



# Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-537



## National Airspace System (NAS)

As of December 31, 2012

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Program Information

**Program Name**

National Airspace System (NAS)

**DoD Component**

Air Force

**Joint Participants**

Army; Navy

## Responsible Office

**Responsible Office**

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## References

**SAR Baseline (Production Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 7, 2005

**Approved APB**

Air Force Acquisition Executive (AFAE) Approved Acquisition Program Baseline (APB) dated July 12, 2006

## Mission and Description

The DoD National Airspace System (NAS) is comprised of three systems: the Digital Airport Surveillance Radar (DASR), the DoD Advanced Automation System (DAAS), also known as the Standard Terminal Automation Replacement System (STARS) within the Federal Aviation Administration (FAA), and the Voice Communication Switching System (VCSS). The DoD NAS program is modernizing the DoD radar approach control facilities in parallel with the FAA. The DoD NAS program provides systems and facilities compatible/interoperable with the FAA modernization, prevents DoD flight delays and cancellations, continues DoD's access into Special Use Airspace, provides transparent services to military and civil aircraft, replaces aging DoD Air Traffic Control (ATC) systems, and increases flight safety. NAS is a Non-Developmental Item (NDI) acquisition. DoD will upgrade voice, data, and sensor systems as well as facility configurations and operations concepts to provide continued quantity and quality of ATC services to the aviation community. To supplement the DAAS, the DoD procured the Airfield Automation System (AFAS) to integrate weather, airport environmental data, and airfield equipment status at air traffic control positions. DoD military ATC and fighting/flying readiness will be maintained.

## Executive Summary

The National Airspace System (NAS) program continued full scale production of Digital Airport Surveillance Radars (DASR) and DoD Advanced Automation Systems (DAAS) for the Air Force, Army and Navy in Calendar Year (CY) 2012.

NAS System Engineering Plan (SEP) was signed on January 10, 2012.

NAS Risk Management Plan signed on February 14, 2012.

NAS approved for "Paper" Configuration Steering Board on December 2, 2012.

Navy procured two DASR systems: El Centro and Meridian.

NAS Program Management Agreement signed March 11, 2013.

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

### Threshold Breaches

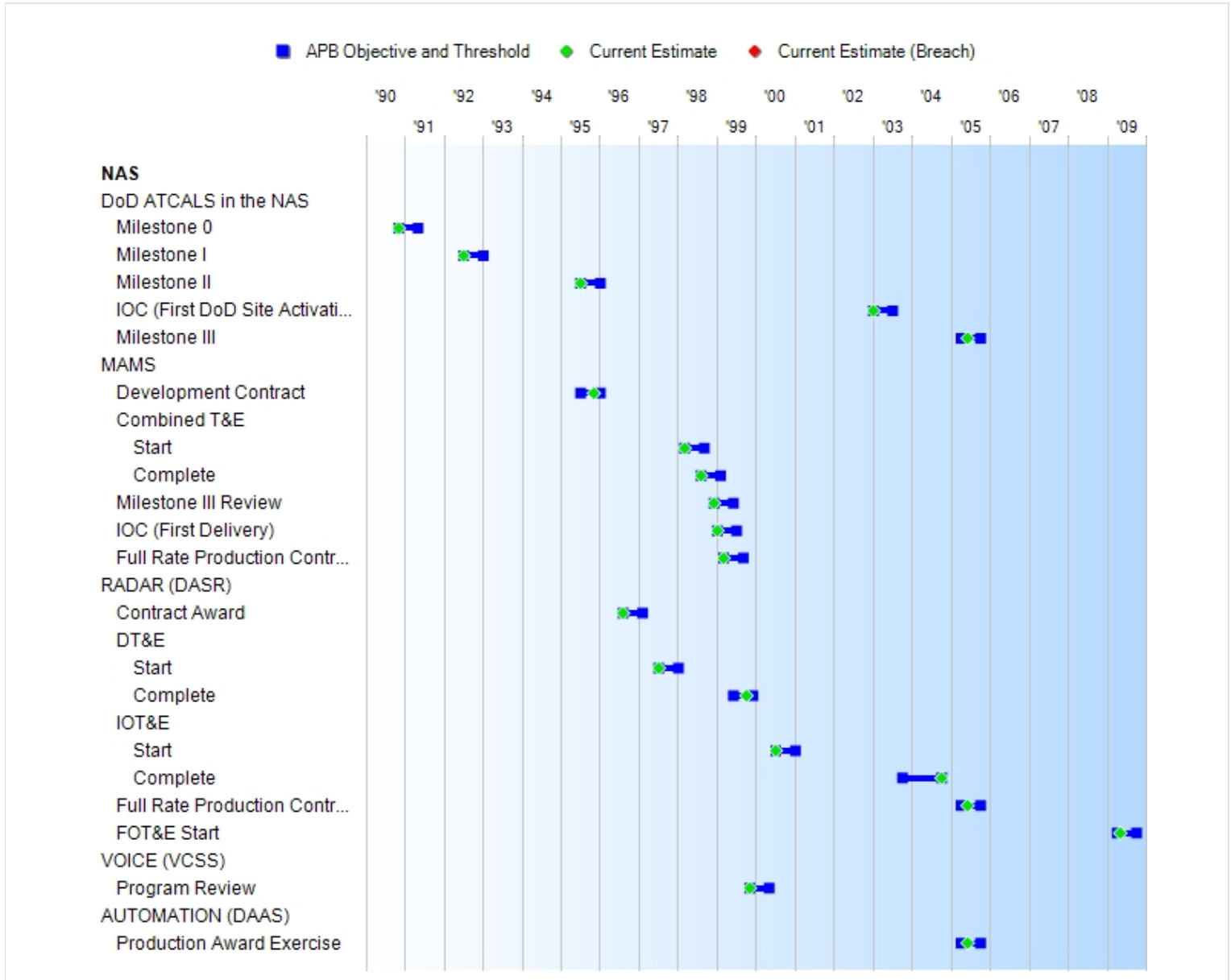
APB Breaches		
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<b>Schedule</b>		<input type="checkbox"/>
<b>Performance</b>		<input type="checkbox"/>
<b>Cost</b>	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
<b>O&amp;S Cost</b>		<input type="checkbox"/>
<b>Unit Cost</b>	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

