Department of Defense
Fiscal Year (FY) 2023 Budget Estimates

April 2022

Air Force

Justification Book Volume 4 of 4

Research, Development, Test & Evaluation, Air Force

Vol−3b

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Department of Defense
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****
Basic Research	496,255	540,706				
Applied Research	1,794,038	1,872,076				
Advanced Technology Development	929,477	1,207,122				
Advanced Component Development & Prototypes	8,528,913	11,293,813				47,500
System Development & Demonstration	5,904,910	5,692,659				
Management Support	4,072,703	3,508,829				
Operational Systems Development	24,647,644	28,920,584				
Software and Digital Technology Pilot Programs	155,067	154,529				
Total Research, Development, Test & Evaluation	46,529,007	53,190,318				47,500

Department of Defense
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request
Basic Research		540,706	546,517
Applied Research		1,872,076	1,549,524
Advanced Technology Development		1,207,122	1,391,486
Advanced Component Development & Prototypes	47,500	11,341,313	10,937,696
System Development & Demonstration		5,692,659	11,774,613
Management Support		3,508,829	3,458,471
Operational Systems Development		28,920,584	29,193,876
Software and Digital Technology Pilot Programs		154,529	1,101,490
Total Research, Development, Test & Evaluation	47,500	53,237,818	59,953,673

R-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:49:52

Department of Defense
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****
Summary Recap of FYDP Programs						
Strategic Forces	897,413	1,157,141				
General Purpose Forces	3,542,013	4,578,366				
Intelligence and Communications	1,143,506	1,142,450				47,500
Mobility Forces	886,208	825,887				
Research and Development	14,431,656	16,605,652				
Central Supply and Maintenance	122,916	155,648				
Training Medical and Other	7,012	17,944				
Administration and Associated Activities	68,180	89,612				
Support of Other Nations	3,592	2,420				
Space	6,979,949	7,040,836				
Classified Programs	18,446,562	21,574,362				
Total Research, Development, Test & Evaluation	46,529,007	53,190,318				47,500

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                              Department of Defense
                            FY 2023 President's Budget
                        Exhibit R-1 FY 2023 President's Budget
                            Total Obligational Authority                    25 Mar 2022
                              (Dollars in Thousands)
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	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request
Summary Recap of FYDP Programs			
Strategic Forces		1,157,141	1,217,682
General Purpose Forces		4,578,366	4,818,319
Intelligence and Communications	47,500	1,189,950	1,509,185
Mobility Forces		825,887	765,678
Research and Development		16,605,652	18,433,261
Central Supply and Maintenance		155,648	66,133
Training Medical and Other		17,944	27,538
Administration and Associated Activities		89,612	29,823
Support of Other Nations		2,420	2,593
Space		7,040,836	10,869,462
Classified Programs		21,574,362	22,213,999
Total Research, Development, Test & Evaluation	47,500	53,237,818	59,953,673

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Department of the Air Force
FY 2023 President's Budget
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Summary Recap of Budget Activities	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****
Basic Research	496,255	540,706				
Applied Research	1,579,544	1,585,571				
Advanced Technology Development	929,477	968,538				
Advanced Component Development & Prototypes	7,193,095	9,695,253				47,500
System Development & Demonstration	2,266,274	2,524,849				
Management Support	3,534,738	3,037,687				
Operational Systems Development	20,022,756	23,240,309				
Software and Digital Technology Pilot Programs						
Total Research, Development, Test & Evaluation	36,022,139	41,592,913				47,500

Department of the Air Force
FY 2023 President's Budget
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Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request
Basic Research		540,706	546,517
Applied Research		1,585,571	1,305,787
Advanced Technology Development		968,538	827,271
Advanced Component Development & Prototypes	47,500	9,742,753	7,945,238
System Development & Demonstration		2,524,849	6,438,954
Management Support		3,037,687	3,033,528
Operational Systems Development		23,240,309	23,090,569
Software and Digital Technology Pilot Programs			946,437
Total Research, Development, Test & Evaluation	47,500	41,640,413	44,134,301

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Summary Recap of FYDP Programs						
Strategic Forces	897,413	1,157,141				
General Purpose Forces	3,542,013	4,578,366				
Intelligence and Communications	1,143,506	1,142,450				47,500
Mobility Forces	886,208	825,887				
Research and Development	14,431,656	16,605,652				
Central Supply and Maintenance	122,916	155,648				
Training Medical and Other	7,012	17,944				
Administration and Associated Activities	68,180	89,612				
Support of Other Nations	3,592	2,420				
Space	9,974	6,740				
Classified Programs	14,909,669	17,011,053				
Total Research, Development, Test & Evaluation	36,022,139	41,592,913				47,500

