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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603913C I Israeli Cooperative Programs							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	1,391.959	267.595	103.835	105.354	-	105.354	108.002	109.742	111.901	114.219	Continuing	Continuing
MD20: Israeli Upper Tier	394.255	74.550	55.793	56.861	-	56.861	58.285	59.225	60.392	61.631	Continuing	Continuing
MD26: Israeli ARROW Program	305.495	56.519	10.831	10.841	-	10.841	11.125	11.288	11.508	11.761	Continuing	Continuing
MD34: Short Range Ballistic Missile Defense (SRBMD)	692.209	136.526	37.211	37.652	-	37.652	38.592	39.229	40.001	40.827	Continuing	Continuing
Program MDAP/MAIS Code: 362												
Note												
Content supports expected contributions from Israel per international agreements.												
A. Mission Description and Budget Item Justification												
Since 1986, the United States and the State of Israel have cooperated on missile defense. Currently, Missile Defense Agency (MDA) has three major projects with Israel to develop and improve their indigenous capability to defend against short and medium range ballistic missiles. These include Upper Tier Interceptors (MD20), the Arrow Weapon System (MD26) and the Short-Range Ballistic Missile Defense, also known as the David's Sling Weapon System (MD34). Within these projects MDA develops and produces weapon systems, conducts tests, and exercises interoperability between U.S. Ballistic Missile Defense System (BMDS) and the Israeli Missile Defense Architecture.												
B. Program Change Summary (\$ in Millions)				FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total				
Previous President's Budget				267.595	103.835	105.612	-	105.612				
Current President's Budget				267.595	103.835	105.354	-	105.354				
Total Adjustments				0.000	0.000	-0.258	-	-0.258				
• Congressional General Reductions				0.000	0.000							
• Congressional Directed Reductions				0.000	0.000							
• Congressional Rescissions				0.000	0.000							
• Congressional Adds				0.000	0.000							
• Congressional Directed Transfers				0.000	0.000							
• Reprogrammings				0.000	0.000							
• SBIR/STTR Transfer				0.000	0.000							
• Other Adjustment				0.000	0.000	-0.258	-	-0.258				
Change Summary Explanation												
N/A												

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603913C / Israeli Cooperative Programs				Project (Number/Name) MD20 / Israeli Upper Tier			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MD20: Israeli Upper Tier	394.255	74.550	55.793	56.861	-	56.861	58.285	59.225	60.392	61.631	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note This project code encompasses the Missile Defense Agency's (MDA) U.S.-Israeli cooperative program for the Israeli Upper Tier Program.												
A. Mission Description and Budget Item Justification Israeli Upper Tier Interceptor (UTI) Project (MD20): The Upper Tier Program provides the Arrow-3 missile, increasing the system`s capability against advanced medium range threats by providing approximately four times the current Arrow-2 battle space. The primary near term objective is to complete and demonstrate Upper Tier design, and continue Initial Lot Production (ILP) deliveries. This project provides funding for the Upper Tier component of the Arrow Weapon System (AWS) development. The United States through the cooperative effort gains knowledge and experience of the Israeli Defense Forces operation of a multi-layered defense architecture. This project also includes the procurement of the Silver Sparrow Air-Launched Target which is necessary to validate the performance of the Arrow-3 Missile and related Block 5 spiral development activities.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2016	FY 2017	FY 2018	
Title: Upper Tier Interceptor Articles: Description: The scope of the Upper Tier Program covers interceptor development, testing, material procurement to include initial lot production, and integration of spiral software development for Block 5 AWS. Recurring Accomplishments include: - Conduct Testing of the Arrow-3 Interceptor - Conduct algorithm design reviews to verify requirements - Continue Interceptor Spiral Development - Procurement and Delivery of Initial Lot Production assets and Test Articles Events unique to an FY are as follows: FY 2016 Accomplishments: With the 2016 congressional adds to the President's Budget: -Testing of the Arrow-3 Interceptor as scheduled in the R4A. -Test Number #2 and #3 design review.									74.550	55.793	56.861	
									-	-	-	

