



# Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-349

## WIN-T Increment 2 – Initial Networking On The Move



## WIN-T INCREMENT 2

As of December 31, 2010

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Program Information

**Designation And Nomenclature (Popular Name)**

Warfighter Information Network - Tactical (WIN-T) Increment 2

**DoD Component**

Army

## Responsible Office

**Responsible Office**

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## References

**SAR Baseline (Production Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 8, 2010.

**Approved APB**

DAE Approved Acquisition Program Baseline (APB) dated March 8, 2010

## Mission and Description

Warfighter Information Network-Tactical (WIN-T) is the implementation of the Army's strategy to achieve a world-class Joint expeditionary network enabled by information technologies that support the goals of the Army Campaign Plan and other Army/Joint mandates. WIN-T is a cornerstone tactical communications system supporting the implementation of the LandWarNet strategy during the 2007 to 2025 timeframe. The WIN-T program is establishing a single integrating framework creating a network of networks for the Army.

The WIN-T program focus is to design, develop, produce and field the Future Modular Force transport network, while leveraging mature technologies that can enhance the Current Modular Force to operate in an emerging noncontiguous environment. WIN-T will be developed and fielded in increments that will successively build upon one another.

The focus of this document is WIN-T Increment 2, which provides an initial commercial and military band networking on-the-move (OTM) capability and a mobile infrastructure to Division, Brigade, Battalion and Company. WIN-T Increment 2 also supports limited collaboration and mission planning. It enables the distribution of information via voice, data and real-time video from ground-to-ground and ground-to-satellite communications. WIN-T Increment 2 enables an initial Planning, Monitoring, Controlling and Prioritizing (PMCP) capability to the Division Headquarters (HQs) and/or the Brigade network. Network survivability is enhanced by automatically reconfiguring the network due to node or link loss. Spectrum efficiency and reuse is accomplished with the Highband Network Waveform (HNW) and Net-Centric Waveform (NCW). The Quality of Service (QoS) capability enables message traffic prioritization by level of importance to the warfighter. This acquisition approach will minimize risk, cost and schedule. WIN-T Increment 3 develops the mature technologies which will be inserted into WIN-T Increment 2.

WIN-T Increment 2 will be developed, tested, produced and fielded using an evolutionary acquisition approach. This approach minimizes time, cost and risk, while providing a capability in increments that is fully integrated with the Army's overall warfighting capabilities. An evolutionary acquisition strategy is being utilized to provide for the timely insertion of new technologies into Army communication systems by adhering to the basic principles of the Department of Defense (DoD) Modular Open Systems Approach (MOSA). This allows the Army to keep pace with changing commercial technology and to maintain required interoperability with other joint, strategic and commercial standards-based networks.

## Executive Summary

The WIN-T Increment 2 program conducted a Milestone C on February 3, 2010. The corresponding Acquisition Decision Memorandum (ADM) approved the Milestone C and entry into the Production and Deployment phase and authorization to procure the Low Rate Initial Production (LRIP) Lot 1A. A Letter Contract for Production efforts was awarded on March 24, 2010 and was definitized on December 30, 2010. A subsequent ADM on September 3, 2010 approved authorization to procure the LRIP Lots 1B and 2. A delivery order for the production of Lots 1B and 2 was awarded on January 28, 2011.

A series of events have successfully occurred as follows: a Reliability Growth Plan has been established to ensure the reliability performance parameter is achieved, initial reliability growth testing occurred at General Dynamics throughout 2010, and briefings were provided to the Office of the Secretary of Defense, Network and Information Integration and the Director, Operational Test & Evaluation. These readouts were successfully completed on January 31, 2011.

An Army Executive Order (EXORD) dated September 17, 2010 moved the Initial Operational Test (IOT) date from November 2011 to April through May 2012. Although the Army has made positive changes to improve integrated testing, this has impacted the Increment 2 schedule by moving training and test events further into FY 2012. The Full Rate Production Decision Review has moved to August 2012.

