which will negatively impact each ship's contract cost performance.

**Impacts of Performance Changes on Unit Cost**

Not Applicable

**Actions taken or Proposed to Control Future Cost Growth**

Using the contracting authorities granted within Section 128 of the FY23 National Defense Authorization Act, the Navy has solicited a cost proposal for the detail design and construction of up to eight additional John Lewis-class fleet replenishment oiler ships using Block Buy contracting techniques. The Navy has received GD NASSCO cost proposals for the eight ships and has assessed that the Congressionally granted authority will result in appreciable cost savings / avoidance as compared to "base with options" acquisition strategy. Additionally, the Navy has contractually implemented the FY 2022 Omnibus Appropriations Act \$20M affordability initiatives and has assessed that the capital improvements will also result in further cost savings / avoidance. The Navy/shipbuilder Cost Reduction Working Group established in 2022 continues to nominate program cost reduction initiatives for Navy Program Manager consideration.

**Status of Each Major Contract and Significant Factors Contributing to Cost and Schedule Variance; Projected Effects on Future Program Costs**

See Contracts section.

**Notes**

None

**(U) Life-Cycle Costs****(U) Operating and Support and Disposal Cost Estimates Compared with Baseline**

Category (\$M) Base Year: 2016	APB Change 1 (Current) 2/5/2020 CY\$ obs Objective / Threshold		Current Estimate CY\$ obs / TY\$ obs	
Total O&S	32,671.0	35,938.1	32,607.2	72,352.0
Total Disposal	-	-	74.4	-

**(U) Current Cost Estimate Sources****Operating and Support Cost**

Type: Required Operational Capabilities &amp; Projected Operational Environment, OCNO

Approved by: OCNO, January 16, 2020

**Disposal/Demilitarization Cost**

Type: Program Office Estimate

Approved by: NAVSEA 05C Cost Engineering &amp; Industrial Analysis Director, January 16, 2020

**Operating and Support Baseline Deviation Explanation**

None

**Cost Notes**

None

**(U) Operating and Support Variance with Prior Estimate**

No Data

**(U) Operating and Support Cost Element Structure Estimates by Acquired System**

(CY\$M) Base Year: 2016							
System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
T-AO 205 Class	7,000.0	7,600.0	7,552.0	271.2	360.0	9,824.0	32,607.2
Program	7,000.0	7,600.0	7,552.0	271.2	360.0	9,824.0	32,607.2

**(U) Annual Operating and Support Costs per Unit Compared with Antecedent System**

(CY\$M) Base Year: 2016
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System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
T-AO 205 Class	8.8	9.6	9.4	0.3	0.5	12.3	40.8
T-AO 187 Class (Antecedent)	9.0	11.0	6.0	1.0	1.0	11.0	39.0

### (U) Operating and Support Cost Estimate Assumptions

System	Quantity to Sustain	Unit Expected Service Life (Years)	Unit of Measure	Fiscal Years Operational
T-AO 205 Class	20	40.0	Ship	2022 - 2062
T-AO 187 Class (Antecedent)	0	-	-	No First FY - No Final FY

### Additional O&S Estimate Assumptions

#### Antecedent Estimate Assumptions

Antecedent System(s) O&S Costs: The Antecedent Systems are the T-AO 187 Class (specifically hulls T-AO 201-204) and T-AKE 1 Class as these are the most recent double-hulled auxiliary ships. The T-AO 201-204 and T-AKE 1-14 estimates were derived using the VAMOSC database and the MSC Indirect values. The years of data used for T-AO 201-204 was FY 1993 through FY 2015. The years of data used for T-AKE 1-14 was FY 2006 through FY 2015

End-Item Quantity to Sustain: 20

Unit Expected Service Life (average): 40 years

Quantity Unit of Measure (e.g., aircraft): Ship

First Operational Fiscal Year (typically IOC): 2022

Final Operational Fiscal Year: projected T-AO 226 Delivery date year + 40

Operating Tempo was assumed 55% of In Fleet Time (IFT) steaming underway and 45% of IFT steaming not underway, the average of the Dry Cargo/Ammunition Ship (T-AKE) Visibility and Management of Operating and Support Costs (VAMOSC) data and the T-AO 201-204 data.

