Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*					R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*							
COST ($ in Millions)	**All Prior Years**	**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**
Total Program Element	262.314	75.703	97.267	156.561	-	156.561	123.687	87.654	53.267	30.507	Continuing	Continuing
SF100: *Aviation Systems Advanced Development*	262.314	75.703	97.267	110.450	-	110.450	54.545	53.140	43.493	13.174	Continuing	Continuing
SF200: *Special Operations CV-22 Development*	-	0.000	0.000	2.911	-	2.911	0.182	0.000	0.000	0.000	0.000	3.093
S750: *Mission Training and Preparation Systems*	-	0.000	0.000	4.851	-	4.851	7.336	7.107	6.651	6.789	Continuing	Continuing
S875: *AC/MC-130J*	-	0.000	0.000	9.957	-	9.957	5.629	1.889	0.411	0.419	Continuing	Continuing
D615: *Rotary Wing Aviation*	-	0.000	0.000	28.392	-	28.392	55.995	25.518	2.712	10.125	Continuing	Continuing

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

Note

Beginning in FY 2014 SO Aviation Systems Program Element 1160403BB represents the approved project consolidation of SO Aviation Systems Advanced Development Program Element (PE) 1160403BB, SO CV-22 Development PE 1160421BB, Mission Training and Preparation Systems PE 1160427BB, AC/MC-130J PE 1160429BB and SOF Rotary Wing Aviation PE 1160482BB.

A. Mission Description and Budget Item Justification

Aviation Systems:
This project 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: SOF specific avionics; Low Probability of Intercept/Low Probability of Detection (LPI/LPD) terrain following/terrain avoidance radar; Electronic Warfare (EW) - radio frequency countermeasures; Precision Strike Package (PSP) for MC-130W Multi-Mission Modification; AC-130H, AC-130W, and AC-130U 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; navigation, target detection, and identification technologies; digital broadcast capabilities; and aerial refueling.

CV-22 Development:
The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 project provides long range, high speed, infiltration, exfiltration, and resupply to Special Forces teams in hostile, denied, and politically sensitive areas. This is a capability not currently provided by other existing aircraft. The V-22 Joint Program Office is developing improved capabilities in block increments. The funding in this project supports these block increments as well as associated flight test support. The Block 10 increment was completed in FY 2007, and the Block 20 increment started in FY 2008.

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command	DATE: April 2013
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Block 10: Integrate and test Directional Infrared Countermeasures, a system that protects against infrared guided missiles; design, integrate and validate the Troop Commander Situational Awareness Station to provide the embarked troop commander access to the CV-22's communication, navigation and mission management system; relocate the ALE-47 chaff and flare dispenser control head to allow any cockpit crew member to activate defensive countermeasures; add a second forward firing chaff and flare dispenser to provide an adequate quantity of consumable countermeasures for the extended duration of SOF infiltration, exfiltration, and resupply missions; and incorporate a dual access feature to the Digital Map System to allow both the pilot and co-pilot to independently access and control the digital map display from the mission computer.
Block 20: Design, integrate, test, and validate enhancements required to meet SOF-unique mission requirements and correct deficiencies identified in previous testing. This incremental development will provide improved capabilities to include, but not limited to, more robust performance in situational awareness, weapons, avionics, survivability, maneuverability, mission deployment and improved reliability and maintainability of the CV platform.

Mission Training and Preparation Systems:
This project funds the definition, design, development, prototyping, integration, and testing of Special Operations Mission Planning and Execution (SOMPE) systems to support mission planning and rehearsal required to meet Special Operations Forces (SOF)-unique mission requirements and correct deficiencies in current mission planning and rehearsal capabilities. The MTPS project also includes program management, systems engineering, configuration management, architecture development, risk reduction, and trade study initiatives, as well as initiatives to assure interoperability and commonality between diverse mission planning systems.

AC/MC-130J:
The AC/MC-130J project funds core SOF-unique modifications to replace aging MC-130E Combat Talon I, MC-130P Combat Shadow, MC-130H Combat Talon II, AC-130H Spectre, AC-130W Stinger II, AC-130U Spooky airframes. The 8 AC-130H Spectre, 12 AC-130W Stinger II and 17 AC-130U Spooky airframes will be replaced with MC-130J aircraft modified with the Precision Strike Package (PSP) to achieve the AC-130J configuration. These platforms perform clandestine or low visibility, single or multi-ship low-level missions intruding politically-sensitive or hostile territories; provide air refueling for special operations helicopters and CV-22 aircraft; airdrop of leaflets, small special operations teams, resupply bundles and combat rubber raiding craft; and provide close air support (CAS), air interdiction, armed reconnaissance, escort, and force protection - integrated base defense. Additional capabilities include low-level navigation and in-flight refueling. The Air Force will procure and field basic aircraft, common support equipment, and trainers for USSOCOM. An incremental upgrade approach will be used to incorporate SOF capabilities onto the aircraft.

Rotary Wing Aviation:
This project develops SOF-unique modifications and upgrades to SOF rotary wing aircraft that operate in increasingly hostile environments. Rotary wing aircraft supported by this project include: MH-60M, MH-47G, and A/MH-6M. These aircraft provide aviation support to Special Operations Forces (SOF) in worldwide contingency operations and low-intensity conflicts. They must be capable of rapid deployment, undetected penetration of hostile areas, and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	74.382	97.267	64.688	-	64.688
Current President's Budget	75.703	97.267	156.561	-	156.561
Total Adjustments	1.321	0.000	91.873	-	91.873
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	3.243	-			
• SBIR/STTR Transfer	-1.922	-			
• Other Adjustments	-	-	91.873	-	91.873

Change Summary Explanation

FY 2012:
Net increase of $1.321 million is due to reprogramming of funding to support PSP system enhancements ($7.123 million) and TFTA radar requirements ($3.021 million), decreases to SOF C-130 Avionics Modifications (-$5.165 million) and EC-130 Modifications (-$1.736 million) to support higher Command priorities, and a transfer of funds to Small Business Innovative Research (-$1.922 million).

