Modernized Selected Acquisition Report (MSAR)

Expeditionary Fast Transport (EPF)

FY 2025 President's Budget

Effective: December 31, 2023

Defense Acquisition Visibility Environment

Table of Contents

(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
Expeditionary Fast Transport

Short Name
EPF

PNO
247

Milestone Decision Authority
Component Acquisition Executive

Lead Component
Department of the Navy

Program Executive Office
PEO Ships

Joint Program
Yes

Supporting Components
Department of the Army

Adaptive Acquisition Pathway
Major Capability Acquisition

Acquisition Type
Major Defense Acquisition Program

Acquisition Category
IB

Acquired Systems
EPF

Acquisition Status
Active Acquisition

Mission
The Expeditionary Fast Transport (EPF), formerly known as the Joint High Speed Vessel (JHSV) is a shallow draft, commercial-based ship capable of intra-theater personnel and cargo lift providing combatant commanders high-speed sealift mobility with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Bridging the gap between low-speed sea lift and high-speed airlift, the EPF will transport personnel, equipment, and supplies over operational distances with access to littoral offload points including austere, minor and degraded ports in support of the Global War on Terrorism (GWOT)/ Theater Security Cooperation Program (TSCP), Intra-theater Operational/Littoral Maneuver and Sustainment; and Seabasing. The EPF will enable the rapid projection, agile maneuver, and sustainment of modular, tailored forces in response to a wide range of military and civilian contingencies such as Non-combatant Evacuation Operations, humanitarian assistance, and disaster relief.

(U) Responsible Office

Program Executive Officer
PEO Ships
RADM Thomas J. Anderson
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(U) Executive Summary

Program Highlights Since Last Report

The EPF program has successfully delivered 14 ships since program inception. The program currently has two ships (EPF 15 and 16) under construction and three Expeditionary Medical Ships (EMS 1-3) under contract.
EPF 14 delivered on 11 January 2024.
EPF 15 Start of Construction (SOC) began January 17, 2022, and keel laying completed March 16, 2023. EPF 15 projected delivery is May 2025.
The Detail Design and Construction (DD&C) option for EPF 16 was exercised on May 3, 2022 and SOC began September 18, 2023. EPF 16 projected delivery is April 2026.
EMS 1-3 DD&C Not To Exceed (NTE) priced contract awarded December 21, 2023. EMS 1-3 were congressionally added in FY 2022 (EMS 1) and FY 2023 (EMS 2-3).
APB is currently being revised to include requirements per the EMS CDD Annex.
Defense Cost and Resource Center Cost and Software Data Reporting Compliance Rating: Green.
There are no significant software-related issues with this program at this time.

(U) History of Significant Developments Since Program Inception

Date	Description
January 2024	EPF 14 Delivered
December 2023	EMS 1-3 DD&C NTE Priced Contract Awarded
August 2023	EMS Top Level Requirements (TLR) Approved
February 2023	EPF 13 Delivered
August 2022	Autonomous Prototype Trials Complete
May 2022	EMS Design Study Undefintized Contracting Action (UCA) Awarded
March 2022	EPF Flight II CDD Annex Endorsed
February 2022	Autonomous Capability Final Critical Design Review (FCDR)
November 2021	Autonomous Capability Initial Critical Design Review (ICDR)
February 2021	EPF reclassified from ACAT II to ACAT IB by ASN (RD&A)
February 2021	Acquisition Strategy (AS) Update signed by ASN (RD&A)
February 2021	Program Streamlined Acquisition Plan (PSTRAP) signed by Deputy ASN Procurement (RD&A)
September 2020	EPF 12 delivered
February 2020	EPF Flight II Top Level Requirements (TLR) approved
December 2019	EPF 11 delivered
March 2019	ADM to approve acquisition of EPF 13 and 14 by PEO Ships
November 2018	EPF 10 delivered
December 2017	EPF 9 delivered
April 2017	EPF 8 delivered
June 2016	EPF 7 delivered

Date	Description
January 2016	EPF 6 delivered
April 2015	EPF 5 delivered
September 2014	EPF 4 delivered
March 2014	EPF 3 delivered
November 2013	Initial Operational Capability (IOC) achieved
August 2013	Initial Operational Test and Evaluation (IOT&E) Complete
June 2013	EPF 2 delivered
April 2013	Program reclassified from an ACAT IC to an ACAT II
December 2012	EPF 1 delivered
December 2009	Acquisition Decision Memorandum (ADM) to begin Construction on lead ship
December 2009	Acquisition Strategy (AS) approved
December 2009	Start of Construction (SOC) lead ship
November 2009	Contract Award (EPF 1 - 10)
October 2009	Production Readiness Review
May 2009	Initial Critical Design Review (ICDR)
October 2008	DAB MS B