Nunn-McCurdy Breaches		
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<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	PAUC	None
	APUC	None

# Schedule



<b>Milestones</b>	<b>SAR Baseline Prod Est</b>	<b>Current APB Production Objective/Threshold</b>		<b>Current Estimate</b>
DoD ATCALs in the NAS				
Milestone 0	NOV 1990	NOV 1990	MAY 1991	NOV 1990
Milestone I	JUL 1992	JUL 1992	JAN 1993	JUL 1992
Milestone II	JUL 1995	JUL 1995	JAN 1996	JUL 1995
IOC (First DoD Site Activation)	JAN 2003	JAN 2003	JUL 2003	JAN 2003
Milestone III	APR 2005	APR 2005	OCT 2005	JUN 2005
MAMS				
Development Contract	JUL 1995	JUL 1995	JAN 1996	NOV 1995
Combined T&E				
Start	MAR 1998	MAR 1998	SEP 1998	MAR 1998
Complete	AUG 1998	AUG 1998	FEB 1999	AUG 1998
Milestone III Review	DEC 1998	DEC 1998	JUN 1999	DEC 1998
IOC (First Delivery)	JAN 1999	JAN 1999	JUL 1999	JAN 1999
Full Rate Production Contract Award	MAR 1999	MAR 1999	SEP 1999	MAR 1999
RADAR (DASR)				
Contract Award	AUG 1996	AUG 1996	FEB 1997	AUG 1996
DT&E				
Start	JUL 1997	JUL 1997	JAN 1998	JUL 1997
Complete	JUN 1999	JUN 1999	DEC 1999	OCT 1999
IOT&E				
Start	JUL 2000	JUL 2000	JAN 2001	JUL 2000
Complete	OCT 2003	OCT 2003	OCT 2004	OCT 2004
Full Rate Production Contract Award	APR 2005	APR 2005	OCT 2005	JUN 2005
FOT&E Start	JUN 2006	APR 2009	OCT 2009	MAY 2009
VOICE (VCSS)				
Program Review	NOV 1999	NOV 1999	MAY 2000	NOV 1999
AUTOMATION (DAAS)				
Production Award Exercise	APR 2005	APR 2005	OCT 2005	JUN 2005



**Acronyms And Abbreviations**

ATCALs - Air Traffic Control and Landing Systems  
DAAS - DOD Advanced Automation System  
DASR - Digital Airport Surveillance Radar  
DT&E - Developmental Test & Evaluation  
FOT&E - Follow-on Operational Test & Evaluation  
IOC - Initial Operational Capability  
IOT&E - Initial Operational Test and Evaluation  
MAMS - Military Airspace Management System  
T&E - Test and Evaluation  
VCSS - Voice Communications Switching System

**Change Explanations**

None

## Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
DoD ATCALs in the NAS					
Inter/Intrafacility Data Transfer					
Auto Transfer of Position Track Data	IAW ICD	IAW ICD	IAW ICD	IAW ICD	IAW ICD
Electronic Inter-facility Transfer of Flight Plans	IAW ICD	IAW ICD	IAW ICD	IAW ICD	IAW ICD
Aircraft Tracked Medium (LCF)	900	900	250	422	422
Radar Subclutter Visibility (dB)	55	55	42	47	47
Net-Ready	100% of applicable, approved key interface profiles	100% of applicable, approved key interface profiles	With FAA agreement, 100% of enterprise-level or critical applicable, approved key interface profiles	TBD	With FAA agreement, 100% of enterprise-level or critical applicable, approved key interface profiles
MAMS					
Conflict Identification	100% of conflicts identified; 85 % of conflicts identified	N/A	N/A	TBD	N/A
Interface with FAA	Transmittal Time for 85% of messages between Scheduler and FAA < or = 5 (min)	N/A	N/A	TBD	N/A
Reporting	Processing Time of	N/A	N/A	TBD	N/A