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency		Date: May 2017	
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD20 / <i>Israeli Upper Tier</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
-Conducted Interceptor Production Readiness Review (PRR). FY 2017 Plans: -Testing of the Arrow-3 Interceptor as scheduled in the R4A. -Test Number #4 design review. FY 2018 Plans: -Testing of the Arrow-3 Interceptor as scheduled in the R4A. -Test Number #5 design review.			
Accomplishments/Planned Programs Subtotals		74.550	55.793
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The Upper-Tier Interceptor Project Agreement under the Research, Development, Test and Evaluation (RDT&E) Framework agreement between the U.S. and Israel creates a joint program office to manage this program. Missile Defense Agency (MDA) and the Israeli Ministry of Defense (IMoD) continue to implement best management practices that allow for the more effective use of program management tools to ensure risk is adequately managed to include Knowledge Points that assess Israel's development progress. The DoD U.S. Israeli Cooperative Program Office jointly manages the Upper Tier program with IMoD to ensure that all systems are delivered on time, on budget, and meet the needs of the warfighter. The program is equitably funded between the U.S. and Israel. A portion of the Israeli cost share comes from non-financial contributions such as previously completed work prior to joint program initiation. Contracts are awarded by IMoD or MDA dependent on what is most advantageous to the Joint Governments. In regard to the Upper Tier Interceptor, IMoD will contract with Israel Aerospace Industries (IAI). IAI subcontracts with Israeli companies, Boeing and other U.S. companies.			
E. Performance Metrics			
N/A			

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
Appropriation/Budget Activity						R-1 Program Element (Number/Name)				Project (Number/Name)					
0400 / 4						PE 0603913C / Israeli Cooperative Programs				MD20 / Israeli Upper Tier					
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Upper Tier Interceptor - Upper Tier Interceptor	C/CPFF	Israel Aerospace Industries (IAI) : Israel	394.255	74.550	Dec 2015	55.793	Dec 2016	56.861	Dec 2017	-		56.861	Continuing	Continuing	Continuing
Subtotal			394.255	74.550		55.793		56.861		-		56.861	-	-	-
Remarks															
N/A															
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-
Remarks															
N/A															
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-
Remarks															
N/A															
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017		
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>				Project (Number/Name) MD20 / <i>Israeli Upper Tier</i>				

Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks N/A															
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			394.255	74.550		55.793		56.861		-		56.861	-	-	-
Remarks Contract cost reflect U.S. contribution only. Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency										Date: May 2017									
Appropriation/Budget Activity					R-1 Program Element (Number/Name)					Project (Number/Name)									
0400 / 4					PE 0603913C / Israeli Cooperative Programs					MD20 / Israeli Upper Tier									
Significant Event Complete ▲					Milestone Decision Complete ★					Element Test Complete ◆					System Level Test Complete ●				
Significant Event Planned △					Milestone Decision Planned ☆					Element Test Planned ◇					System Level Test Planned ○				
Israeli Cooperative Arrow 3 Intercept Test #1- FY 2016					◆◆◆◆														
Israeli Cooperative Arrow 3 Intercept Test #2- FY 2017										◇◇◇◇									
Israeli Cooperative Arrow 3 Intercept Test #3 FY 2018										◇◇◇◇									
Israeli Cooperative Arrow 3 Intercept Test #4- FY 2019										◇◇◇◇									
Israeli Cooperative Arrow 3 Intercept Test #5- FY 2020															◇◇◇◇				
Israeli Cooperative Arrow 3 Intercept Test #6 FY 2021															◇◇◇◇				
Israeli Cooperative Arrow 3 Intercept Test #7- FY 2022																			

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD20 / <i>Israeli Upper Tier</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Israeli Cooperative Arrow 3 Intercept Test #1- FY 2016	1	2016	4	2016
Israeli Cooperative Arrow 3 Intercept Test #2- FY 2017	1	2017	4	2017
Israeli Cooperative Arrow 3 Intercept Test #3 FY 2018	1	2018	4	2018
Israeli Cooperative Arrow 3 Intercept Test #4- FY 2019	1	2019	4	2019
Israeli Cooperative Arrow 3 Intercept Test #5- FY 2020	1	2020	4	2020
Israeli Cooperative Arrow 3 Intercept Test #6 FY 2021	1	2021	4	2021
Israeli Cooperative Arrow 3 Intercept Test #7- FY 2022	1	2022	4	2022