FY2014:
Increase of $64.869 million is due to the approved consolidation of RDT&E program lines into PE 1160403BB; specific amounts consolidated:
Special Operations CV-22 Development, PE 1160421BB +$0.911 million
AC/MC-130J, PE 1160429BB +$8.225 million
SOF Rotary Wing Aviation, PE 1160482BB +$47.448
Mission Training and Preparation Systems, PE 1160427BB +$8.285 million

Net Programmatic Increases ($27.004 million)
CV-22 Aircraft block upgrades increased by $2.000 million
AC/MC-130J Increment 3 development increased by $5.000 million
Electronic Warfare Countermeasure Development increased by $2.000 million
PSP Large Caliber Gun increased by $29.559 million
C-130 Terrain Following Radar Development increased by $12.782 million
Terrain Following/Terrain Avoidance (Silent Knight) Radar increased by $11.306 million
Decrease of $27.578 million realigned to support higher Department priorities.
Decrease of $8.065 million realigned to support higher Command priorities.

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command	DATE: April 2013
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Schedule: None.

Technical: None.

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT SF100: *Aviation Systems Advanced Development*	

COST ($ in Millions)	All Prior Years	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
SF100: *Aviation Systems Advanced Development*	262.314	75.703	97.267	110.450	-	110.450	54.545	53.140	43.493	13.174	Continuing	Continuing
Quantity of RDT&E Articles												

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

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: SOF specific avionics; low probability of intercept/low probability of detection (LPI/LPD), terrain following/terrain avoidance (TF/TA) radar; electronic warfare – radio frequency countermeasures (RFCM); Precision Strike Package (PSP) for MC-130W Multi-Mission Modification, AC-130H replacement aircraft, and other SOF platforms; digital terrain elevation data and electronic order of battle; digital maps; Enhanced Situational Awareness (ESA); near-real-time intelligence to include data fusion, threat detection and avoidance; navigation, target detection and identification technologies; digital broadcast capability; and aerial refueling.

• SOF C-130 Avionics Modifications: Provides for development necessary to maintain current SOF-unique capabilities for SOF C-130 aircraft. Includes the fit/function/interface replacement of the mission computers on the MC-130H and AC-130U aircraft due to obsolescence issues with the current AP-102 mission computer.

• 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.

• ESA for MC-130H: Provides for near-real-time intelligence reporting to include data fusion, threat detection, identification, and avoidance.

• EW – Radio Frequency (RF) Countermeasures: Supports development, integration and test activities to provide EW capability against RF threats for SOF AC/MC-130J aircraft. The RF countermeasures program provides SOF-unique aircraft defensive capabilities required for Special Operations Forces missions. This program is a new start in FY 2014.

• PSP for SOF: Supports systems engineering, analysis, development, and enhancement of the baseline PSP for later integration and installation onto host MC-130J aircraft provided by the U.S. Air Force for the AC-130H, AC-130W and AC-130U recapitalization, as well as current SOF C-130s other SOF platforms. Missions for the AC-130 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.

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
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• PSP Large Caliber Gun: Supports systems engineering, analysis, development, integration, and test of a large caliber gun capability enhancement to the PSP installed on the MC-130J aircraft. This program is a new start in FY 2014.

• C-130 Terrain Following Radar System: Supports development, integration and test of a TF/TA radar and on-board processor to provide a multi-mode terrain following capability on MC-130J aircraft.

• SOF Common Terrain Following/Terrain Avoidance (TF/TA) (Silent Knight) Radar: Supports Engineering and Manufacturing Development, and developmental, qualification, and operational flight testing of a SOF common LPI/LPD radar to defeat advanced passive detection threats while maintaining ability to fly safe TF. This radar is targeted for use on all MH-47G Heavy Assault helicopters, MC-130 Combat Talon and CV-22 Tilt-Rotor aircraft.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: SOF C-130 Avionics Modifications ***FY 2012 Accomplishments:*** Completed development and integration of aircraft modifications to maintain SOF-unique capabilities executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence dates, to include MC-130H and AC130U mission computer replacement.	2.399	0.000	0.000
Title: EC-130J Commando Solo Upgrades ***FY 2013 Plans:*** Continue integration of SOF-unique implementation of the C-130J block cycle upgrade installed on the EC-130J Commando Solo aircraft and development of digital broadcast capabilities. ***FY 2014 Plans:*** Continues integration and test of digital broadcast capabilities.	0.000	0.673	0.693
Title: ESA for MC-130H ***FY 2013 Plans:*** Initiate risk reduction, development and integration of an enhanced situational awareness system on MC-130H aircraft. ***FY 2014 Plans:*** Continue risk reduction, development and integration of an enhanced situational awareness system on MC-130H aircraft.	0.000	1.800	0.911
Title: EW – RF Countermeasures ***FY 2014 Plans:*** FY 2014 new start. Initiates risk reduction activities and development efforts for an EW - RF countermeasures system on AC/MC-130J aircraft.	0.000	0.000	2.000
Title: Precision Strike Package (PSP) for SOF	32.879	29.351	13.323

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Continued development, integration, risk reduction, test and system improvement of the PSP on MC-130J aircraft. ***FY 2013 Plans:*** Continue development, integration, test, and system improvement of the PSP on MC-130J aircraft. ***FY 2014 Plans:*** Continues development, integration, test, and system improvement of the PSP on SOF C-130s and other SOF aircraft.			
Title: Precision Strike Package Large Caliber Gun ***FY 2014 Plans:*** FY 2014 new start. Develops, integrates and tests of large caliber gun capability upgrade of the PSP on AC-130J aircraft	0.000	0.000	19.674
Title: C-130 TF Radar System ***FY 2012 Accomplishments:*** Continued development and integration of the TF Radar System onto MC-130J aircraft. ***FY 2013 Plans:*** Continue development and integration of the TF Radar System onto MC-130J aircraft. ***FY 2014 Plans:*** Continues development, integration and test of the TF Radar System on MC-130J aircraft. Supports developmental flight testing and an Operational Utility Evaluation for the first software spiral providing initial TF Capabilities. Also supports development, integration and test efforts for LPI TF capabilities on MC-130J aircraft as part of a second software spiral.	17.083	37.523	50.213
Title: SOF Common TF/TA (Silent Knight) Radar ***FY 2012 Accomplishments:*** Continued EMD of SOF Common TF/TA radar. Completed contractor flight testing and platform integration. Began developmental flight testing. ***FY 2013 Plans:*** Continue EMD of SOF Common TF/TA radar. Continue developmental flight testing. ***FY 2014 Plans:*** Continues EMD of SOF Common TF/TA radar. Performs qualification flight testing and begin operational flight testing.	23.342	27.920	23.636
Accomplishments/Planned Programs Subtotals	75.703	97.267	110.450

