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Department of Defense  
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

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# B-52 RADAR MODERNIZATION PROGRAM (B-52 RMP)

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Selected Acquisition Report (SAR)



AS OF THE FY 2023 PRESIDENT'S BUDGET  
U.S. AIR FORCE

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## Program Manager

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**Date Assigned:** June 24, 2021

**Address:** 2690 Loop Road West, Wright-Patterson AFB, OH 45433-7424

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## Mission and Description

The B-52 Radar Modernization Program (RMP) supports nuclear and conventional operations by upgrading or replacing, in whole or in part, the current APQ-166 radar Line Replaceable Units (LRU) on the B-52H aircraft. The APQ-166 system will be increasingly difficult to sustain due to diminished manufacturing sources and obsolescent technologies; the current failure rate of the APQ-166 places long-duration missions at risk. This modernization program will encompass the radar antenna array and up to 14 individual LRUs that comprise the entire radar system. The RMP will provide development, production and installation of new components and systems to replace the legacy equipment, which will be installed on all 76 B-52H aircraft. RMP will take advantage of advances in technology and on-going development efforts to acquire, to the maximum extent possible, off-the-shelf components and integrate them into the B-52. The use of new technology will increase both the overall reliability of the radar system and the capabilities for new missions. This Radar Modernization Program will allow the operational command (AF Global Strike Command) to fully utilize the capabilities of the B-52H aircraft to employ an array of weapons and to perform mission-essential navigation and weather avoidance functions. In addition, all the applicable training devices which process radar data or represent the radar subsystem must also be modified and upgraded in conjunction with the aircraft modifications. This upgrade will affect all three Weapon System Trainers (WST), the WST Training Systems Integration Laboratory (SIL), both B-52 Offensive Station Maintenance Trainers (OSMT), and the Bombing-Navigation System Maintenance Trainers (BNSMT).

## Executive Summary

### *Program Highlights Since Last Report*

This is the initial SAR submission for the B-52 Radar Modernization Program (RMP).

The B-52H RMP is an ACAT IB program which entered the formal acquisition reporting process at the Engineering and Manufacturing Development (EMD) phase. The Milestone Decision Authority authorized entry into EMD on June 10, 2021. An EMD contract was awarded to Boeing (Defense, Space and Security) on June 14, 2021.

The program completed its eighth and final subsystem Critical Design Review (CDR) in December 2021, and conducted its System-level CDR in February 2022. The program System-level developmental testing is planned to begin in September 2023. Current performance estimates meet objective values in the Acquisition Program Baseline (APB). The program's current estimates for all APB Schedule Events are within the objective and threshold dates.

The program received a \$26M Congressional mark in FY 2022 and the team is working to minimize the impact.

The B-52 RMP is not using a Modular Open Systems Approach (MOSA) per USC Title 10, section 4402(e) because it is not practical and is cost prohibitive to re-design off-the-shelf subsystems; however, the program is implementing Open System Architecture attributes for information distribution, video standards, display solutions, and imagery storage and transmission.

In December 2021, the program completed negotiations on the EMD contract (awarded in June 2021), and definitized the contract on January 31, 2022.

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

### *History of Significant Developments Since Program Initiation*

Date	Significant Development Description
March 2018	The Joint Requirements Oversight Council approved the Capability Development Document (CDD)
August 2018	The program team completed the System Requirements Review (SRR).
October 2018	The program team completed the System Functional Review (SFR).
July 2019	The prime contractor completed subsystem supplier selections.
October 2020	The program team completed the System Preliminary Design Review (PDR).
June 2021	The program team received authorization to enter EMD via the Milestone B Acquisition Decision Memorandum (ADM).
February 2022	The program team completed the System CDR.

