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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2011 United States Special Operations Command **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b>			<b>R-1 ITEM NOMENCLATURE</b>								
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i>			PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>								
BA 7: <i>Operational Systems Development</i>											
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	72.225	72.308	68.691	0.000	68.691	76.041	78.689	55.581	35.267	Continuing	Continuing
SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>	72.225	72.308	68.691	0.000	68.691	76.041	78.689	55.581	35.267	Continuing	Continuing

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

This program element provides for the development, demonstration, and integration of current and maturing technologies for Special Operations Forces (SOF)-unique aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: low probability of intercept/low probability of detection, terrain following/terrain avoidance radar; Precision Strike Package for MC-130W Multi-Mission Modification, AC-130H Recapitalization, and other SOF airborne platforms; digital terrain elevation data and electronic order of battle; digital maps; enhanced situational awareness; near-real-time intelligence to include data fusion, threat detection and avoidance; electronic support measures for threat geo-location and specific emitter identification; navigation, target detection, and identification technologies; digital broadcast capabilities; and aerial refueling.

**B. Program Change Summary (\$ in Millions)**

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Previous President's Budget	43.856	82.621	0.000	0.000	0.000
Current President's Budget	72.225	72.308	68.691	0.000	68.691
Total Adjustments	28.369	-10.313	68.691	0.000	68.691
• Congressional General Reductions		-15.513			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		5.200			
• Congressional Directed Transfers		0.000			
• Reprogrammings	29.860	0.000			
• SBIR/STTR Transfer	-1.491	0.000			
• Other Adjustment	0.000	0.000	68.691	0.000	68.691

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>
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**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** SF100: *1160403BB Special Operations Aviation Systems Advanced Development/Project SF100*

Congressional Add: *Congressional add: Helicopter Cable Warning Obstacle Avoidance System*

Congressional Add: *EC-130J Multi-Mission Upgrades*

Congressional Add Subtotals for Project: SF100

Congressional Add Totals for all Projects

	FY 2009	FY 2010
	0.000	1.195
	0.000	3.983
	0.000	5.178
	0.000	5.178

**Change Summary Explanation**

Funding:

FY09: Net increase of \$28.369 million is due to Small Business Innovative Research transfer (-\$1.491 million), a reprogramming for risk reduction efforts on a Precision Strike Package MC-130 Multi-Mission Modification (+\$7.600 million), and an above threshold reprogramming to fulfill an urgent USSOCOM requirement to rapidly arm and field multi-mission precision strike platforms (+\$22.260 million).

FY10: Net decrease of -\$10.313 million (decrease of -\$15.209 million in Avionics Modernization Program and -\$0.304 million due to Section 8097 congressional general reduction). Increase of \$1.200 million for Helicopter cable warning obstacle avoidance system as well as increase of \$4.000 million for EC-130J Multi-Mission Upgrades. The \$1.200 million add funding will be moved via DD Form 1415-3 reprogramming action to PE 1160482BB SOF Rotary Wing Aviation.

FY11: Increase of \$68.691 million is due to the DoD not estimating FY 2011 cost when the FY 2010 President's Budget was prepared.

Schedule: None.

Technical: None.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 United States Special Operations Command								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>				<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>	72.225	72.308	68.691	0.000	68.691	76.041	78.689	55.581	35.267	Continuing	Continuing
Quantity of RDT&E Articles											

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

This project provides for the investigation, evaluation, demonstration, and integration of current and maturing technologies for Special Operations Forces (SOF)-unique aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: low probability of intercept/low probability of detection (LPI/LPD), terrain following/terrain avoidance (TF/TA) radar; Precision Strike Package MC-130W Multi-Mission Modification; AC-130H Recapitalization; and other SOF airborne platforms; digital terrain elevation data and electronic order of battle; digital maps; enhanced situational awareness; near-real-time intelligence to include data fusion, threat detection and avoidance; electronic support measures for threat geo-location and specific emitter identification; navigation, target detection and identification technologies; digital broadcast capability; aerial refueling and develop cable warning obstacle avoidance system.