	Utilization Data Requests				
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**Requirements Source:** Operational Requirements Document (ORD) for DoD Air Traffic Control and Landing Systems (ATCALs) dated March 16, 2005

#### Acronyms And Abbreviations

AFOTEC - Air Force Operational Test and Evaluation Center

ATCALs - Air Traffic Control and Landing Systems

dB - decibels

FAA - Federal Aviation Administration

IAW - In Accordance With

ICD - Interface Control Document

LCF - Local Control Facility

MAMS - Military Airspace Management System

N/A - Not Applicable

TBD - To Be Determined

#### Change Explanations

None

## Track To Budget

### RDT&E

APPN 1319	BA 05	PE 0604504N	(Navy)	
	Project 1657	Navy NAS Mod/Shore Air Traffic Control Systems	(Shared)	(Sunk)
APPN 2040	BA 05	PE 0604633A	(Army)	
	Project D586	Army Airfield Support Equipment		(Sunk)
APPN 3600	BA 07	PE 0305137F	(Air Force)	
	Project 4090	National Airspace System (NAS)		(Sunk)

### Procurement

APPN 1810	BA 02	PE 0204696N	(Navy)	
	ICN 284000	Navy NAS Mod	(Shared)	
APPN 1810	BA 08	PE 0204696N	(Navy)	
	ICN 9020	Navy NAS Mod	(Shared)	(Sunk)
APPN 2031	BA 04	PE 0210100A	(Army)	
	ICN AA0050	Army Airfield Support Equipment	(Shared)	
APPN 3080	BA 03	PE 0305137F	(Air Force)	
	ICN 833020	NAS		
APPN 3080	BA 05	PE 0305137F	(Air Force)	
	ICN 861900	NAS	(Shared)	(Sunk)

## Cost and Funding

### Cost Summary

#### Total Acquisition Cost and Quantity

Appropriation	BY2005 \$M			BY2005 \$M	TY \$M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	134.0	134.0	147.4	135.1	115.8	115.8	115.8
Procurement	1239.2	1239.2	1363.1	1259.0	1305.3	1305.3	1331.0
Flyaway	845.7	--	--	907.7	894.9	--	966.1
Recurring	845.7	--	--	907.7	894.9	--	966.1
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	393.5	--	--	351.3	410.4	--	364.9
Other Support	327.4	--	--	289.3	342.2	--	301.3
Initial Spares	66.1	--	--	62.0	68.2	--	63.6
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	1373.2	1373.2	N/A	1394.1	1421.1	1421.1	1446.8

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	93	93	88
Total	93	93	88

The unit of measure of this program represents NAS operational sites. A NAS site (unit) represents at least one paired DoD Advanced Automation Systems (DAAS) and Digital Airport Surveillance Radars (DASR). This definition of a unit is not representative of the typical equipment installed at a NAS site. It does not account for Voice Communication Switching System (VCSS) equipment, stand-alone DAAS equipment, or sites that have multiple DASR systems. Costs vary significantly from site to site due to particular site unique configuration requirements.

Current Estimate quantity has changed from 92 in previous SAR to 88 due to Navy reducing their planned unit procurement quantities by 4. Quantity and funding reduction due to Navy resource sponsors decision to reduce their inventory.

## Cost and Funding

### Funding Summary

#### Appropriation and Quantity Summary FY2014 President's Budget / December 2012 SAR (TY\$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	115.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.8
Procurement	1242.9	42.9	20.4	12.1	7.2	2.7	2.8	0.0	1331.0
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	1358.7	42.9	20.4	12.1	7.2	2.7	2.8	0.0	1446.8
PB 2013 Total	1354.2	47.0	26.6	31.8	13.3	2.8	0.0	0.0	1475.7
Delta	4.5	-4.1	-6.2	-19.7	-6.1	-0.1	2.8	0.0	-28.9

Current Estimate quantity has changed from 92 in previous SAR to 88 due to Navy reducing their planned unit procurement quantities by 4. Quantity and funding reduction due to Navy resource sponsors decision to reduce their inventory.

