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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0305182F: Spacelift Range System (SPACE)							
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	-	9.245	8.760	13.345	-	13.345	13.630	9.171	10.607	10.798	Continuing	Continuing
674137: Launch and Test Range System (LTRS) Modernization	-	9.245	8.760	13.345	-	13.345	13.630	9.171	10.607	10.798	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

The Eastern Range (ER) at Patrick Air Force Base (AFB)/Cape Canaveral Air Force Station, FL, and the Western Range (WR) at Vandenberg AFB, CA, make up the Spacelift Range System (SLRS), also known as the Launch and Test Range System (LTRS). The ER and WR provide tracking, telemetry, communications, flight safety, and other capabilities to enable: national security, civil, and commercial space launches; ballistic missile and missile defense test launches; and aeronautical and guided weapons tests. Decreasing reliability of aging range systems leads to higher operations and maintenance costs and increased risk of launch delays.

The AF will address range deficiencies in FY14 via multiple contracts, including the LTRS Integrated Support Contract (LISC), a command destruct modernization contract, small business set-aside contracts for ER and WR network modernization, and the Systems Engineering and Integration (SE&I) Contract. As a follow-on to the Spacelift Range System Contract (SLRSC) which runs through FY13, the AF will award LISC as a consolidated sustainment, operations, and maintenance contract in FY14. LISC will provide interface systems engineering, technical studies, and requirements analysis to integrate future maintenance and sustainment upgrades with modernization efforts. Also, the separate Systems Engineering and Integration (SE&I) contract supporting the program management office will expand efforts to provide systems engineering and integration support for future modernization efforts, in terms of system baselines, configurations, and architectures. These efforts will comply with OSD policies and standards for interface with IT systems.

In addition to these system upgrades, the Standard Space Trainer program will provide a complementary training application for the Spacelift Ranges, incorporating Range Modernization functionality, as part of the common platform for all space system operational training.

All of these upgrades to fielded systems at operating ranges are categorized as Budget Activity 7, Operational Systems Development.

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B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	
Previous President's Budget	9.877	8.760	13.345	-	13.345	
Current President's Budget	9.245	8.760	13.345	-	13.345	
Total Adjustments	-0.632	0.000	0.000	-	0.000	
• Congressional General Reductions	-	0.000				
• Congressional Directed Reductions	-	0.000				
• Congressional Rescissions	0.000	0.000				
• Congressional Adds	-	0.000				
• Congressional Directed Transfers	-	0.000				
• Reprogrammings	0.000	0.000				
• SBIR/STTR Transfer	-0.632	0.000				
• Other Adjustments	0.000	0.000	0.000	-	0.000	
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: Range Modernization (SLRSC)				6.172	6.210	0.000
Description: SLRSC continues systems engineering, special studies, and requirements analysis for modernization of selected telemetry, radar, and command destruct instrumentation site systems through FY13. Subsequently, the AF will accomplish systems engineering, special studies, and requirements analysis via the Launch and Test Range System Integrated Support Contract (LISC) to integrate its range operations, maintenance, and sustainment (OM&S) functions with future range modernization efforts.						
FY 2012 Accomplishments: SLRSC continued systems engineering, special studies, and requirements analysis for modernization of selected command destruct, radar, and telemetry instrumentation site systems.						
FY 2013 Plans: SLRSC will complete systems engineering, special studies, and requirements analysis for modernization of selected command destruct, radar, and telemetry instrumentation site systems.						
FY 2014 Plans: N/A						
Title: LISC Systems Engineering and Tech Support				0.000	0.000	1.900
Description: Beginning in FY14, the AF will accomplish interface systems engineering, special studies, and requirements analysis via the Launch and Test Range System Integrated Support Contract (LISC) to integrate its future range operations, maintenance,						