## Schedule

### Schedule Events

Events	Development APB Objective	Current APB Development Objective/Threshold		Current Estimate/Actual	Deviation
Preliminary Design Review	Oct 2020	Oct 2020	Oct 2020	October 22, 2020	
Milestone B	Jun 2021	Jun 2021	Jun 2021	June 10, 2021	
Critical Design Review	Nov 2021	Nov 2021	May 2022	February 25, 2022	
Milestone C Decision Point #1	Mar 2024	Mar 2024	Mar 2025	Sep 2024	
Milestone C Decision Point #2	Sep 2024	Sep 2024	Sep 2025	Mar 2025	
Initial Operational Capability	Sep 2026	Sep 2026	Sep 2027	Mar 2027	
Full Rate Production	Dec 2026	Dec 2026	Dec 2027	Mar 2027	

### Schedule Notes

- Milestone C Decision Point #1 is for approval to buy first LRIP lot and comply with Milestone C requirements with the following criteria:
  - Manufacturing Readiness Assessment conducted. Manufacturing Readiness Level seven achieved.
  - Hardware maturity demonstrated through:
    - Environmental testing, Electromagnetic (EM) Interference, EM Compatibility, and safety of flight testing completed.
    - Hardware interfaces demonstrated in ground testing.
    - Capability to create high-resolution Synthetic Aperture Radar map demonstrated during flight testing.
    - Developmental Testing (DT) interim technical report and Operational Testing (OT) periodic report completed.
    - Statutory documents for Milestone C completed.
- Milestone C Decision Point #2 is for approval of remaining program production with the following specific entrance criteria:
  - Production Readiness Review conducted
  - System flight testing conducted and documented in DT interim technical report
  - Operational assessment documented in OT periodic report
- 12 month difference in Milestone Decision Points, IOC and FRP threshold and objective dates is due to adding six months of additional schedule risk for additional software and testing per recommendations in the B-52 RMP ITRA report, DDT&E assessment, and OSD CAPE ICE

## Significant Schedule Risks

Significant Schedule Risks	
Current Estimate (December 2021)	
1.	FY 2022 Mark: If the program team cannot mitigate the \$26M FY 2022 Mark, Schedule Events will be delayed by at least 3 months due to the forced deceleration of critical software development activities, and the deferral of equipment installation in System Integration Laboratories. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--defer tasks, delay material acquisitions and de-scope contracts in FY 2022.
2.	Radome Integrated Test: If radio-frequency issues occur during test, then design re-work and delay to production is possible. Managed as likelihood of two, consequence of four in risk management program. Mitigation plan--complete additional qualification testing at contractor's Antenna Measurement Laboratory; conduct radio-frequency interoperability analysis; conduct qualification at contractor facility.
3.	Software Integration Laboratory Availability: If there are delays in other B-52 programs Software Integration Laboratory activities then there will be program schedule delays. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--coordinate with contractor and Government Platform Integration Team to deconflict Software Integration Laboratory usage among programs. Design shared racks and benches for modularity between laboratories. Track potential impact from other programs.
4.	Radar Development Laboratory Authority-To-Operate: If Radar Development Laboratory with the radar bench is not approved for classified operations when needed then increment 0.5 software development, integration, and test activities will be delayed, affecting overall critical path and causing a slip to the currently planned Milestone C/Decision Point #1. Managed as likelihood of five, consequence of four in risk management program. Mitigation plan--attain Boeing and Defense Counterintelligence and Security Agency concurrence to submit Authority-To-Operate artifacts and implementation early to ensure Authority-To-Operate is approved in time for laboratory testing.
5.	Software Schedule: If software functions are not implemented by planned increments (software drops), then flight testing will be delayed. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--software development mitigation actions were ongoing in pre-EMD and continue in EMD to reduce the need for additional software drops. Agile Software development process in Software Integration Laboratory to qualify software and reduce integration cycle-time and re-work. Program will leverage several fielded radar modes from F-15 and F-18 with no need for flying testbed support. Modes will be fully qualified in contractor laboratory.
6.	Equipment for Software Integration Laboratory: If Combat Network Communications Technology equipment is unavailable in required quantities then testing will be extended and program delays will occur. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--develop Rent Free Non Interference Use approval to share equipment.
Milestone B (June 2021)	
1.	Test Aircraft Availability: If required test aircraft are not available to support Developmental and Operational Testing, then the test program could be extended to validate system requirements. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--program is planning for two test aircraft. B-52 Platform Integration Team is working to obtain required test aircraft while ensuring aircraft availability for the B-52 fleet.
2.	Software Integration Laboratory/Radome Integrated Test: If radio-frequency issues occur during Flight Test, then design re-work and delay to Production is possible. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--integration testing of the radome and radar together will be performed in the radar Software Integration Laboratory.