- SOF C-130 Avionics Modifications. Provides for development necessary to maintain current SOF-unique capabilities for SOF C-130 aircraft. Includes, but is not limited to, mission computers and display generators.
- EC-130J Commando Solo Upgrades. Provides for integration of SOF-unique implementation of the C-130J block cycle upgrade as installed on the EC-130J Commando Solo aircraft and development of digital broadcast capabilities.
- Aviation Engineering Analysis. Provides a rapid response capability to support SOF fixed wing aircraft and unmanned aircraft systems. The purpose is to correct system deficiencies, improve asset life, and enhance mission capability through the means of feasibility studies, analysis of alternatives, pre-developmental risk reduction studies, and engineering analyses. This sub-project provides the engineering required to improve the design and performance integrity of the aircraft support systems, sub-systems, equipment, and embedded computer software as they relate to the maintenance, overhaul, repair, quality assurance, modifications, materiel improvements, and service life extensions. Conducts risk reduction studies, analyses, and demonstrations to support emerging, time critical weapons and sensor enhancements. Note: A new Program Element 1160422BB and Project SF101 were created for Aviation Engineering Analysis in Budget Activity 3. The resources moved beginning in FY 2010.

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>	<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>
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- Acquisition Development Support. This funding is required to support systems engineering, analysis, and integration. Primary use of funds is to examine commonality and interoperability across systems. Funding will be used in a multitude of avenues across systems to support cost-benefit analysis; provide additional test support; and further reduce cost, schedule, and technical risk. As required, funds will support manpower costs for experts needed to meet certification, safety, reliability, and other requirements required by Office of the Secretary of Defense, Acquisition, Technology and Logistics, as well as commitments for joint programs.
- Precision Strike Package (PSP) MC-130W Multi-Mission Modification. This program fulfills an urgent combat requirement to rapidly arm and field multi-mission precision strike platforms. Provides an armed over-watch capability including sensors, communication systems, precision guided munitions, and a single medium-caliber gun. An interim kit is being fielded and funded under a Combat Mission Needs Statement in FY 2009. The MC-130W will return to its primary mobility role once PSP is fielded on recapitalized AC-130H aircraft.
- Precision Strike Package (PSP) for SOF Airborne Platforms. This funding is required to support systems engineering, analysis, and integration of the baseline PSP onto host MC-130J aircraft provided by the U.S. Air Force for AC-130H recapitalization as well as other SOF airborne platforms. Missions for the AC-130H recap aircraft include, but are not limited to, Close Air Support (CAS), Air Interdiction, Armed Reconnaissance, Escort, and Force Protection – Integrated Base Defense. PSP is modular, scalable, and platform neutral, and includes mission management, sensors, and weapons.
- SOF Common TF/TA Radar. Continues system design and development of a SOF common LPI/LPD radar (Silent Knight Radar) to defeat advanced passive detection threat while maintaining ability to fly safe TF. This radar is targeted for use on all MH-47G Heavy Assault helicopters, MH-60M Blackhawk helicopters, MC-130H Combat Talon II and CV-22 Tilt-Rotor aircraft.
- C-130 Terrain Following Radar System. This funding integrates a TF/TA radar with an on-board processor to provide a multi-mode terrain following capability. This system is targeted for the MC-130W, MC-130H and MC-130J platforms.
- Cable Obstacle Avoidance System. Congressional add to develop a cable warning obstacle avoidance system. This system will allow aircraft to perform evasive actions, significantly increasing the aircrew’s probability of survival during a hostile fire engagement. The funding will be moved via DD 1415 reprogramming action to PE 1160482BB SOF Aviation.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SOF C-130 Avionics Modifications	0.000	4.800	24.542	0.000	24.542

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<p><i>FY 2009 Accomplishments:</i> [*** PLEASE ENTER ACCOMPLISHMENT/PLANNED PROGRAM TEXT FOR PRIOR YEAR. ***]</p> <p><i>FY 2010 Plans:</i> FY10 Initiates development and integration of aircraft modifications to maintain SOF-unique capabilities.</p> <p><i>FY 2011 Base Plans:</i> FY11 Continue development and integration of aircraft modifications to maintain SOF-unique capabilities which will be executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence dates</p>						
<p>EC-130J Commando Solo Upgrades</p> <p><i>FY 2009 Accomplishments:</i> FY09 Initiated integration of SOF-unique implementation of the C-130J Block Cycle 7.0 Upgrade as installed on the EC-130J Commando Solo aircraft.</p> <p><i>FY 2010 Plans:</i> FY10 Continues development and integration of SOF-unique implementation of the C-130J Block Cycle 7.0 Upgrade as installed on the EC-130J Commando Solo aircraft.</p> <p><i>FY 2011 Base Plans:</i> FY11 Develop and integrate digital broadcast capability for incorporation on EC-130J.</p>		0.486	0.974	0.581	0.000	0.581
Aviation Engineering Analysis		12.965	0.000	0.000	0.000	0.000