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

## Threshold Breaches

### APB Breaches

<b>Schedule</b>		<input type="checkbox"/>
<b>Performance</b>		<input type="checkbox"/>
<b>Cost</b>	RDT&E	<input type="checkbox"/>
	Procurement	<input checked="" type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
<b>Unit Cost</b>	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

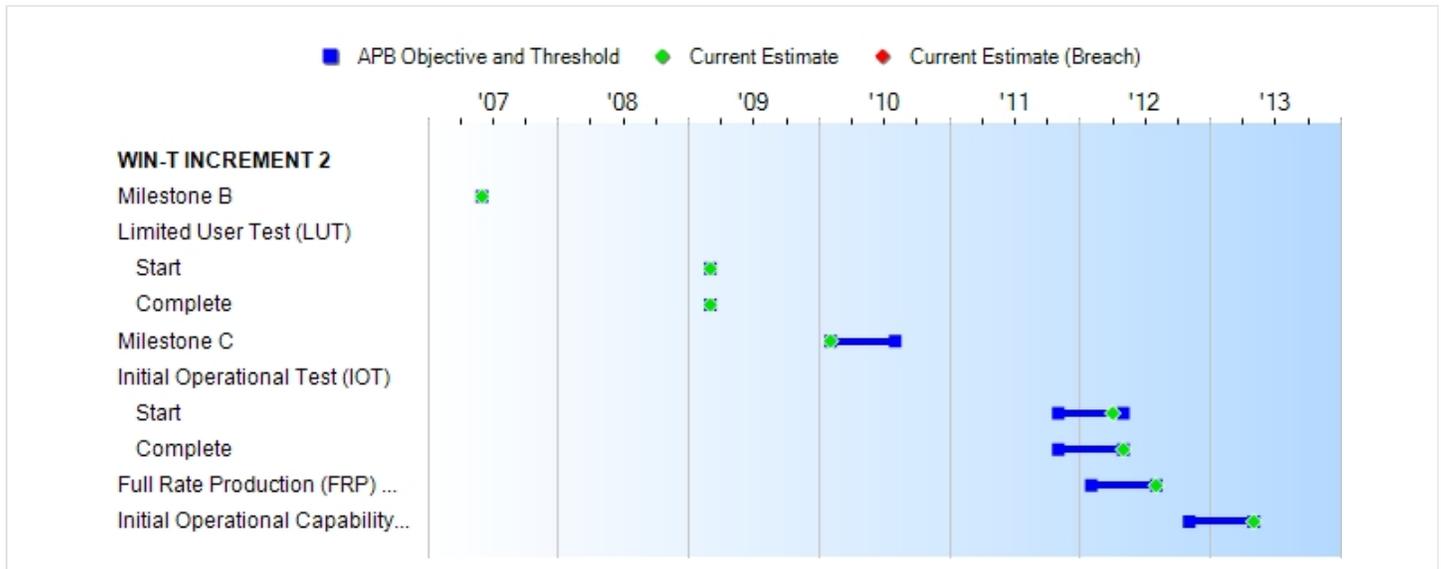
### Explanation of Breach

Because the program is executing successfully, there have been increases to the Increment 2 Procurement quantities and therefore funding. The FY 2012 President's Budget reflects the increased funding and the quantity of units Increment 2 procures.

### Nunn-McCurdy Breaches

<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	PAUC	None
	APUC	None

**Schedule**



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone B	JUN 2007	JUN 2007	JUN 2007	JUN 2007	
Limited User Test (LUT)					
Start	MAR 2009	MAR 2009	MAR 2009	MAR 2009	
Complete	MAR 2009	MAR 2009	MAR 2009	MAR 2009	
Milestone C	FEB 2010	FEB 2010	AUG 2010	FEB 2010	
Initial Operational Test (IOT)					
Start	NOV 2011	NOV 2011	MAY 2012	APR 2012	(Ch-1)
Complete	NOV 2011	NOV 2011	MAY 2012	MAY 2012	(Ch-1)
Full Rate Production (FRP) Decision Review	FEB 2012	FEB 2012	AUG 2012	AUG 2012	(Ch-2)
Initial Operational Capability (IOC)	NOV 2012	NOV 2012	MAY 2013	MAY 2013	(Ch-3)

**Change Explanations**

(Ch-1) The IOT start and complete dates were changed from November 2011 and November 2011 to April 2012 and May 2012, respectively to reflect the direction of the Executive Order dated September 17, 2010.

(Ch-2) The FRP decision date was changed from February 2012 to August 2012 due to the IOT date change.

(Ch-3) The IOC date was changed from November 2012 to May 2013 due to the IOT date change.

## Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Net Ready	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, authenticatio	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, authenticatio	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 identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity,	Achieved threshold at Limited User Test (LUT).	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-

	n, confidentiality, and nonrepudiation, issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	n, confidentiality, and nonrepudiation, issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	authentication, confidentiality, and nonrepudiation, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.		tion, confidentiality, and nonrepudiation, issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.
Network Management	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current network status and connectivity) its WIN-T equipped	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current network status and connectivity) its WIN-T equipped	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current network status and connectivity) its WIN-T equipped	The ability to plan a network was not tested during the LUT. NetOps soldiers could not monitor, manage, or troubleshoot the Quality of Service Edge Device.	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current network status and connectivity) its WIN-T equipped

	units (Bde, Bn, Co) that connect: Objective: Top Secret, Secret, and Unclassified users.	units (Bde, Bn, Co) that connect: Objective: Top Secret, Secret, and Unclassified users.	units (Bde, Bn, Co) that connect: Threshold: Secret and Unclassified users.		units (Bde, Bn, Co) that connect: Objective: Top Secret, Secret, and Unclassified users.
Information Dissemination	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Objective: Critical survival information (Category 1) delivery in <0.5 seconds (95% of completed messages) and time sensitive information (Category 2) in <1 seconds (92% of completed	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Objective: Critical survival information (Category 1) delivery in <0.5 seconds (95% of completed messages) and time sensitive information (Category 2) in <1 seconds (92% of completed	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Threshold: Critical survival information (Category 1) delivery in < or = to 5 seconds (95% of completed messages) and time sensitive information (Category 2) in <8 seconds (92% of completed	Demonstrated during Development Test in December 2008 and used during the LUT in March 2009.	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Objective: Critical survival information (Category 1) delivery in <0.5 seconds (95% of completed messages) and time sensitive information (Category 2) in <1 seconds (92% of completed

	messages).	messages).	messages).		messages).
Force Protection Armor required for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel threats	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel threats (IAW JROCM 120-05)	Achieved threshold at LUT.	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel.
Mobile Throughput For Brigade/Battalion maneuver commanders and their CPs	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communications: Objective: Ground vehicles: from 0 to 45 mph with 4 Mbps per link available for user data.	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communications: Objective: Ground vehicles: from 0 to 45 mph with 4 Mbps per link available for user data.	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communications: Threshold: Ground vehicles: from 0 to 25 mph with 256 Kbps per link available for user data.	Not demonstrated in LUT. TRADOC clarified KPP 5 as aggregate bandwidth (both UDP and TCP-IP, in December 2009). Development Test (DT) demonstrated 160 Kbps simultaneously sent and received UDP data in December 2008. Army and contractor DT demonstrated rates exceeding 256 Kbps using UDP data in December 2009. Army is planning	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communications: Objective: Ground vehicles: from 0 to 45 mph with 4 Mbps per link available for user data.

				DT event for more challenging TCP-IP data.	
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**Requirements Source:**

Capability Production Document (CPD) for Warfighter Information Network - Tactical (WIN-T), approved November 25, 2008

**Acronyms And Abbreviations**

ATH - At The Halt  
 ATO - Authority to Operate  
 BCT - Brigade Combat Team  
 Bde - Brigade  
 Bn - Battalion  
 CENTRIX - Combined Enterprise Regional Information Exchange  
 CP - Command Post  
 CPD - Capabilities Production Document  
 DAA - Designated Approving Authority  
 DISR - Department of Defense Information Technology Standards and Profile Registry  
 DSN - Defense Switched Network  
 DT - Development Test  
 GIG - Global Information Grid  
 HQ - Headquarters  
 IA - Information Assurance  
 IT - Information Technology  
 JROC - Joint Requirements Oversight Council  
 Ka - Kurtz Above  
 Kbps - Kilobits Per Second  
 KIPs - Key Interface Profiles  
 KPP - Key Performance Parameter  
 Ku - Kurtz Under  
 LUT - Limited User Test  
 Mbps - Megabits Per Second  
 Mph - Miles Per Hour  
 NCOW - Network Centric Operations and Warfare  
 NetOps - Network Operations  
 NIPR - Non-Secure Internet Protocol Router  
 RM - Reference Model  
 Sec - Second  
 SIPR - Secure Internet Protocol Router  
 TCP-IP - Transmission Control Protocol - Internet Protocol  
 TRADOC - Training and Doctrine Command  
 UDP - User Datagram Protocol

**Change Explanations**

None

**Memo**

Demonstrated performance is as documented in the Operational Assessment dated January 14, 2010.

**Track To Budget****RDT&E**

APPN 2040	BA 04	PE 0603782A	(Army)	
	Project 355	WIN-T DEM/VAL/Warfighter Information Network Tactical - DEM/VAL	(Shared)	(Sunk)
	Sunk in 2008			
	Project 367	WIN-T DEM/VAL/Warfighter Information Network Tactical - DEM/VAL		
	Project 367 began in FY2009 for WIN-T Increment 2 exclusively. Prior to FY2009 Project 355 was a shared line for both WIN-T Increment 2 and WIN-T Increment 3.			