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	87	1	0	0	0	0	0	0	88
PB 2014 Total	0	87	1	0	0	0	0	0	0	88
PB 2013 Total	0	88	1	1	1	1	0	0	0	92
Delta	0	-1	0	-1	-1	-1	0	0	0	-4

## Cost and Funding

### Annual Funding By Appropriation

#### Annual Funding TY\$

#### 3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1990	--	--	--	--	--	--	4.0
1991	--	--	--	--	--	--	9.9
1992	--	--	--	--	--	--	4.2
1993	--	--	--	--	--	--	6.7
1994	--	--	--	--	--	--	14.2
1995	--	--	--	--	--	--	29.5
1996	--	--	--	--	--	--	13.3
1997	--	--	--	--	--	--	11.8
1998	--	--	--	--	--	--	11.6
1999	--	--	--	--	--	--	1.8
2000	--	--	--	--	--	--	1.8
<b>Subtotal</b>	--	--	--	--	--	--	<b>108.8</b>

**Annual Funding BY\$**

**3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
1990	--	--	--	--	--	--	5.2
1991	--	--	--	--	--	--	12.4
1992	--	--	--	--	--	--	5.1
1993	--	--	--	--	--	--	8.0
1994	--	--	--	--	--	--	16.6
1995	--	--	--	--	--	--	33.9
1996	--	--	--	--	--	--	15.0
1997	--	--	--	--	--	--	13.1
1998	--	--	--	--	--	--	12.8
1999	--	--	--	--	--	--	2.0
2000	--	--	--	--	--	--	1.9
<b>Subtotal</b>	--	--	--	--	--	--	<b>126.0</b>



**Annual Funding TY\$**

**1319 | RDT&E | Research, Development, Test, and Evaluation, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
1990	--	--	--	--	--	--	4.0
<b>Subtotal</b>	--	--	--	--	--	--	<b>4.0</b>

**Annual Funding BY\$**

**1319 | RDT&E | Research, Development, Test, and Evaluation, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
1990	--	--	--	--	--	--	5.2
<b>Subtotal</b>	--	--	--	--	--	--	<b>5.2</b>

**Annual Funding TY\$**  
**2040 | RDT&E | Research, Development, Test, and Evaluation, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
1990	--	--	--	--	--	--	3.0
<b>Subtotal</b>	--	--	--	--	--	--	<b>3.0</b>

**Annual Funding BY\$**

**2040 | RDT&E | Research, Development, Test, and Evaluation, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
1990	--	--	--	--	--	--	3.9
<b>Subtotal</b>	--	--	--	--	--	--	<b>3.9</b>

**Annual Funding TY\$**  
**2031 | Procurement | Aircraft Procurement, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
1997	--	--	0.7	--	0.7	--	0.7
1998	--	--	0.1	--	0.1	1.0	1.1
1999	--	--	1.6	--	1.6	0.1	1.7
2000	--	--	2.4	--	2.4	--	2.4
2001	--	--	12.0	--	12.0	1.2	13.2
2002	--	--	5.5	--	5.5	2.9	8.4
2003	1	6.7	2.4	--	9.1	4.6	13.7
2004	1	7.3	0.3	--	7.6	5.2	12.8
2005	2	7.7	1.0	--	8.7	4.8	13.5
2006	1	10.1	1.1	--	11.2	4.0	15.2
2007	2	18.6	4.8	--	23.4	4.8	28.2
2008	2	9.0	4.2	--	13.2	6.2	19.4
2009	1	19.1	4.1	--	23.2	5.1	28.3
2010	1	7.8	2.9	--	10.7	2.2	12.9
2011	--	--	3.2	--	3.2	1.3	4.5
2012	--	--	8.6	--	8.6	1.8	10.4
2013	--	--	1.2	--	1.2	0.2	1.4
2014	--	--	1.9	--	1.9	0.6	2.5
2015	--	--	2.0	--	2.0	0.9	2.9
2016	--	--	1.6	--	1.6	0.9	2.5
<b>Subtotal</b>	<b>11</b>	<b>86.3</b>	<b>61.6</b>	<b>--</b>	<b>147.9</b>	<b>47.8</b>	<b>195.7</b>

**Annual Funding BY\$**  
**2031 | Procurement | Aircraft Procurement, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
1997	--	--	0.8	--	0.8	--	0.8
1998	--	--	0.1	--	0.1	1.1	1.2
1999	--	--	1.7	--	1.7	0.1	1.8
2000	--	--	2.6	--	2.6	--	2.6
2001	--	--	12.6	--	12.6	1.3	13.9
2002	--	--	5.6	--	5.6	3.1	8.7
2003	1	6.8	2.4	--	9.2	4.8	14.0
2004	1	7.2	0.3	--	7.5	5.2	12.7
2005	2	7.4	1.0	--	8.4	4.6	13.0
2006	1	9.5	1.0	--	10.5	3.8	14.3
2007	2	17.1	4.5	--	21.6	4.4	26.0
2008	2	8.2	3.8	--	12.0	5.6	17.6
2009	1	17.1	3.7	--	20.8	4.5	25.3
2010	1	6.8	2.6	--	9.4	1.9	11.3
2011	--	--	2.8	--	2.8	1.1	3.9
2012	--	--	7.2	--	7.2	1.5	8.7
2013	--	--	0.9	--	0.9	0.2	1.1
2014	--	--	1.5	--	1.5	0.5	2.0
2015	--	--	1.6	--	1.6	0.7	2.3
2016	--	--	1.2	--	1.2	0.7	1.9
<b>Subtotal</b>	<b>11</b>	<b>80.1</b>	<b>57.9</b>	<b>--</b>	<b>138.0</b>	<b>45.1</b>	<b>183.1</b>