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603913C / Israeli Cooperative Programs				Project (Number/Name) MD26 / Israeli ARROW Program			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MD26: Israeli ARROW Program	305.495	56.519	10.831	10.841	-	10.841	11.125	11.288	11.508	11.761	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note												
This project code encompasses the Missile Defense Agency's (MDA) U.S.-Israeli cooperative program for the Israeli Arrow Weapon System Program.												
A. Mission Description and Budget Item Justification												
Israeli Arrow Weapon System (AWS) (MD26): The Arrow System Improvement Program (ASIP) includes block upgrades to the AWS that enhances capabilities against evolving medium range threats by increasing the total defended area by approximately 50 percent. ASIP elements include the Arrow-2 missile and launcher, Citron Tree Battle Management Center (BMC), Green Pine (GP) and Super Green Pine (SGP) Radars, and the Hazelnut Tree Launcher Control Center (LCC). Also included is the integration of Block 5 assets which include the Arrow-3 missile and launcher.												
Arrow Block 5 development will also incorporate a Long Range Detection suite that consists of an unmanned aerial vehicle Airborne Early Warning System (ABEWS) and a S-Band Silver Oak radar for increased sensor range, early detection and enhanced raid size capacity. The program also includes the continued development of Arrow`s interoperability with U.S. BMDS.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2016	FY 2017	FY 2018	
Title: Arrow System Improvement Program									50.157	4.469	4.479	
									Articles: -	-	-	
Description: The Arrow Weapon System (AWS) continues development of Block 4 and Block 5 spiral development. Included is the integration of Block 5 assets which consists of the Arrow-3 missile, launcher and the Long Range Detection Suite (LRDS).												
FY 2016 Accomplishments: With the 2016 congressional adds to the President's Budget: -Continued Block 5 Arrow Weapon System integration. -Continued Long Range Detection Suite Development. -Continued Lab and flight testing and analysis to demonstrate and complete Knowledge Points.												
FY 2017 Plans: -See description												
FY 2018 Plans:												

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency		Date: May 2017	
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD26 / <i>Israeli ARROW Program</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
-See description			
Title: Israeli Test Bed (ITB) Articles: Description: The Israeli Test Bed (ITB) provides experiments to evaluate Human Machine Interface (HMI) battle management and integration of Block 5 Arrow Weapon System TTPs and CONOPs. FY 2016 Accomplishments: -See description. FY 2017 Plans: -See description. FY 2018 Plans: -See description.		3.535 -	3.535 -
Title: Israeli Systems Architecture and Integration (ISA&I) Articles: Description: Israeli Systems Architecture and Integration conducts studies to assess Israel's future 2025 Missile Defense Architecture. This identifies the preferred missile defense architecture and reference threat for 10-15 year future epoch and interoperability special studies on regional threats and growth path options. FY 2016 Accomplishments: -See description. FY 2017 Plans: -See description. FY 2018 Plans: -See description.		2.827 -	2.827 -
Accomplishments/Planned Programs Subtotals		56.519	10.831
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD26 / <i>Israeli ARROW Program</i>
<p><u>D. Acquisition Strategy</u></p> <p>The DoD U.S. Israeli Cooperative Program Office jointly manages the Arrow Program with Israel Ministry of Defense (IMoD) to ensure that all systems are delivered with quality on time, on budget, and meet the needs of the warfighter. The program funding is equitably funded between the U.S. and Israel with Israel providing matching contributions. However, a portion of the Israeli cost share comes from non-financial contributions such as previously completed work prior to joint program initiation. Contracts are awarded by IMoD or MDA dependent on what is most advantageous to the Joint Governments. In regard to Arrow System Improvement Program (ASIP), IMoD contracts on behalf of U.S. government with Israel Aerospace Industries (IAI). IAI subcontracts with Israeli and U.S. companies. For the Israeli Test Bed, the Missile Defense Agency (MDA) contracts directly with Elbit Systems, Ltd. while IMoD provides an equitable share of the funding to the U.S. Finally, MDA contracts directly with WALES, Ltd for the Israeli System Architecture and Integration program.</p> <p><u>E. Performance Metrics</u></p> <p>N/A</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603913C / Israeli Cooperative Programs					Project (Number/Name) MD26 / Israeli ARROW Program				
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Arrow System Improvement Program - Arrow System Improvement Program (ASIP)	C/CPFF	Israel Aerospace Industries (IAI) : Israel	263.691	50.157	Dec 2015	4.469	Dec 2016	4.479	Dec 2017	-		4.479	Continuing	Continuing	Continuing
Israeli Test Bed (ITB) - Israeli Test Bed	C/FFP	Elbit Systems : Israel	24.745	3.535	Oct 2015	3.535	Dec 2016	3.535	Dec 2017	-		3.535	Continuing	Continuing	Continuing
Israeli Systems Architecture and Integration (ISA&I) - ISA&I	C/FFP	Wales LTD : Israel	17.059	2.827	Oct 2015	2.827	Dec 2016	2.827	Dec 2017	-		2.827	Continuing	Continuing	Continuing
Subtotal			305.495	56.519		10.831		10.841		-		10.841	-	-	-
Remarks N/A															
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-
Remarks N/A															
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-
Remarks N/A															