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<i>FY 2009 Accomplishments:</i> FY09 Continued engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions. Conducted risk reduction studies, analyses, and demonstrations to support Precision Strike Package (PSP) MC-130W Multi-Mission Modification concepts.						
Acquisition Development Support <i>FY 2010 Plans:</i> FY10 Conducts engineering, analysis and integration support across a multitude of systems to examine commonality and interoperability across systems; to support cost-benefit analyses; to provide additional test support; and to further reduce cost, schedule, and technical risk. <i>FY 2011 Base Plans:</i> FY11 Conduct engineering, analysis and integration support across a multitude of systems to examine commonality and interoperability across systems; to support cost-benefit analyses; to provide additional test support; and to further reduce cost, schedule, and technical risk.		0.000	0.407	2.094	0.000	2.094
Precision Strike Package (PSP) MC-130W Multi-Mission Modification <i>FY 2009 Accomplishments:</i> FY09 Integrated and tested PSP on a MC-130W aircraft, mission training device development, and training systems improvements. <i>FY 2010 Plans:</i> FY10 Continues integration and testing for offensive systems, sensors, and mission management of the PSP on a MC-130W aircraft.		22.260	27.148	0.000	0.000	0.000
Precision Strike Package (PSP) for SOF Airborne Platforms		0.000	0.000	4.279	0.000	4.279

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<i>FY 2011 Base Plans:</i> FY11 Initiate development and integration of the PSP on a MC-130J aircraft.						
SOF Common Terrain Following /Terrain Avoidance (TF/TA) Radar – Silent Knight <i>FY 2009 Accomplishments:</i> FY09 Continued engineering and manufacturing development (EMD) of SOF Common TF/TA radar. Continued hardware and software design and integration, and refinement of developmental test plans for MH-47G platform. <i>FY 2010 Plans:</i> FY10 Continues EMD of SOF Common TF/TA radar. Continues prototype integration and testing. Begins developmental contractor flight testing and kit build for development/qualification flight test, platform integration, and test planning. <i>FY 2011 Base Plans:</i> FY11 Continue EMD of SOF Common TF/TA radar. Continue contractor flight testing, and platform integration and begin developmental flight testing.		36.514	33.801	35.205	0.000	35.205
MC-130W Terrain Following Radar System <i>FY 2011 Base Plans:</i> FY11 Initiates development and integration of the Terrain Following Radar System onto the MC-130W.		0.000	0.000	1.990	0.000	1.990
Accomplishments/Planned Programs Subtotals		72.225	67.130	68.691	0.000	68.691
		<b>FY 2009</b>	<b>FY 2010</b>			
		0.000	1.195			

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

	FY 2009	FY 2010
Congressional Add: Congressional add: Helicopter Cable Warning Obstacle Avoidance System <i>FY 2010 Plans:</i> FY10 Develop a Cable Warning Obstacle Avoidance System. Funding will be moved via DD 1415-3 reprogramming action to PE 1160482BB, SOF Aviation.		
Congressional Add: EC-130J Multi-Mission Upgrades <i>FY 2010 Plans:</i> FY10 Expand existing capability to a multi-mission configuration to support additional special operations forces capabilities.	0.000	3.983
<b>Congressional Adds Subtotals</b>	0.000	5.178

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PROC:: <i>EC130 Mods</i>	0.728	0.000	0.808		0.808	0.776	0.000	0.000	0.000	Continuing	Continuing
• PROC1:: <i>PSP for SOF Airborne Platforms</i>	0.000	0.000	0.000		0.000	46.410	133.350	190.043	213.740	Continuing	Continuing
• PROC2:: <i>MC-130 Terrain Following</i>							2.932	17.637	19.845	Continuing	Continuing
• PROC3:: <i>PS[ MC-130W Multi-Mission Mod</i>	141.300	32.326	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