#### O&S Annual Cost Calculation Memo

Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost:

Base Year Total O&S Cost \$32,671.2M = 20 ships x \$40.839M Average Annual Cost per ship x 40 year service life. Then Year Total O&S Cost \$72,352.0M = 20 ships x \$90.440M Average Annual Cost per ship x 40 year service life

## (U) Technologies and Systems Engineering

### (U) Current Significant Technical Risks and Risks Identified at Milestones/Decisions

Event	Date	Description
Other	4/1/2023	During range testing performed in 3Q FY 2023, T-AO 205 degaussing system performance did not meet contract performance objectives. PMS 325 has initiated non-recurring engineering design changes to modify the existing degaussing system design to improve performance and will implement the system design changes for forward fit on program ships without disrupting construction and will utilize the system design change technical package to enable backfit on ships already delivered.

**(U) Performing Activities and Contracts****(U) External Government Activities**

None

**(U) Contracts and Efforts**

Contract Title	Contract Number / Effort	Contractor	Phase
Detail Design & Construction of T-AO 205	N00024-16-C-2229/1	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 206	N00024-16-C-2229/2	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 207	N00024-16-C-2229/3	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 208	N00024-16-C-2229/4	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 209	N00024-16-C-2229/5	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 210	N00024-16-C-2229/6	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 211	N00024-16-C-2229/7	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 212	N00024-16-C-2229/8	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production
Detail Design & Construction of T-AO 213	N00024-16-C-2229/9	General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	Production

**(U) Contract and Effort Identification, Price, Quantity and Performance**

<b>Contract Number:</b>	N00024-16-C-2229/1	<b>Order Number:</b>	-
<b>Contract Title:</b>	Detail Design & Construction of T-AO 205	<b>Strategy:</b>	FAR 15: Negotiated Contracts
<b>CAGE:</b>	81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	<b>Contracting Office:</b>	Naval Sea Systems Command, Washington DC
<b>City, State/Province:</b>	San Diego, CA		

<b>Effort Number:</b>	-	<b>Supported Phase:</b>	Production
<b>Type:</b>	Fixed-Price Incentive (Firm Target)	<b>Award Date:</b>	June 30, 2016
<b>Latest Modification Date:</b>	-	<b>Definitization Date:</b>	June 30, 2016
<b>Latest Modification No.:</b>	-	<b>Work Start Date:</b>	September 19, 2018
<b>Technical Data Rights:</b>	Government Purpose License Rights		
<b>Notes:</b>	In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)		

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	1

**(U) Contract and Effort Identification, Price, Quantity and Performance**

<b>Contract Number:</b>	N00024-16-C-2229/2	<b>Order Number:</b>	-
<b>Contract Title:</b>	Detail Design & Construction of T-AO 206	<b>Strategy:</b>	FAR 15: Negotiated Contracts
<b>CAGE:</b>	81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	<b>Contracting Office:</b>	Naval Sea Systems Command, Washington DC
<b>City, State/Province:</b>	San Diego, CA		
<b>Effort Number:</b>	-	<b>Supported Phase:</b>	Production
<b>Type:</b>	Fixed-Price Incentive (Firm Target)	<b>Award Date:</b>	June 5, 2017
<b>Latest Modification Date:</b>	-	<b>Definitization Date:</b>	June 5, 2017
<b>Latest Modification No.:</b>	-	<b>Work Start Date:</b>	December 13, 2019
<b>Technical Data Rights:</b>	Government Purpose License Rights		
<b>Notes:</b>	In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)		

