Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0102419A: Aerostat Joint Project Office

DATE: February 2010

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	344.850	328.356	372.493	0.000	372.493	176.198	118.448	0.000	0.000	Continuing	Continuing
E55: Jnt Land Atk Msl Def Elevated Netted Sensor-JLENS	344.850	328.356	372.493	0.000	372.493	176.198	118.448	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

U) The mission of the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) is to provide elevated, persistent, Over-The-Horizon (OTH) surveillance and fire control quality data on Army and Joint networks enabling protection of the United States, Allied and Coalition forces, as well as critical geo-political assets from Cruise Missiles, Aircraft, Unmanned Aerial Vehicles (UAVs), Tactical Ballistic Missiles (TBMs), Large Caliber Rockets (LCRs), and Surface Moving Targets (SMTs). JLENS is a critical part of the Army's future Integrated Air and Missile Defense (IAMD) architecture and is a Joint Service interest program. A JLENS orbit consists of two systems: a fire control radar system and a wide-area surveillance radar system. Each radar system employs a separate 74-meter tethered aerostat, mobile mooring station, radar and communications payload, processing station, and associated ground equipment. JLENS uses advanced sensor and networking technologies to provide 360-degree, wide-area surveillance and precision tracking of land-attack cruise missiles. This JLENS information is distributed via joint service networks and contributes to the development of a single integrated air picture. JLENS has the capability of detecting and tracking surface moving targets, detecting Tactical Ballistic Missiles at boost phase and Large Caliber Rockets during the ascent phase. JLENS also performs as a multirole platform to enable extended range command and control linkages, communications relay, and battlefield situational awareness.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0102419A: Aerostat Joint Project Office

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)

	FY 2009	<u>FY 2010</u>	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	355.257	360.076	372.153	0.000	372.153
Current President's Budget	344.850	328.356	372.493	0.000	372.493
Total Adjustments	-10.407	-31.720	0.340	0.000	0.340
 Congressional General Reductions 		0.000			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	-0.524	0.000			
 SBIR/STTR Transfer 	-9.883	0.000			
 Adjustments to Budget Years 	0.000	0.000	0.340	0.000	0.340
 Congressional General Reductions 	0.000	-1.720	0.000	0.000	0.000
 Congressional Directed Reductions 	0.000	-30.000	0.000	0.000	0.000

Change Summary Explanation

Adjustments to FY 2010: FY 2010 funds realigned -\$30,000 (dollars thousands) to higher priority requirements.

Exhibit R-2A, RDT&E Project Justif	ication: PB 20	011 Army						DATE: February 2010			
APPROPRIATION/BUDGET ACTI 2040: Research, Development, Test & E BA 7: Operational Systems Development	Evaluation, Ar	my			NOMENCLA A: Aerostat Jo	TURE oint Project O	ffice	PROJECT E55: Jnt Lan JLENS	nd Atk Msl Dej	f Elevated Ne	tted Sensor-
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
E55: Jnt Land Atk Msl Def Elevated Netted Sensor-JLENS	344.850	328.356	372.493	0.000	372.493	176.198	118.448	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