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT SF100: *Aviation Systems Advanced Development*

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
• PROC1:: *C-130 MODIFICATIONS*	27.965	25.248	71.940		71.940	73.416	67.182	110.591	112.890	Continuing	Continuing
• PROC2:: *PRECISION STRIKE PACKAGE*	0.000	73.013	107.687		107.687	184.232	240.382	281.984	278.418	826.890	1,992.606
• PROC3:: *Rotary Wing Upgrades and Sustainment*			93.813		93.813	122.633	160.088	197.954	176.204	Continuing	Continuing

Remarks

D. Acquisition Strategy

• SOF C-130 Avionics Modifications: Develop a fit/function/ interface replacement mission computer and rehost existing Operational Flight Program and Fire Control Software. Effort is being executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence mitigation need dates.
• EC-130J Commando Solo Upgrades. Operational Flight Program Block Cycle is being developed by the Air Force program office using existing development and production contracts. Digital broadcast capabilities are being procured through an incremental acquisition strategy to incorporate and test readily available equipment into the EC-130J aircraft.
• ESA for MC-130H: Award competitive development contract for software integration effort for enhanced situational awareness hardware to include processors and displays.
• EW – RF Counter Measures: Award a competitive Engineering and Manufacturing Development (EMD) contract for development, integration and test of an RF Countermeasure system on AC/MC-130J aircraft.
• PSP MC-130W Multi-Mission Modification: Executing incremental acquisition strategy with development, integration and testing for offensive systems, sensors, and mission management.
• PSP for SOF: Incremental acquisition strategy to integrate and test the PSP and capability enhancements on MC-130J aircraft provided by the U.S. Air Force and the current SOF C-130s. Multiple contract awards.
• PSP Large Caliber Gun: Combination of Government Service activity and contractor development, integration and test for large caliber gun capability enhancement for the PSP installed on AC-130J aircraft. Multiple contract awards.
• C-130 TF Radar System: Awarded competitive EMD contract for development, integration and test in FY 2012 A minimum of two spirals are planned for integrating a TF radar on the MC-130J aircraft. Spiral one is the initial effort to integrate and test TF capabilities. Spiral two is planned to develop, integrate and test LPI TF capabilities on the MC-130J. Spiral two is planned as a software modification to hardware initially integrated and tested as part of Spiral one.
• SOF Common TF/TA (Silent Knight) Radar: Executing incremental acquisition strategy with the MH-47G as the lead platform. A competitive EMD contract with an option for six low-rate initial production (LRIP) units was awarded to Raytheon in FY 2007. MH-60M Group A design and integration effort was awarded in FY 2010. Follow-on platforms (MC -130 & CV-22) Group A design and integration efforts will be awarded. Group A production and installation contracts will be awarded. A follow-on radar production contract using LRIP price points will be awarded.

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
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E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command		DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
EC-130J Commando Solo Upgrades	C/CPIF	Lockheed Martin:Marietta, GA	3.791	-		0.673	Dec 2012	0.693	Dec 2013	-		0.693	Continuing	Continuing	
ESA for MC-130H	C/TBD	TBD:TBD	-	-		1.800	Dec 2012	0.911	Jan 2014	-		0.911	Continuing	Continuing	
EW Systems - RF Countermeasures	C/TBD	TBD:TBD	-	-		-		2.000	Mar 2014	-		2.000	Continuing	Continuing	
PSP for SOF - Prime Mission Product	SS/ Various	Various:Various	4.067	30.661	Aug 2012	29.351	Mar 2013	4.098	Mar 2014	-		4.098	Continuing	Continuing	
PSP Large Caliber Gun	C/TBD	Various:Various	-	-		-		9.625	Mar 2014	-		9.625	Continuing	Continuing	
C-130 TF Radar System	C/CPIF	Scientific Research Corporation:Atlanta, GA	1.930	17.083	Apr 2012	37.523	Dec 2012	50.213	Jan 2014	-		50.213	Continuing	Continuing	
SOF Common TF/TA (Silent Knight) Radar - Systems Engineering	C/Various	Various:Various	14.407	1.167	Dec 2011	1.396	Dec 2012	1.182	Dec 2013	-		1.182	Continuing	Continuing	
SOF Common TF/TA (Silent Knight) Radar Prime Mission Product	C/CPIF	Raytheon:Dallas, TX	76.927	1.167	Dec 2011	1.396	Dec 2012	1.182	Dec 2013	-		1.182	Continuing	Continuing	
Prior Year Funding - Completed Efforts	TBD	Various:Various	63.939	-		-		-		-		-	0.000	63.939	
SOF C-130 Avionics Modifications	C/FFP	Various:Various	13.192	3.164	May 2012	-		-		-		-	0.000	16.356	
		Subtotal	178.253	53.242		72.139		69.904		0.000		69.904			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PSP for SOF	C/Various	Various:Various	0.384	1.453	Mar 2012	-		0.475	Jan 2014	-		0.475	Continuing	Continuing	
PSP Large Caliber Gun	C/Various	Various:Various	-	-		-		1.182	Mar 2014	-		1.182	Continuing	Continuing	
Prior Year Funding - COmpleted Efforts	TBD	Various:Various	22.334	-		-		-		-		-	0.000	22.334	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command		DATE: April 2013
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	22.718	1.453		0.000		1.657		0.000		1.657			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PSP for SOF	C/Various	Various:Various	-	-		-		8.750	Jan 2014	-		8.750	Continuing	Continuing	
PSP Large Caliber Gun	C/Various	Various:Various	-	-		-		8.867	Mar 2014	-		8.867	Continuing	Continuing	
SOF Common TF/TA (Silent Knight) Radar	C/CPIF	Various:Various	37.420	19.140	Dec 2011	22.894	Dec 2012	19.381	Dec 2013	-		19.381	Continuing	Continuing	
		Subtotal	37.420	19.140		22.894		36.998		0.000		36.998			

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SOF Common TF/TA (Silent Knight) Radar	C/CPIF	Raytheon:Dallas, TX	23.923	1.868	Dec 2011	2.234	Dec 2012	1.891	Dec 2013	-		1.891	Continuing	Continuing	
		Subtotal	23.923	1.868		2.234		1.891		0.000		1.891			