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	1

**(U) Contract and Effort Identification, Price, Quantity and Performance**

<b>Contract Number:</b>	N00024-16-C-2229/3	<b>Order Number:</b>	-
<b>Contract Title:</b>	Detail Design & Construction of T-AO 207	<b>Strategy:</b>	FAR 15: Negotiated Contracts
<b>CAGE:</b>	81220 - General Dynamics, National Steel and	<b>Contracting Office:</b>	Naval Sea Systems Command, Washington DC



Shipbuilding Company (GD NASSCO)

City, State/Province: San Diego, CA

Effort Number: - Supported Phase: Production  
 Type: Fixed-Price Incentive (Firm Target) Award Date: December 5, 2017  
 Latest Modification Date: - Definitization Date: December 5, 2017  
 Latest Modification No.: - Work Start Date: December 8, 2020  
 Technical Data Rights: Government Purpose License Rights

Notes: In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

(U) Contract and Effort Identification, Price, Quantity and Performance

Contract Number: N00024-16-C-2229/4 Order Number: -  
 Contract Title: Detail Design & Construction of T-AO 208 Strategy: FAR 15: Negotiated Contracts  
 CAGE: 81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO) Contracting Office: Naval Sea Systems Command, Washington DC  
 City, State/Province: San Diego, CA

Effort Number: - Supported Phase: Production  
 Type: Fixed-Price Incentive (Firm Target) Award Date: December 27, 2018  
 Latest Modification Date: - Definitization Date: December 27, 2018  
 Latest Modification No.: - Work Start Date: May 21, 2021  
 Technical Data Rights: Government Purpose License Rights

Notes: In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

(U) Contract and Effort Identification, Price, Quantity and Performance

<b>Contract Number:</b>	N00024-16-C-2229/5	<b>Order Number:</b>	-
<b>Contract Title:</b>	Detail Design & Construction of T-AO 209	<b>Strategy:</b>	FAR 15: Negotiated Contracts
<b>CAGE:</b>	81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	<b>Contracting Office:</b>	Naval Sea Systems Command, Washington DC
<b>City, State/Province:</b>	San Diego , CA		
<b>Effort Number:</b>	-	<b>Supported Phase:</b>	Production
<b>Type:</b>	Fixed-Price Incentive (Firm Target)	<b>Award Date:</b>	March 12, 2020
<b>Latest Modification Date:</b>	-	<b>Definitization Date:</b>	March 12, 2020
<b>Latest Modification No.:</b>	-	<b>Work Start Date:</b>	October 21, 2022
<b>Technical Data Rights:</b>	Government Purpose License Rights		
<b>Notes:</b>	In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)		

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

**(U) Contract and Effort Identification, Price, Quantity and Performance**

<b>Contract Number:</b>	N00024-16-C-2229/6	<b>Order Number:</b>	-
<b>Contract Title:</b>	Detail Design & Construction of T-AO 210	<b>Strategy:</b>	FAR 15: Negotiated Contracts
<b>CAGE:</b>	81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)	<b>Contracting Office:</b>	Naval Sea Systems Command, Washington DC
<b>City, State/Province:</b>	San Diego, CA		
<b>Effort Number:</b>	-	<b>Supported Phase:</b>	Production
<b>Type:</b>	Fixed-Price Incentive (Firm Target)	<b>Award Date:</b>	March 12, 2020
<b>Latest Modification Date:</b>	-	<b>Definitization Date:</b>	March 12, 2020
<b>Latest Modification No.:</b>	-	<b>Work Start Date:</b>	March 27, 2023
<b>Technical Data Rights:</b>	Government Purpose License Rights		
<b>Notes:</b>	In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)		

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

**(U) Contract and Effort Identification, Price, Quantity and Performance**

**Contract Number:** N00024-16-C-2229/7      **Order Number:** -  
**Contract Title:** Detail Design & Construction of T-AO 211      **Strategy:** FAR 15: Negotiated Contracts  
**CAGE:** 81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)      **Contracting Office:** Naval Sea Systems Command, Washington DC  
**City, State/Province:** San Diego, CA  
  