**Procurement**

APPN 2035	BA 02		(Army)
	ICN BS9741	WIN-T INCREMENT 2 Spares	
	ICN BW7115	Increment 2 Initial Networking On The Move	

The parent line for the Increment 2 Spares (BS9741) is BS9100. The parent line for the Increment 2 procurement (BW7115) is BW7100.

## Cost and Funding

### Cost Summary

#### Total Acquisition Cost and Quantity

Appropriation	BY2010 \$M			BY2010 \$M	TY \$M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold	Current Estimate	Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	264.7	264.7	291.2	271.8	266.5	266.5	273.9
Procurement	4421.3	4421.3	4863.4	5620.5 <sup>1</sup>	4730.4	4730.4	6078.6
Flyaway	3426.9	--	--	4223.9	3652.6	--	4538.1
Recurring	3316.9	--	--	4044.6	3537.1	--	4347.7
Non Recurring	110.0	--	--	179.3	115.5	--	190.4
Support	994.4	--	--	1396.6	1077.8	--	1540.5
Other Support	732.7	--	--	1144.7	793.9	--	1266.9
Initial Spares	261.7	--	--	251.9	283.9	--	273.6
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	4686.0	4686.0	N/A	5892.3	4996.9	4996.9	6352.5

<sup>1</sup> APB Breach

Because the program is executing successfully, there have been increases to the Increment 2 Procurement quantities and therefore funding. The FY 2012 President's Budget reflects the increased funding and the quantity of units Increment 2 procures.

Like all life cycle cost estimates previously performed by the OSD CAPE, the updated estimate to support the WIN-T Increment 2 Milestone C approval is not consistent with the 80% confidence level specified in the Acquisition Reform Act of 2009. It is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful. (Source: Acquisition Decision Memorandum of March 9, 2010.)

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	56	56	56
Procurement	2160	2160	2790
Total	2216	2216	2846

Unit of measure is a combination of communications nodes, which vary in capability depending upon the increment of WIN-T being executed. WIN-T Increment 2 unit of measure is comprised of Tactical Communications Nodes (TCNs), Points of Presence (PoPs) and Soldier Network Extensions (SNEs).

**Cost and Funding****Funding Summary**

**Appropriation and Quantity Summary  
FY2012 President's Budget / December 2010 SAR (TY\$ M)**

<b>Appropriation</b>	<b>Prior</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>To Complete</b>	<b>Total</b>
RDT&E	225.4	17.4	10.2	0.0	0.0	0.0	20.9	0.0	273.9
Procurement	603.0	362.1	936.3	775.9	769.2	1081.8	1038.4	511.9	6078.6
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 2012 Total	828.4	379.5	946.5	775.9	769.2	1081.8	1059.3	511.9	6352.5
PB 2011 Total	828.6	379.5	792.3	783.7	815.8	1105.7	292.1	0.0	4997.7
Delta	-0.2	0.0	154.2	-7.8	-46.6	-23.9	767.2	511.9	1354.8

<b>Quantity</b>	<b>Undistributed</b>	<b>Prior</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>To Complete</b>	<b>Total</b>
Development	56	0	0	0	0	0	0	0	0	56
Production	0	304	96	642	336	370	556	486	0	2790
PB 2012 Total	56	304	96	642	336	370	556	486	0	2846
PB 2011 Total	56	304	96	444	384	376	556	0	0	2216
Delta	0	0	0	198	-48	-6	0	486	0	630

**Cost and Funding****Annual Funding By Appropriation****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>
2007	--	--	--	--	--	--	8.2
2008	--	--	--	--	--	--	107.6
2009	--	--	--	--	--	--	91.3
2010	--	--	--	--	--	--	18.3
2011	--	--	--	--	--	--	17.4
2012	--	--	--	--	--	--	10.2
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	20.9
<b>Subtotal</b>	<b>56</b>	--	--	--	--	--	<b>273.9</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 2010 \$M</b>	<b>Non End Item Recurring Flyaway BY 2010 \$M</b>	<b>Non Recurring Flyaway BY 2010 \$M</b>	<b>Total Flyaway BY 2010 \$M</b>	<b>Total Support BY 2010 \$M</b>	<b>Total Program BY 2010 \$M</b>
2007	--	--	--	--	--	--	8.4
2008	--	--	--	--	--	--	108.7
2009	--	--	--	--	--	--	91.2
2010	--	--	--	--	--	--	18.1
2011	--	--	--	--	--	--	16.9
2012	--	--	--	--	--	--	9.8
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	18.7
<b>Subtotal</b>	<b>56</b>	--	--	--	--	--	<b>271.8</b>