	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	262.314	75.703		97.267		110.450		0.000		110.450			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 United States Special Operations Command		DATE: April 2013
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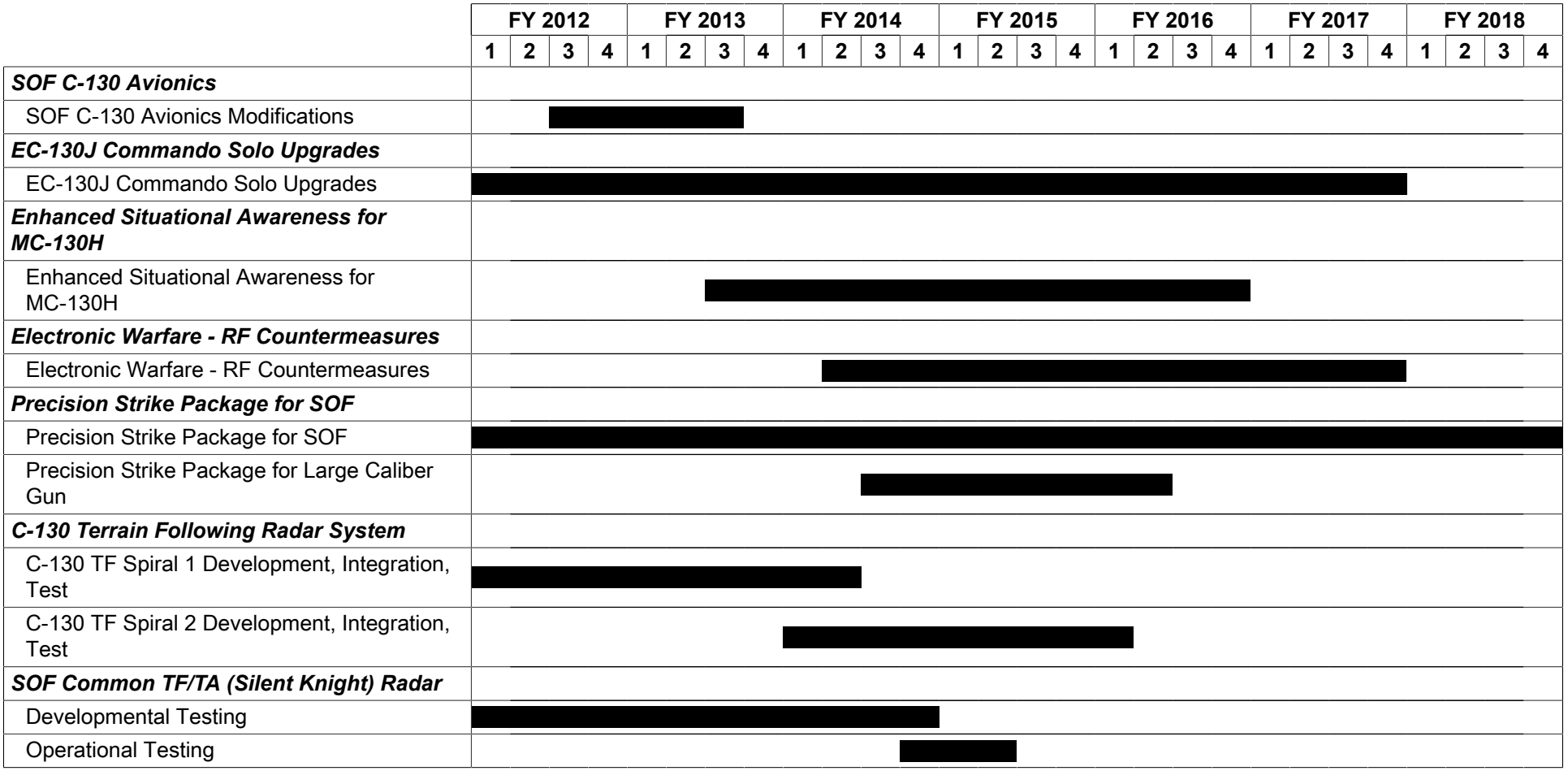

Exhibit R-4A, RDT&E Schedule Details: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 1160403BB: *SO Aviation Systems*	**PROJECT** SF100: *Aviation Systems Advanced Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SOF C-130 Avionics				
SOF C-130 Avionics Modifications	3	2012	3	2013
EC-130J Commando Solo Upgrades				
EC-130J Commando Solo Upgrades	1	2012	4	2017
Enhanced Situational Awareness for MC-130H				
Enhanced Situational Awareness for MC-130H	3	2013	4	2016
Electronic Warfare - RF Countermeasures				
Electronic Warfare - RF Countermeasures	2	2014	4	2017
Precision Strike Package for SOF				
Precision Strike Package for SOF	1	2012	4	2018
Precision Strike Package for Large Caliber Gun	3	2014	2	2016
C-130 Terrain Following Radar System				
C-130 TF Spiral 1 Development, Integration, Test	1	2012	2	2014
C-130 TF Spiral 2 Development, Integration, Test	1	2014	1	2016
SOF Common TF/TA (Silent Knight) Radar				
Developmental Testing	1	2012	4	2014
Operational Testing	4	2014	2	2015

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT SF200: *Special Operations CV-22 Development*	

COST ($ in Millions)	All Prior Years	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
SF200: *Special Operations CV-22 Development*	-	0.000	0.000	2.911	-	2.911	0.182	0.000	0.000	0.000	0.000	3.093
Quantity of RDT&E Articles												

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

Mission Description and Budget Item Justification: The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 provides long range, high speed infiltration, exfiltration, and resupply to Special Forces teams in hostile, denied, and politically sensitive areas. This is a capability not currently provided by existing aircraft. The V-22 Joint Program Office is developing improved capabilities in block increments supported with rapid prototyping. The funding in this project supports these block increments as well as associated flight test support. The Block 10 increment completed in FY 2007, and the Block 20 increment started in FY 2008.

Block 10: Integrate and test Directional Infrared Countermeasures, a system that protects against infrared guided missiles; design, integrate and validate the Troop Commander Situational Awareness Station to provide the embarked troop commander access to the CV-22's communication, navigation and mission management system; relocate the ALE-47 chaff and flare dispenser control head to allow any cockpit crew member to activate defensive countermeasures; add a second forward firing chaff and flare dispenser to provide an adequate quantity of consumable countermeasures for the extended duration of SOF infiltration, exfiltration, and resupply missions; and incorporate a dual access feature to the Digital Map System to allow both the pilot and co-pilot to independently access and control the digital map display from the mission computer.