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017		
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>				Project (Number/Name) MD26 / <i>Israeli ARROW Program</i>				

Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-

Remarks N/A															
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	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	305.495	56.519		10.831		10.841		-		10.841	-	-	-

Remarks Contract cost reflect U.S. contribution only.													
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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency														Date: May 2017																		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603913C / Israeli Cooperative Programs										Project (Number/Name) MD26 / Israeli ARROW Program																	
Significant Event Complete ▲ Significant Event Planned △					Milestone Decision Complete ★ Milestone Decision Planned ☆					Element Test Complete ◆ Element Test Planned ◇					System Level Test Complete ● System Level Test Planned ○					Complete Activity ◆ Planned Activity ◇												
					FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2016					◆	◆	◆	◆																								
Israeli Test Bed Experiments FY 2016					◆	◆	◆	◆																								
Israeli Test Bed Exercise with Warfighter FY2016					◆	◆	◆	◆																								
Israeli Test Bed Experiments FY 2017									◇	◇	◇	◇																				
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2017									◇	◇	◇	◇																				
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2018													◇	◇	◇	◇																
Israeli Test Bed Experiments FY 2018													◇	◇	◇	◇																
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2019														◇	◇	◇	◇															
Israeli Test Bed Experiments FY 2019														◇	◇	◇	◇															
Israeli Test Bed Experiments FY 2020																		◇	◇	◇	◇											
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2020																		◇	◇	◇	◇											
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2021																						◇	◇	◇	◇							
Israeli Test Bed Experiments FY 2021																						◇	◇	◇	◇							
Israeli Test Bed Experiments FY 2022																														◇		
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2022																												◇	◇	◇	◇	

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD26 / <i>Israeli ARROW Program</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2016	1	2016	4	2016
Israeli Test Bed Experiments FY 2016	1	2016	4	2016
Israeli Test Bed Exercise with Warfighter FY2016	1	2016	4	2016
Israeli Test Bed Experiments FY 2017	1	2017	4	2017
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2017	1	2017	4	2017
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2018	1	2018	4	2018
Israeli Test Bed Experiments FY 2018	1	2018	4	2018
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2019	1	2019	4	2019
Israeli Test Bed Experiments FY 2019	1	2019	4	2019
Israeli Test Bed Experiments FY 2020	1	2020	4	2020
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2020	1	2020	4	2020
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2021	1	2021	4	2021
Israeli Test Bed Experiments FY 2021	1	2021	4	2021
Israeli Test Bed Experiments FY 2022	4	2022	4	2022
Israeli Test Bed Exercise to include Ground Test (GT) Support FY 2022	1	2022	4	2022

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603913C / Israeli Cooperative Programs				Project (Number/Name) MD34 / Short Range Ballistic Missile Defense (SRBMD)			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MD34: Short Range Ballistic Missile Defense (SRBMD)	692.209	136.526	37.211	37.652	-	37.652	38.592	39.229	40.001	40.827	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note This project code encompasses the Missile Defense Agency's (MDA) U.S.-Israeli cooperative program for the Israeli David's Sling Weapon System Program.												
A. Mission Description and Budget Item Justification Short Range Ballistic Missile Defense (SRBMD) (MD34): SRBMD, also known as the David`s Sling Weapon System (DSWS), is designed to counter short range rockets, cruise missiles, and tactical ballistic missiles and will be integrated into the Israeli Missile Defense Architecture adding another layer of defense to the current Arrow System. The David`s Sling Weapon System (DSWS) includes the Stunner Interceptor, Missile Firing Unit (MFU), Multi-Mission Radar (MMR), Launch Site Controller (LSC), Data Link (DL) and the Golden Almond Battle Management Center (BMC).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2016	FY 2017	FY 2018	
Title: SRBMD Program Articles: Description: The scope of the David's Sling Weapon System covers system development, testing, material procurement to include initial lot production, and integration of spiral software development for Blocks 1-3.Block 1 capability will enhance the short range rocket and missile defense capability. Block 2 will add capability to defend against medium range and cruise missiles. Block 3 will provide robust defense capability and add significant detection capability to the Israeli Air Defense Architecture. Recurring Accomplishments include: - Conduct Testing of the DSWS Events unique to an FY are as follows: FY 2016 Accomplishments: With the 2016 congressional adds to the President's Budget: -Delivered Initial Lot Production (ILP) Interceptors to the Israeli Air Force. -Block One system intercept test with ILP Interceptor to demonstrate production stunner performance. -Continued Block 2 Development -Completed remaining Block One Knowledge Points and conduct final Performance Design Review -Conducted ground test and simulations to validate missile and system performance and provide data to assess subsystem and system design robustness.									136.526	37.211	37.652	
									-	-	-	