## Annual Funding TY\$

## 3080 | Procurement | Other Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1998	--	--	4.5	--	4.5	11.3	15.8
1999	--	--	5.9	--	5.9	9.2	15.1
2000	3	28.0	7.9	--	35.9	12.7	48.6
2001	2	33.7	12.0	--	45.7	14.5	60.2
2002	4	32.4	0.3	--	32.7	21.1	53.8
2003	1	13.3	2.9	--	16.2	21.5	37.7
2004	--	--	13.2	--	13.2	16.8	30.0
2005	1	28.3	2.5	--	30.8	12.8	43.6
2006	3	34.3	5.5	--	39.8	24.5	64.3
2007	6	40.6	2.2	--	42.8	26.7	69.5
2008	4	50.3	--	--	50.3	15.1	65.4
2009	6	49.9	--	--	49.9	14.5	64.4
2010	4	42.2	--	--	42.2	14.5	56.7
2011	7	74.8	--	--	74.8	16.6	91.4
2012	3	36.4	--	--	36.4	9.9	46.3
2013	--	--	17.2	--	17.2	7.4	24.6
2014	--	--	3.3	--	3.3	4.0	7.3
2015	--	--	0.2	--	0.2	2.0	2.2
2016	--	--	0.2	--	0.2	2.0	2.2
2017	--	--	0.2	--	0.2	2.5	2.7
2018	--	--	0.3	--	0.3	2.5	2.8
<b>Subtotal</b>	<b>44</b>	<b>464.2</b>	<b>78.3</b>	<b>--</b>	<b>542.5</b>	<b>262.1</b>	<b>804.6</b>

**Annual Funding BY\$**  
**3080 | Procurement | Other Procurement, Air Force**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
1998	--	--	4.9	--	4.9	12.3	17.2
1999	--	--	6.3	--	6.3	9.9	16.2
2000	3	29.7	8.4	--	38.1	13.4	51.5
2001	2	35.1	12.6	--	47.7	15.1	62.8
2002	4	33.2	0.3	--	33.5	21.6	55.1
2003	1	13.8	3.0	--	16.8	22.3	39.1
2004	--	--	13.4	--	13.4	17.1	30.5
2005	1	27.9	2.5	--	30.4	12.6	43.0
2006	3	32.9	5.3	--	38.2	23.4	61.6
2007	6	37.9	2.1	--	40.0	25.0	65.0
2008	4	46.1	--	--	46.1	13.8	59.9
2009	6	45.1	--	--	45.1	13.1	58.2
2010	4	37.6	--	--	37.6	12.9	50.5
2011	7	65.4	--	--	65.4	14.5	79.9
2012	3	31.2	--	--	31.2	8.4	39.6
2013	--	--	14.5	--	14.5	6.2	20.7
2014	--	--	2.7	--	2.7	3.3	6.0
2015	--	--	0.2	--	0.2	1.6	1.8
2016	--	--	0.2	--	0.2	1.5	1.7
2017	--	--	0.2	--	0.2	1.9	2.1
2018	--	--	0.2	--	0.2	1.9	2.1
<b>Subtotal</b>	<b>44</b>	<b>435.9</b>	<b>76.8</b>	<b>--</b>	<b>512.7</b>	<b>251.8</b>	<b>764.5</b>



**Annual Funding TY\$**  
**1810 | Procurement | Other Procurement, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
1998	--	--	0.9	--	0.9	1.3	2.2
1999	2	5.3	--	--	5.3	3.4	8.7
2000	5	27.0	--	--	27.0	6.4	33.4
2001	--	--	23.6	--	23.6	7.8	31.4
2002	3	13.3	--	--	13.3	5.3	18.6
2003	2	5.1	--	--	5.1	1.9	7.0
2004	1	11.3	--	--	11.3	4.6	15.9
2005	1	8.4	--	--	8.4	4.7	13.1
2006	4	14.4	--	--	14.4	3.8	18.2
2007	4	22.8	--	--	22.8	4.5	27.3
2008	1	19.9	--	--	19.9	4.1	24.0
2009	3	21.5	--	--	21.5	1.5	23.0
2010	3	27.8	--	--	27.8	1.1	28.9
2011	1	16.6	--	--	16.6	0.8	17.4
2012	2	23.4	--	--	23.4	1.2	24.6
2013	1	15.9	--	--	15.9	1.0	16.9
2014	--	--	9.8	--	9.8	0.8	10.6
2015	--	--	6.4	--	6.4	0.6	7.0
2016	--	--	2.3	--	2.3	0.2	2.5
<b>Subtotal</b>	<b>33</b>	<b>232.7</b>	<b>43.0</b>	<b>--</b>	<b>275.7</b>	<b>55.0</b>	<b>330.7</b>