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Department of the Air Force
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Summary Recap of FYDP Programs			
Strategic Forces		1,157,141	1,217,682
General Purpose Forces		4,578,366	4,818,319
Intelligence and Communications	47,500	1,189,950	1,509,185
Mobility Forces		825,887	765,678
Research and Development		16,605,652	18,432,445
Central Supply and Maintenance		155,648	66,133
Training Medical and Other		17,944	27,538
Administration and Associated Activities		89,612	29,823
Support of Other Nations		2,420	2,593
Space		6,740	24,264
Classified Programs		17,011,053	17,240,641
Total Research, Development, Test & Evaluation	47,500	41,640,413	44,134,301

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
1	0601102F	Defense Research Sciences	01	303,718	353,303					U
2	0601103F	University Research Initiatives	01	178,083	187,403					U
3	0601108F	High Energy Laser Research Initiatives	01	14,454						U
		Basic Research		496,255	540,706					
4	0602020F	Future AF Capabilities Applied Research	02	73,226	79,901					U
5	0602102F	Materials	02	228,115	220,960					U
6	0602201F	Aerospace Vehicle Technologies	02	148,576	183,032					U
7	0602202F	Human Effectiveness Applied Research	02	127,160	156,863					U
8	0602203F	Aerospace Propulsion	02	190,732	190,683					U
9	0602204F	Aerospace Sensors	02	221,779	255,918					U
10	0602212F	Defense Laboratories R&D Projects (10 U.S.C, Sec 2358)	02	106,964						U
11	0602298F	Science and Technology Management - Major Headquarters Activities	02	8,910	8,891					U
12	0602602F	Conventional Munitions	02	118,541	151,757					U
13	0602605F	Directed Energy Technology	02	122,816	116,456					U
14	0602788F	Dominant Information Sciences and Methods	02	205,839	221,110					U

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
1	0601102F	Defense Research Sciences	01		353,303	375,325	U
2	0601103F	University Research Initiatives	01		187,403	171,192	U
3	0601108F	High Energy Laser Research Initiatives	01				U
		Basic Research			540,706	546,517	
4	0602020F	Future AF Capabilities Applied Research	02		79,901	88,672	U
5	0602102F	Materials	02		220,960	134,795	U
6	0602201F	Aerospace Vehicle Technologies	02		183,032	159,453	U
7	0602202F	Human Effectiveness Applied Research	02		156,863	135,771	U
8	0602203F	Aerospace Propulsion	02		190,683	172,861	U
9	0602204F	Aerospace Sensors	02		255,918	192,733	U
10	0602212F	Defense Laboratories R&D Projects (10 U.S.C, Sec 2358)	02				U
11	0602298F	Science and Technology Management - Major Headquarters Activities	02		8,891	8,856	U
12	0602602F	Conventional Munitions	02		151,757	137,303	U
13	0602605F	Directed Energy Technology	02		116,456	109,302	U
14	0602788F	Dominant Information Sciences and Methods	02		221,110	166,041	U

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Department of the Air Force
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Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	S e c
15	0602890F	High Energy Laser Research	02	26,886						U
		Applied Research		1,579,544	1,585,571					
16	0603032F	Future AF Integrated Technology Demos	03	135,940	112,643					U
17	0603112F	Advanced Materials for Weapon Systems	03	57,221	63,378					U
18	0603199F	Sustainment Science and Technology (S&T)	03	15,631	19,112					U
19	0603203F	Advanced Aerospace Sensors	03	33,162	53,750					U
20	0603211F	Aerospace Technology Dev/Demo	03	34,321	105,486					U
21	0603216F	Aerospace Propulsion and Power Technology	03	159,354	110,273					U
22	0603270F	Electronic Combat Technology	03	33,804	44,938					U
23	0603273F	Science & Technology for Nuclear Re-entry Systems	03							U
24	0603401F	Advanced Spacecraft Technology	03	63,088						U
25	0603444F	Maui Space Surveillance System (MSSS)	03	11,486						U
26	0603456F	Human Effectiveness Advanced Technology Development	03	29,412	23,459					U
27	0603601F	Conventional Weapons Technology	03	124,025	155,306					U
28	0603605F	Advanced Weapons Technology	03	29,094	31,855					U