## Annual Funding TY\$

## 2035 | Procurement | Other Procurement, Army

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
2009	56	121.0	--	0.6	121.6	14.3	135.9
2010	248	384.6	--	37.6	422.2	44.9	467.1
2011	96	228.8	--	55.9	284.7	77.4	362.1
2012	642	829.1	--	13.6	842.7	93.6	936.3
2013	336	562.5	--	6.9	569.4	206.5	775.9
2014	370	552.3	--	29.5	581.8	187.4	769.2
2015	556	860.1	--	7.2	867.3	214.5	1081.8
2016	486	809.3	--	24.1	833.4	205.0	1038.4
2017	--	--	--	7.4	7.4	260.5	267.9
2018	--	--	--	7.6	7.6	236.4	244.0
<b>Subtotal</b>	<b>2790</b>	<b>4347.7</b>	<b>--</b>	<b>190.4</b>	<b>4538.1</b>	<b>1540.5</b>	<b>6078.6</b>

**Annual Funding BY\$****2035 | Procurement | Other Procurement, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2010 \$M</b>	<b>Non End Item Recurring Flyaway BY 2010 \$M</b>	<b>Non Recurring Flyaway BY 2010 \$M</b>	<b>Total Flyaway BY 2010 \$M</b>	<b>Total Support BY 2010 \$M</b>	<b>Total Program BY 2010 \$M</b>
2009	56	120.5	--	0.6	121.1	14.2	135.3
2010	248	377.9	--	36.9	414.8	44.1	458.9
2011	96	221.4	--	54.1	275.5	74.9	350.4
2012	642	789.7	--	13.0	802.7	89.1	891.8
2013	336	526.9	--	6.5	533.4	193.3	726.7
2014	370	508.7	--	27.2	535.9	172.5	708.4
2015	556	778.9	--	6.5	785.4	194.3	979.7
2016	486	720.6	--	21.5	742.1	182.5	924.6
2017	--	--	--	6.5	6.5	228.1	234.6
2018	--	--	--	6.5	6.5	203.6	210.1
<b>Subtotal</b>	<b>2790</b>	<b>4044.6</b>	<b>--</b>	<b>179.3</b>	<b>4223.9</b>	<b>1396.6</b>	<b>5620.5</b>

## Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	6/5/2007	2/3/2010
<b>Approved Quantity</b>	408	400
<b>Reference</b>	Restructure ADM	MS C ADM
<b>Start Year</b>	2009	2009
<b>End Year</b>	2010	2011

The WIN-T Increment 2 Low Rate Initial Production (LRIP) program is consistent with Defense Acquisition Executive (DAE) direction contained in the WIN-T Acquisition Decision Memorandum (ADM) dated June 5, 2007 and corresponding Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (CAIG) estimate. The ADM stated "The Army will fund to the Chairman of the Cost Analysis Improvement Group's (CAIG) estimate for Increments 1 and 2; procure Increment 1 equipment to complete fielding to about 199 Army units; and procure Increment 2 equipment for about 37 Army units, based on affordability through Fiscal Year (FY) 2013." The current WIN-T Increment 2 program only procures 32 Army units through FY 2013.

The original LRIP quantity was reported to Congress in the September 2007 Selected Acquisition Report (SAR) and again in the December 2007 SAR. This original LRIP plan consisted of a two year LRIP phase with quantities totaling 408 communications nodes, or approximately 22%, of the total Army Procurement Objective (APO) of 1837. These LRIP units were to be procured over two years, with the first year providing units to support Production Qualification Test (PQT) and Initial Operational Test (IOT), and the second year supporting production ramp up and fielding.

The current WIN-T Increment 2 LRIP plan consists of a two year LRIP phase with quantities totaling 400 communications nodes. The PM has received approval to exceed the 10% limit. The first year of LRIP provides units to support Initial Operational Test (IOT) and the second year permits an orderly increase in the production rate for the system sufficient to lead to full-rate production upon the successful completion of operational testing.

The LRIP start year changed from 2009 to 2010 as a result of program schedule changes. The Milestone C was held on February 3, 2010 after which the program entered into LRIP.

## Foreign Military Sales

None.