(U) Schedule

(U) Schedule Events

Events		Development APB (Milestone) 2/11/2009 Objective	Development APB (Current) 2/11/2009 Objective / Threshold		Current Estimate 12/31/2023	Actual
DAB MS B	MS B	Oct 2008	Oct 2008	Apr 2009	-	31 Oct 2008
Follow Ship 0901N Delivery	Other	Jan 2013	Jan 2013	Jan 2014	-	6 Jun 2013
Contract Award	Other	Nov 2008	Nov 2008	May 2009	-	13 Nov 2008
Initial Critical Design Review	Other	May 2009	May 2009	Nov 2009	-	30 Oct 2009
Production Readiness Review	Other	Nov 2009	Nov 2009	May 2010	-	30 Oct 2009
Keel Laying	Other	May 2010	May 2010	Nov 2010	-	14 Jun 2010
Lead Ship Delivery	Other	Nov 2011	Nov 2011	Nov 2012	-	5 Dec 2012*
IOT&E Complete	Other	Sept 2012	Sept 2012	Sept 2013	-	30 Aug 2013
DAB MS C	MS C	Sept 2012	Sept 2012	Sept 2013	-	30 Sept 2013
IOC	IOC	Oct 2012	Oct 2012	Oct 2013	-	25 Nov 2013*
Follow Ship 0902A Delivery	Other	Jul 2013	Jul 2013	Jul 2014	-	21 Mar 2014
Follow Ship 1001N Delivery	Other	Jan 2014	Jan 2014	Jan 2015	-	15 Sept 2014
Follow Ship 1002A Delivery	Other	Jul 2014	Jul 2014	Jul 2015	-	13 Apr 2015
Follow Ship 1101N Delivery	Other	Jan 2015	Jan 2015	Jan 2016	-	14 Jan 2016
Follow Ship 1102A Delivery	Other	Jul 2015	Jul 2015	Jul 2016	-	24 Jun 2016
Follow Ship 1201N Delivery	Other	Jan 2016	Jan 2016	Jan 2017	-	21 Apr 2017*
Follow Ship 1202A Delivery	Other	Jul 2016	Jul 2016	Jul 2017	-	19 Dec 2017*
Follow Ship 1301N Delivery (2)	Other	Jan 2017	Jan 2017	Jan 2018	-	15 Nov 2018*

* Baseline Deviation

Notes

Follow Ship 0901N Delivery = EPF 2
Follow Ship 0902A Delivery= EPF 3
Follow Ship 1001N Delivery =EPF 4
Follow Ship 1002A Delivery = EPF 5
Follow Ship 1101N Delivery = EPF 6
Follow Ship 1102A Delivery = EPF 7
Follow Ship 1201N Delivery = EPF 8
Follow Ship 1202A Delivery = EPF 9
Follow Ship 1301N Delivery (2) = EPF 10
Acronyms and Abbreviations:

IOT&E - Initial Operational Test and Evaluation
MS - Milestone
Schedule Notes:
EPF 11: Delivery - 12/10/19 (actual), OWLD - July 2021
EPF 12: Delivery - 9/2/20 (actual), OWLD - June 2022
EPF 13: Delivery - 2/16/23 (actual), OWLD - Apr 2024
EPF 14: Delivery - 1/11/24 (actual), OWLD - Mar 2025
EPF 15: Delivery - May 2025 (estimate), OWLD - Jul 2026
EPF 16: Delivery - Apr 2026 (estimate), OWLD - June 2027
*EMS 1: Delivery - Jun 2028 (estimate), OWLD - Aug 2029
*EMS 2: Delivery - Jun 2029 (estimate), OWLD - Aug 2030
*EMS 3: Delivery - May 2030 (estimate), OWLD - Jul 2031
*Assumes EMS is an EPF Flight II Variant with some enhanced permanent medical capabilities.

Schedule Baseline Deviation Explanation

Lead Ship Delivery, IOC, Follow Ship 1201N Delivery, Follow Ship 1202A Delivery, and Follow Ship 1301N Delivery deviations were reported in the December 2022 SAR.

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

None

(U) Performance

(U) Performance Attributes

Survivability		**[attribute type not provided]**
Current Estimate **12/31/2023**		EPF will be built to commercial ABS standards and will not be shock hardened.
Demonstrated Performance **11/30/2012**		EPF will be built to commercial ABS standards and will not be shock hardened.
Development APB (Current) **2/11/2009**	**Objective**	JHSV will be built to commercial ABS standards and will not be shock hardened.
	Threshold	JHSV will be built to commercial ABS standards and will not be shock hardened.
Development APB (Milestone) **2/11/2009**	**Objective**	JHSV will be built to commercial ABS standards and will not be shock hardened.
Ramp (M1A2 Capable)		**[attribute type not provided]**
Current Estimate **12/31/2023**		EPF shall have a ramp capable of interfacing with RRDFs, piers with curb heights of up to 15 in., quay walls and other austere on- and off -load points and on/off-loading a combat-loaded M1A2 with articulation from dead astern to 40 deg abaft the beam to one side.
Demonstrated Performance **8/30/2013**		EPF shall have a ramp capable of interfacing with RRDFs, piers with curb heights of up to 15 in., quay walls and other austere on- and off -load points and on/off-loading a combat-loaded M1A2 with articulation from dead astern to 40 deg abaft the beam to one side.
Development APB (Current) **2/11/2009**	**Objective**	JHSV shall have a ramp capable of interfacing with RRDFs, piers with curb heights of up to 15 in., quay walls and other austere on- and off-load points and on/off-loading a combat-loaded M1A2 with articulation from dead astern to 40 deg abaft the beam to either side.
	Threshold	JHSV shall have a ramp capable of interfacing with RRDFs, piers with curb heights of up to 15 in., quay walls and other austere on- and off-load points and on/off-loading a combat-loaded M1A2 with articulation from dead astern to 40 deg abaft the beam towards one side.
Development APB (Milestone) **2/11/2009**	**Objective**	JHSV shall have a ramp capable of interfacing with RRDFs, piers with curb heights of up to 15 in., quay walls and other austere on- and off-load points and on/off-loading a combat-loaded M1A2 with articulation from dead astern to 40 deg abaft the beam to either side.
Transport Capability		**[attribute type not provided]**