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
15	0602890F	High Energy Laser Research	02				U
		Applied Research			1,585,571	1,305,787	
16	0603032F	Future AF Integrated Technology Demos	03		112,643	152,559	U
17	0603112F	Advanced Materials for Weapon Systems	03		63,378	29,116	U
18	0603199F	Sustainment Science and Technology (S&T)	03		19,112	10,695	U
19	0603203F	Advanced Aerospace Sensors	03		53,750	36,997	U
20	0603211F	Aerospace Technology Dev/Demo	03		105,486	54,727	U
21	0603216F	Aerospace Propulsion and Power Technology	03		110,273	64,254	U
22	0603270F	Electronic Combat Technology	03		44,938	33,380	U
23	0603273F	Science & Technology for Nuclear Re-entry Systems	03			39,431	U
24	0603401F	Advanced Spacecraft Technology	03				U
25	0603444F	Maui Space Surveillance System (MSSS)	03				U
26	0603456F	Human Effectiveness Advanced Technology Development	03		23,459	20,652	U
27	0603601F	Conventional Weapons Technology	03		155,306	187,374	U
28	0603605F	Advanced Weapons Technology	03		31,855	98,503	U

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Department of the Air Force
FY 2023 President's Budget
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Total Obligational Authority
(Dollars in Thousands)

25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
29	0603680F	Manufacturing Technology Program	03	143,334	176,200					U
30	0603788F	Battlespace Knowledge Development and Demonstration	03	59,605	72,138					U
		Advanced Technology Development		929,477	968,538					
31	0603036F	Modular Advanced Missile	04							U
32	0603260F	Intelligence Advanced Development	04	4,312	5,795					U
33	0603742F	Combat Identification Technology	04	25,824	21,939					U
34	0603790F	NATO Research and Development	04	3,506	4,114					U
35	0603851F	Intercontinental Ballistic Missile - Dem/Val	04	34,755	76,621					U
36	0604001F	NC3 Advanced Concepts	04		6,900					U
37	0604002F	Air Force Weather Services Research	04	2,151	3,855					U
38	0604003F	Advanced Battle Management System (ABMS)	04	152,691	268,849					U
39	0604004F	Advanced Engine Development	04	642,581	583,712					U
40	0604006F	Dept of the Air Force Tech Architecture	04		25,138					U
41	0604015F	Long Range Strike - Bomber	04	2,744,473	2,872,624					U
42	0604032F	Directed Energy Prototyping	04	19,023	15,820					U
43	0604033F	Hypersonics Prototyping	04	374,426	318,687					U

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Department of the Air Force
FY 2023 President's Budget
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
29	0603680F	Manufacturing Technology Program	03		176,200	47,759	U
30	0603788F	Battlespace Knowledge Development and Demonstration	03		72,138	51,824	U
		Advanced Technology Development			968,538	827,271	
31	0603036F	Modular Advanced Missile	04			125,688	U
32	0603260F	Intelligence Advanced Development	04		5,795	6,101	U
33	0603742F	Combat Identification Technology	04		21,939	17,318	U
34	0603790F	NATO Research and Development	04		4,114	4,295	U
35	0603851F	Intercontinental Ballistic Missile – Dem/Val	04		76,621	46,432	U
36	0604001F	NC3 Advanced Concepts	04		6,900	5,098	U
37	0604002F	Air Force Weather Services Research	04		3,855		U
38	0604003F	Advanced Battle Management System (ABMS)	04		268,849	231,408	U
39	0604004F	Advanced Engine Development	04		583,712	353,658	U
40	0604006F	Dept of the Air Force Tech Architecture	04		25,138	66,615	U
41	0604015F	Long Range Strike - Bomber	04		2,872,624	3,253,584	U
42	0604032F	Directed Energy Prototyping	04		15,820	4,269	U
43	0604033F	Hypersonics Prototyping	04		318,687	431,868	U

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Department of the Air Force
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(Dollars in Thousands)

25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
44	0604183F	Hypersonics Prototyping - Hypersonic Attack Cruise Missile (HACM)	04		190,116					U
45	0604201F	PNT Resiliency, Mods, and Improvements	04		39,742					U
46	0604257F	Advanced Technology and Sensors	04	25,901	23,745					U
47	0604288F	Survivable Airborne Operations Center	04	50,038	95,788					U
48	0604317F	Technology Transfer	04	16,823	56,768					U
49	0604327F	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	04	53,026	12,886					U
50	0604414F	Cyber Resiliency of Weapon Systems-ACS	04	67,616	71,229					U
51	0604668F	Joint Transportation Management System (JTMS)	04							U
52	0604776F	Deployment & Distribution Enterprise R&D	04	25,474	40,103					U
53	0604858F	Tech Transition Program	04	297,254	359,045					U
54	0604860F	Operational Energy and Installation Resilience	04		104,000					U
55	0605230F	Ground Based Strategic Deterrent	04	1,397,485	2,553,541					U
56	0207110F	Next Generation Air Dominance	04	869,740	1,524,667					U
57	0207179F	Autonomous Collaborative Platforms	04							U