3.	Nuclear Hardening: If baseline components cannot be nuclear hardened through industry hardening standards, then redesign may be required to meet KPP. Managed as likelihood of two, consequence of four in risk management program. Mitigation plan--program will ensure subsystems meet B-52 radiation hardening requirements per assessments of suppliers (i.e., radar, displays, controllers, etc) when they are selected.
4.	Safety Criticality: If the Displays & Sensor System Processor development process does not comply with military requirements, then air worthiness certification may be denied resulting in added rework and test delays. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--close coordination between contractor and USAF established prior to design start and team will continue to monitor design requirements.
5.	Software Schedule: If software functions are not implemented by planned increments (software drops), then flight testing will be delayed. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--program will use Agile Software Process to rapidly qualify software in the Software Integration Laboratory. B-52 Crew Working Group will mitigate risks, issues, and complexity and obtain operational feedback. Contract Incentive Fee Plan will focus on delivering high quality (low defect) and on-time software in laboratories and flight test.
6.	Combat Network Communications Technology Equipment for Software Integration Laboratory: If Combat Network Communications Technology equipment is unavailable in required quantities, then testing will be extended and program delays will occur. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan-- equipment will be shared from other laboratories and/or emulations will be utilized.
7.	Software Integration Laboratory Availability: If there are delays in other B-52 programs Software Integration Laboratory activities then there will be program schedule delays. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--program will establish early & constant communication with B-52 Platform Integration Team and design shared racks and benches for utilization across multiple programs.

## Performance

Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance w/date	Current Estimate/Actual	Deviation
<b>System Survivability, Nuclear Hardness</b>					
Sufficient hardening to survive HEMP and nuclear radiation effects.	Sufficient hardening to survive HEMP and nuclear radiation effects.	(T=O) Sufficient hardening to survive HEMP and nuclear radiation effects.	TBD	Sufficient hardening to survive HEMP and nuclear radiation effects.	
<b>System Survivability, Electromagnetic Spectrum</b>					
None - See CDD	None - See CDD	(T=O) None - See CDD	None	None - See CDD	
<b>System Survivability, Cyber Security</b>					
RMP shall be protected against any level actor through prevention, mitigation, and recovery of system capabilities in response to Cybersecurity/Electronic Warfare by actively managing system configuration to protect and counter vulnerabilities at tactically relevant rates.	RMP shall be protected against any level actor through prevention, mitigation, and recovery of system capabilities in response to Cybersecurity/Electronic Warfare by actively managing system configuration to protect and counter vulnerabilities at tactically relevant rates.	(T=O) RMP shall be protected against any level actor through prevention, mitigation, and recovery of system capabilities in response to Cybersecurity/Electronic Warfare by actively managing system configuration to protect and counter vulnerabilities at tactically relevant rates.	TBD	RMP shall be protected against any level actor through prevention, mitigation, and recovery of system capabilities in response to Cybersecurity/Electronic Warfare by actively managing system configuration to protect and counter vulnerabilities at tactically relevant rates.	
<b>Sustainment, Operational Availability</b>					
RMP shall have an A(o) of 95% or higher at FOC.	RMP shall have an A(o) of 95% or higher at FOC.	(T=O) RMP shall have an A(o) of 95% or higher at FOC.	TBD	RMP shall have an A(o) of 95% or higher at FOC.	
<b>Sustainment, Materiel Availability</b>					
RMP shall have an A(m) of 84% or higher at FOC.	RMP shall have an A(m) of 84% or higher at FOC.	(T=O) RMP shall have an A(m) of 84% or higher at FOC.	TBD	RMP shall have an A(m) of 84% or higher at FOC.	
<b>Reliability</b>					
Total system installed performance shall provide 1,000 hours Mean Time Between Critical Failure (MTBCF) at IOC.	Total system installed performance shall provide 1,000 hours Mean Time Between Critical Failure (MTBCF) at IOC.	300 hours MTBCF at IOC.	TBD	Total system installed performance shall provide 1,000 hours Mean Time Between Critical Failure (MTBCF) at IOC.	

## Requirements Source

B-52 RMP CDD approved by JROC on March 12, 2018.