**Annual Funding BY\$**  
**1810 | Procurement | Other Procurement, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non End Item Recurring Flyaway BY 2005 \$M</b>	<b>Non Recurring Flyaway BY 2005 \$M</b>	<b>Total Flyaway BY 2005 \$M</b>	<b>Total Support BY 2005 \$M</b>	<b>Total Program BY 2005 \$M</b>
1998	--	--	1.0	--	1.0	1.4	2.4
1999	2	5.7	--	--	5.7	3.7	9.4
2000	5	28.9	--	--	28.9	6.8	35.7
2001	--	--	25.0	--	25.0	8.2	33.2
2002	3	13.9	--	--	13.9	5.5	19.4
2003	2	5.2	--	--	5.2	2.0	7.2
2004	1	11.3	--	--	11.3	4.6	15.9
2005	1	8.1	--	--	8.1	4.6	12.7
2006	4	13.5	--	--	13.5	3.6	17.1
2007	4	20.9	--	--	20.9	4.2	25.1
2008	1	18.0	--	--	18.0	3.7	21.7
2009	3	19.2	--	--	19.2	1.3	20.5
2010	3	24.3	--	--	24.3	0.9	25.2
2011	1	14.3	--	--	14.3	0.7	15.0
2012	2	19.7	--	--	19.7	1.0	20.7
2013	1	13.1	--	--	13.1	0.9	14.0
2014	--	--	8.0	--	8.0	0.6	8.6
2015	--	--	5.1	--	5.1	0.5	5.6
2016	--	--	1.8	--	1.8	0.2	2.0
<b>Subtotal</b>	<b>33</b>	<b>216.1</b>	<b>40.9</b>	<b>--</b>	<b>257.0</b>	<b>54.4</b>	<b>311.4</b>

## Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	7/1/1995	8/8/2001
<b>Approved Quantity</b>	8	20
<b>Reference</b>	Milestone II ADM	ADM
<b>Start Year</b>	1995	1995
<b>End Year</b>	2001	2001

The Current Total LRIP Quantity is more than 10% of the total production quantity due to Air Force approved amendment to the Acquisition Decision Memorandum (ADM) dated August 8, 2001, which authorized LRIP of up to 20 Digital Airport Surveillance Radars (DASRs) and 13 DoD Advanced Automation Systems (DAAS). This keeps DoD DASR production and deployment efforts on track avoiding shutdown, restart, and retraining impacts.

The LRIP quantity of eight DASR and zero DAAS approved at Milestone (MS) II during July 1995 was for the radar and automation portions of NAS. Air Force approved an ADM on June 30, 1997 increasing the LRIP up to 20 DASRs and 20 DAAS.