(U) The mission of the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) is to provide elevated, persistent, Over-The-Horizon (OTH) surveillance and fire control quality data on Army and Joint networks enabling protection of the United States, Allied and Coalition forces, as well as critical geo-political assets from Cruise Missiles, Aircraft, Unmanned Aerial Vehicles (UAVs), Tactical Ballistic Missiles (TBMs), Large Caliber Rockets (LCRs), and Surface Moving Targets (SMTs). JLENS is a critical part of the Army's future Integrated Air and Missile Defense (IAMD) architecture and is a Joint Service interest program. A JLENS orbit consists of two systems: a fire control radar system and a wide-area surveillance radar system. Each radar system employs a separate 74-meter tethered aerostat, mobile mooring station, radar and communications payload, processing station, and associated ground equipment. JLENS uses advanced sensor and networking technologies to provide 360-degree, wide-area surveillance and precision tracking of land-attack cruise missiles. This JLENS information is distributed via joint service networks and contributes to the development of a single integrated air picture. JLENS has the capability of detecting and tracking surface moving targets, detecting Tactical Ballistic Missiles at boost phase and Large Caliber Rockets during the ascent phase. JLENS also performs as a multirole platform to enable extended range command and control linkages, communications relay, and battlefield situational awareness.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	294.771	261.689	237.258	0.000	237.258
Continue System Development and Demonstration (SDD) phase contract activity. FY 2009 Accomplishments: FY 2009 FY 2010 Plans:					
FY 2010					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0102419A: Aerostat Joint Project Office	ce	PROJECT E55: Jnt Land Atk Msl Def Elevated Netted Sens JLENS			
B. Accomplishments/Planned Program (\$ in Millions)	'					
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		11.846	17.491	52.700	0.000	52.70
Government System Test and Evaluation						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		24.600	30.986	40.073	0.000	40.07
Other contracts and Other Government Agencies (OGAs).						
FY 2009 Accomplishments: FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0102419A: Aerostat Joint Proje	ect Office	PROJECT E55: Jnt Lan JLENS	Ր and Atk Msl Def Elevated Netted Sensor			
B. Accomplishments/Planned Program (\$ in Millions)			'				
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #4		3.818	3.310	2.272	0.000	2.272	
Government Project Management							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #5		9.815	5.694	40.190	0.000	40.190	
Government Furnished Equipment(GFE)							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0102419A: Aerostat Joint Project Q	PROJECT E55: Jnt Land Atk Msl Def Elevated Netted Sensor JLENS						
B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #6		0.000	9.186	0.000	0.000	0.000		
Small Business Innovative Research/Small Business Technology Trans	fer Programs (SBIR/STTR)							
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Ac	ccomplishments/Planned Programs Subtotals	344.850	328.356	372.493	0.000	372.493		

Exhibit R-2A, RDT&E Project Justifie	cation: PB 201	11 Army						DATE: February 2010					
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & Ev BA 7: Operational Systems Developmen	valuation, Arm	y		R-1 ITEM N 0 PE 0102419A			fice	PROJECT E55: Jnt Land Atk Msl Def Elevated Netted Sensor- JLENS					
C. Other Program Funding Summary	(\$ in Millions	<u>s)</u>	EST 4011	FW7 4044	FW 4011			C. AT					
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	<u>FY 2011</u> Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost		
• Ord. #1: PE 0604869A, Proj M06, Patriot/MEADS Combined Aggregate Program (CAP)	454.565	566.215	467.139	0.000	467.139	408.012	325.184	240.018	75.585	Continuing			
• Ord. #2: SSN C53101, MSE Missile • Ord. #3: SSN C53201, Patriot/	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	607.796 0.000	534.022 126.589	516.479 217.639	503.786 528.435	Continuing Continuing	_		
MEADS GSE • Ord. #4: SSN BZ0525, JLENS Production	0.000	0.000	0.000	0.000	0.000	470.661	419.801	427.731	394.325	Continuing	Continuing		
• Ord. #5: <i>PE 0604802A</i> , <i>Proj S23</i> , <i>SLAMRAAM</i>	31.306	56.441	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing		
• Ord. #6: <i>PE 0605450A</i> , <i>Proj S35</i> <i>SLAMRAAM</i>	0.000	0.000	23.700	0.000	23.700	17.800	53.500	7.500	7.600	Continuing	Continuing		
• Ord. #7: SSN C81002, SLAMRAAM Launcher	40.349	0.000	116.732	0.000	116.732	83.302	233.762	241.691		Continuing			
• Ord. #8: SSN C81004, SLAMRAAM Missile	0.000	0.000	0.000	0.000	0.000	0.000	39.542	39.426		Continuing			
 Ord. #9: SSN WK5053, FAAD GBS Ord. #10: PE 0603327A, Proj S34, AMD System of System Engineering and Integration 	0.000 111.496	0.000 166.061	91.467 0.000	169.260 0.000	260.727 0.000	7.948 0.000	7.935 0.000	0.000	0.000	Continuing Continuing	_		
Ord. #11: PE 0605457A, Proj S40, Army Integrated Air and Missile Defense (AIAMD)	0.000	0.000	251.124	0.000	251.124	271.543	251.646	228.639	129.043	Continuing	Continuing		
• Ord. #12: SSN BZ5075, Army IAMD Battle Commond System (IBCS)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.045	99.102	Continuing	Continuing		
• Ord. #13: <i>PE 0605456A</i> , <i>Project PA3</i> , <i>PAC-3/MSE Missile</i>	0.000	0.000	62.500	0.000	62.500	62.100	3.500	62.000	64.500	Continuing	Continuing		
	1.949	36.005	12.403	0.000	12.403	12.630	13.038	7.982	7.947	Continuing	Continuing		