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
and sustainment (OM&S) functions with future range modernization efforts. Additionally, LISC will integrate its future OM&S functions with the primary systems engineering and integration contract supporting the program management office.				
FY 2012 Accomplishments: N/A				
FY 2013 Plans: N/A				
FY 2014 Plans: LISC will initiate interface systems engineering, special studies, and requirements analysis to integrate its future range operations, maintenance, and sustainment (OM&S) functions with future range modernization efforts. Additionally, LISC will integrate its future OM&S functions with the primary systems engineering and integration contract supporting the program management office.				
Title: Systems Engineering and Integration		2.717	2.157	6.566
Description: Provide independent, comprehensive systems engineering and integration efforts, via the SE&I contract. These efforts are focused on future system definition, baselines, range architectures, and integration planning for modernization and sustainment efforts. SE&I ensures modernization and sustainment efforts address operational requirements; launch enterprise transformation plans; reliability, maintainability, and availability factors; and necessary interfaces with IT systems.				
FY 2012 Accomplishments: Continued independent SE&I efforts to integrate modernization and sustainment efforts into the ranges for the future. Provided systems definition, baseline, architecture, integration planning and support for future systems. Included products of completed SLRSC instrumentation modernization and sustainment efforts in future plans, as well as sustainment products from follow-on LISC and modernization products from OPAF-funded network and command destruct contracts.				
FY 2013 Plans: Continue independent SE&I efforts to integrate modernization and sustainment efforts into future ranges. Provide systems definition, baseline, architecture, integration planning and support for future systems. Refine plans to include LISC sustainment products and network and command destruct modernization products in future architecture.				
FY 2014 Plans: Expand independent SE&I efforts to integrate modernization and sustainment efforts into future ranges. Provide systems definition, baseline, architecture, integration planning and support for future systems. Add integration of LISC sustainment efforts, ER and WR network modernization, and command destruct modernization in range future architecture.				
Title: Program Management Administration		0.356	0.393	0.405

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Description: Provide program management support, to include System Program Office operations, Systems Engineering and Technical Assistance (SETA), and Federally Funded Research and Development Centers (FFRDC). FY 2012 Accomplishments: Continued program management support, to include System Program Office operations, SETA, and engineering support from Aerospace (FFRDC). FY 2013 Plans: Continue program management support, to include System Program Office operations, SETA, and engineering support from Aerospace (FFRDC). FY 2014 Plans: Continue program management support, to include System Program Office operations, SETA, and engineering support from Aerospace (FFRDC).				
Title: Standard Space Trainer Description: Develops the Standard Space Trainer (SST) application for the spacelift ranges. SST is the AFSPC/CC-directed training system for all Combat Mission Ready (CMR) space systems. It provides a common platform for all space operational training systems for both AFSPC and AETC. The Spacelift Range SST will be developed to support CMR training for the ranges' Aerospace Control Officer (ACO), Range Control Officer (RCO)/Range Operations Commander (ROC), Mission Flight Control Officer (MFCO) and Launch Weather Officer (LWO) positions. FY 2012 Accomplishments: N/A FY 2013 Plans: N/A FY 2014 Plans: Begins development of Standard Space Trainer application for ranges to provide more responsive, cost effective, and adaptive training capability than current training on operational system.		0.000	0.000	4.474
Accomplishments/Planned Programs Subtotals		9.245	8.760	13.345