**Effort Number:** -      **Supported Phase:** Production  
**Type:** Fixed-Price Incentive (Firm Target)      **Award Date:** June 28, 2022  
**Latest Modification Date:** -      **Definitization Date:** June 28, 2022  
**Latest Modification No.:** -      **Work Start Date:** March 12, 2024  
**Technical Data Rights:** Government Purpose License Rights  
**Notes:** In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

**(U) Contract and Effort Identification, Price, Quantity and Performance**

**Contract Number:** N00024-16-C-2229/8      **Order Number:** -  
**Contract Title:** Detail Design & Construction of T-AO 212      **Strategy:** FAR 15: Negotiated Contracts  
**CAGE:** 81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)      **Contracting Office:** Naval Sea Systems Command, Washington DC  
**City, State/Province:** San Diego , CA  
  
**Effort Number:** -      **Supported Phase:** Production  
**Type:** Fixed-Price Incentive (Firm Target)      **Award Date:** June 28, 2022  
**Latest Modification Date:** -      **Definitization Date:** June 28, 2022  
**Latest Modification No.:** -      **Work Start Date:** -  
**Technical Data Rights:** Government Purpose License Rights

**Notes:** In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

**(U) Contract and Effort Identification, Price, Quantity and Performance**

**Contract Number:** N00024-16-C-2229/9      **Order Number:** -

**Contract Title:** Detail Design & Construction of T-AO 213      **Strategy:** FAR 15: Negotiated Contracts

**CAGE:** 81220 - General Dynamics, National Steel and Shipbuilding Company (GD NASSCO)      **Contracting Office:** Naval Sea Systems Command, Washington DC

**City, State/Province:** San Diego , CA

**Effort Number:** -      **Supported Phase:** Production

**Type:** Fixed-Price Incentive (Firm Target)      **Award Date:** May 1, 2023

**Latest Modification Date:** -      **Definitization Date:** May 19, 2023

**Latest Modification No.:** -      **Work Start Date:** -

**Technical Data Rights:** Government Purpose License Rights

**Notes:** In accordance with Section 830(a)(2) of the FY 2020 National Defense Authorization Act, which requires a SAR to be submitted "in unclassified form without any designation relating to dissemination control" this SAR section has omitted information that is Controlled Unclassified Information (CUI)

Initial Price (TY\$M) Target / Ceiling	Current Price (TY\$M) Target / Ceiling	Estimate at Completion (TY\$M) Contractor / PM	Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	1	1	-

**(U) Production****(U) Low-Rate Initial Production**

	Original LRIP Determination	Current LRIP Determination
Total LRIP Quantity	6	12
Date	9/22/2017	6/21/2022
Reference	ASN(RDA) Milestone B/C Acquisition Decision Memorandum	ASN(RDA) Acquisition Decision Memorandum
LRIP Period	FY 2016 - 2022	FY 2016 - 2027
Total Procurement Quantity	17	20
LRIP Percentage of Total	35.3%	60.0%

**Rationale if LRIP Quantity Exceeds 10% of Total Procurement Quantity (Current Determination)**

Construction times and cost efficient production rates of large Navy auxiliary ships coupled with the time required to complete IOT&E on the first delivered ships of the program, preclude an LRIP quantity of less than 10% of the total procurement quantity.

**LRIP Notes**

None

**(U) Deliveries and Expenditures****(U) Acquisition Funding**

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	22	8	36.4%
Appropriations (TY, \$M)	17,521.2	17,410.5	99.4%
Expenditures (TY, \$M)	17,521.2	3,858.9	22.0%

**(U) End Items Delivered**

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Procurement	20			
T-AO 205 Class		2	2	
<b>Total</b>	<b>20</b>	<b>2</b>	<b>2</b>	<b>10.0%</b>

**Notes**

Effective date of measure of completion status: 31 December 2023

## (U) International Program Aspects

### General Memo

The U.S. Navy does not envision nor is it aware of any T-AO Program Foreign Military Sales (FMS), Direct Commercial Sales (DCS) or International Cooperative Program (ICP) procurement prospects for the T-AO 205 program.