Current Estimate **12/31/2023**		EPF shall be capable of transporting 600 ST 1200 NM at an average speed of 35 kts in a significant wave height of 1.25 meters prior to needing refueling.
Demonstrated Performance **8/30/2013**		EPF shall be capable of transporting 600 ST 1200 NM at an average speed of 35 kts in a significant wave height of 1.25 meters prior to needing refueling.
Development APB (Current) **2/11/2009**	**Objective**	JHSV shall be capable of transporting 700 ST 1200 NM at an average speed of 35 kts in a significant wave height of 1.25 meters prior to needing refueling.
	Threshold	JHSV shall be capable of transporting 600 ST of troops, supplies, and equipment 1200 NM at an average speed of 35 kts in a significant wave height of 1.25 meters prior to needing refueling.
Development APB (Milestone) **2/11/2009**	**Objective**	JHSV shall be capable of transporting 700 ST 1200 NM at an average speed of 35 kts in a significant wave height of 1.25 meters prior to needing refueling.
Draft		**[attribute type not provided]**
Current Estimate **12/31/2023**		EPF shall have a draft of less than or equal to 13 ft.
Demonstrated Performance **6/29/2012**		EPF shall have a draft of less than or equal to 13 ft.
Development APB (Current) **2/11/2009**	**Objective**	JHSV shall have a draft of less than or equal to 10 ft.
	Threshold	JHSV shall have a draft of less than or equal to 15 ft.
Development APB (Milestone) **2/11/2009**	**Objective**	JHSV shall have a draft of less than or equal to 10 ft.
Net-Ready KPP		**[attribute type not provided]**
Current Estimate **12/31/2023**		The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentication, confidentiality, and on repudiation, and issuance of an ATO by the DAA, and 5) Operationally Effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.
Demonstrated Performance **6/7/2013**		The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must

		satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentication, confidentiality, and on repudiation, and issuance of an ATO by the DAA, and 5) Operationally Effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.
Development APB (Current) **2/11/2009**	**Objective**	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentica-tion, confidential-ity, and nonrepudia-tion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.
	Threshold	The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs issuance of an IATO by the DAA, and 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentica-tion, confidential-ity, and nonrepudia-tion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.
Development APB (Milestone) **2/11/2009**	**Objective**	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentica-tion, confidential-ity, and nonrepudia-tion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.

Cargo movement between mission deck and flight deck; between pier and mission deck.		[attribute type not provided]
Current Estimate 12/31/2023		EPF shall have the capability to move 27,000 lbs of cargo in a single lift between the flight deck and the mission deck in a significant wave height of 1.25 meters. JHSV shall have the capability to move 40,000 lbs of cargo in a single lift between the mission deck and the pier in a significant wave height of 0.1 meters.
Demonstrated Performance 8/30/2013		EPF shall have the capability to move 27,000 lbs of cargo in a single lift between the flight deck and the mission deck in a significant wave height of 1.25 meters. JHSV shall have the capability to move 40,000 lbs of cargo in a single lift between the mission deck and the pier in a significant wave height of 0.1 meters.
Development APB (Current) 2/11/2009	Objective	JHSV shall have the capability to move 27,000 lbs of cargo in a single lift between the flight deck and the mission deck in a significant wave height of 1.25 meters. JHSV shall have the capability to move 40,000 lbs of cargo in a single lift between the mission deck and the pier in a significant wave height of 0.1 meters.
	Threshold	JHSV shall have the capability to move 27,000 lbs of cargo in a single lift between the flight deck and the mission deck in a significant wave height of 1.25 meters. JHSV shall have the capability to move 40,000 lbs of cargo in a single lift between the mission deck and the pier in a significant wave height of 0.1 meters.
Development APB (Milestone) 2/11/2009	Objective	JHSV shall have the capability to move 27,000 lbs of cargo in a single lift between the flight deck and the mission deck in a significant wave height of 1.25 meters. JHSV shall have the capability to move 40,000 lbs of cargo in a single lift between the mission deck and the pier in a significant wave height of 0.1 meters.
Force Protection		[attribute type not provided]
Current Estimate 12/31/2023		EPF shall be equipped with a crew-served weapons system. Additionally, JHSV shall provide the space, weight and power for obtaining the objective.
Demonstrated Performance 8/30/2013		EPF shall be equipped with a crew-served weapons system. Additionally, JHSV shall provide the space, weight and power for obtaining the objective.
Development APB (Current)	Objective	The JHSV shall possess a force protection system to sense, identify and lethally engage surface threats such as patrol boats and Boghammer type threats. The SST function shall provide the capability to sense, identify and track potential surface threats in nighttime, low light, and limited visibility conditions such as haze and light fog throughout 360 degrees. The SST function shall provide JHSV watch standers capability to sense potential surface threats at a range no less than the effective line-of-sight of the JHSV's navigation radars. The SST function shall provide simultaneous and continuous visual auto-tracking of no less than two operator selected surface