## Nuclear Cost

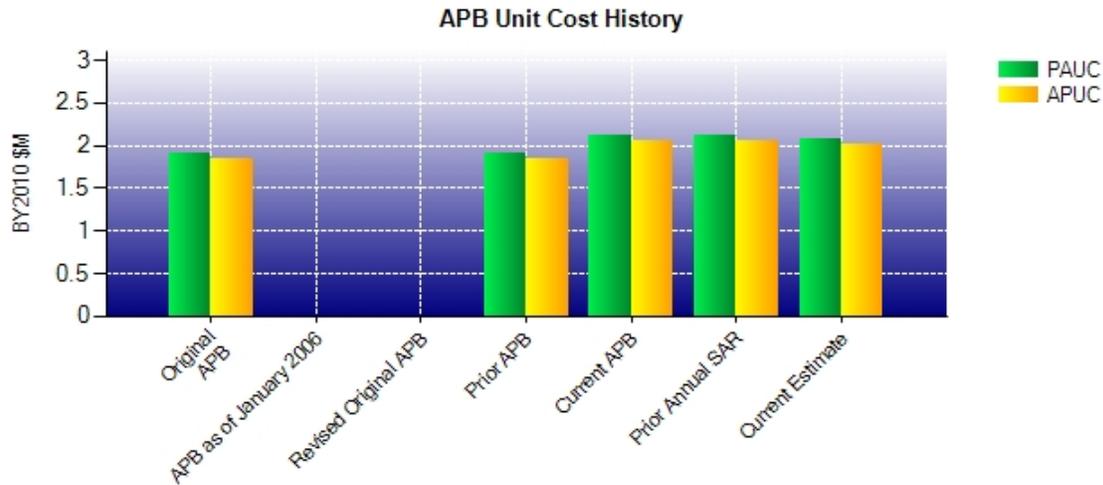
None.

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

	BY2010 \$M	BY2010 \$M	
Unit Cost	Current UCR Baseline (MAR 2010 APB)	Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	4686.0	5892.3	
Quantity	2216	2846	
Unit Cost	2.115	2.070	-2.13
Average Procurement Unit Cost (APUC)			
Cost	4421.3	5620.5	
Quantity	2160	2790	
Unit Cost	2.047	2.015	-1.56

	BY2010 \$M	BY2010 \$M	
Unit Cost	Original UCR Baseline (OCT 2007 APB)	Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	3617.2	5892.3	
Quantity	1893	2846	
Unit Cost	1.911	2.070	+8.32
Average Procurement Unit Cost (APUC)			
Cost	3384.5	5620.5	
Quantity	1837	2790	
Unit Cost	1.842	2.015	+9.39

### Unit Cost History



	Date	BY2010 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
<b>Original APB</b>	OCT 2007	1.911	1.842	2.064	1.999
<b>APB as of January 2006</b>	N/A	N/A	N/A	N/A	N/A
<b>Revised Original APB</b>	N/A	N/A	N/A	N/A	N/A
<b>Prior APB</b>	OCT 2007	1.911	1.842	2.064	1.999
<b>Current APB</b>	MAR 2010	2.115	2.047	2.255	2.190
<b>Prior Annual SAR</b>	DEC 2009	2.115	2.047	2.255	2.190
<b>Current Estimate</b>	DEC 2010	2.070	2.015	2.232	2.179

### 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	
2.064	-0.055	-0.063	0.016	0.000	0.093	0.000	0.200	0.191	2.255

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

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
2.255	-0.001	-0.154	-0.005	0.000	-0.026	0.000	0.163	-0.023	2.232

**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	
1.999	-0.055	-0.055	0.017	0.000	0.079	0.000	0.205	0.191	2.190

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

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
2.190	-0.001	-0.142	-0.005	0.000	-0.029	0.000	0.166	-0.011	2.179

**SAR Baseline History**

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	JUN 2007	JUN 2007	JUN 2007
Milestone C	N/A	APR 2009	FEB 2010	FEB 2010
IOC	N/A	AUG 2011	NOV 2012	MAY 2013
Total Cost (TY \$M)	N/A	3907.0	4996.9	6352.5
Total Quantity	N/A	1893	2216	2846
Prog. Acq. Unit Cost (PAUC)	N/A	2.064	2.255	2.232