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency		Date: May 2017	
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD34 / <i>Short Range Ballistic Missile Defense (SRBMD)</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
-Conducted ILP Production Readiness Review -Conducted Test Mission Readiness Review for FY2017 Block One Flight Tests FY 2017 Plans: -Block One system intercept test with ILP Interceptor to demonstrate production stunner performance. -Deliver final Initial Lot Production (ILP) Interceptors to the Israeli Air Force FY 2018 Plans: -Block 2 System Intercept Test to demonstrate initial cruise missile defense performance			
Accomplishments/Planned Programs Subtotals		136.526	37.211
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The Short Range Ballistic Missile Defense (SRBMD), also known as the David's Sling Weapon System (DSWS) Project Agreement under the Research, Development, Test and Evaluation (RDT&E) Framework agreement between the U.S. and Israel creates a joint program office to manage this program. Missile Defense Agency (MDA) and the Israeli Ministry of Defense (IMoD) continue to implement management practices that allow for the more effective use of program management tools to ensure risk is adequately managed to include Knowledge Points that assess Israel's development progress. The DoD U.S. Israeli Cooperative Program Office jointly manages the SRBMD/DSWS program with IMoD to ensure that all systems are delivered in an effective manner, and meet the needs of the warfighter. The program is equitably funded between the U.S. and Israel. A portion of the Israeli cost share comes from non-financial contributions such as previously completed work prior to joint program initiation. Contracts are awarded by IMoD or MDA dependent on what is most advantageous to the Joint Governments. For the Stunner Interceptor, Rafael Advanced Systems (an Israeli company), subcontracts to Raytheon Missile Systems for Stunner interceptor components.			
E. Performance Metrics			
N/A			

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>						Project (Number/Name) MD34 / <i>Short Range Ballistic Missile Defense (SRBMD)</i>			
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SRBMD Program - SRBMD Program	C/CPFF	Rafael : Israel	692.209	136.526	Dec 2015	37.211	Dec 2016	37.652	Dec 2017	-		37.652	Continuing	Continuing	Continuing
Subtotal			692.209	136.526		37.211		37.652		-		37.652	-	-	-
Remarks N/A															
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-
Remarks N/A															
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-
Remarks N/A															
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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			-	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017		
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>				Project (Number/Name) MD34 / <i>Short Range Ballistic Missile Defense (SRBMD)</i>				

Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks N/A															
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			692.209	136.526		37.211		37.652		-		37.652	-	-	-
Remarks Contract cost reflect U.S. contribution only.															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency										Date: May 2017									
Appropriation/Budget Activity					R-1 Program Element (Number/Name)					Project (Number/Name)									
0400 / 4					PE 0603913C / Israeli Cooperative Programs					MD34 / Short Range Ballistic Missile Defense (SRBMD)									
Significant Event Complete ▲		Milestone Decision Complete ★		Element Test Complete ◆		System Level Test Complete ●		Complete Activity ◆											
Significant Event Planned △		Milestone Decision Planned ☆		Element Test Planned ◇		System Level Test Planned ○		Planned Activity ◇											
					FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		
System Flight Test #4 FY 2016					◆	◆	◆	◆											
System Flight Test #5 FY 2017							◇	◇	◇	◇									
System Flight Test #6 FY 2018									◇	◇	◇	◇							
System Flight Test #7 FY 2019											◇	◇	◇	◇					
System Flight Test #8 FY 2020													◇	◇	◇	◇			
System Flight Test #9 FY 2021															◇	◇	◇	◇	
System Flight Test #10 FY 2022																	◇	◇	

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603913C / <i>Israeli Cooperative Programs</i>	Project (Number/Name) MD34 / <i>Short Range Ballistic Missile Defense (SRBMD)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
System Flight Test #4 FY 2016	1	2016	4	2016
System Flight Test #5 FY 2017	1	2017	4	2017
System Flight Test #6 FY 2018	1	2018	4	2018
System Flight Test #7 FY 2019	1	2019	4	2019
System Flight Test #8 FY 2020	1	2020	4	2020
System Flight Test #9 FY 2021	1	2021	4	2021
System Flight Test #10 FY 2022	1	2022	4	2022