UNCLASSIFIED

R-1 Line Item #154 Page 7 of 14 406 of 897

Exhibit R-2A, RDT&E Project Justif	ication: PB 20						DATE: February 2010					
APPROPRIATION/BUDGET ACTI 2040: Research, Development, Test & E		N.		R-1 ITEM N O PE 0102419A		_	fice	PROJECT F55: Int Lan	T and Atk Msl Def Elevated Netted Sensor-			
BA 7: Operational Systems Developmen		, y		1 L 0102+17/1	1101031411 301	nii 1 Tojeci Ojj	,ice	JLENS	a Mik Msi Dej	Lievaica ivei	ica sensor	
C. Other Program Funding Summar	y (\$ in Millions	<u>s)</u>										
			FY 2011	FY 2011	FY 2011					Cost To		
<u>Line Item</u>	<u>FY 2009</u>	FY 2010	<u>Base</u>	<u>oco</u>	<u>Total</u>	FY 2012	FY 2013	<u>FY 2014</u>	FY 2015	Complete	Total Cost	
• Ord. #14: <i>PE 0208053</i> , <i>Proj 635</i> ,												
JOINT TACT GRD STATION-P3I												
(MIP)												
• Ord. #15: BZ8401, Joint Tactical	0.000	6.682	9.279	0.000	9.279	0.000	0.000	9.415	4.658	Continuing	Continuing	
Ground Station (JTAGS)												

D. Acquisition Strategy

The JLENS Operational Requirements Document (ORD) calls for initial fielding to Block I requirements (tethered aerostat platforms for Fire Control and Surveillance radars); followed by fielding of Block II (untethered platforms for Fire Control and Surveillance radars); and Block III (both radars on a single untethered platform). There is currently no funding beyond Block I. On 28 Jun 05, the Defense Acquisition Board (DAB) approved the JLENS program for entry into System Development and Demonstration (SDD) as recommended by the Army Acquisition Executive. The DAB elected to maintain oversight of JLENS as an ACAT 1D program as stated in the Acquisition Decision Memorandum signed on 5 Aug 05. As part of the overall strategy for the Army Integrated Air and Missile Defense (IAMD) capability, The Department of Army, in POM10-15, stretched the SDD program for other higher Army priorities independent of JLENS program performance. The Department of the Army resourced the schedule extension in POM10-15 with additional RDTE funds. Low Rate Initial Production, previously to begin in FY2011 will be delayed until FY2012. The Department of Army decided to re-allocate JLENS FY11 LRIP funding and stretch the SDD program for "other higher Army priorities". There were no JLENS program issues that necessitated the Department of Army decision. The JLENS program was and is meeting cost, schedule and performance goals.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0102419A: Aerostat Joint Project Office

E55: Jnt Land Atk Msl Def Elevated Netted Sensor-JLENS

BA 7: Operational Systems Development

Product Development (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Development (TD) Phase Contracts and Government	SS	Raytheon Systems Co. (MA/CA/FL/ TX) Location could not be determined.	301.083	0.000		0.000		0.000		0.000	Continuing	Continuing	301.083
Lightweight X-band Radar Antenna	С	Multiple Location could not be determined.	7.811	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Contractor System Development and Demonstration (SDD) Hardware/Software	SS/CPIF	Raytheon Systems Co. (MA/CA/FL/ TX) Location could not be determined.	671.431	253.619		201.802		0.000		201.802	Continuing	Continuing	1,414.652
SDD OGA System Engineering	С	Multiple Location could not be determined.	11.612	5.402		5.242		0.000		5.242	Continuing	Continuing	0
SDD System Engineering Contracts	С	Multiple Location could not be determined.	43.943	24.074		33.261		0.000		33.261	Continuing	Continuing	0
SDD GFE Various	С	Multiple Location could not be determined.	18.091	1.464		0.000		0.000		0.000	Continuing	Continuing	0
SDD GFE - Cooperative Engagement Transmission Processing Set (CETPS)	С	Multiple Location could not be determined.	15.389	4.230		5.190		0.000		5.190	Continuing	Continuing	0
SDD Govt Integrated Logistics Support	С	Multiple	2.500	1.510		1.570		0.000		1.570	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0102419A: Aerostat Joint Project Office