Block 20: Design, integrate, test, and validate enhancements required to meet SOF-unique mission requirements and correct deficiencies identified in previous testing. This incremental development will provide improved capabilities to include, but not limited to, robust performance in situational awareness, weapons, avionics, survivability, maneuverability, mission deployment, improved reliability and maintainability of the CV platform.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: CV-22 Aircraft Block 20	0.000	0.000	2.911
FY 2014 Plans: Continues ESA development providing enhanced, correlated, fusion and display, threat response, training and simulation capabilities and developmental testing for aircraft block upgrades.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	2.911

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT SF200: *Special Operations CV-22 Development*

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
• PROC1: *1000CV2200 CV-22 SOF Modification*	116.536	139.147	98.927		98.927	19.828	14.203	7.783	6.726	0.000	1,696.207
• PROC2/V022A0: *Aircraft Procurement CV-22 (MYP)*	359.865	309.220	230.798		230.798	0.000	0.000	0.000	0.000	0.000	4,272.414
• RDT&E1/0401318F: *RDT&E, USAF*	13.223	28.027	46.705		46.705	41.588	26.728	16.073	14.566	131.500	613.166
• RDT&E/0604262N: *V-22 RDT&E, N BA-05*	71.938	54.512	43.084		43.084	68.816	60.659	53.319	53.063	273.513	9,363.505

Remarks

D. Acquisition Strategy

The CV-22 program is managed by the Navy V-22 Joint Program Office (NAVAIRSYSCOM PMA-275). This ensures that the CV-22 changes are incorporated into the ongoing V-22 production line with minimum impact. Funding for the baseline CV-22 Engineering Manufacturing and Development, known as Block 0, is embedded in the Navy budget. Block 10 RDT&E funding was sent from USSOCOM to NAVAIRSYSCOM to be placed on contract with the V-22 prime contractor. Block 10 capability is required for compliance with the Joint Operational Requirements Document and associated Milestone III Capabilities Production Document. Block 20 and subsequent block upgrades are planned to follow the same acquisition strategy, with NAVAIRSYSCOM PMA-275 ensuring the integration of SOF-unique systems with the ongoing basic vehicle improvements supporting both the CV-22 and the Marine Corps MV-22.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT SF200: *Special Operations CV-22 Development*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Enhanced Situational Awareness	SS/TBD	TBD:TBD	-	-		-		0.911	Mar 2014	-		0.911	0.182	1.093	
		Subtotal	0.000	0.000		0.000		0.911		0.000		0.911	0.182	1.093	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Test and Evaluation (Block 20)	SS/ Various	Bell-Boeing; 413FLTS:Amarillo, Tx; Fort Worth, TX	-	-		-		1.000	Jan 2014	-		1.000	0.000	1.000	
System Test and Evaluation	SS/ Various	Bell-Boeing; Dyncorp:Amarillo, TX; Fort Worth, TX	-	-		-		1.000	Dec 2013	-		1.000	0.000	1.000	
		Subtotal	0.000	0.000		0.000		2.000		0.000		2.000	0.000	2.000	

	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	0.000	0.000		0.000		2.911		0.000		2.911	0.182	3.093	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT SF200: *Special Operations CV-22 Development*

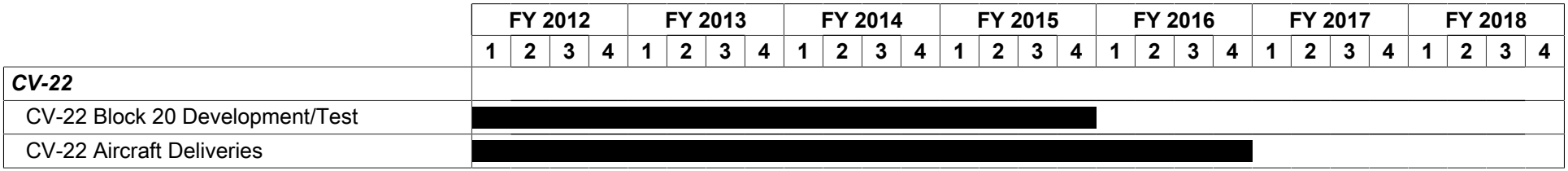

Exhibit R-4A, RDT&E Schedule Details: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 1160403BB: *SO Aviation Systems*	**PROJECT** SF200: *Special Operations CV-22 Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
CV-22				
CV-22 Block 20 Development/Test	1	2012	4	2015
CV-22 Aircraft Deliveries	1	2012	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S750: *Mission Training and Preparation Systems*	

COST ($ in Millions)	All Prior Years	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
S750: *Mission Training and Preparation Systems*	-	0.000	0.000	4.851	-	4.851	7.336	7.107	6.651	6.789	Continuing	Continuing
Quantity of RDT&E Articles												

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

This project funds the definition, design, development, prototyping, integration, and testing of Mission Training and Preparation Systems (MTPS) to support training, avoid obsolescence, and maintain simulator concurrency with weapon system configurations; support mission planning and rehearsal systems enhancements required to meet Special Operations Force (SOF)-unique mission requirements and correct deficiencies identified in previous testing; and support mission planning and rehearsal capabilities in current MTPS. The MTPS project also includes program management, systems engineering, configuration management, architecture development, risk reduction, and trade study initiatives, as well as initiatives to assure interoperability and commonality between diverse SOF training systems.

Sub-projects include:

• Special Operations Mission Planning Environment (SOMPE): Develops, integrates, tests, and validates software enhancements required to meet SOF-unique requirements for, and correct deficiencies to, mission planning, preview, and execution software tools to support all phases of SOF operations from deliberate to time critical. The SOMPE project automates time-sensitive planning activities and provides enhanced situational awareness during mission execution. SOMPE provides the interoperable environment for SOF adaptive planning to integrate global operations including, but not limited to, precision strike software, digital navigation, and unmanned aerial systems command and control. This project also provides the integration of SOMPE with multi-dimensional visualization systems, providing immersive mission rehearsal in minimal timeframes from the SOMPE mission plan. SOMPE is embedded in the USSOCOM Headquarters, Theater Special Operations Commands, Joint Special Operations Task Forces, Joint Special Operations Aviation Components, SOF war-fighters, and SOF warfighter platforms.

• MC/AC-130J Simulator (MC/AC-130J): Conducts analysis, development, integration, assembly, test and checkout of SOF-unique MC-130J and AC-130J simulator development efforts modifications to include, but not limited to, all efforts of technical and functional activities associated with the design, development, and production of mating surfaces, structures, equipment, parts, materiels, and software required to assemble equipment (hardware/software) elements into training mission equipment as a whole and not directly part of any other individual element.