### Exportability and Business Issues

If coalition or allied governments expressed interest in either FMS, DCS or ICP procurement of T-AO 205 class ships, the U.S. Navy would welcome any of these prospects as they could have the following potential benefits to the U.S. Navy and the U.S. industrial base:

- Overhead absorption at GD-NASSCO which could lead to lower costs to U.S. Navy shipbuilding programs performed at GD-NASSCO
- Increased procurements of American made ship systems, equipment and components for FMS/DCS T-AO 205 ships
- Increased interoperability of coalition or allied navies who procured T-AO 205 ships by using common at sea logistics support platform replenishment systems and communications systems.

Is design for international exportability planned?	No	Industry/Partner Exportability Cost-Sharing?	No
If not, has the MDA approved an exportability waiver for a U.S.-only design?	Not Applicable		

### Program Protection: Technology Security and Foreign Disclosure Issues

The T-AO 205 program has not conducted a study of impacts on Supply Chain Assurance, Information Assurance, Anti-Tamper, Analysis of Critical Program Information in the context of Exportability. However, due to the explicit adoption of commercial design and production practices in the T-AO 205 program acquisition strategy performed in program execution, the program does not envision intractable technology security or foreign disclosure issues to exist that would prevent FMS/DCS opportunities.

### (U) Agreements

No International Agreements have been defined for T-AO 205 Class



UNCLASSIFIED

## **Modernized Selected Acquisition Report Supplement**

### **T-AO 205 John Lewis Class Fleet Replenishment Oiler (T-AO 205 Class)**

FY 2025 President's Budget  
As of: December 31, 2023

UNCLASSIFIED



## **MSAR Supplement Sections**

Program Description

Program Use of the Adaptive Acquisition Framework

Technologies and Systems Engineering

Funding Sources (Acquisition)

Funding Sources (Operating and Support)

Acquisition Estimate and Quantity Summary

Annual Acquisition Estimates by Appropriation Account

Acquired System Annual End-Item Quantities by Appropriation Account

Nuclear Costs

Operational Fielding Plan

O&S Independent Cost Estimate

Annual Operating and Support Estimates by Cost Element

## Program Description

**Full Name**

T-AO 205 John Lewis Class Fleet Replenishment Oiler

**Short Name**

T-AO 205 Class

**PNO**

452

**Lead Component**

Navy

**AAF Pathway**

MCA

**Acquisition Type**

MDAP

**Acquired Systems**

T-AO 205 Class

**Related Programs**

Full Name	PNO	Pathway	Type	ACAT/ BCAT	Acquisition Status	Costs in SAR?	
						Acq	O&S

## **Program Use of the Adaptive Acquisition Framework**

This acquisition is accomplished by a single program in the Major Capability Acquisition Pathway.

## Technologies and Systems Engineering

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

#### Major Software Efforts

Title	Status	Fielding Date	Description

#### Major Engineering Changes

Title	Original Need Date	Fielding Date	Description, Rationale and Program Impacts

## Funding Sources (Acquisition)

### Acquisition Funding Notes

None

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	1319N	XX	OTHER - Other or New 1319N Line Item	XXX	XXX - --		x
Note: BA 04 BLI 0408042N PE 0408042N RDT&E Project 0900 Future Combat Logistics Force Development Notes: FY 2011 & FY 2012 National Defense Sealift Fund (NDSF) R&D Project 3417							
RDT&E	1319N	XX	OTHER - Other or New 1319N Line Item	XXX	XXX - --		x
Note: BA 04 BLI 0603564N PE 0603564N RDT&E Project 3375 Ship Prel Design & Feasibility Studies Notes: FY 2014 Congressional Transfer from NDSF R&D to RDT&E							
RDT&E	1319N	05	0605327N - T-AO 205 Class	0605327N	3375 - T-AO 205 Class Development		
Note: FY24 is last year of RDT&E funding. No additional RDT&E funding expected beginning in FY25							
Procurement	1611N	05	5025 - TAO Fleet Oiler	0204441N	-		
Procurement	1611N	05	5110 - Outfitting	0204441N	-	x	
Procurement	1611N	05	5300 - Completion of PY Shipbuilding Programs	0204441N	-	x	

## Funding Sources (Operating and Support)

*Note: Budget lines fund activities executed by the Program Office or Sustainment Office.*

### Operating and Support Funding Notes

The Military Sealift Command (MSC) maintains the T-AO Fleet Replenishment Oilers and provides the O&S funding. All O&S funding comes from MSC.