		threats at a range of no less than 750 meters during daytime, nighttime (low-light conditions) and during limited visibility conditions such as haze or light fog. JHSV shall possess sufficient small arms gun mounts to engage threat surface platforms throughout no less than 360 deg. The gun mounts shall be stabilized in at least 2 axis in sea states with a significant wave heights of up to 6-8 ft. during wind conditions of 17-21 kts. The gun mount(s) shall have the capability to lethally engage patrol boats / Boghammer threats with a hit probability of no less than 70 % at 500 yds. Gun mounts shall be remotely linked to the SST and be capable of being slaved to the SST tracking function or being remotely operated by JHSV watchstander(s). Gun mounts shall be capable of hosting a variety of small arms to include: M2 .50 caliber machine guns and MK-19 grenade launchers. The surface force protection system shall be completely operable from the watch standing bridge.
2/11/2009	**Threshold**	JHSV shall be equipped with a crew-served weapons system. Additionally, JHSV shall provide the space, weight and power for obtaining the objective.
Development APB (Milestone) **2/11/2009**	**Objective**	The JHSV shall possess a force protection system to sense, identify and lethally engage surface threats such as patrol boats and Boghammer type threats. The SST function shall provide the capability to sense, identify and track potential surface threats in nighttime, low light, and limited visibility conditions such as haze and light fog throughout 360 degrees. The SST function shall provide JHSV watch standers capability to sense potential surface threats at a range no less than the effective line-of-sight of the JHSV's navigation radars. The SST function shall provide simultaneous and continuous visual auto-tracking of no less than two operator selected surface threats at a range of no less than 750 meters during daytime, nighttime (low-light conditions) and during limited visibility conditions such as haze or light fog. JHSV shall possess sufficient small arms gun mounts to engage threat surface platforms throughout no less than 360 deg. The gun mounts shall be stabilized in at least 2 axis in sea states with a significant wave heights of up to 6-8 ft. during wind conditions of 17-21 kts. The gun mount(s) shall have the capability to lethally engage patrol boats / Boghammer threats with a hit probability of no less than 70 % at 500 yds. Gun mounts shall be remotely linked to the SST and be capable of being slaved to the SST tracking function or being remotely operated by JHSV watchstander(s). Gun mounts shall be capable of hosting a variety of small arms to include: M2 .50 caliber machine guns and MK-19 grenade launchers. The surface force protection system shall be completely operable from the watch standing bridge.
Mission Deck Weight Loading		**[attribute type not provided]**
Current Estimate **12/31/2023**		Mission deck capable of supporting a maximum vehicle size/weight to on/offload a combat ready M1A2 main

		battle tank (total weight); a fully loaded Heavy Expanded Mobility Tactical Truck - Palletized Load System (HEMTT-PLS) with a 20 ft ISO container loaded (point loading).
Demonstrated Performance **8/30/2013**		Mission deck capable of supporting a maximum vehicle size/weight to on/offload a combat ready M1A2 main battle tank (total weight); a fully loaded Heavy Expanded Mobility Tactical Truck - Palletized Load System (HEMTT-PLS) with a 20 ft ISO container loaded (point loading).
Development APB (Current) **2/11/2009**	**Objective**	Mission deck capable of supporting a maximum vehicle size/weight to on/offload a combat ready M1A2 main battle tank (total weight); a fully loaded HEMTT-PLS with a 20 ft ISO container loaded (point loading).
	Threshold	Mission deck capable of supporting a maximum vehicle size/weight to on/offload a combat ready M1A2 main battle tank (total weight); a fully loaded HEMTT-PLS with a 20 ft ISO container loaded (point loading).
Development APB (Milestone) **2/11/2009**	**Objective**	Mission deck capable of supporting a maximum vehicle size/weight to on/offload a combat ready M1A2 main battle tank (total weight); a fully loaded HEMTT-PLS with a 20 ft ISO container loaded (point loading).

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

1. Document Type Not Provided
   Notes: Capability Development Document (CDD) dated January 29, 2007

Notes

ABS - American Bureau of Shipping
ATO - Approval to Operate
DAA - Designated Approval Authority
deg - Degrees
DISR - DOD Information Technology Standards and Profile Registry
ft - Feet/Foot
GIG - Global Information Grid
HEMTT-PLS - Heavy Expanded Mobility Tactical Truck- Palletized Load System
IA - Information Assurance
IATO - Interim Approval to Operate
in - Inches
ISO - International Standard for Organizations
IT - Information Technology
KIP - Key Interface Profile
kts - Knots
lbs - Pounds
MK - Mark
NCOW-RM - Net Centric Operations Warfare Reference Model
NM - Nautical Mile
RRDF - Roll-on/Roll-off Discharge Facilities
SST - Search, Sense and Tracking