**Cost Variance****Cost Variance Summary**

<b>Summary Then Year \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	266.5	4730.4	--	4996.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+0.9	+2.9	--	+3.8
Other	--	--	--	--
Support	--	-3.0	--	-3.0
Subtotal	+0.9	-0.1	--	+0.8
Current Changes				
Economic	+0.1	-3.2	--	-3.1
Quantity	--	+983.4	--	+983.4
Schedule	--	-13.2	--	-13.2
Engineering	--	--	--	--
Estimating	+6.4	-85.2	--	-78.8
Other	--	--	--	--
Support	--	+466.5	--	+466.5
Subtotal	+6.5	+1348.3	--	+1354.8
Total Changes	+7.4	+1348.2	--	+1355.6
CE - Cost Variance	273.9	6078.6	--	6352.5
CE - Cost & Funding	273.9	6078.6	--	6352.5

<b>Summary Base Year 2010 \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	264.7	4421.3	--	4686.0
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+0.9	+2.8	--	+3.7
Other	--	--	--	--
Support	--	-2.9	--	-2.9
<b>Subtotal</b>	<b>+0.9</b>	<b>-0.1</b>	<b>--</b>	<b>+0.8</b>
Current Changes				
Economic	--	--	--	--
Quantity	--	+879.1	--	+879.1
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+6.2	-84.9	--	-78.7
Other	--	--	--	--
Support	--	+405.1	--	+405.1
<b>Subtotal</b>	<b>+6.2</b>	<b>+1199.3</b>	<b>--</b>	<b>+1205.5</b>
<b>Total Changes</b>	<b>+7.1</b>	<b>+1199.2</b>	<b>--</b>	<b>+1206.3</b>
CE - Cost Variance	271.8	5620.5	--	5892.3
CE - Cost & Funding	271.8	5620.5	--	5892.3

Previous Estimate: December 2009

RDT&E	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	+0.1
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
Cost decrease due to FY2010 fact of life Revised Annual Program (RAP) adjustments. (Estimating)	-0.1	-0.1
Increase in Government test costs due to a later Initial Operational Test (IOT) date. (Estimating)	+6.9	+7.2
Refinement of FY2016 Government test cost. (Estimating)	-0.5	-0.6
RDT&E Subtotal	+6.2	+6.5

Procurement	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	-3.2
Quantity variance resulting from an increase of 630 Nodes from 2160 to 2790 for additional requirements in FY 2012 and FY 2016 (Subtotal)	+880.0	+984.5
Quantity variance resulting from an increase of 630 Nodes from 2160 to 2790 for additional requirements in FY 2012 and FY 2016. (Quantity)	(+879.1)	(+983.4)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+0.9)	(+1.1)
Acceleration of procurement profile as a result of increased requirements in FY 2012 for two more Brigade Combat Teams (BCTs) and subsequent reductions in FY 2013 and FY 2014. (Schedule)	0.0	-13.2
Adjustment for current and prior escalation. (Estimating)	-0.5	-0.5
Reduction in contract costs due to definitized prices and quantity lot discounts. (Estimating)	-206.3	-218.3
Increased Government Furnished Software costs due to transfer in procurement responsibility from the Contractor to the Government. (Estimating)	+83.3	+89.5
Increase in non-recurring production costs due to additional platforms requiring integration (e.g. Mine Resistant Ambush Protected vehicle) and urgent emerging requirement to reduce size and weight due to Quick Reaction Capability (QRC) requirements. (Estimating)	+59.7	+62.3
Decrease in Engineering Change Order estimate due to the decrease in actual contract hardware costs. (Estimating)	-52.2	-54.5
Increase due to the refinement of the System Test and Evaluation (ST&E) estimate for Army integrated testing, experimentation, and satellite time. (Estimating)	+30.2	+35.2
Increase in Other Support costs due to an additional year of procurement in FY 2016 and the refinement of the fielding schedule. (Support)	+414.9	+476.6
Decrease in Initial Spares associated with lower definitized contract costs. (Support)	-9.8	-10.1
Procurement Subtotal	+1199.3	+1348.3

(QR) Quantity Related

## Contracts

### Appropriation: RDT&E

Contract Name	<b>WIN-T Increment 2 SDD</b>
Contractor	General Dynamics C4 Systems, Inc.
Contractor Location	Taunton, MA 02780
Contract Number, Type	DAAB07-02-C-F404, CPAF
Award Date	August 14, 2007
Definitization Date	September 19, 2008

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
126.8	N/A	56	127.0	N/A	56	141.9	141.9

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	-4.5	-0.1
Previous Cumulative Variances	-3.5	-1.7
Net Change	-1.0	+1.6

### Cost And Schedule Variance Explanations

Performance data reflects contractor reporting, as reported in the July 2010 Contract Performance Report (CPR). All work on this contract has been completed at this time. An net unfavorable cost variance of -\$1.0M is the result of an engineering design change which resulted in increases of material and labor. A net favorable schedule variance of \$1.6M is the result of the completion of the Level 1 Integration and Test for Engineering Change Proposal 2 (ECP2), delivery of the PoP and SNE A-Kits, the final delivery of the Testbed hardware, and contract closeout activities.