**D. Acquisition Strategy**

• SOF C-130 Avionics Modifications. Restoration and integration of existing SOF-unique capabilities will be executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence dates.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 United States Special Operations Command		<b>DATE:</b> February 2010
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<ul style="list-style-type: none"><li>• EC-130J Commando Solo Upgrades. Block 7.0 will be procured by the Air Force program office using existing development and production contracts. Digital broadcast capabilities will be procured through an incremental acquisition strategy to incorporate readily available equipment into the EC-130J aircraft.</li><li>• Acquisition Development Support. Conduct engineering, analysis and integration support across a multitude of systems to examine commonality and interoperability issues to ensure cost, schedule and technical issues are addressed.</li><li>• Precision Strike Package (PSP) MC-130W Multi-Mission Modifications. Provides incremental acquisition strategy with integration and testing for offensive systems, sensors, and mission management.</li><li>• PSP for SOF Airborne Platforms. Provides incremental acquisition strategy to integrate and test the PSP on MC-130J aircraft provided by the U.S. Air Force and other SOF airborne platforms.</li><li>• Terrain Following/Terrain Avoidance Radar (Silent Knight). Incremental acquisition strategy with the MH-47G as the lead platform. A competitive engineering and manufacturing development contract with an option for six low-rate initial production (LRIP) units was awarded to Raytheon in FY 2007. A follow-on radar production contract using LRIP price points will be awarded. MH-47G installation and follow-on platform group A design and integration efforts will be awarded.</li><li>• MC-130W Terrain Following Radar System. A competitive engineering and manufacturing development contract will be awarded for integration and test.</li><li>• SOF Aviation. Develop cable warning obstacle avoidance system.</li></ul>		
<b><u>E. Performance Metrics</u></b> N/A		

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 United States Special Operations Command** **DATE:** February 2010

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**Product Development (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SOF C-130 Avionics Modification	TBD	TBD TBD	0.000	4.800	Jul 2010	21.084	Jun 2011	0.000		21.084	Continuing	Continuing	Continuing
EC-130J Block Cycle Engineering	C/CPIF	Lockheed Martin Aero Marietta, GA	1.128	0.974	Dec 2009	0.581	Dec 2010	0.000		0.581	Continuing	Continuing	Continuing
Precision Strike Package MC-130W	TBD/TBD	VARIOUS VARIOUS	8.486	23.862	Jan 2010	0.000		0.000		0.000	Continuing	Continuing	Continuing
Precision Strike Package SOF Air	TBD/TBD	TBD TBD	0.000	0.000		4.000	Dec 2010	0.000		4.000	Continuing	Continuing	Continuing
Terrain Following/Terrain Avoidance (TF/TA) Radar Risk Reduction	C/CPIF	Raytheon and Northrop Grumman McKinney, TX ; Baltimore, MD	8.042	0.000		0.000		0.000		0.000	0.000	8.042	Continuing
TF/TA Radar Eng & Mfr Dev (EMD)	C/CPIF	Raytheon Dallas, TX	28.676	0.000		0.000		0.000		0.000	0.000	28.676	Continuing
TF/TA Radar Eng & Mfr Dev (EMD) Prime Mission Product	C/CPIF	Raytheon Dallas, TX	57.230	17.046	Dec 2009	3.511	Dec 2010	0.000		3.511	Continuing	Continuing	Continuing
TF/TA Radar Eng & Mfr Dev (EMD) Systems Engineering	C/CPIF	Raytheon Dallas, TX	9.992	3.259	Dec 2009	0.944	Dec 2010	0.000		0.944	Continuing	Continuing	Continuing
MC-130W Terrain Following	TBD/TBD	TBD TBD	0.000	0.000		1.990	Dec 2010	0.000		1.990	Continuing	Continuing	Continuing
<b>Subtotal</b>			113.554	49.941		32.110		0.000		32.110	0.000	36.718	

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**Product Development (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

**Remarks**

**Support (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aviation Engineering Analysis	Various/ Various	VARIOUS VARIOUS	75.864	0.000		0.000		0.000		0.000	0.000	75.864	Continuing
Acquisition Development Support	Various/ Various	VARIOUS VARIOUS	0.000	0.407		2.094		0.000		2.094	0.000	2.501	Continuing
PSP MC-130W Dev Spt	TBD/TBD	VARIOUS VARIOUS	1.050	0.498	Oct 2010	0.000		0.000		0.000	Continuing	Continuing	Continuing
Precision Strike Package SOF Air	TBD/TBD	VARIOUS VARIOUS	0.000	0.000		0.279	Dec 2010	0.000		0.279	Continuing	Continuing	Continuing
SOF C-130 Avionics Modernization	Various/ Various	656th AESS Wright Patterson, OH	0.000	0.000		3.458	Apr 2011	0.000		3.458	Continuing	Continuing	Continuing
PSP MC-130W Training	Various/ Various	VARIOUS VARIOUS	6.200	0.000		0.000		0.000		0.000	0.000	6.200	Continuing
<b>Subtotal</b>			83.114	0.905		5.831		0.000		5.831	0.000	84.565	