### Acronyms and Abbreviations:

- A(m) - Materiel Availability
- A(o) - Operational Availability
- FOC - Full Operational Capability
- HEMP - High Altitude Electromagnetic Pulse
- IOC - Initial Operational Capability
- MTBCF - Mean Time Between Critical Failure
- NM - Nautical Miles
- RMP - Radar Modernization Program
- SAR - Synthetic Aperture Radar

## Acquisition Budget Estimate

### Total Acquisition Cost

Category	Base Year	Development APB	Development APB (Current) June 10, 2021		Budget Estimate PB 2023		Deviation
		Objective (BY\$M)	Objective (BY\$M)	Threshold (BY\$M)	BY\$M	TY\$M	
RDT&E	2021	1,157.1	1,157.1	1,272.8	1,137.35	1,199.34	
Procurement	2021	885.0	885.0	973.5	885.0	1028.8	
MILCON	2021	0.0	0.0	0.0	0.0	0.0	
Acq. O&M	2021	0.0	0.0	0.0	0.0	0.0	
<b>Total</b>	<b>2021</b>	<b>2,042.1</b>	<b>2,042.1</b>	<b>2,246.3</b>	<b>2,022.35</b>	<b>2,228.14</b>	
PAUC	2021	26.870	26.870	29.557	26.610	29.318	
APUC	2021	11.959	11.959	13.155	11.959	13.903	

### Total End Item Quantity

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development	2	2
Procurement	74	74

### Budget Notes

On June 10, 2021, the Service Acquisition Executive fully endorsed the Service Cost Position (SCP), dated May 12, 2021, to serve as the cost baseline for the program. The APB reflects the SCP cost estimate, while the budget estimate reflects the latest financial position as of the FY 2023 PB cycle.

### Quantity Notes

Quantities in the Development Phase include two B-52 jets in FY 2021 for RMP testing. After RMP testing is complete, these two test aircraft become operational aircraft. Additionally, development funding includes FY 2028-FY 2030 APPN 3600 funding for two Edwards Air Force Base (AFB) B-52 test aircraft RMP kit buys and installation.

In Production and Deployment Phase, the 74 B-52 aircraft quantity includes 72 operational aircraft plus the 2 Edwards AFB test jets. For the O&S Phase, 74 B-52 RMP-outfitted aircraft are included in O&S cost assumptions.

## Risks and Sensitivity Analysis

Risks and Sensitivity Analysis	
Current Baseline Estimate (December 2021)	
1.	Radome Integrated Test: If radio-frequency issues occur during test, then design re-work and delay to production is possible. Managed as likelihood of two, consequence of four in risk management program. Mitigation plan--complete additional qualification testing at contractor's Antenna Measurement Laboratory; conduct radio-frequency interoperability analysis; conduct qualification at contractor facility.
2.	Software Schedule: If software functions are not implemented by planned increments (software drops), then flight testing will be delayed. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--software development mitigation actions were ongoing in pre-EMD and continue in EMD to reduce the need for additional software drops. Agile Software development process in Software Integration Laboratory to qualify software and reduce integration cycle-time and re-work. Program will leverage several fielded radar modes from F-15 and F-18 with no need for flying testbed support. Modes will be fully qualified in contractor laboratory.
3.	Equipment for Software Integration Laboratory: If Combat Network Communications Technology equipment is unavailable in required quantities then testing will be extended and program delays will occur. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--develop Rent-Free Non-Interference Use approval to share equipment.
Milestone B (June 2021)	
1.	Radome Latch Loads: If predicted latch loads are real, then changes to the latch and/or attachment hardware will be necessary causing minor cost impact. Managed as likelihood of four, consequence of two in risk management program. Mitigation plan--program will test a sample of latch attachments to determine actual load capability.
2.	Test Aircraft Availability: If required test aircraft are not available to support Developmental and Operational Testing, then the test program could be extended to validate system requirements. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--program is planning for two test aircraft. B-52 Platform Integration Team is working to obtain required test aircraft while ensuring aircraft availability for the B-52 fleet.
3.	Software Integration Laboratory/Radome Integrated Test: If radio-frequency issues occur during Flight Test, then design re-work and delay to Production is possible. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--integration testing of the radome and radar together will be performed in the radar Software Integration Laboratory.
4.	Nuclear Hardening: If baseline components cannot be nuclear hardened through industry hardening standards, then redesign may be required to meet KPP. Managed as likelihood of two, consequence of four in risk management program. Mitigation plan--program will ensure subsystems meet B-52 radiation hardening requirements per assessments of suppliers (i.e., radar, displays, controllers, etc) when they are selected.
5.	Safety Criticality: If the Displays & Sensor System Processor development process does not comply with military requirements, then air worthiness certification may be denied resulting in added rework and test delays. Managed as likelihood of three, consequence of three in risk management program. Mitigation plan--close coordination between contractor and USAF established prior to design start and team will continue to monitor design requirements.
6.	Software Schedule: If software functions are not implemented by planned increments (s/w drops), then flight testing will be delayed. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan--program will use Agile Software Process to rapidly qualify software in the Software Integration Laboratory. B-52 Crew Working Group will mitigate risks, issues, and complexity and obtain