• Terrain Following/Terrain Avoidance Silent Knight Radar Simulator (TF/TA SKR): Integrates, tests, and validates the SKR capability into the MH-47G and MH-60 combat mission simulators. This is a SOF-common multi-mode radar characterized by a Low Probability of Intercept/ Low Probability of Detection (LPI/LPD) capability.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Special Operations Mission Planning and Execution (SOMPE)	0.000	0.000	4.851

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S750: *Mission Training and Preparation Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2014 Plans: Continue required development of software applications to address SOF-unique aviation, ground and maritime mission planning requirements, data transfer software from mission planning systems to SOF helicopters, airplanes, and simulator/rehearsal systems, and automated performance models and performance prediction software. Completes testing of mission planning, data transfer and performance software completing development.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	4.851

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
• PROC2: *AC/MC-130J*			7.996		7.996	4.436				Continuing	Continuing
• PROC3: *C-130 MODIFICATIONS*			17.334		17.334	7.741	19.175	20.492	20.918	Continuing	Continuing
• PROC4: *ROTARY WING UPGRADE AND SUSTAINMENT*			93.813		93.813	122.633	160.088	197.954	176.204	Continuing	Continuing

Remarks

D. Acquisition Strategy

• SOMPE: Comprises multiple mission planning software development contracts awarded annually to developers for each project effort. Acquisition strategies depend on the type of development effort. For minor software development projects, contracts may be awarded as sole source acquisitions from existing contract vehicles. For major software development projects, contracts may be awarded as limited or full and open competition acquisitions. Individual acquisition strategies are developed as the scope of software development projects are identified and defined.

• MC/AC-130J Simulator: Comprises multiple contracts that may be awarded via competition or sole source to developers for each project effort as required to ensure training device development conforms to MC/AC-130J SOF-unique capabilities.

• TF/TA SKR: Contract awarded as a competitive small business set aside. Project will be integrated as part of the Common Avionics Architecture System integration effort.

E. Performance Metrics

None

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S750: *Mission Training and Preparation Systems*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Special Operations Mission Planning and Execution (SOMPE) Software	C/TBD	Various:Various	-	-		-		4.107	Jan 2014	-		4.107	Continuing	Continuing	
		Subtotal	0.000	0.000		0.000		4.107		0.000		4.107			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Special Operations Mission Planning and Execution (SOMPE) Software	MIPR	Special Operations Mission Planning Office:Fort Eustis, VA	-	-		-		0.264	Feb 2014	-		0.264	Continuing	Continuing	
		Subtotal	0.000	0.000		0.000		0.264		0.000		0.264			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Special Operations Mission Planning and Execution (SOMPE) Software	C/CPFF	Wyle-CAS:Huntsville, AL	-	-		-		0.480	Jan 2014	-		0.480	Continuing	Continuing	
		Subtotal	0.000	0.000		0.000		0.480		0.000		0.480			

	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	0.000	0.000		0.000		4.851		0.000		4.851			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S750: *Mission Training and Preparation Systems*

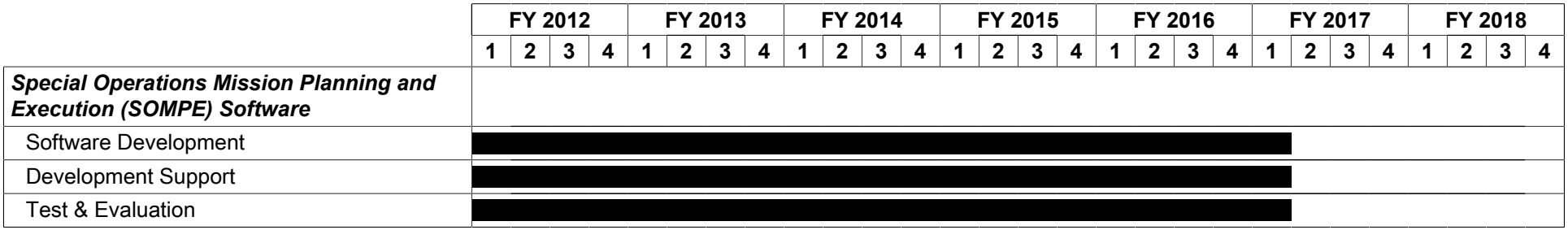

Exhibit R-4A, RDT&E Schedule Details: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 1160403BB: *SO Aviation Systems*	**PROJECT** S750: *Mission Training and Preparation Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Special Operations Mission Planning and Execution (SOMPE) Software				
Software Development	1	2012	1	2017
Development Support	1	2012	1	2017
Test & Evaluation	1	2012	1	2017

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S875: *AC/MC-130J*	

COST ($ in Millions)	All Prior Years	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
S875: *AC/MC-130J*	-	0.000	0.000	9.957	-	9.957	5.629	1.889	0.411	0.419	Continuing	Continuing
Quantity of RDT&E Articles												

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 AC/MC-130J project funds core Special Operations Forces (SOF)-unique modifications to replace aging MC-130E Combat Talon I, MC-130P Combat Shadow, MC-130H Combat Talon II, AC-130H Spectre, AC-130W Stinger II, and AC-130U Spooky airframes. The 8 AC-130H Spectre, 12 AC-130W Stinger II and 17 AC-130U Spooky airframes will be replaced with MC-130J aircraft modified with the Precision Strike Package (PSP) to achieve the AC-130J configuration. These platforms perform clandestine or low visibility, single- or multi-ship low-level missions intruding politically-sensitive or hostile territories; provide air refueling for special operations helicopters and CV-22 aircraft; airdrop leaflets, small special operations teams, resupply bundles and combat rubber raiding craft; and close air support (CAS), air interdiction, armed reconnaissance, escort, and force protection - integrated base defense. Additional capabilities include low-level navigation and in-flight refueling. The Air Force will procure and field basic aircraft, common support equipment, and trainers for USSOCOM. USSOCOM will then employ an incremental upgrade approach to incorporate SOF capabilities onto the Air Force-provided aircraft.