ST - Short Tons
TV - Technical Standards View
yd - Yards

Performance Deviation Explanation

None

(U) Acquisition Budget Estimate

(U) Total Acquisition Estimates and Quantities

Category ($M) Base Year: 2008	Development APB (Milestone) 2/11/2009 CY$ obs Objective	Development APB (Current) 2/11/2009 CY$ obs Objective / Threshold		Current Estimate PB 2025 CY$ obs / TY$ obs	
RDT&E	122.2	122.2	134.4	114.7	115.5
Procurement	3,337.8	3,337.8	3,671.6	3,456.6	4,588.6
MILCON	0.0	0.0	-	0.0	0.0
O&M	0.0	0.0	-	0.0	0.0
R&MF	-	-	-	0.0	0.0
Total Acquisition	3,460.0	3,460.0	-	3,571.3	4,704.1
Program Acquisition Unit Cost	192.222	192.222	211.444	187.965	247.585
Average Procurement Unit Cost	185.433	185.433	203.976	181.928	241.506
Program End-Item Quantity					
Development	0	0		-	
Procurement	18	18		19	
O&M-Acquired	-	-		0	

Budget Notes

None

Quantity Notes

2023 Congressional Add of two EMS increases total quantity (19) above 18. APB is being revised to include additional EMS.

Cost Baseline Deviation Explanation

None

(U) Risk and Sensitivity Analysis

Current Procurement Estimate Risks (12/31/2023)
None
Current Baseline Risks (2/11/2009)
None
Original Baseline Risks (2/11/2009)
None

(U) Unit Costs

(U) Current Estimate Compared with Current Baseline

Category (CY$M) Base Year: 2008	Current Baseline 02/11/2009	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	3,460.0	3,571.3	
Program Quantity	18	19	
PAUC	192.222	187.965	-2.21%
Average Procurement Unit Cost			
Procurement Cost	3,337.8	3,456.6	
Procurement Quantity	18	19	
APUC	185.433	181.928	-1.89%

(U) Current Estimate Compared with Original Baseline

Category (CY$M) Base Year: 2008	Original Baseline 02/11/2009	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	3,460.0	3,571.3	
Program Quantity	18	19	
PAUC	192.222	187.965	-2.21%
Average Procurement Unit Cost			
Procurement Cost	3,337.8	3,456.6	
Procurement Quantity	18	19	
APUC	185.433	181.928	-1.89%

Notes

None

(U) Life-Cycle Costs

(U) Operating and Support and Disposal Cost Estimates Compared with Baseline

Category ($M) Base Year: 2008	Development APB (Milestone) 2/11/2009 CY$ obs Objective	Development APB (Current) 2/11/2009 CY$ obs Objective / Threshold		Current Estimate CY$ obs / TY$ obs	
Total O&S	9,621.9	9,621.9	10,584.1	7,714.0	10,413.0
Total Disposal	-	-	-	-	-

(U) Current Cost Estimate Sources

Operating and Support Cost
Type: Program Office Estimate
Approved by: PMO, April 04, 2024

Disposal/Demilitarization Cost
Type: No estimate. Not Applicable

Operating and Support Baseline Deviation Explanation

None

Cost Notes

Please see PB25 MSAR Supplement for all data relative to this MSAR section.

(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: 2008							
System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
EPF	1,756.8	1,369.8	3,373.2	11.4	-	1,202.8	7,714.0
Program	1,756.8	1,369.8	3,373.2	11.4	-	1,202.8	7,714.0

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

(CY$M) Base Year: 2008

System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
EPF	4.6	3.6	8.9	-	-	3.2	**20.3**

(U) Operating and Support Cost Estimate Assumptions

System	Quantity to Sustain	Unit Expected Service Life (Years)	Unit of Measure	Fiscal Years Operational
EPF	19	20.0	Ship	2012 - 2050

Additional O&S Estimate Assumptions

None

Antecedent Estimate Assumptions

None

O&S Annual Cost Calculation Memo

Program O&S Cost developed by: Average Cost of an EPF ($20.3M), multiplied by the number of EPFs in the class (19),multiplied by the amount of years the ship will be in service (20), equals the expected O&S cost for the class: $7,714M(20.3 X 19)(20) = 7,714M BY$08. Current estimate in TY$ = 10,413M

(U) Performing Activities and Contracts

(U) External Government Activities

None

(U) Contracts and Efforts

Contract Title	Contract Number / Effort	Contractor	Phase
Expeditionary Fast Transport (EPF)	N00024-19-C-2227 / 13	Austal USA	Production
Expeditionary Fast Transport (EPF)	N00024-19-C-2227 / 14	Austal USA	Production
Expeditionary Fast Transport (EPF)	N00024-19-C-2227 / 15	Austal USA	Production
Expeditionary Fast Transport (EPF)	N00024-19-C-2227 / 16	Austal USA	Production

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

Contract Number:	N00024-19-C-2227	**Order Number:**	-
Contract Title:	Expeditionary Fast Transport (EPF)	**Strategy:**	-
CAGE:	- - Austal USA	**Contracting Office:**	-
City, State/Province:	Mobile, AL		
Effort Number:	13	**Supported Phase:**	Production
Type:	Fixed-Price Incentive (Firm Target)	**Award Date:**	March 25, 2019
Latest Modification Date:	February 29, 2024	**Definitization Date:**	March 25, 2019
Latest Modification No.:	P00046	**Work Start Date:**	-
Technical Data 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 CUI. The Basic Construction Costs category in the budget exhibit includes additional costs required to validate and deliver a fully capable ship to the Navy that are not part of nor included in the shipbuilder contract target price.		