PROJECT

E55: Jnt Land Atk Msl Def Elevated Netted Sensor-

JLENS

Product Development (\$ in Millions)

				FY	FY 2010		FY 2011 Base		FY 2011 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Location could not be determined.											
SDD Organizational Support Equipment	С	Multiple Location could not be determined.	0.000	0.000		35.000		0.000		35.000	Continuing	Continuing	0
		Subtotal	1,071.860	290.299		282.065		0.000		282.065			1,715.735

Remarks

Support (\$ in Millions)

			_										I
				FY 2	2010	FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
TD Phase Misc Support	С	Multiple Location could not be determined.	2.084	0.000		0.000		0.000		0.000	0	2.084	0
		Subtotal	2.084	0.000		0.000		0.000		0.000	0.000	2.084	0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development

PE 0102419A: Aerostat Joint Project Office

E55: Jnt Land Atk Msl Def Elevated Netted Sensor-JLENS

Test and Evaluation (\$ in Millions)

				FY:	2010		2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
TD Phase Maintain Test Bed	SS	CAS-TX NM	3.056	0.000		0.000		0.000		0.000	Continuing	Continuing	0
SDD Contractor System Test and Evaluation	SS/CPIF	Raytheon Systems Co. (MA/CA/FL/ TX) Location could not be determined.	7.625	8.070		35.456		0.000		35.456	Continuing	Continuing	0
SDD Government System Test and Evaluation	С	Multiple Location could not be determined.	20.389	17.491		52.700		0.000		52.700	Continuing	Continuing	0
		Subtotal	31.070	25.561		88.156		0.000		88.156			0.000

Remarks

Management Services (\$ in Millions)

				FY :	2010		2011 ase	FY 2	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SDD Government Program Management	С	PEO Missiles and Space HSV, AL	9.543	3.310		2.272		0.000		2.272	Continuing	Continuing	0
SBIR/STTR	С	Nothing entered for Activity and Location.	0.000	9.186		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0102419A: Aerostat Joint Project Office	E55: Int Lan	d Atk Msl Def Elevated Netted Sensor-
BA 7: Operational Systems Development		JLENS	

Management Services (\$ in Millions)

				FY	2010	FY :	2011 ase	FY :	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Location could not be determined.											
		Subtotal	9.543	12.496		2.272		0.000		2.272			0.000

Remarks

	Total Prior Years Cost	FY 2	2010	FY 2	2011 FY	2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
						-		F		
Project Cost Totals	1,114.557	328.356		372.493	0.000		372.493			1,715.735

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 7: Operational Systems Development

		FY 2009]	F Y	201	0]	F Y :	201	1	FY 2012			2	FY 2013			3	FY 2014				FY 2015			5
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Orbit 1 Delivery to Test									#																			
Milestone (MS) C													#															
Orbit 2 Delivery to Test										#																		
First Unit Equipped (FUE)																	#											
Subsystem/System (Ss/Sys) Level Integration							#	#	#	#																		
Developmental Testing (DT)									#	#	#	#	#	#	#	#	#	#	#									
Force Development Experiment (FDE)- Operational Testing (OT)											#																	
Limited User Test (LUT) - OT												#																
Force Development Test (FDT)- OT																	#											
Initial Operational Test (IOT)																	#	#										

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0102419A: Aerostat Joint Project Office	E55: Jnt Land Atk Msl Def Elevated Netted Sensor-
BA 7: Operational Systems Development		JLENS

Schedule Details

	St	art	En	d
Event	Quarter	Year	Quarter	Year
Orbit 1 Delivery to Test	1	2011	1	2011
Milestone (MS) C	1	2012	1	2012
Orbit 2 Delivery to Test	2	2011	2	2011
First Unit Equipped (FUE)	1	2013	1	2013
Subsystem/System (Ss/Sys) Level Integration	3	2010	2	2011
Developmental Testing (DT)	1	2011	3	2013
Force Development Experiment (FDE)- Operational Testing (OT)	3	2011	3	2011
Limited User Test (LUT) - OT	4	2011	4	2011
Force Development Test (FDT)- OT	1	2013	1	2013
Initial Operational Test (IOT)	1	2013	2	2013