Conducts development, integration, and testing of aircraft enhancements to meet SOF-unique mission requirements. Enhancements include, but are not limited to, SOF communications, mission processors, aircraft performance enhancements, enhanced situational awareness, electronic warfare and survivability systems, and other SOF mission kits. Provides PSP aircraft infrastructure development.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: AC/MC-130J	0.000	0.000	9.957
FY 2014 Plans: Continues SOF-unique mission improvements including, but not limited to, MC-130J Increment 3 development, integration, and test efforts. Initiates Enhanced Situational Awareness (ESA) integration and test. ESA is a new start program in FY 2014 for integration, test and installation on MC-130J aircraft. Develop and test aircraft modification designs for PSP kit installation.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	9.957

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S875: *AC/MC-130J*	

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
• PROC1: *SOF TANKER RECAPITALIZATION*	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	99.666
• PROC2: *AC/MC-130J*	61.391	51.484	51.870		51.870	105.105	57.527	58.866	95.694	Continuing	Continuing
• PROC3: *PRECISION STRIKE PACKAGE*	0.000	73.013	107.687		107.687	184.232	240.382	281.984	278.418	705.250	1,870.966

Remarks

D. Acquisition Strategy

The basic AC/MC-130J aircraft will be acquired under the United States Air Force HC/MC-130J Recapitalization procurement program. USSOCOM will fund development, integration, test and production/retrofit of SOF-unique mission equipment under this program and the USSOCOM Precision Strike Package program.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S875: *AC/MC-130J*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MC-130J	C/Various	Lockheed Martin:Atlanta, GA	-	-		-		5.957	Jan 2014	-		5.957	Continuing	Continuing	
AC-130J	C/Various	Lockheed Martin:Lexington, KY	-	-		-		4.000	Jan 2014	-		4.000	Continuing	Continuing	
		Subtotal	0.000	0.000		0.000		9.957		0.000		9.957			

	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	0.000	0.000		0.000		9.957		0.000		9.957			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S875: *AC/MC-130J*

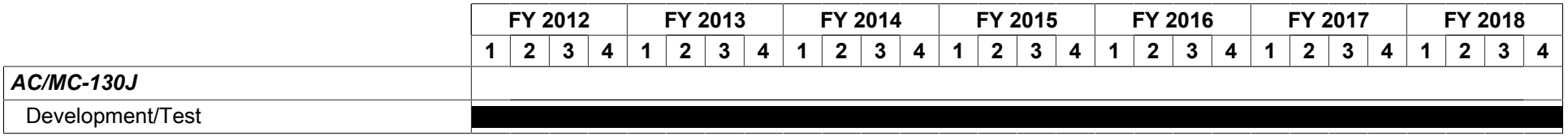

Exhibit R-4A, RDT&E Schedule Details: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT S875: *AC/MC-130J*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
AC/MC-130J				
Development/Test	1	2012	4	2018

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT D615: *Rotary Wing Aviation*	

COST ($ in Millions)	All Prior Years	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
D615: *Rotary Wing Aviation*	-	0.000	0.000	28.392	-	28.392	55.995	25.518	2.712	10.125	Continuing	Continuing
Quantity of RDT&E Articles												

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

This project develops/upgrades SOF rotary wing aircraft systems that operate in increasingly hostile environments. Rotary wing aircraft supported by this project include: MH-60M, MH-47G, and A/MH-6M. These aircraft provide aviation support to SOF in worldwide contingency operations and low-intensity conflicts, and they must be capable of rapid deployment; undetected penetration of hostile areas; and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters. Sub-projects include:

• A/MH-6M Block 3.0 Upgrade is necessary to restore structural, performance, and safety margins for the aircrews. An airframe structural modification will address structural failures due to high intensity, high gross weight operations, and a decade of battle damage. A main/tail rotor drive train and engine control replacement effort will reduce airframe loads and restore sufficient safety and performance margins. An avionics upgrade (NDI/COTS) will replace obsolescent components and provide basic situational awareness. This upgrade is critical to keep a 1960's vintage aircraft in the fight until a suitable replacement aircraft is available, estimated to be in the 2025 timeframe.

• MH-60 SOF Modernization program provides for the systems engineering and platform integration efforts, to include continued flight and qualification testing and test support.

• Degraded Visual Environment (DVE) solution will fuse information from currently fielded aircraft sensors with emerging technology to display real-time reference points, obstacles, and landing zone information to the aviator. The DVE solution will provide MH-47/60 aircrews with visual cues for obstacle avoidance and aircraft control during all phases of flight and significantly increase crew and passenger survivability in DVE such as dirt and snow. Additional funding is provided to begin software development.

• Future Vertical Lift (FVL) program provides for the long-term replacement of an aging fleet of aircraft and provides a significant increase in range, speed, payload, survivability, reliability, and maintainability of vertical lift aircraft to meet emerging mission requirements. USSOCOM will participate in the Service Common development of a joint future vertical lift aircraft by injecting USSOCOM requirements and equities into the initial development and design efforts to minimize SOF-peculiar modifications to the common aircraft. This is a new start in FY 2014

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT D615: *Rotary Wing Aviation*

- Infrared Countermeasure (IRCM) program provides a lightweight capability suitable for the A/MH-6 Mission Enhanced Little Bird (MELB). The IRCM program will develop, integrate, qualify, and test a complete lightweight IRCM system to include a missile warning system and expendables dispenser. The A/MH-6 is the only tactical aircraft in the U.S. Army inventory without protection from IR guided missiles. IRCM is a new start in FY 2014.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: A/MH-6M Block 3.0 Upgrade ***FY 2014 Plans:*** Continues to development of cockpit upgrades, improved rotor systems, and upgrades to airframe.	0.000	0.000	12.832
Title: MH-60 SOF Modernization Program ***FY 2014 Plans:*** Initiates development of an improved tail rotor for the MH-60M aircraft to increase tactical maneuverability.	0.000	0.000	1.251
Title: Degraded Visual Environment (DVE) ***FY 2014 Plans:*** Continues development of DVE sensor solution.	0.000	0.000	11.809
Title: Future Vertical Lift (FVL) ***FY 2014 Plans:*** FY 2014 new start program. Begins to identify classes of FVL technology development most applicable to SOF Aviation platforms and participate in the Analysis of Alternatives (AoA) conducted by the Joint FVL Program Office.	0.000	0.000	1.000
Title: Infrared Countermeasures (IRCM) ***FY 2014 Plans:*** FY 2014 new start program. Begins development of a lightweight infrared countermeasure system to include a Missile Warning System and expendables dispenser or laser jammer.	0.000	0.000	1.500
Accomplishments/Planned Programs Subtotals	0.000	0.000	28.392