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D. 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
• OPAF: BA03: Line item # 836770: Spacelift Range System Space	124.967	109.545	98.062		98.062	96.092	101.490	105.041	106.931	Continuing	Continuing
• OPAF: BA05: Line Item # 86190A: Spares and Repair Parts	2.976	3.076	3.120		3.120	3.172	0.000	0.000	0.000	Continuing	Continuing
Remarks											
E. Acquisition Strategy											
The AF will use competitively awarded, complementary contracts managed by the Space and Missile Systems Center (SMC) to modernize and sustain the ranges in FY14 on a minimal-interference basis as they continue to support operational launches and tests. These include the new Launch and Test Range System Integrated Support Contract (LISC) to be awarded in FY14, the Systems Engineering and Integration (SE&I) contract to be re-awarded in FY14, and the new Standard Space Trainer contract to be awarded in FY14. Additionally, SMC will obtain program management support via the Aerospace (FFRDC) contract.											
F. Performance Metrics											
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0305182F: Spacelift Range System (SPACE)						PROJECT 674137: Launch and Test Range System (LTRS) Modernization			
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Spacelift Range System Contract (SLRSC)	C/CPAF	ITT Exelis:Cape Canaveral, FL	-	6.172	Nov 2011	6.210	Nov 2012	0.000		-		0.000	Continuing	Continuing	TBD
LTRS Integrated Support Contract (LISC)	C/FPIF	TBD:TBD,	-	0.000		0.000		1.900	Jan 2014	-		1.900	Continuing	Continuing	TBD
Standard Space Trainer	SS/CPFF	Sonalysts, Inc:Waterford, CT	-	0.000		0.000		4.474	Dec 2013	-		4.474	Continuing	Continuing	9.129
Systems Engineering and Integration Contract	C/CPIF	Booz Allen and Hamilton:McLean, VA	-	2.717	Dec 2011	2.157	Dec 2012	6.566	Dec 2013	-		6.566	Continuing	Continuing	TBD
Subtotal			0.000	8.889		8.367		12.940		0.000		12.940			
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Support (FFRDC)	RO	Aerospace:El Segundo, CA	-	0.356	Nov 2011	0.393	Jan 2013	0.405	Jan 2014	-		0.405	Continuing	Continuing	TBD
Subtotal			0.000	0.356		0.393		0.405		0.000		0.405			

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	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	9.245		8.760		13.345		0.000		13.345				

Remarks

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

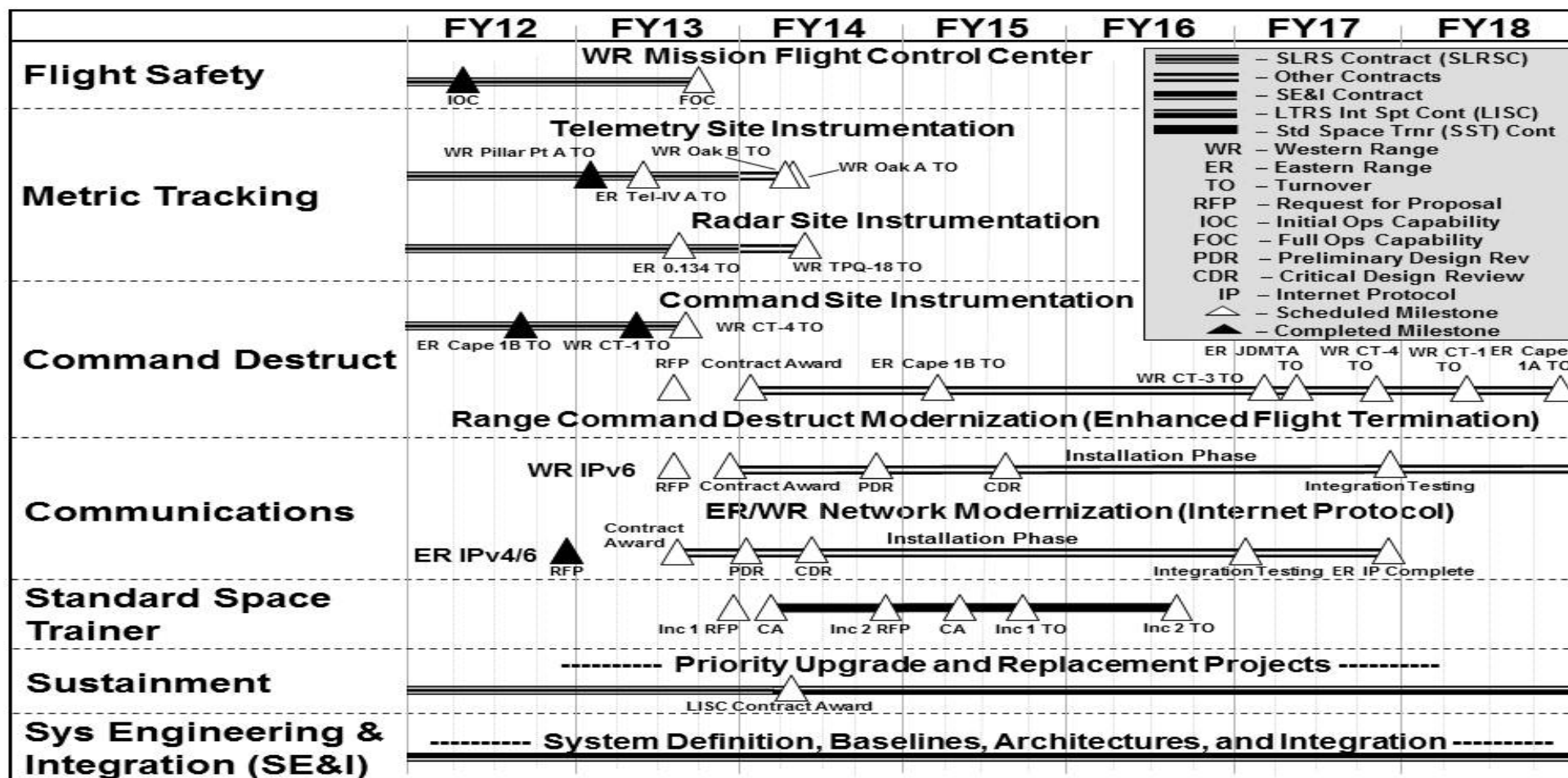
3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305182F: Spacelift Range System
(SPACE)

