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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Navy	<b>DATE:</b> April 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	92.713	23.188	31.064	46.007	-	46.007	53.481	58.401	72.885	74.168	133.488	585.395
3071: <i>Very Low Collateral Damage Weapon</i>	0.000	1.200	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.200
3072: <i>Small Diameter Bomb (SDB)</i>	90.759	17.906	17.792	27.265	-	27.265	33.023	45.360	63.750	68.846	129.356	494.057
3082: <i>JMM BRU</i>	1.954	4.082	13.272	18.742	-	18.742	20.458	13.041	9.135	5.322	4.132	90.138

**MDAP/MAIS Code(s):** 439

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**A. Mission Description and Budget Item Justification**

Small Diameter Bomb Increment II (SDB II) is a joint program, with the Air Force (AF) as the lead service, which provides the warfighter a capability to attack mobile targets in all weather from Stand-Off range. SDB II addresses the following warfighter requirements: attack mobile targets, adverse weather operations, multiple kills per pass, multiple ordnance carriage, precision munitions capability, capability against fixed targets, reduced munitions footprint, increased weapons effectiveness, minimized potential for collateral damage, reduced susceptibility of munitions to countermeasures, and provides a net-centric operations capability. The threshold aircraft for the AF is the F-15E and the threshold aircraft for the Department of Navy are the F-35B and F-35C. SDB II will be compatible with the Joint Miniature Munitions Bomb Rack Unit (JMM BRU) (BRU-61A/A).

This program is funded under System Development and Demonstration because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy				DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0604329N: Small Diameter Bomb (SDB)			
BA 5: System Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	29.635	31.064	48.434	-	48.434
Current President's Budget	23.188	31.064	46.007	-	46.007
Total Adjustments	-6.447	0.000	-2.427	-	-2.427
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-5.857	0.000			
• SBIR/STTR Transfer	-0.590	0.000			
• Rate/Misc Adjustments	0.000	0.000	-2.427	-	-2.427
Change Summary Explanation					
Schedule: SDB II LRIP contract awards I through V slipped one year to reflect new contracting strategies. Subsequently, first Department of Navy procurement will remain in FY17, moving from Lot 5 to Lot 4, resulting in procurement cost savings.					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Navy										<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>					<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>				<b>PROJECT</b> 3071: <i>Very Low Collateral Damage Weapon</i>			
<b>COST (\$ in Millions)</b>	<b>All Prior Years</b>	<b>FY 2012</b>	<b>FY 2013<sup>#</sup></b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO <sup>##</sup></b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3071: <i>Very Low Collateral Damage Weapon</i>	0.000	1.200	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.200
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012 <sup>##</sup> The FY 2014 OCO Request will be submitted at a later date												
<b>A. Mission Description and Budget Item Justification</b>												
OSD Joint Rapid Acquisition Cell directed execution of joint Precision Lethality (PL) MK-82 Quick Reaction Capability (QRC) to support Joint Urgent Operational Need (JUON) CC-0381 for a Very Low Collateral Damage Weapon (VLCDW). Provides low lethality in far field using non-fragmenting carbon fiber MK-82 form factor case to minimize collateral damage outside near field blast effect. Provides high lethality in near field using a specially tuned variant of high impulse Multi-phase Blast Explosive (MBX) similar to Small Diameter Bomb (SDB).												
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>										<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>Title:</b> Very Low Collateral Damage										1.200	0.000	0.000
<b>Articles:</b>										0		
<b>FY 2012 Accomplishments:</b> Continued bomb case loading qualification, explosive qualification, and flight clearance.												
<b>Accomplishments/Planned Programs Subtotals</b>										1.200	0.000	0.000
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
N/A												
<b>Remarks</b>												
<b>D. Acquisition Strategy</b>												
OSD Joint Rapid Acquisition Cell directed execution of joint PL MK-82 QRC to support JUON CC-0381 for a VLCDW.												
<b>E. Performance Metrics</b>												
N/A												

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Navy												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>				<b>PROJECT</b> 3071: <i>Very Low Collateral Damage Weapon</i>					

  

<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Government Support	Various	Various:Various	0.000	1.200	Oct 2011	0.000		0.000		-		0.000	0.000	1.200	
<b>Subtotal</b>			0.000	1.200		0.000		0.000		0.000		0.000	0.000	1.200	

  

	<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	0.000	1.200		0.000		0.000		0.000		0.000	0.000	1.200	

  