	operational feedback. Contract Incentive Fee Plan will focus on delivering high quality (low defect) and on-time software in laboratories and flight test.
7.	Combat Network Communications Technology Equipment for Software Integration Laboratory: If Combat Network Communications Technology equipment is unavailable in required quantities then testing will be extended and program delays will occur. Managed as likelihood of three, consequence of four in risk management program. Mitigation plan-- equipment will be shared from other laboratories and/or emulations will be utilized.
<b>Revised Original Estimate (N/A)</b>	
1.	None
<b>Current Procurement Cost (December 2021)</b>	
1.	There are no known risks identified with this program at this time.

## Unit Cost

### *Current Baseline Compared with Current Estimate*

Category (\$M)	Current APB	Current Estimate	% Change	NMC Breach
<b>PAUC</b>				
Cost	2,042.1	2,022.35	-0.97%	-
Quantity	76	76	-	-
Unit Cost	26.870	26.610	-0.97%	-
<b>APUC</b>				
Cost	885.0	885.0	-	-
Quantity	74	74	-	-
Unit Cost	11.959	11.959	0.00%	-

### *Original Baseline Compared with Current Estimate*

Category (\$M)	Current APB	Current Estimate	% Change	NMC Breach
<b>PAUC</b>				
Cost	2,042.1	2,022.35	-0.97%	-
Quantity	76	76	-	-
Unit Cost	26.870	26.610	-0.97%	-
<b>APUC</b>				
Cost	885.0	885.0	-	-
Quantity	74	74	-	-
Unit Cost	11.959	11.959	0.00%	-

### Unit Cost Notes

Cost information sourced from Milestone B SCP dated March 31, 2021 with SCP Memo Addendum dated May 12, 2021. Due to a difference in rounding and dollar precision the numbers in the APB may not align completely with the SCP.

*Significant Technical Risks*

Significant Technical Risks	
<b>Current Baseline Estimate (December 2021)</b>	
1.	There are no known risks identified with this baseline estimate.
<b>Milestone B (June 2021)</b>	
1.	There are no known risks identified with this baseline estimate.

## Contracts

Contract Data (\$TYM)		
Contract Number	FA8628-19-F-1003	
Effort Number		
Contract Type	CPFF	
Modification Number		
Award Date	June 27, 2019	
Definitization Date	December 19, 2019	
Order Number		
CAGE Code/CAGE Legal Name	1N929 / The Boeing Company - Defense, Space and Security	
Contract Title	B-52 RMP Phase 2B Suppliers Integration	
Contract Address	6001 S. Air Depot Blvd, Oklahoma City, OK 73135	
Contracts/Effort Price, Quantity, and Performance (\$TYM)		
Initial Target Price (UCA NTE)	Current Target Price	
130.0	194.6	
Initial Ceiling Price	Current Ceiling Price	
N/A	N/A	
Contract's EAC	PM's EAC	
163.5	167.2	
Initial Quantity	Current Quantity	Delivered Quantity
N/A	N/A	N/A
BAC	BCWP	ACWP:
175.7	129.3	125.9
BCWS	Cost Variance	Schedule Variance
138.8	3.46	-9.48

### Contract Notes

This is the first time this contract is being reported in a SAR. The difference between the Initial Contract Price Target and the Current Contract Price Target is due to definitizing the Undefinitized Contract Action, awarding five Contract/Engineering Change Proposals, covering material and labor overruns, and exercising four option Contract Line Item Numbers.

#### Cost Variance:

The favorable cumulative cost variance is due to several work units across the contract, including sub-suppliers, using less hours than planned to complete scheduled work scope, accomplishing contract scope more efficiently.