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 United States Special Operations Command** **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>	<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>
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**Support (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

**Remarks**

**Test and Evaluation (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Precision Strike Package MC-130W	TBD/TBD	VARIOUS VARIOUS	0.000	2.290		0.000		0.000		0.000	Continuing	Continuing	Continuing
TF/TA Radar EMD	C/CPIF	Raytheon Dallas, TX	0.000	5.583	Dec 2009	25.470	Dec 2010	0.000		25.470	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	7.873		25.470		0.000		25.470			

**Remarks**

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 United States Special Operations Command** **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>	<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>
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**Management Services (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Precision Strike Package MC-130W	TBD/TBD	VARIOUS VARIOUS	0.000	0.498		0.000		0.000		0.000	Continuing	Continuing	Continuing
TF/TA Radar EMD	C/CPIF	Raytheon Dallas, TX	6.091	7.913	Dec 2009	5.280	Dec 2010	0.000		5.280	Continuing	Continuing	Continuing
EC-130 130J Multi-Mission Upgrades (CP)	TBD/TBD	TBD TBD	0.000	3.983		0.000		0.000		0.000	Continuing	Continuing	Continuing
Helicopter Cable Warning and Obstacle Avoidance (CP)	TBD/TBD	TBD TBD	0.000	1.195		0.000		0.000		0.000	Continuing	Continuing	Continuing
<b>Subtotal</b>			6.091	13.589		5.280		0.000		5.280			

**Remarks**

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	202.759	72.308	68.691	0.000	68.691	0.000	121.283	

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2011 United States Special Operations Command** **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>	<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>
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<b>Exhibit R-4, RDT&amp;E Program Schedule Profile</b>												Date: FEBRUARY 2010																										
Appropriation/Budget Activity				Program Element Number and Name												Project Number and Name																						
RDT&E/7				PE1160403BB/Special Operations Aviation Systems Advanced Development												SF100/Aviation System Advanced Development																						
Fiscal Year				2009				2010				2011				2012				2013				2014				2015										
				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							
C-130 Avionics Modification											▲	—————												▲														
EC-130J Commando Solo Upgrades					▲			—————												▲																		
Aviation Engineering Analysis							▲	—————																														
C-130 Avionics Study				▲	▲			—————																														
Precision Strike Package Studies and Analyses							▲	—————																														
Acquisition Development Support							▲	—————				▲	—————																									
Precision Strike Package MC-130W Multi-Mission Modifications							▲	—————				▲	—————																									
Precision Strike Package SOF Airborne Platforms												▲	—————				▲	—————																				
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight																																						
System Design							▲	—————																														
Critical Design Review				▲				—————																														
Prototype Integration and Testing					▲			—————				▲	—————																									
Developmental Testing										▲	—————				▲	—————																						
Operational Testing																		▲	▲	—————																		
Follow-On Platform Integration and Testing																				▲	—————				▲	—————												
MC-130W Terrain Following Radar System Development												▲	—————				▲	—————																				

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 United States Special Operations Command		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>	<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
C-130 Avionics Modification	4	2010	4	2015
EC-130J Commando Solo Upgrades	2	2009	4	2015
Aviation Engineering Analysis	1	2009	1	2010
C-130 Avionics Study	1	2009	3	2009
PSP Studies and Analyses	1	2009	1	2010
Acquisition Development Support	1	2010	3	2011
Precision Strike Package MC-130W Multi-Mission Modifications	1	2010	4	2011
Precision Strike Package for SOF Airborne Platforms	1	2011	4	2013
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight - System Design	1	2009	4	2009
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight - Critical Design Review	1	2009	1	2009
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight - Prototype Integration and Testing	2	2009	4	2010
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight - Developmental Testing	3	2010	3	2013
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight - Operational Testing	3	2013	1	2014
	1	2013	4	2015

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2011 United States Special Operations Command **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160403BB: <i>Special Operations Aviation Systems Advanced Development/SF100</i>	<b>PROJECT</b> SF100: <i>1160403BB Special Operations Aviation Systems Advanced Development/Project SF100</i>
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Event	Start		End	
	Quarter	Year	Quarter	Year
Terrain Following/Terrain Avoidance Radar Engineering and Manufacturing Development Silent Knight - Follow-On Platform Integration and Testing				
MC-130W Terrain Following Radar System	1	2011	4	2014

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