**Remarks**

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)				PROJECT 3072: Small Diameter Bomb (SDB)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3072: Small Diameter Bomb (SDB)	90.759	17.906	17.792	27.265	-	27.265	33.023	45.360	63.750	68.846	129.356	494.057
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
SDB II is an ACAT ID program providing the warfighter a capability to attack mobile targets in all weather from Stand-Off range. The Air Force is the lead service, Raytheon in Tucson, AZ is the prime contractor. SDB II addresses the following warfighter requirements: attack mobile targets, multiple kills per pass, multiple ordnance carriage, all weather operations, near-precision munitions capability, capability against fixed targets, reduced munitions footprint, increased weapons effectiveness, minimized potential for collateral damage, reduced susceptibility of munitions to countermeasures, and a migration path to net centric ops capability. Threshold aircraft is the F-15E for the Air Force and the F-35B and F-35C for the Department of the Navy. Objective aircraft include the F/A-22, B-1, B-2, F-117, F-16, B-52, Predator B, and F/A-18E/F.												
As a result of the Joint Strike Fighter (F-35) programs restructure, SDB II integration was moved from the JSF OFP Block 3 to Block 4. IOC is FY2020.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
Title: SDB II Weapon Support <div>Articles:</div> <b>Description:</b> Funding provides for SDB II Engineering Manufacturing and Development (EMD) efforts including weapon vendor support, test assets, and government support.  <b>FY 2012 Accomplishments:</b> Continued EMD support and integration of SDB II with F-35B and F-35C.  <b>FY 2013 Plans:</b> Continue support of EMD and integration of SDB II with F-35B and F-35C.  <b>FY 2014 Plans:</b> Continue support of EMD and integration of SDB II with F-35B and F-35C. Continue support of SDB II prime contractor and government support of weapon development efforts. Navy integration support efforts of SDB II prime contractor have moved to FY15 to accommodate the JSF Operational Flight Plan (OFP) change from Block 3 to Block 4.										14.030	10.821	3.235
										80	0	0
Title: JSF Integration										3.876	6.971	24.030

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)				PROJECT 3072: Small Diameter Bomb (SDB)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
Articles:										0	0	0
Description: Funding provided for integration of SDB II on F-35B and F-35C, specifically for Lockheed Martin to develop F-35 Operational Flight Program (OFP) software, flight missions, and support and analysis of missions.												
FY 2012 Accomplishments: Continued F-35 OFP development and coding and supported fit checks with SDB II Weapon Vendor (Raytheon).												
FY 2013 Plans: Continue F-35 OFP development and coding and support fit checks with SDB II Weapon Vendor (Raytheon).												
FY 2014 Plans: Continue F-35 OFP development and coding and support fit checks and testing with SDB II Weapon Vendor (Raytheon). Begin software coding of Universal Armament Interface and JSF Block 4 Operational Flight Plan (OFP) and full manning of JSF prime contractor team to support SDB II weapon development.												
Accomplishments/Planned Programs Subtotals										17.906	17.792	27.265
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• RDTE,AF/0604329F: Small Diameter Bomb	133.902	143.000	115.000		115.000	54.000	18.000	64.000	15.675	24.006	1,157.510	
• MPAF/0207327F: Small Diameter Bomb	0.000	42.000	42.347		42.347	71.353	101.961	94.770	73.458	1,434.707	1,860.596	
• WPN/223800: Small Diameter Bomb	0.000	0.000	0.000		0.000	0.000	0.000	25.543	98.502	565.100	689.145	
Remarks												
D. Acquisition Strategy												
The SDB Increment II acquisition strategy is to conduct a full and open competition to select up to two contractors to compete during a planned 42-month risk reduction phase prior to entering Engineering, Manufacturing and Development (EMD). This competition began April 17, 2006 with the signature of contracts to the competing contractors: 1) Raytheon and 2) the team of Boeing and Lockheed Martin. A Fixed Price Incentive Firm Target type contract for EMD, including Firm Fixed Price procurement options for Lots 1-3 was awarded to Raytheon August 9, 2010. Lots 4 & 5 are included in the contract, but are Not-To-Exceed options.												