#### Schedule Variance:

The unfavorable cumulative schedule variance is due to the radar vendor requesting a period of performance extension in their material Contract Line Item Numbers because they are behind schedule on material ordering and receipt. The program believes this will have little impact to critical, near critical or driving paths. Further, the Electronic Warfare interoperability supplier is behind on software tasks. This sub-supplier has added additional resources to recover.

Contract Data (\$TYM)		
Contract Number	FA8628-21-F-1006	
Effort Number		
Contract Type	CPIF	
Modification Number		
Award Date	June 14, 2021	
Definitization Date	January 31, 2022	
Order Number		
CAGE Code/CAGE Legal Name	1N929 / The Boeing Company - Defense, Space and Security	
Contract Title	B-52 Radar Modernization Program - EMD	
Contract Address	6001 S. Air Depot Blvd, Oklahoma City, OK 73135	
Contracts/Effort Price, Quantity, and Performance (\$TYM)		
Initial Target Price	Current Target Price	
523.4	523.6	
Initial Ceiling Price	Current Ceiling Price	
N/A	N/A	
Contract's EAC	PM's EAC	
524.7	553.2	
Initial Quantity	Current Quantity	Delivered Quantity
2	2	0
BAC	BCWP	ACWP
527.737	77.3	80.3
BCWS	Cost Variance	Schedule Variance
79.8	-2.93	-2.48

## Contract Notes

This is the first time this contract is being reported in a SAR. The B-52 Program team definitized the EMD Undefinitized Contract Action at a total negotiated price of \$523.4M.

### Cost Variance:

The unfavorable cumulative cost variance is due to ordering material earlier than planned to maintain schedule given increased lead times, as well as surge labor required to meet Critical Design Review entry criteria and successfully conduct the Critical Design Review in February 2022.

### Schedule Variance:

The unfavorable cumulative schedule variance is due to the radar sub-supplier's hardware dependencies delaying software development as well as delayed display unit delivery because of faulty components that needed to be sent back to the vendor for repair.

## Deliveries and Expenditures

### *Deliveries*

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	74	0.00%
<b>Total Program Quantity Delivered</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>0.00%</b>

### *Expended and Appropriated (TY \$M)*

Total Acquisition Cost:	2,228.1
Expended to Date:	505.1
Percent Expended:	22.7%
Total Funding Years:	14
Years Appropriated:	6
Percent Years Appropriated:	42.9%
Appropriated to Date:	559.4
Percent Appropriated:	25.1%

## Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	June 10, 2021	June 10, 2021
<b>Approved Quantity</b>	28	28
<b>Reference</b>	Milestone B ADM	Milestone B ADM
<b>Start Year</b>	2024	2024
<b>End Year</b>	2026	2026

Rationale if Current Total LRIP Quantity exceeds 10% of the total Procurement quantities:

In the program's Milestone B ADM, the SAE approved the following updates in the RMP acquisition strategy:

The program's elimination of advanced procurement (AP) results in the need to use same-year funding for long-lead and kit procurement. This change affected the program's Milestone C (MS C) strategy and resulted in a need to increase LRIP quantities to avoid a break in the production line.

The program will split the MS C event into two separate decision points. The reason for this split is to enable procurement of the initial lot in time to support production line stand-up required to meet the FY 2026 IOC date.

The program would need to purchase long-lead items in FY 2024 to meet the number of assets required by the IOC date. The two Milestone C decision points allow the use of procurement funds in support of the program timeline and also mitigates risk.

The LRIP quantity increased from 11 aircraft (15% of total quantities) to 28 aircraft (38% of total quantities). This is due to elimination of AP. In the prior approved acquisition strategy, the inclusion of AP in the production strategy enabled Lot 2 procurement to occur after the Full Rate Production decision.

## Operating and Support Costs

### *Total Program O&S Cost Compared with Baseline*

	Current APB Objective (BY\$)	Current APB Threshold (BY\$)	Current Estimate (BY\$)	Current Estimate (TY\$)	Deviation
<b>Total O&amp;S (\$Millions)</b>	391.8	431.0	391.8	582.6	

### *O&S Cost Breakdown*

Category (BY\$ Million)	B-52 RMP
Unit-Level Manpower	-
Unit Operations	-
Maintenance	257.05
Sustaining Support	69.10
Continued System Improvements	65.68
Other	-
<b>Total O&amp;S</b>	<b>391.83</b>