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
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## Acquisition Estimate and Quantity Summary

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

#### Acquisiton Estimates

Category	PB 2025	TY (\$M)	Current Base Year	Original Base Year	Report Fiscal Year
			CY2016 (\$M)	CY2016 (\$M)	CY2024 (\$M)
RDT&E		65.6	65.3	65.3	82.9
Procurement		17,455.6	12,405.5	12,405.5	15,743.1
MILCON		-	-	-	-
O&M		-	-	-	-
Total Acquisition		17,521.1	12,470.9	12,470.9	15,826.0
PAUC		876.057	623.543	623.543	791.298
APUC		872.780	620.277	620.277	787.153

#### Acquisiton End-Item Quantities

System	PB 2025	Development	Procurement
T-AO 205 Class		-	20
<b>Total</b>		-	<b>20</b>

#### Unit Description

T-AO 205 Oiler Class Ships

#### Current and Future Years Defense Program Summary, TY(\$M)

Appropriation	Prior	2024	2025	2026	2027	2028	2029	To Complete	Total
RDT&E	65.5	0.1	-	-	-	-	-	-	65.6
Procurement	6,116.1	967.6	261.2	1,742.3	922.5	1,763.6	990.2	4,692.2	17,455.6
MILCON	-	-	-	-	-	-	-	-	-
O&M	-	-	-	-	-	-	-	-	-
<b>PB 2025 Total</b>	<b>6,181.6</b>	<b>967.7</b>	<b>261.2</b>	<b>1,742.3</b>	<b>922.5</b>	<b>1,763.6</b>	<b>990.2</b>	<b>4,692.2</b>	<b>17,521.1</b>

**T-AO 205 John Lewis Class Fleet Replenishment Oiler**

Source for TY\$-CY\$ Conversion: ASN FMB-6 Inflation Rates and Outlay Factors for DA, DoN and DW accounts: 17 Jan 2024

<b>1319N - Research, Development, Test &amp; Eval, Navy</b>					
<b>fiscal year</b>		<b>Other/ Unallocated</b>	<b>Total TY(\$M)</b>	<b>Weighted Rate</b>	<b>Total CY2016 (\$M)</b>
<b>Total</b>		<b>65.6</b>	<b>65.6</b>	<b>-</b>	<b>65.3</b>
2011		4.500	4.5	0.949929	4.7
2012		12.600	12.6	0.965683	13.0
2013		24.640	24.6	0.975823	25.3
2014		10.470	10.5	0.989612	10.6
2015		0.870	0.9	1.002063	0.9
2016		-	-	1.020662	-
2017		1.020	1.0	1.039759	1.0
2018		1.900	1.9	1.065227	1.8
2019		1.250	1.3	1.085743	1.2
2020		1.680	1.7	1.125670	1.5
2021		2.050	2.1	1.176262	1.7
2022		4.290	4.3	1.237713	3.5
2023		0.210	0.2	1.274560	0.2
2024		0.070	0.1	1.303656	0.1



**T-AO 205 John Lewis Class Fleet Replenishment Oiler**

Source for TY\$-CY\$ Conversion:

ASN FMB-6 Inflation Rates and Outlay Factors for DA, DoN and DW accounts: 17 Jan 2024