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>	<b>PROJECT</b> 3072: <i>Small Diameter Bomb (SDB)</i>
<p>The Navy funding will support Navy-unique efforts for SDB Increment II, such as aircraft integration, ship suitability, studies and analysis, and program management and government in-house support. These efforts will be performed on several cost-type contracts or through cost reimbursable work requests to government activities and contractors.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>Earned Value Management has been implemented on the EMD contract with Raytheon.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)				PROJECT 3072: Small Diameter Bomb (SDB)					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Aircraft Integration - JSF	C/CPFF	Lockheed Martin:Fort Worth, TX	16.960	0.000		5.166	Jun 2013	13.637	Jan 2014	-		13.637	77.874	113.637	113.637
Primary Hardware Development - SDB II EMD	C/FPIF	Raytheon:Tucson, AZ	6.181	4.654	Jan 2012	1.094	Jan 2013	0.300	Jan 2014	-		0.300	116.208	128.437	128.437
Prior year cost no longer funded in the FYDP	Various	Various:Various	15.497	0.000		0.000		0.000		-		0.000	0.000	15.497	
Subtotal			38.638	4.654		6.260		13.937		0.000		13.937	194.082	257.571	
Remarks															
Primary Hardware Development Prior Years includes McDonnell Douglas Corp and Raytheon Missile Systems Primary H/W Development for the SDB II 42-month risk reduction phase, \$4.393M for Boeing/Lockheed Martin team and \$4.393M for Raytheon and \$2.6M for Joint Surface Warfare (JSuW) efforts with Raytheon and \$4.111M for BRU-61 Shipboard Suitability efforts.															
Primary H/W and Aircraft Integration to Raytheon in Tucson, AZ reflects the winning SDB II contractor and includes test assets. Funding for Lockheed Martin F-35 does not include OFP nor Test missions which are represented in Support and Test sections. Beginning FY11, funding for JMM BRU (BRU-61A/A) is included in PU3082.															
Aircraft Integration contract award moved to June 2013 due to delay in RFP release.															
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development - JSF	C/CPFF	Lockheed Martin:Ft. Worth, TX	0.000	1.204	Aug 2012	1.505	Jun 2013	9.007	Jan 2014	-		9.007	23.182	34.898	34.898
Prior year cost no longer funded in the FYDP	Various	Various:Various	17.410	0.000		0.000		0.000		-		0.000	0.000	17.410	
Subtotal			17.410	1.204		1.505		9.007		0.000		9.007	23.182	52.308	
Remarks															
Studies and Analyses include Navy activities to define CONOPS and better define Navy-specific and interoperability requirements, such as Weapon Data Link Advanced Concept Technology Demonstration, Seeker Trade Studies, and Data Link Trade Studies. Prior year Software Development efforts are in support of JSuW Joint Capability Technology Demonstrations (JCTD) incorporation of J.11 Message Set into Strike Weapons and Weapon Data Link Network efforts. Software Development for JSF is the Universal Armament Interface (UAI), Operational Flight Plan (OFP) and mission planning which supports the SDB II program.															



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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)				PROJECT 3072: Small Diameter Bomb (SDB)					
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation - JSuW/WDLN	Various	Various:Various	2.864	0.000		0.000		0.000		-		0.000	4.058	6.922	
Operational Test & Evaluation - SDBII	WR	COMOPTEVFOR:China Lake, CA	1.010	0.000		0.000		0.000		-		0.000	16.018	17.028	
Developmental Test & Evaluation - SDB II	C/CPFF	Lockheed Martin:Ft. Worth, TX	0.000	0.000		1.322	Jun 2013	0.000		-		0.000	45.939	47.261	47.261
SDB II Weapon Test Assets	C/FFP	Raytheon:Tucson, AZ	2.060	5.989	Jan 2012	2.962	Jan 2013	0.000		-		0.000	15.239	26.250	26.250
Subtotal			5.934	5.989		4.284		0.000		0.000		0.000	81.254	97.461	
Remarks															
Developmental T&E Lockheed Martin in FY 2013 supports wind tunnel testing. Contract award moved to June 2013 due to delay in RFP release.															
Developmental T&E and Operational T&E include all aspects of the weapon system - SDB II, JMM BRU, and F35 aircraft OFP. There will be no separate DT or OT period for JMM BRU.															
Test assets include weapon assets required for Development Test and Operational Test.															
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Services	Various	Various:Various	1.099	0.297	Nov 2011	0.312	Nov 2012	0.411	Nov 2013	-		0.411	2.252	4.371	
Government Support	WR	NAWC WD:China Lake	15.706	2.666	Nov 2011	2.761	Nov 2012	2.067	Nov 2013	-		2.067	19.298	42.498	
Government Support	WR	Various:Various	7.729	0.569	Nov 2011	0.170	Nov 2012	0.250	Nov 2013	-		0.250	3.593	12.311	
Program Management Support	WR	Various:Various	2.674	2.347	Nov 2011	2.374	Nov 2012	1.500	Nov 2013	-		1.500	13.385	22.280	
Travel	MIPR	ASC20OG:Eglin AFB, FL	1.569	0.180	Oct 2011	0.126	Oct 2012	0.093	Oct 2013	-		0.093	1.400	3.368	
Subtotal			28.777	6.059		5.743		4.321		0.000		4.321	39.928	84.828	