### Contract Comments

The WIN-T Increment 2 program was initiated per the June 5, 2007 Acquisition Decision Memorandum. The WIN-T Increment 2 System Development and Demonstration (SDD) effort was implemented through a within scope change to the Phase 3 SDD contract, under authority of the Federal Acquisition Regulation (FAR) 52.243-02, Changes. The modification incorporating this change was awarded on August 14, 2007.

The Initial Contract Price of \$126.8M represented a Not To Exceed amount. Modification P00165 dated January 21, 2010 definitized ECP1 increasing the Target Price to \$127.0M. The Current Contract Price represents the performance measurement baseline of the contract.

This contract is 99% complete and will no longer be reported on.

**Appropriation: Procurement**

Contract Name **WIN-T Increment 2 Production**  
 Contractor Gneral Dynamics C4 Systems, Inc.  
 Contractor Location Taunton, MA 02780-1036  
 Contract Number, Type W15P7T-10-D-C007, FPIF/FFP  
 Award Date March 24, 2010  
 Definitization Date December 30, 2010

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
299.7	299.7	160	299.7	299.7	160	299.7	299.7

**Cost And Schedule Variance Explanations**

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

**Contract Comments**

This is the first time this contract is being reported.

**Deliveries and Expenditures**

<b>Deliveries To Date</b>	<b>Plan To Date</b>	<b>Actual To Date</b>	<b>Total Quantity</b>	<b>Percent Delivered</b>
Development	56	56	56	100.00%
Production	0	0	2790	0.00%
<b>Total Program Quantities Delivered</b>	<b>56</b>	<b>56</b>	<b>2846</b>	<b>1.97%</b>

<b>Expenditures and Appropriations (TY \$M)</b>			
Total Acquisition Cost	6352.5	Years Appropriated	5
Expenditures To Date	482.6	Percent Years Appropriated	41.67%
Percent Expended	7.60%	Appropriated to Date	1207.9
Total Funding Years	12	Percent Appropriated	19.01%

Total expenditures to date reflects actual disbursements through December 31, 2010.

## Operating and Support Cost

### Assumptions And Ground Rules

1. Operating and support costs based on the annual update to the Increment 2 Program Office Estimate, as of January 31, 2011.
2. Costs estimated in accordance with Department of the Army Cost Analysis Manual, Deputy Assistant Secretary of the Army, US Army Cost and Economic Analysis Center, May 2002.
3. Operating and support cost factors taken from Operating and Support Management Information System.
4. The figures below are per the Office of the Secretary of Defense (OSD) Operating and Support (O&S) cost structure.
5. A "buy-to-budget" strategy is reflected in the figures below.
6. Mission Pay and Allowance costs are the total Military Personnel costs.
7. Mission Pay and Allowance estimates based on WIN-T manpower estimates included in the WIN-T Increment 2 Cost Analysis Requirements Description (CARD) dated June 3, 2009.
8. Unit Level Consumption and Intermediate Maintenance assume threshold reliability is met.
9. Intermediate Maintenance Costs reflect the OSD cost element Maintenance Costs and includes Depot Maintenance and Contractor Support.
10. Estimated costs based on Operating Tempo approved by the Army's Training and Doctrine Command.
11. Costs based on two-level maintenance concept.
12. System life is estimated at 10 years.
13. Operating and support costs reflect the total average annual cost for WIN-T Increment 2 communications nodes. Multiplying the total average annual cost by 10 years and by 2790 communications nodes will achieve the total costs shown below.
14. There is no antecedent program to this system.

Costs BY2010 \$M		
Cost Element	WIN-T INCREMENT 2 Average Annual Cost per Communications Node	Antecedent System N/A
Unit-Level Manpower	0.115	--
Unit Operations	0.003	--
Maintenance	0.060	--
Sustaining Support	0.007	--
Continuing System Improvements	0.023	--
Indirect Support	0.000	--
Other	0.006	--
Total Unitized Cost (Base Year 2010 \$)	0.214	--

Total O&S Costs \$M	WIN-T INCREMENT 2	Antecedent System
Base Year	5961.9	--
Then Year	7425.7	--