Initial Price (TY$M) Target	Initial Price (TY$M) Ceiling	Current Price (TY$M) Target	Current Price (TY$M) Ceiling	Estimate at Completion (TY$M) Contractor	Estimate at Completion (TY$M) PM	Initial Quantity	Current Quantity	Delivered Quantity
178.0	197.0	241.2	267.0	-	-	1	1	1

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

Contract Number:	N00024-19-C-2227	**Order Number:**	-
Contract Title:	Expeditionary Fast Transport	**Strategy:**	-

(EPF)

CAGE:	- - Austal USA	**Contracting Office:**	-
City, State/Province:	Mobile, AL		
Effort Number:	14	**Supported Phase:**	Production
Type:	Fixed-Price Incentive (Firm Target)	**Award Date:**	March 25, 2019
Latest Modification Date:	February 29, 2024	**Definitization Date:**	March 25, 2019
Latest Modification No.:	P00046	**Work Start Date:**	-
Technical Data 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 CUI. The Basic Construction Costs category in the budget exhibit includes additional costs required to validate and deliver a fully capable ship to the Navy that are not part of nor included in the shipbuilder contract target price.

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
196.3	218.2	223.5	247.5	-	-	1	1	1

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

Contract Number:	N00024-19-C-2227	**Order Number:**	-
Contract Title:	Expeditionary Fast Transport (EPF)	**Strategy:**	-
CAGE:	- - Austal USA	**Contracting Office:**	-
City, State/Province:	Mobile, AL		
Effort Number:	15	**Supported Phase:**	Production
Type:	Fixed-Price Incentive (Firm Target)	**Award Date:**	December 20, 2021
Latest Modification Date:	February 29, 2024	**Definitization Date:**	December 20, 2021
Latest Modification No.:	P00046	**Work Start Date:**	-
Technical Data 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 CUI. The Basic Construction Costs category in the budget exhibit includes additional costs required to validate and deliver a fully capable ship to the Navy that are not part of nor included in the shipbuilder contract target price.

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
226.1	251.4	226.6	251.0	-	-	1	1	-

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

Contract Number:	N00024-19-C-2227	**Order Number:**	-

Contract Title:	Expeditionary Fast Transport (EPF)	**Strategy:**	-
CAGE:	- - Austal USA	**Contracting Office:**	-
City, State/Province:	-		
Effort Number:	16	**Supported Phase:**	Production
Type:	Fixed-Price Incentive (Firm Target)	**Award Date:**	May 3, 2022
Latest Modification Date:	February 29, 2024	**Definitization Date:**	May 3, 2022
Latest Modification No.:	P00046	**Work Start Date:**	-
Technical Data 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 CUI. The Basic Construction Costs category in the budget exhibit includes additional costs required to validate and deliver a fully capable ship to the Navy that are not part of nor included in the shipbuilder contract target price.

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
230.5	256.4	231.6	257.5	-	-	1	1	-

(U) Production

(U) Low-Rate Initial Production

	Original LRIP Determination	Current LRIP Determination
Total LRIP Quantity	10	19
Date	11/12/2008	2/17/2021
Reference	Milestone B ADM	EPF 15-19 PSTRAP
LRIP Period	FY 2008 - 2013	FY 2008 - 2023
Total Procurement Quantity	10	19
LRIP Percentage of Total	100.0%	100.0%

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

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the EPF program entering the Engineering and Manufacturing Development phase with approval for a LRIP quantity of 10 ships.

LRIP Notes

None

(U) Deliveries and Expenditures

(U) Acquisition Funding

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	26	20	76.9%
Appropriations (TY, $M)	4,704.1	4,614.3	98.1%
Expenditures (TY, $M)	4,704.1	3,261.6	69.3%

(U) End Items Delivered

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Procurement	19			
Total	**19**	-	-	-

Notes

None

(U) International Program Aspects

General Memo

None

Exportability and Business Issues

N/A

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

N/A

(U) Agreements

No International Agreements have been defined for EPF

Modernized
Selected Acquisition Report
Supplement

Expeditionary Fast Transport
(EPF)

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

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
Expeditionary Fast Transport

Short Name
EPF

PNO
247

Lead Component
Navy

AAF Pathway
MCA

Acquisition Type
MDAP

Acquired Systems
EPF

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

Expeditionary Fast Transport

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

Expeditionary Fast Transport

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	1319N	07	0208058N - Joint High Speed Vessel (JHSV)	0208058N	3131 - Intratheater Connectors (Concept Studies)		x
RDT&E	1319N	07	0208058N - Joint High Speed Vessel (JHSV)	0208058N	3134 - Intratheater Connectors (Contract Design)		x
RDT&E	2040A	07	0208058A - Joint High Speed Vessel (JHSV)	0208058A	JH1 - Joint High Speed Vessel Manufacturing Tech		x
Procurement	2035A	03	3464M11203 - Joint High Speed Vessel (JHSV)	0208058A	-		x
Procurement	1611N	03	3043 - Expeditionary Fast Transport (EPF)	0208058N	-		x
Procurement	1611N	05	5110 - Outfitting	0208058N	-	x	
Procurement	1611N	05	5300 - Completion of PY Shipbuilding Programs	0208058N	-		x