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)					PROJECT 3072: Small Diameter Bomb (SDB)				
		All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		90.759	17.906		17.792		27.265		0.000		27.265	338.446	492.168	

Remarks

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PE 0604329N: *Small Diameter Bomb (SDB)*  
Navy

R-1 Line #101

## R-1 ITEM NOMENCLATURE

PE 0604329N: *Small Diameter Bomb (SDB)*

3072: *Small Diameter Bomb (SDB)*



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Navy			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>	<b>PROJECT</b> 3072: <i>Small Diameter Bomb (SDB)</i>	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Small Diameter Bomb II</i></b>				
Acquisition Milestones: Milestones: MS C	2	2014	2	2014
Systems Development: Hardware Development: Engineering Manufacturing and Development (EMD)	1	2012	1	2017
Systems Development: Hardware Development: Dual Power BRU-61/A	1	2012	2	2012
Systems Development: Hardware Development: SDB II Qualification BRU-61/A	1	2012	4	2014
Test & Evaluation: Technical Evaluation: Developmental Test	2	2017	4	2017
Production Milestones: Contract Awards: Low Rate Initial Production (LRIP) I Contract Award (USAF Only) (Missile Procurement, AF)	2	2014	2	2014
Production Milestones: Contract Awards: LRIP II Contract Award (USAF Only) (Missile Procurement, AF)	2	2015	2	2015
Production Milestones: Contract Awards: LRIP III Contract Award (USAF Only) (Missile Procurement, AF)	2	2016	2	2016
Production Milestones: Contract Awards: LRIP IV Contract Award (USAF and DoN) (Missile Procurement, AF and WPN)	2	2017	2	2017
Production Milestones: Contract Awards: LRIP V Contract Award (USAF and DoN) (Missile Procurement, AF and WPN)	2	2018	2	2018
Deliveries: LRIP I Deliveries (USAF only)	4	2015	4	2016
Deliveries: LRIP II Deliveries (USAF only)	4	2016	4	2017
Deliveries: LRIP III Deliveries (USAF only)	4	2017	4	2018
Deliveries: LRIP IV Deliveries (USAF and DoN)	4	2018	4	2018