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Department of the Air Force
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25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
44	0604183F	Hypersonics Prototyping - Hypersonic Attack Cruise Missile (HACM)	04		190,116	144,891	U
45	0604201F	PNT Resiliency, Mods, and Improvements	04		39,742	12,010	U
46	0604257F	Advanced Technology and Sensors	04		23,745	13,311	U
47	0604288F	Survivable Airborne Operations Center	04		95,788	203,213	U
48	0604317F	Technology Transfer	04		56,768	16,759	U
49	0604327F	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	04		12,886	106,826	U
50	0604414F	Cyber Resiliency of Weapon Systems-ACS	04		71,229	44,526	U
51	0604668F	Joint Transportation Management System (JTMS)	04			51,758	U
52	0604776F	Deployment & Distribution Enterprise R&D	04		40,103	27,586	U
53	0604858F	Tech Transition Program	04		359,045	649,545	U
54	0604860F	Operational Energy and Installation Resilience	04		104,000		U
55	0605230F	Ground Based Strategic Deterrent	04		2,553,541		U
56	0207110F	Next Generation Air Dominance	04		1,524,667	1,657,733	U
57	0207179F	Autonomous Collaborative Platforms	04			51,747	U

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58	0207420F	Combat Identification	04							U
59	0207455F	Three Dimensional Long-Range Radar (3DELRR)	04	18,862						U
60	0207522F	Airbase Air Defense Systems (ABADS)	04	8,451	10,905					U
61	0208030F	War Reserve Materiel - Ammunition	04		3,943					U
62	0208099F	Unified Platform (UP)	04	5,869						U
63	0304369F	Cyber Capabilities Support Office (CCSO)	04	19,964						U
64	0305236F	Common Data Link Executive Agent (CDL EA)	04	39,221	43,881					U
65	0305601F	Mission Partner Environments	04	10,991	16,420					U
66	0306250F	Cyber Operations Technology Support	04	226,073	242,499				38,900	U
67	0306415F	Enabled Cyber Activities	04	10,166	16,578				8,600	U
68	0401310F	C-32 Executive Transport Recapitalization	04	6,151						U
69	0708051F	Rapid Sustainment Modernization (RSM)	04	34,693	65,000					U
70	0808737F	CVV Integrated Prevention	04							U
71	0901410F	Contracting Information Technology System	04	5,555	20,343					U

R-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:49:52
*Includes enacted funding pursuant to the Extending Government Funding and Delivering Emergency Assistance Act (Public Law 117-43).
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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
58	0207420F	Combat Identification	04			1,866	U
59	0207455F	Three Dimensional Long-Range Radar (3DELRR)	04			14,490	U
60	0207522F	Airbase Air Defense Systems (ABADS)	04		10,905	52,498	U
61	0208030F	War Reserve Materiel - Ammunition	04		3,943	10,288	U
62	0208099F	Unified Platform (UP)	04				U
63	0304369F	Cyber Capabilities Support Office (CCSO)	04				U
64	0305236F	Common Data Link Executive Agent (CDL EA)	04		43,881	37,460	U
65	0305601F	Mission Partner Environments	04		16,420	17,378	U
66	0306250F	Cyber Operations Technology Support	04	38,900	281,399	234,576	U
67	0306415F	Enabled Cyber Activities	04	8,600	25,178	16,728	U
68	0401310F	C-32 Executive Transport Recapitalization	04				U
69	0708051F	Rapid Sustainment Modernization (RSM)	04		65,000		U
70	0808737F	CVV Integrated Prevention	04			9,315	U
71	0901410F	Contracting Information Technology System	04		20,343	14,050	U

R-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:49:52

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Exhibit R-1 FY 2023 President's Budget
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
72	1206415F	U.S. Space Command Research and Development Support	04							U
		Advanced Component Development & Prototypes		7,193,095	9,695,253				47,500	
73	0604200F	Future Advanced Weapon Analysis & Programs	05	22,478	18,499					U
74	0604201F	PNT Resiliency, Mods, and Improvements	05	37,409	163,520					U
75	0604222F	Nuclear Weapons Support	05	24,502	30,050					U
76	0604270F	Electronic Warfare Development	05	2,017	7,110					U
77	0604281F	Tactical Data Networks Enterprise	05	111,125	159,836					U
78	0604287F	Physical Security Equipment	05	5,979	8,469					U
79	0604602F	Armament/Ordnance Development	05	20,199	9,047					U
80	0604604F	Submunitions	05	3,085	2,954					U
81	0604617F	Agile Combat Support	05	18,398	27,938					U
82	0604618F	Joint Direct Attack Munition	05	6,555						U
83	0604706F	Life Support Systems	05	27,748	25,437					U
84	0604735F	Combat Training Ranges	05	23,054	23,980					U
85	0604800F	F-35 - EMD	05	5,214						U
86	0604932F	Long Range Standoff Weapon	05	373,499	599,042					U
87	0604933F	ICBM Fuze Modernization	05	151,158	129,709					U