Funding Sources (Operating and Support)

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

Operating and Support Funding Notes

None

Expeditionary Fast Transport

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk

Acquisition Estimate and Quantity Summary

Expeditionary Fast Transport

Acquisiton Estimates

Category PB 2025	TY ($M)	Current Base Year CY2008 ($M)	Original Base Year CY2008 ($M)	Report Fiscal Year CY2024 ($M)
RDT&E	115.5	114.7	114.7	163.0
Procurement	4,588.7	3,456.7	3,456.7	4,912.2
MILCON	-	-	-	-
O&M	-	-	-	-
Total Acquisition	4,704.2	3,571.4	3,571.4	5,075.2
PAUC	247.592	187.970	187.970	267.117
APUC	241.511	181.933	181.933	258.538

Acquisiton End-Item Quantities

System PB 2025	Development	Procurement
EPF	-	19
Total	**-**	**19**

Unit Description

Ship

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

Appropriation	Prior	2024	2025	2026	2027	2028	2029	To Complete	Total
RDT&E	115.5	-	-	-	-	-	-	-	115.5
Procurement	4,482.8	16.1	10.5	4.3	19.8	21.8	27.5	5.9	4,588.7
MILCON	-	-	-	-	-	-	-	-	-
O&M	-	-	-	-	-	-	-	-	-
PB 2025 Total	**4,598.3**	**16.1**	**10.5**	**4.3**	**19.8**	**21.8**	**27.5**	**5.9**	**4,704.2**

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

Expeditionary Fast Transport

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

2040A - Research, Development, Test & Eval, Army					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2008 ($M)
Total		**47.5**	**47.5**	**-**	**47.8**
2005		10.000	10.0	0.944162	10.6
2006		3.126	3.1	0.970622	3.2
2007		20.172	20.2	0.994049	20.3
2008		4.973	5.0	1.013087	4.9
2009		2.926	2.9	1.026033	2.9
2010		3.100	3.1	1.041555	3.0
2011		3.153	3.2	1.062032	3.0

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

Expeditionary Fast Transport

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

1319N - Research, Development, Test & Eval, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2008 ($M)
Total		**68.1**	**68.1**	**-**	**66.9**
2005			-	0.939483	-
2006		6.540	6.5	0.968757	6.8
2007		13.727	13.7	0.992485	13.8
2008		18.353	18.4	1.010589	18.2
2009		11.466	11.5	1.023566	11.2
2010		7.821	7.8	1.038919	7.5
2011		3.508	3.5	1.063725	3.3
2012		3.961	4.0	1.081367	3.7
2013		1.728	1.7	1.092721	1.6
2014		0.974	1.0	1.108162	0.9

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

Expeditionary Fast Transport

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

1611N (BLS Hist) - Shipbuilding and Conversion, Navy									
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non-Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2008 ($M)
Total	**3,607.4**	**-**	**-**	**-**	**-**	**201.2**	**3,808.6**	**-**	**2,706.5**
2005							-	0.957348	-
2006							-	0.991110	-
2007							-	1.036653	-
2008							-	1.071961	-
2009	192.033						192.0	1.104754	173.8
2010	174.600						174.6	1.143136	152.7
2011	176.070					1.256	177.3	1.180637	150.2
2012	348.945					0.780	349.7	1.207721	289.6
2013	183.053					10.227	193.3	1.232981	156.8
2014	10.245					8.542	18.8	1.257948	14.9
2015	214.000					16.292	230.3	1.286941	178.9
2016	251.236					8.624	259.9	1.319851	196.9
2017	13.255					6.505	19.8	1.357711	14.6
2018	225.000					5.001	230.0	1.401938	164.1
2019	225.000					3.133	228.1	1.454102	156.9
2020	49.000					2.216	51.2	1.514020	33.8
2021	310.000					4.916	314.9	1.575234	199.9
2022	590.000					10.367	600.4	1.630238	368.3
2023	645.000					17.379	662.4	1.668600	397.0
2024						16.059	16.1	1.704396	9.4
2025						10.500	10.5	1.740251	6.0
2026						4.276	4.3	1.776797	2.4
2027						19.846	19.8	1.814110	10.9
2028						21.776	21.8	1.852206	11.8
2029						27.526	27.5	1.891102	14.6
2030						5.931	5.9	1.930815	3.1

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

Expeditionary Fast Transport

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

2035A - Other Procurement, Army									
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non-Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2008 ($M)
Total	**770.3**	**-**	**-**	**-**	**-**	**9.8**	**780.1**	**-**	**750.2**
2005							-	0.949952	-
2006							-	0.975443	-
2007							-	0.999170	-
2008	214.500					0.200	214.7	1.015985	211.3
2009	168.323						168.3	1.029460	163.5
2010	188.800					4.500	193.3	1.048335	184.4
2011	198.700					5.100	203.8	1.067069	191.0