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)				PROJECT 3082: JMM BRU			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3082: JMM BRU	1.954	4.082	13.272	18.742	-	18.742	20.458	13.041	9.135	5.322	4.132	90.138
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
The Joint Miniature Munitions Bomb Rack Unit (JMM BRU) is an Air Force (USAF) led ACAT III program. It is required for the Department of the Navy's (DoN) carriage of the SDB II weapon in the internal bay of the F-35B and F-35C and operation in the DoN environment. The SDB II Capability Development Document states that it must be operable on the Miniature Munitions Smart Rack BRU-61/A. The BRU-61/A, currently in production in the USAF, does not meet the needs to operate with SDB II within the F-35 internal bay in the DoN environment. The JMM BRU, designated BRU-61A/A, fills the capability gap required by the DoN. Efforts include development of a dual power capability to meet the SDB II operating environment on the F-35.												
SDB II and the JMM BRU integration were moved from F-35 Block 3 to Block 4. Budgets and schedules have been modified to meet the F-35 Block 4 schedule.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Joint Miniature Munitions Bomb Rack Unit (JMM BRU) Government Support  Articles:  Description: Funding provided for the SDB II Carriage System support and integration into Navy environments.  FY 2012 Accomplishments: Supported prime contractor contract and initiated Technology Development (TD) Phase. Completed Dual Power development.  FY 2013 Plans: Continue with TD Phase.  FY 2014 Plans: Continue with TD Phase. Full manning of JMM BRU government team and conduct DoN logistics efforts for support equipment, specific to JMM BRU.									4.082	3.422	5.490	
									0	0	0	
Title: Joint Miniature Munitions Bomb Rack (JMM BRU) Prime Contractor  Articles:  Description: Prime Contractor Support of JMM BRU (BRU-61A/A) Technology Development (TD)/Engineering & Manufacturing Development (EMD) contract.									0.000	9.850 2	13.252 5	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Navy								<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>			<b>PROJECT</b> 3082: <i>JMM BRU</i>				
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>								<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	
<b><i>FY 2013 Plans:</i></b> Select Prime Contractor and awarded TD/EMD contract. Conduct source selection of JMM BRU Prime contractor and TD contract award May 2013.											
<b><i>FY 2014 Plans:</i></b> Continue TD/EMD contract. JMM BRU Prime contractor fully manned to complete TD phase, including delivering two JMM BRU prototypes, two Inertial Measurement Vehicle (IMV) BRUs, and three JMM BRU simulators in support of SDB II/JMM BRU/JSF integration efforts.											
<b>Accomplishments/Planned Programs Subtotals</b>								4.082	13.272	18.742	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN/0720: <i>War Consumables</i>	0.000	0.000	0.000		0.000	0.000	0.000	0.000	19.835	281.734	301.569
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
The JMM BRU is an Air Force led ACAT III program. Industry day was held 4Q FY 2010, Acquisition Strategy approved 1Q FY2011 and Material Development Decision 2Q FY2011.											
<b>E. Performance Metrics</b>											
Earned Value Management will be implemented on the TD/EMD contract with the successful offeror for the technology demonstration contract.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0604329N: Small Diameter Bomb (SDB)				PROJECT 3082: JMM BRU					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Miniature Munitions Bomb Rack Unit (JMM BRU)	C/CPIF	TBD:TBD	0.000	0.000		8.926	Apr 2013	8.854	Apr 2014	-		8.854	19.337	37.117	37.117
Subtotal			0.000	0.000		8.926		8.854		0.000		8.854	19.337	37.117	37.117
Remarks															
Funding provided to the successful offerer for development of a JMM BRU SDB II carriage system which satisfies DoN environments. JMM BRU will carry four SDB II's and will be capable of being used both internally and externally.															
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
JMM BRU Test Assets	C/CPFF	TBD:TBD	0.000	0.000		0.885	Apr 2013	4.421	Apr 2014	-		4.421	4.353	9.659	9.659
Flight Test	TBD	TBD:TBD	0.000	0.000		0.000		0.000		-		0.000	0.436	0.436	
Subtotal			0.000	0.000		0.885		4.421		0.000		4.421	4.789	10.095	
Remarks															
Funding provided to purchase JMM BRU test assets required for DT and OT. DT and OT efforts are budgeted for in the SDB II project unit as DT and OT will be for total weapon system. There will be no dedicated JMM BRU DT and OT.															
Flight Test conducted will be fit checks on F-35B and F-35C with the new JMM BRU.															
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Support	WR	NAWC WD:China Lake, CA	0.366	1.636	Nov 2011	1.129	Nov 2012	2.161	Nov 2013	-		2.161	12.000	17.292	
Government Support	WR	Various:Various	1.548	2.396	Nov 2011	2.301	Nov 2012	3.283	Nov 2013	-		3.283	15.355	24.883	
Travel	MIPR	ASC20OG:Eglin AFB, FL	0.040	0.050	Oct 2011	0.031	Nov 2012	0.023	Oct 2013	-		0.023	0.250	0.394	

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Navy												<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>				<b>PROJECT</b> 3082: <i>JMM BRU</i>				

  

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			1.954	4.082		3.461		5.467		0.000		5.467		27.605	42.569	

  

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	1.954	4.082		13.272		18.742		0.000		18.742	51.731	89.781	

  

**Remarks**



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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

## APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy  
BA 5: System Development & Demonstration (SDD)

## R-1 ITEM NOMENCLATURE

PE 0604329N: Small Diameter Bomb (SDB)

## PROJECT

3082: JMM BRU

Joint Miniature Munitions Bomb Rack Unit (JMM BRU)	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestonees																												
Milestones														Milestone B ▲														
Systems Development																												
Hardware Development																												
Reviews														Preliminary Design Review (PDR) ■														
Test & Evaluation																												
Technical Evaluation																												
Procurement																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Navy			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604329N: <i>Small Diameter Bomb (SDB)</i>	<b>PROJECT</b> 3082: <i>JMM BRU</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Joint Miniature Munitions Bomb Rack Unit (JMM BRU)</i></b>				
Acquisition Milestonees: Milestones: Milestone B	2	2015	2	2015
Systems Development: Hardware Development: Technology Development	2	2013	2	2015
Systems Development: Hardware Development: Engineering Manufacturing and Development (EMD)	3	2015	4	2017
Systems Development: Reviews: Preliminary Design Review (PDR)	1	2015	1	2015
Systems Development: Reviews: Critical Design Review (CDR)	4	2015	4	2015
Test & Evaluation: Technical Evaluation: Design Verification	3	2014	4	2015
Test & Evaluation: Technical Evaluation: Environmental Qualification	2	2016	2	2017
Procurement: LRIP 1 Contract Award	2	2018	2	2018