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Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
72	1206415F	U.S. Space Command Research and Development Support	04			10,350	U
		Advanced Component Development & Prototypes		47,500	9,742,753	7,945,238	
73	0604200F	Future Advanced Weapon Analysis & Programs	05		18,499	9,879	U
74	0604201F	PNT Resiliency, Mods, and Improvements	05		163,520	176,824	U
75	0604222F	Nuclear Weapons Support	05		30,050	64,425	U
76	0604270F	Electronic Warfare Development	05		7,110	2,222	U
77	0604281F	Tactical Data Networks Enterprise	05		159,836	133,117	U
78	0604287F	Physical Security Equipment	05		8,469	8,493	U
79	0604602F	Armament/Ordnance Development	05		9,047	5,279	U
80	0604604F	Submunitions	05		2,954	3,273	U
81	0604617F	Agile Combat Support	05		27,938	14,252	U
82	0604618F	Joint Direct Attack Munition	05				U
83	0604706F	Life Support Systems	05		25,437	47,442	U
84	0604735F	Combat Training Ranges	05		23,980	91,284	U
85	0604800F	F-35 - EMD	05				U
86	0604932F	Long Range Standoff Weapon	05		599,042	928,850	U
87	0604933F	ICBM Fuze Modernization	05		129,709	98,376	U

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                              Department of the Air Force
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                          Exhibit R-1 FY 2023 President's Budget
                             Total Obligational Authority                        25 Mar 2022
                                 (Dollars in Thousands)
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
88	0605030F	Joint Tactical Network Center (JTNC)	05							U
89	0605056F	Open Architecture Management	05	29,709	37,109					U
90	0605223F	Advanced Pilot Training	05	216,765	188,898					U
91	0605229F	HH-60W	05	32,196	62,255					U
92	0605238F	Ground Based Strategic Deterrent EMD	05							U
93	0101125F	Nuclear Weapons Modernization	05	9,595						U
94	0207171F	F-15 EPAWSS	05	165,691	112,012					U
95	0207279F	Isolated Personnel Survivability and Recovery	05							U
96	0207328F	Stand In Attack Weapon	05	145,858	166,570					U
97	0207701F	Full Combat Mission Training	05	9,060	12,064					U
98	0303267F	Auctioned Spectrum Relocation Fund	05	36,154						U
99	0303667F	Citizen Broadband Radio System	05	2,306						U
100	0303767F	AMBIT - Pre-Auctioned SRF	05	5,270						U
101	0305176F	Combat Survivor Evader Locator	05	935						U
102	0401221F	KC-46A Tanker Squadrons	05	35,818	66,758					U
103	0401319F	VC-25B	05	720,155	655,665					U
104	0701212F	Automated Test Systems	05	12,418	15,445					U

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
88	0605030F	Joint Tactical Network Center (JTNC)	05			2,222	U
89	0605056F	Open Architecture Management	05		37,109	38,222	U
90	0605223F	Advanced Pilot Training	05		188,898	37,121	U
91	0605229F	HH-60W	05		62,255	58,974	U
92	0605238F	Ground Based Strategic Deterrent EMD	05			3,614,290	U
93	0101125F	Nuclear Weapons Modernization	05				U
94	0207171F	F-15 EPAWSS	05		112,012	67,956	U
95	0207279F	Isolated Personnel Survivability and Recovery	05			27,881	U
96	0207328F	Stand In Attack Weapon	05		166,570	283,152	U
97	0207701F	Full Combat Mission Training	05		12,064	3,028	U
98	0303267F	Auctioned Spectrum Relocation Fund	05				U
99	0303667F	Citizen Broadband Radio System	05				U
100	0303767F	AMBIT - Pre-Auctioned SRF	05				U
101	0305176F	Combat Survivor Evader Locator	05				U
102	0401221F	KC-46A Tanker Squadrons	05		66,758	197,510	U
103	0401319F	VC-25B	05		655,665	492,932	U
104	0701212F	Automated Test Systems	05		15,445	16,664	U

R-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:49:52

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
105	0804772F	Training Developments	05	4,471	2,482					U
106	0901299F	AF A1 Systems	05	7,453						U
107	1206442F	Next Generation OPIR	05							U
		System Development & Demonstration		2,266,274	2,524,849					
108	0604256F	Threat Simulator Development	06	56,987	46,909					U
109	0604759F	Major T&E Investment	06	207,103	130,766					U
110	0605101F	RAND Project Air Force	06	35,195	36,017					U
111	0605502F	Small Business Innovation Research	06	662,308						U
112	0605712F	Initial Operational Test & Evaluation	06	10,407	12,582					U
113	0605807F	Test and Evaluation Support	06	770,149	811,032					U
114	0605826F	Acq Workforce- Global Power	06	264,371						U
115	0605827F	Acq Workforce- Global Vig & Combat Sys	06	263,868	267,919					U
116	0605828F	Acq Workforce- Global Reach	06	164,440	429,659					U
117	0605829F	Acq Workforce- Cyber, Network, & Bus Sys	06	251,517	439,571					U
118	0605830F	Acq Workforce- Global Battle Mgmt	06	173,987						U
119	0605831F	Acq Workforce- Capability Integration	06	227,357	263,014					U