PROJECT

674137: Launch and Test Range System
(LTRS) Modernization



Note: Schedule represents integrated view of RDT&E and OPAF funded modernization/sustainment efforts

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
- WR Mission Flight Control Center Ops Acceptance	1	2012	2	2012
- WR Mission Flight Control Center IOC	2	2012	2	2012
- WR Mission Flight Control Center FOC	4	2013	4	2013
- Metric Tracking (Telemetry) WR Pillar Point Info Assurance Fixes Complete	1	2012	2	2012
- Metric Tracking (Telemetry) WR Pillar Point Ops Turnover	2	2012	1	2013
- Metric Tracking (Telemetry) ER Tel-IV Authority to Operate	1	2012	3	2012
- Metric Tracking (Telemetry) ER Tel-IV Ops Turnover	4	2012	2	2013
- Metric Tracking (Telemetry) WR Oak Mtn B T&E	4	2012	1	2013
- Metric Tracking (Telemetry) WR Oak Mtn B Ops Turnover	2	2013	2	2014
- Metric Tracking (Telemetry) WR Oak Mtn A Antenna Turnover	2	2012	4	2012
- Metric Tracking (Telemetry) WR Oak Mtn A Site Ops Turnover	1	2013	2	2014
- Metric Tracking (Radar) ER Patrick Site Ops Turnover	1	2012	3	2013
- Metric Tracking (Radar) WR VAFB Site T&E	1	2013	2	2013
- Metric Tracking (Radar) WR VAFB Site Ops Turnover	3	2013	2	2014
- Command Instrumentation Site WR CT-1 Ops Testing	1	2012	2	2012
- Command Instrumentation Site WR CT-1 Ops Turnover	2	2012	2	2013
- Command Instrumentation Site ER Cape 1B Ops Testing	1	2012	2	2012
- Command Instrumentation Site ER Cape 1B Ops Turnover	2	2012	3	2012
- Command Instrumentation Site WR CT-4 Ops Testing	3	2012	2	2013
- Command Instrumentation Site WR CT-4 Ops Turnover	3	2013	3	2013
- Standard Space Trainer Increment 1 Contract Award	1	2014	1	2014
- Standard Space Trainer Increment 1 Turnover	3	2015	3	2015

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013	
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		Start		End
Events		Quarter	Year	Quarter
- Standard Space Trainer Increment 2 Contract Award		2	2015	2
- Standard Space Trainer Increment 2 Turnover		3	2016	3