## **Foreign Military Sales**

None

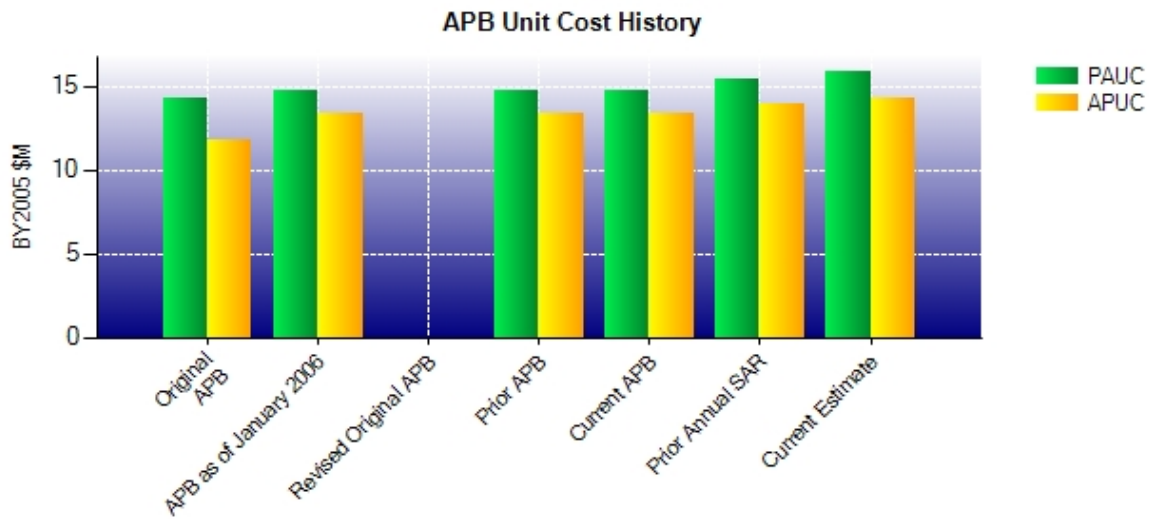
## **Nuclear Cost**

None

**Unit Cost****Unit Cost Report**

	<b>BY2005 \$M</b>	<b>BY2005 \$M</b>	
<b>Unit Cost</b>	<b>Current UCR Baseline (JUL 2006 APB)</b>	<b>Current Estimate (DEC 2012 SAR)</b>	<b>BY % Change</b>
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	1373.2	1394.1	
Quantity	93	88	
Unit Cost	14.766	15.842	+7.29
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	1239.2	1259.0	
Quantity	93	88	
Unit Cost	13.325	14.307	+7.37
	<b>BY2005 \$M</b>	<b>BY2005 \$M</b>	
<b>Unit Cost</b>	<b>Original UCR Baseline (JUL 1995 APB)</b>	<b>Current Estimate (DEC 2012 SAR)</b>	<b>BY % Change</b>
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	762.1	1394.1	
Quantity	53	88	
Unit Cost	14.379	15.842	+10.17
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	629.7	1259.0	
Quantity	53	88	
Unit Cost	11.881	14.307	+20.42

### Unit Cost History



	Date	BY2005 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
<b>Original APB</b>	JUL 1995	14.270	11.789	14.926	12.711
<b>APB as of January 2006</b>	JUN 2005	14.766	13.325	15.281	14.035
<b>Revised Original APB</b>	N/A	N/A	N/A	N/A	N/A
<b>Prior APB</b>	JUN 2005	14.766	13.325	15.281	14.035
<b>Current APB</b>	JUL 2006	14.766	13.325	15.281	14.035
<b>Prior Annual SAR</b>	DEC 2011	15.421	13.952	16.040	14.782
<b>Current Estimate</b>	DEC 2012	15.842	14.307	16.441	15.125

### SAR Unit Cost History

#### Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
14.926	-0.815	-3.104	1.517	1.544	-0.791	0.000	2.004	0.355	15.281

#### Current SAR Baseline to Current Estimate (TY \$M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
15.281	0.028	0.327	0.091	0.000	1.242	0.000	-0.528	1.160	16.441

**Initial SAR Baseline to Current SAR Baseline (TY \$M)**

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
12.711	-0.747	-2.152	1.517	1.544	-0.842	0.000	2.004	1.324	14.035

**Current SAR Baseline to Current Estimate (TY \$M)**

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
14.035	0.040	0.256	0.091	0.000	1.231	0.000	-0.528	1.090	15.125

**SAR Baseline History**

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	JUL 1992	JUL 1992	JUL 1992	JUL 1992
Milestone II	JAN 1994	JUL 1995	JUL 1995	JUL 1995
Milestone III	MAR 1997	JUN 1998	APR 2005	JUN 2005
IOC	OCT 1999	APR 2000	JAN 2003	JAN 2003
Total Cost (TY \$M)	122.6	791.1	1421.1	1446.8
Total Quantity	N/A	53	93	88
Prog. Acq. Unit Cost (PAUC)	N/A	14.926	15.281	16.441

**Cost Variance**

<b>Summary Then Year \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	115.8	1305.3	--	1421.1
Previous Changes				
Economic	-1.0	+1.8	--	+0.8
Quantity	--	-8.8	--	-8.8
Schedule	--	+8.8	--	+8.8
Engineering	--	--	--	--
Estimating	+1.0	+97.5	--	+98.5
Other	--	--	--	--
Support	--	-44.7	--	-44.7
Subtotal	--	+54.6	--	+54.6
Current Changes				
Economic	--	+1.7	--	+1.7
Quantity	--	-38.8	--	-38.8
Schedule	--	-0.8	--	-0.8
Engineering	--	--	--	--
Estimating	--	+10.9	--	+10.9
Other	--	--	--	--
Support	--	-1.9	--	-1.9
Subtotal	--	-28.9	--	-28.9
Total Changes	--	+25.7	--	+25.7
CE - Cost Variance	115.8	1331.0	--	1446.8
CE - Cost & Funding	115.8	1331.0	--	1446.8



<b>Summary Base Year 2005 \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	134.0	1239.2	--	1373.2
Previous Changes				
Economic	--	--	--	--
Quantity	--	-7.3	--	-7.3
Schedule	--	+11.7	--	+11.7
Engineering	--	--	--	--
Estimating	+1.1	+80.3	--	+81.4
Other	--	--	--	--
Support	--	-40.3	--	-40.3
Subtotal	+1.1	+44.4	--	+45.5
Current Changes				
Economic	--	--	--	--
Quantity	--	-31.2	--	-31.2
Schedule	--	-0.8	--	-0.8
Engineering	--	--	--	--
Estimating	--	+9.3	--	+9.3
Other	--	--	--	--
Support	--	-1.9	--	-1.9
Subtotal	--	-24.6	--	-24.6
Total Changes	+1.1	+19.8	--	+20.9
CE - Cost Variance	135.1	1259.0	--	1394.1
CE - Cost & Funding	135.1	1259.0	--	1394.1