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

Expeditionary Fast Transport

2035A - Other Procurement, Army				
fiscal year	EPF			Total
Total	**4**			**4**
Undistributed				-
2008	1			1
2009	1			1
2010	1			1
2011	1			1

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

Expeditionary Fast Transport

1611N (BLS Hist) - Shipbuilding and Conversion, Navy				
fiscal year	EPF			Total
Total	**15**			**15**
Undistributed				-
2008				-
2009	1			1
2010	1			1
2011	1			1
2012	2			2
2013	1			1
2014				-
2015	1			1
2016	1			1
2017				-
2018	1			1
2019	1			1
2020				-
2021	1			1
2022	2			2
2023	2			2

Nuclear Costs

Expeditionary Fast Transport

Program's Use of Department of Energy Resources

None

Operational Fielding Plan

Expeditionary Fast Transport

System: EPF

Fielding and Inventory Notes

EPF Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					13
2024		1			14
2025		1			15
2026		1			16
2027					16
2028		1			17
2029		1			18

O&S Independent Cost Estimate

Expeditionary Fast Transport

Independent and Current Cost Estimate Comparison

Category CY2008 ($M)	Independent Cost Estimate 3/4/2021	Current Estimate 4/4/2024	Variance with ICE (%)
Unit-Level Manpower	1,756.8	1,756.8	0%
Unit Operations	1,369.8	1,369.8	0%
Maintenance	3,373.2	3,373.2	0%
Sustaining Support	11.4	11.4	0%
Continued System Improvements	-	-	-
Other	1,202.8	1,202.8	0%
Total O&S	**7,714.0**	**7,714.0**	**0%**

Independent Cost Estimate Source

Event: PB22 SAR
Type: Independent Cost Estimate
Approved by: 05C, March 4, 2021
Note: 05C

Current Cost Estimate Source

Type: Program Office Estimate
Approved by: Program Office , April 4, 2024

Cost Estimate Variance Explanation

No variance

Annual Operating and Support Estimates by Cost Element

Expeditionary Fast Transport

System: EPF

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 CY2008 ($M)
Total	**1,756.8**	**1,369.8**	**3,373.2**	**11.4**	**-**	**1,202.8**	**7,714.0**
2012	0.493	0.384	0.946	0.003	-	0.337	2.2
2013	2.542	1.982	4.881	0.016	-	1.741	11.2
2014	9.073	7.074	17.421	0.059	-	6.212	39.8
2015	17.162	13.381	32.952	0.111	-	11.750	75.4
2016	27.811	21.685	53.400	0.180	-	19.042	122.1
2017	34.708	27.062	66.642	0.225	-	23.763	152.4
2018	38.824	30.271	74.545	0.252	-	26.581	170.5
2019	43.000	33.527	82.564	0.279	-	29.441	188.8
2020	47.173	36.781	90.577	0.306	-	32.298	207.1
2021	50.006	38.989	96.016	0.324	-	34.237	219.6
2022	51.341	40.031	98.580	0.333	-	35.152	225.4
2023	54.173	42.239	104.017	0.351	-	37.090	237.9
2024	55.509	43.280	106.582	0.360	-	38.005	243.7
2025	59.676	46.529	114.583	0.387	-	40.858	262.0
2026	63.856	49.788	122.609	0.414	-	43.720	280.4
2027	66.757	52.050	128.180	0.433	-	45.706	293.1
2028	69.448	54.149	133.347	0.450	-	47.549	304.9
2029	78.046	60.852	149.855	0.506	-	53.435	342.7
2030	80.923	63.096	155.380	0.524	-	55.405	355.3
2031	87.421	68.162	167.855	0.566	-	59.854	383.9
2032	86.033	67.079	165.190	0.557	-	58.904	377.8
2033	80.785	62.988	155.114	0.523	-	55.311	354.7
2034	73.512	57.317	141.149	0.476	-	50.331	322.8
2035	67.463	52.601	129.536	0.437	-	46.190	296.2
2036	58.948	45.962	113.186	0.382	-	40.360	258.8
2037	53.077	41.384	101.912	0.344	-	36.340	233.1
2038	51.492	40.148	98.870	0.334	-	35.255	226.1
2039	47.096	36.721	90.429	0.305	-	32.245	206.8
2040	42.705	33.297	81.997	0.277	-	29.239	187.5
2041	39.669	30.930	76.167	0.257	-	27.160	174.2
2042	39.217	30.578	75.301	0.254	-	26.851	172.2
2043	37.462	29.209	71.931	0.243	-	25.649	164.5

System: EPF

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 CY2008 ($M)
2044	32.961	25.700	63.288	0.214	-	22.567	144.7
2045	28.532	22.246	54.783	0.185	-	19.535	125.3
2046	24.175	18.849	46.418	0.157	-	16.552	106.2
2047	21.151	16.492	40.612	0.137	-	14.482	92.9
2048	18.668	14.556	35.845	0.121	-	12.781	82.0
2049	11.552	9.007	22.181	0.075	-	7.909	50.7
2050	4.362	3.401	8.375	0.028	-	2.986	19.2