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Department of the Air Force
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Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
105	0804772F	Training Developments	05		2,482	15,138	U
106	0901299F	AF A1 Systems	05				U
107	1206442F	Next Generation OPIR	05			148	U
		System Development & Demonstration			2,524,849	6,438,954	
108	0604256F	Threat Simulator Development	06		46,909	21,067	U
109	0604759F	Major T&E Investment	06		130,766	44,714	U
110	0605101F	RAND Project Air Force	06		36,017	37,921	U
111	0605502F	Small Business Innovation Research	06			86	U
112	0605712F	Initial Operational Test & Evaluation	06		12,582	13,926	U
113	0605807F	Test and Evaluation Support	06		811,032	826,854	U
114	0605826F	Acq Workforce- Global Power	06				U
115	0605827F	Acq Workforce- Global Vig & Combat Sys	06		267,919	255,995	U
116	0605828F	Acq Workforce- Global Reach	06		429,659	457,589	U
117	0605829F	Acq Workforce- Cyber, Network, & Bus Sys	06		439,571	459,223	U
118	0605830F	Acq Workforce- Global Battle Mgmt	06			3,696	U
119	0605831F	Acq Workforce- Capability Integration	06		263,014	229,610	U

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
120	0605832F	Acq Workforce- Advanced Prgm Technology	06	53,577	62,755					U
121	0605833F	Acq Workforce- Nuclear Systems	06	174,318	227,425					U
122	0605898F	Management HQ - R&D	06	5,424	5,537					U
123	0605976F	Facilities Restoration and Modernization - Test and Evaluation Support	06	60,856	70,788					U
124	0605978F	Facilities Sustainment - Test and Evaluation Support	06	29,826	30,057					U
125	0606017F	Requirements Analysis and Maturation	06	66,233	90,799					U
126	0606398F	Management HQ - T&E	06	6,929	6,163					U
127	0303166F	Support to Information Operations (IO) Capabilities	06		537					U
128	0303255F	Command, Control, Communication, and Computers (C4) - STRATCOM	06	21,525	35,340					U
129	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	06	9,561	26,720					U
130	0702806F	Acquisition and Management Support	06	12,943	37,211					U
131	0804731F	General Skill Training	06	1,260	1,506					U
132	0804772F	Training Developments	06		2,957					U
133	0909999F	Financing for Cancelled Account Adjustments	06	1,005						U

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                          Department of the Air Force
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                        Exhibit R-1 FY 2023 President's Budget
                          Total Obligational Authority                        25 Mar 2022
                             (Dollars in Thousands)
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
120	0605832F	Acq Workforce- Advanced Prgm Technology	06		62,755	92,648	U
121	0605833F	Acq Workforce- Nuclear Systems	06		227,425	241,226	U
122	0605898F	Management HQ - R&D	06		5,537	4,347	U
123	0605976F	Facilities Restoration and Modernization - Test and Evaluation Support	06		70,788	77,820	U
124	0605978F	Facilities Sustainment - Test and Evaluation Support	06		30,057	31,561	U
125	0606017F	Requirements Analysis and Maturation	06		90,799	101,844	U
126	0606398F	Management HQ - T&E	06		6,163	6,285	U
127	0303166F	Support to Information Operations (IO) Capabilities	06		537	556	U
128	0303255F	Command, Control, Communication, and Computers (C4) - STRATCOM	06		35,340	15,559	U
129	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	06		26,720	83,231	U
130	0702806F	Acquisition and Management Support	06		37,211	24,306	U
131	0804731F	General Skill Training	06		1,506	871	U
132	0804772F	Training Developments	06		2,957		U
133	0909999F	Financing for Cancelled Account Adjustments	06				U