Previous Estimate: December 2011

Procurement	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	+1.7
Stretch-out of procurement buy profile resulting from quantity change in FY 2014 to FY 2016 (Navy). (Schedule) (QR)	0.0	+0.2
Total Quantity variance resulting from a decrease of 4 NAS units from 37 to 33 (Navy). (Subtotal)	-42.8	-53.2
Quantity variance resulting from a decrease of 4 NAS units from 37 to 33 (Navy). (Quantity) (QR)	(-31.2)	(-38.8)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-0.8)	(-1.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-10.8)	(-13.4)
Correction to align support and flyaway. (Subtotal)	0.0	0.0
(Estimating)	(+0.1)	(+0.1)
(Support)	(-0.1)	(-0.1)
Adjustment for current and prior escalation. (Estimating)	-0.6	-0.8
Requirements realigned/reprioritized within Product Office. As a result some requirements were moved from FY 2013 to FY 2012 (Army). (Estimating)	+1.5	+1.8
Revised estimate due to movement of 1 NAS unit in FY 2012 (Navy). (Estimating) (QR)	+0.2	+0.3
Increase due to reduced DASR procurement by 4 units while simultaneously procuring corresponding DAAS units (Navy); program quantity is defined as a combination of DASR and DAAS units (Navy). (Estimating) (QR)	+18.9	+22.9
Adjustment for current and prior escalation. (Support)	-0.3	-0.1
Increase in Other Support reflects baseline extension (Air Force). (Support)	+1.6	+2.1
Decrease in Other Support (Army). (Support)	-1.1	-1.4
Decrease in Other Support (Navy). (Support)	-1.9	-2.3
Decrease in Initial Spares (Army). (Support)	-0.1	-0.1
Procurement Subtotal	-24.6	-28.9

(QR) Quantity Related

**Contracts**

**Appropriation: Procurement**

Contract Name **Digital Airport Surveillance Radar II**  
 Contractor Raytheon Company  
 Contractor Location Marlborough, MA 01752  
 Contract Number, Type FA8730-08-D-0001/1, FFP/IDIQ  
 Award Date May 22, 2008  
 Definitization Date September 30, 2008

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
679.0	N/A	95	679.0	N/A	95	679.0	679.0

**Cost And Schedule Variance Explanations**

Cost and Schedule variance reporting is not required on this FFP/IDIQ contract.

**Contract Comments**

Maximum quantity that could be contracted is 95 for Digital Airport Surveillance Radar Phase II Contract.  
 37 Quantities ordered to date:  
 • United States Air Force - 20  
 • United States Navy - 13  
 • United States Army - 4

Contract Price and Funding to date: \$310.2M

## Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	69	69	88	78.41%
Total Program Quantities Delivered	69	69	88	78.41%

Expenditures and Appropriations (TY \$M)			
Total Acquisition Cost	1446.8	Years Appropriated	24
Expenditures To Date	1211.6	Percent Years Appropriated	82.76%
Percent Expended	83.74%	Appropriated to Date	1401.6
Total Funding Years	29	Percent Appropriated	96.88%

The above data is current as of 3/31/2013.

## Operating and Support Cost

### NAS

#### Assumptions and Ground Rules

##### Cost Estimate Reference:

The Operating and Support (O&S) cost estimate is based on analysis performed for the Milestone III decision, letter titled "Department of Defense (DOD) National Airspace System (NAS) Air Force Cost Analysis Improvement Group (AFCAIG) Service Cost Position (SCP)" from SAF/FMC dated March 18, 2005.

##### Sustainment Strategy:

The estimate assumes a 34 year life from year FY00 to FY34 for the 88 sites.

##### Antecedent Information:

There is no antecedent system.

Unitized O&S Costs BY2005 \$M		
Cost Element	NAS Avg Annual Cost Per NAS Site	Avg Annual Cost Per (Antecedent) Antecedent
Unit-Level Manpower	2.100	0.000
Unit Operations	0.200	0.000
Maintenance	0.000	0.000
Sustaining Support	0.100	0.000
Continuing System Improvements	0.400	0.000
Indirect Support	0.300	0.000
Other	0.000	0.000
<b>Total</b>	<b>3.100</b>	<b>--</b>

##### Unitized Cost Comments:

None

	Total O&S Cost \$M			
	Current Production APB Objective/Threshold		Current Estimate	
	NAS		NAS	Avg Annual Cost Per (Antecedent)
<b>Base Year</b>	0.0	0.0	9275.2	N/A
<b>Then Year</b>	0.0	N/A	11000.1	N/A

Total O&S Costs Comments:

Current Estimate quantity has changed from 92 in previous SAR to 88 due to Navy reducing their planned unit procurement quantities by 4. Quantity and funding reduction due to Navy resource sponsors decision to reduce their inventory.

**Disposal Costs**

None