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
• PROC2: *ROTARY WING UPGRADES AND SUSTAINMENT*			112.456		112.456	102.650	161.432	197.954	176.204	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT D615: *Rotary Wing Aviation*

D. Acquisition Strategy

• A/MH-6M Block 3.0 Upgrade is comprised of three major efforts: comprised of three major efforts: airframe/rotors, engine control, and cockpit. The airframe/ rotors development effort will be a sole source contract to Boeing, who owns the technical data associated with the A/MH-6 airframe. The engine control work will be performed by Rolls-Royce and Goodrich Power and Engine Control (GPEC) under subcontract to Boeing. As part of the airframe upgrade, the main and tail rotor blades are being replaced with one of several blades available off-the-shelf through a competitive evaluation. The cockpit avionics architecture will be developed by Rockwell-Collins, with the intent to leverage the Common Avionics Architecture System (CAAS) source code to the extent possible. Any new hardware components will be NDI/COTS and will be competitively selected. The production software effort will be a FFP contract. Airframe modification and integration work will be conducted at the Special Operations Forces Support Activity (SOFSA) by the incumbent contractor.

• MH-60M SOF Modernization Program - This supports the Systems Integration and Qualification efforts on the prototype MH-60M helicopter. This includes, but is not limited to, government and contractor flight test support, engineering analysis, documentation, and airworthiness substantiation. There are no proprietary considerations that may direct some efforts to the original equipment manufacturer.

• DVE - This effort integrates and qualifies a solution to address a safety of flight issue while flying in degraded visual environments. A competitive source selection process will be conducted for the DVE solution to the extent possible while capitalizing on Science and Technology initiatives and other Service DVE investments. Proprietary considerations may direct some efforts to the original equipment manufacturer. Additional funds will be employed to begin the development of the software/ firmware for the Synthetic Vision Backbone which uses Digital Terrain Elevation Data or High Resolution digital elevation maps, Threat Data, and Blue Force Tracker. This is combined with Q2 Electro-Optic Sighting System overlay and Silent Knight Radar or DVE sensors (not yet defined) to provide a synthetic vision scene to aid the aircrew in degraded visual environments. The Synthetic Vision Backbone is sensor agnostic, maximizing the use of a priori data with sensors used for change detection.

• Future Vertical Lift (FVL) - New start in FY2014. This effort is the SOF aviation participation in the Joint FVL effort to develop the next generation of vertical takeoff and landing (VTOL) aircraft and establishes the foundation for the transformation of the Department of Defense (DoD) vertical lift Aviation capabilities over the next 40 years.

• Infrared Countermeasures (IRCM) - New Start in FY2014. This program will be a competitive source selection effort that develops, integrates, and qualifies a mission configurable Missile Warning System (MWS) and IRCM capability which does not currently exist at a weight suitable for the A/MH-6 Mission Enhanced Little Bird (MELB). Special operations aviation requires the addition of IRCM to protect against increasingly proliferated and sophisticated infrared-guided weapons.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT D615: *Rotary Wing Aviation*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
A/MH-6M Block 3.0 Upgrades	C/Various	PM MELB:Ft. Eustis, VA.	-	-		-		12.832	Mar 2014	-		12.832	Continuing	Continuing	
DVE	C/Various	PM TAPO:Ft. Eustis, VA.	-	-		-		11.809	Jan 2014	-		11.809	Continuing	Continuing	
FVL	C/Various	PEO-RW: MacDill AFB, FL	-	-		-		1.000	Jan 2014	-		1.000	Continuing	Continuing	
IRCM	C/Various	PM TAPO:Ft. Eustis, VA.	-	-		-		1.500	Jan 2014	-		1.500	Continuing	Continuing	
		Subtotal	0.000	0.000		0.000		27.141		0.000		27.141			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MH-60 SOF Modernization Program	C/Various	Various:Various	-	-		-		1.251	Jan 2014	-		1.251	0.000	1.251	
		Subtotal	0.000	0.000		0.000		1.251		0.000		1.251	0.000	1.251	

	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	0.000	0.000		0.000		28.392		0.000		28.392			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT D615: *Rotary Wing Aviation*

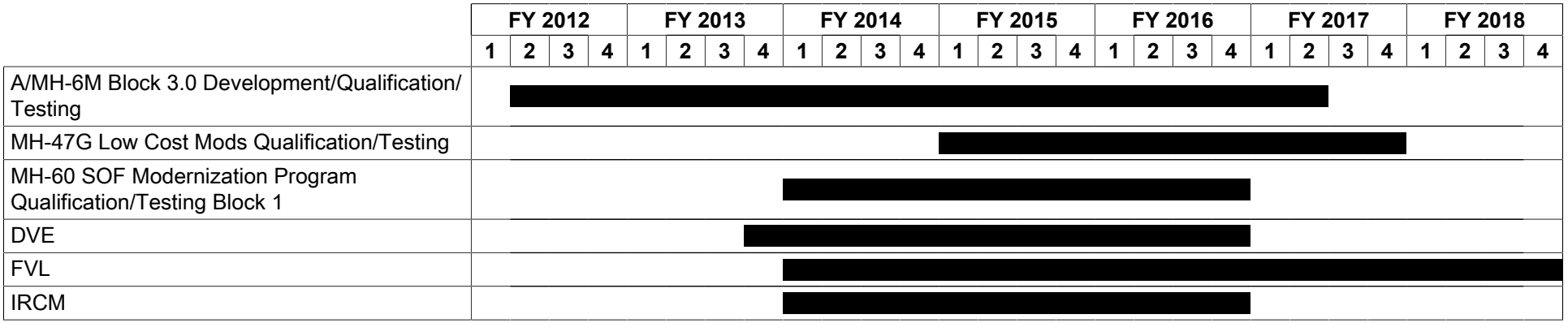

Exhibit R-4A, RDT&E Schedule Details: PB 2014 United States Special Operations Command		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 1160403BB: *SO Aviation Systems*	PROJECT D615: *Rotary Wing Aviation*

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
A/MH-6M Block 3.0 Development/Qualification/Testing	2	2012	2	2017
MH-47G Low Cost Mods Qualification/Testing	1	2015	4	2017
MH-60 SOF Modernization Program Qualification/Testing Block 1	1	2014	4	2016
DVE	4	2013	4	2016
FVL	1	2014	4	2018
IRCM	1	2014	4	2016