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
134	1001004F	International Activities	06	3,592	2,420					U
135	1206864F	Space Test Program (STP)	06		3					U
		Management Support		3,534,738	3,037,687					
136	0604233F	Specialized Undergraduate Flight Training	07	13,438	8,589					U
137	0604445F	Wide Area Surveillance	07		2,760					U
138	0604617F	Agile Combat Support	07							U
139	0604776F	Deployment & Distribution Enterprise R&D	07	479						U
140	0604840F	F-35 C2D2	07	684,931	1,105,404					U
141	0605018F	AF Integrated Personnel and Pay System (AF-IPPS)	07	29,526	22,010					U
142	0605024F	Anti-Tamper Technology Executive Agency	07	46,785	51,492					U
143	0605117F	Foreign Materiel Acquisition and Exploitation	07	68,962	71,391					U
144	0605278F	HC/MC-130 Recap RDT&E	07	15,552	46,796					U
145	0606018F	NC3 Integration	07	30,521	26,532					U
146	0606942F	Assessments and Evaluations Cyber Vulnerabilities	07	2,885						U
147	0101113F	B-52 Squadrons	07	453,605	646,811					U

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
134	1001004F	International Activities	06		2,420	2,593	U
135	1206864F	Space Test Program (STP)	06		3		U
		Management Support			3,037,687	3,033,528	
136	0604233F	Specialized Undergraduate Flight Training	07		8,589	18,037	U
137	0604445F	Wide Area Surveillance	07		2,760		U
138	0604617F	Agile Combat Support	07			8,199	U
139	0604776F	Deployment & Distribution Enterprise R&D	07			156	U
140	0604840F	F-35 C2D2	07		1,105,404	1,014,708	U
141	0605018F	AF Integrated Personnel and Pay System (AF-IPPS)	07		22,010	37,901	U
142	0605024F	Anti-Tamper Technology Executive Agency	07		51,492	50,066	U
143	0605117F	Foreign Materiel Acquisition and Exploitation	07		71,391	80,338	U
144	0605278F	HC/MC-130 Recap RDT&E	07		46,796	47,994	U
145	0606018F	NC3 Integration	07		26,532	23,559	U
146	0606942F	Assessments and Evaluations Cyber Vulnerabilities	07				U
147	0101113F	B-52 Squadrons	07		646,811	770,313	U

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
148	0101122F	Air-Launched Cruise Missile (ALCM)	07	1,377	453					U
149	0101126F	B-1B Squadrons	07	15,276	39,127					U
150	0101127F	B-2 Squadrons	07	147,390	131,647					U
151	0101213F	Minuteman Squadrons	07	63,535	113,622					U
152	0101316F	Worldwide Joint Strategic Communications	07	30,124	15,202					U
153	0101324F	Integrated Strategic Planning & Analysis Network	07	23,420	29,564					U
154	0101328F	ICBM Reentry Vehicles	07	108,625	96,313					U
156	0102110F	UH-1N Replacement Program	07	34,524	16,132					U
157	0102326F	Region/Sector Operation Control Center Modernization Program	07	9,846	771					U
158	0102412F	North Warning System (NWS)	07	96	99					U
159	0102417F	Over-the-Horizon Backscatter Radar	07		67,400					U
160	0202834F	Vehicles and Support Equipment - General	07		5,889					U
161	0205219F	MQ-9 UAV	07	103,245	79,121					U
162	0205671F	Joint Counter RCIED Electronic Warfare	07	4,080	3,111					U
163	0207040F	Multi-Platform Electronic Warfare Equipment	07		36,607					U

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Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
148	0101122F	Air-Launched Cruise Missile (ALCM)	07		453	571	U
149	0101126F	B-1B Squadrons	07		39,127	13,144	U
150	0101127F	B-2 Squadrons	07		131,647	111,990	U
151	0101213F	Minuteman Squadrons	07		113,622	69,650	U
152	0101316F	Worldwide Joint Strategic Communications	07		15,202	22,725	U
153	0101324F	Integrated Strategic Planning & Analysis Network	07		29,564	3,180	U
154	0101328F	ICBM Reentry Vehicles	07		96,313	118,616	U
156	0102110F	UH-1N Replacement Program	07		16,132	17,922	U
157	0102326F	Region/Sector Operation Control Center Modernization Program	07		771	451	U
158	0102412F	North Warning System (NWS)	07		99	76,910	U
159	0102417F	Over-the-Horizon Backscatter Radar	07		67,400	12,210	U
160	0202834F	Vehicles and Support Equipment - General	07		5,889	14,483	U
161	0205219F	MQ-9 UAV	07		79,121	98,499	U
162	0205671F	Joint Counter RCIED Electronic Warfare	07		3,111	1,747	U
163	0207040F	Multi-Platform Electronic Warfare Equipment	07		36,607	23,195	U