<b>1611N (BLS Hist) - Shipbuilding and Conversion, Navy</b>									
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non- Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2016 (\$M)
<b>Total</b>	<b>17,339.5</b>	<b>-</b>	<b>116.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17,455.6</b>	<b>-</b>	<b>12,405.5</b>
2011	-		-				-	0.957477	-
2012	-		-				-	0.979442	-
2013	-		-				-	0.999927	-
2014	-		-				-	1.020175	-
2015	-		-				-	1.043687	-
2016	592.090		102.100				694.2	1.070377	648.5
2017	73.079						73.1	1.101081	66.4
2018	539.800						539.8	1.136948	474.8
2019	1,057.860		14.000				1,071.9	1.179252	908.9
2020	996.820						996.8	1.227845	811.8
2021	109.710						109.7	1.277488	85.9
2022	1,570.110						1,570.1	1.322096	1,187.6
2023	1,060.530						1,060.5	1.353206	783.7
2024	967.640						967.6	1.382236	700.1
2025	261.200						261.2	1.411315	185.1
2026	1,742.250						1,742.3	1.440952	1,209.1
2027	922.450						922.5	1.471212	627.0
2028	1,763.560						1,763.6	1.502108	1,174.1
2029	990.240						990.2	1.533652	645.7
2030	1,127.730						1,127.7	1.565859	720.2
2031	1,128.790						1,128.8	1.598742	706.0
2032	1,108.030						1,108.0	1.632315	678.8
2033	1,158.440						1,158.4	1.666594	695.1
2034	43.900						43.9	1.701592	25.8
2035	43.600						43.6	1.737326	25.1
2036	66.620						66.6	1.773810	37.6
2037	15.050						15.1	1.811060	8.3

## Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

1611N (OSD Compt) - Shipbuilding and Conversion, Navy				
fiscal year	T-AO 205 Class			Total
<b>Total</b>	<b>20</b>			<b>20</b>
Undistributed				-
2016	1			1
2017	-			-
2018	1			1
2019	2			2
2020	2			2
2021	-			-
2022	2			2
2023	1			1
2024	1			1
2025	-			-
2026	2			2
2027	1			1
2028	2			2
2029	1			1
2030	1			1
2031	1			1
2032	1			1
2033	1			1

## **Nuclear Costs**

### **T-AO 205 John Lewis Class Fleet Replenishment Oiler**

#### **Program's Use of Department of Energy Resources**

None

## Operational Fielding Plan

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

#### System: T-AO 205 Class

#### Fielding and Inventory Notes

First of Class, T-AO 205, delivered July 2022; Second of Class, T-AO 206, delivered July 2023.

#### T-AO 205 Class Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					2
2024		1			3
2025		1			4
2026		2			6
2027		1			7
2028		3			10
2029		-			10

## O&S Independent Cost Estimate

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

#### Independent and Current Cost Estimate Comparison

Category	CY2016 (\$M)	Independent Cost Estimate	Current Estimate 1/16/2020	Variance with ICE (%)
Unit-Level Manpower			7,000.0	-
Unit Operations			7,600.0	-
Maintenance			7,552.0	-
Sustaining Support			271.2	-
Continued System Improvements			360.0	-
Other			9,824.0	-
<b>Total O&amp;S</b>		-	<b>32,607.2</b>	-

#### Independent Cost Estimate Source

Event:

Type:

Approved by:

#### Current Cost Estimate Source

Type: Component Cost Estimate

Approved by: Required Operational Capabilities & Projected Operational Environment, OCNO,  
January 16, 2020

Note: No Annual O&S Estimates or conversion data is provided because these hulls are not operated or sustained by the PEO. These hulls are turned over to Military Sealift Command for operations and sustainment once they are delivered.

#### Cost Estimate Variance Explanation

None

## Annual Operating and Support Estimates by Cost Element

### T-AO 205 John Lewis Class Fleet Replenishment Oiler

#### System: T-AO 205 Class

Source for TY-CY Conversion:

Operating and Support Cost Elements							
fiscal year	1.0 Unit-Level Manpower	2.0 Unit Operations	3.0 Maintenance	4.0 Sustaining Support	5.0 Continuing System Improvements	Other	Total CY2016 (\$M)
Total	-	-	-	-	-	-	-