R-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:49:52

Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
164	0207131F	A-10 Squadrons	07	24,274	34,224					U
165	0207133F	F-16 Squadrons	07	197,641	225,573					U
166	0207134F	F-15E Squadrons	07	230,299	239,616					U
167	0207136F	Manned Destructive Suppression	07	14,462	15,855					U
168	0207138F	F-22A Squadrons	07	642,138	647,296					U
169	0207142F	F-35 Squadrons	07	104,264	69,365					U
170	0207146F	F-15EX	07	79,866	107,126					U
171	0207161F	Tactical AIM Missiles	07	18,779	32,974					U
172	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	50,074	51,288					U
173	0207227F	Combat Rescue - Pararescue	07	668	852					U
174	0207247F	AF TENCAP	07	21,605	23,685					U
175	0207249F	Precision Attack Systems Procurement	07	8,983	12,083					U
176	0207253F	Compass Call	07	15,228	91,266					U
177	0207268F	Aircraft Engine Component Improvement Program	07	121,206	115,715					U
178	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	07	63,712	117,325					U
179	0207327F	Small Diameter Bomb (SDB)	07	20,010	32,109					U

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
164	0207131F	A-10 Squadrons	07		34,224	72,393	U
165	0207133F	F-16 Squadrons	07		225,573	244,696	U
166	0207134F	F-15E Squadrons	07		239,616	213,272	U
167	0207136F	Manned Destructive Suppression	07		15,855	16,695	U
168	0207138F	F-22A Squadrons	07		647,296	559,709	U
169	0207142F	F-35 Squadrons	07		69,365	70,730	U
170	0207146F	F-15EX	07		107,126	83,830	U
171	0207161F	Tactical AIM Missiles	07		32,974	34,536	U
172	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07		51,288	52,704	U
173	0207227F	Combat Rescue - Pararescue	07		852	863	U
174	0207247F	AF TENCAP	07		23,685	23,309	U
175	0207249F	Precision Attack Systems Procurement	07		12,083	12,722	U
176	0207253F	Compass Call	07		91,266	49,054	U
177	0207268F	Aircraft Engine Component Improvement Program	07		115,715	116,087	U
178	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	07		117,325	117,198	U
179	0207327F	Small Diameter Bomb (SDB)	07		32,109	27,713	U

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Department of the Air Force
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
180	0207410F	Air & Space Operations Center (AOC)	07	50,133	90,027					U
181	0207412F	Control and Reporting Center (CRC)	07	15,514	9,875					U
182	0207417F	Airborne Warning and Control System (AWACS)	07	108,779	167,014					U
183	0207418F	AFSPECWAR - TACP	07	497	4,598					U
185	0207431F	Combat Air Intelligence System Activities	07	16,534	17,863					U
186	0207438F	Theater Battle Management (TBM) C4I	07	7,660	7,905					U
187	0207439F	Electronic Warfare Integrated Reprogramming (EWIR)	07		15,000					U
188	0207444F	Tactical Air Control Party-Mod	07	12,589	13,081					U
189	0207452F	DCAPES	07	14,135	4,305					U
190	0207521F	Air Force Calibration Programs	07	1,966	1,984					U
191	0207522F	Airbase Air Defense Systems (ABADS)	07		7,392					U
192	0207573F	National Technical Nuclear Forensics	07	380	1,971					U
193	0207590F	Seek Eagle	07	29,572	30,539					U
194	0207601F	USAF Modeling and Simulation	07	17,023	17,110					U
195	0207605F	Wargaming and Simulation Centers	07	6,113	7,535					U

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Department of the Air Force
FY 2023 President's Budget
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(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

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180	0207410F	Air & Space Operations Center (AOC)	07		90,027		U
181	0207412F	Control and Reporting Center (CRC)	07		9,875	6,615	U
182	0207417F	Airborne Warning and Control System (AWACS)	07		167,014	239,658	U
183	0207418F	AFSPECWAR - TACP	07		4,598	5,982	U
185	0207431F	Combat Air Intelligence System Activities	07		17,863	23,504	U
186	0207438F	Theater Battle Management (TBM) C4I	07		7,905	5,851	U
187	0207439F	Electronic Warfare Integrated Reprogramming (EWIR)	07		15,000	15,990	U
188	0207444F	Tactical Air Control Party-Mod	07		13,081	10,315	U
189	0207452F	DCAPES	07		4,305	8,049	U
190	0207521F	Air Force Calibration Programs	07		1,984	2,123	U
191	0207522F	Airbase Air Defense Systems (ABADS)	07		7,392		U
192	0207573F	National Technical Nuclear Forensics	07		1,971	2,039	U
193	0207590F	Seek Eagle	07		30,539	32,853	U
194	0207601F	USAF Modeling and Simulation	07		17,110	19,341	U
195	0207605F	Wargaming and Simulation Centers	07		7,535	7,004	U

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Department of the Air Force
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Appropriation: 3600F Research, Development, Test & Eval, AF

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196	0207610F	Battlefield Abn Comm Node (BACN)	07	5,450	32,008					U
197	0207697F	Distributed Training and Exercises	07	3,260	4,007					U
198	0208006F	Mission Planning Systems	07	80,193	96,057					U
199	0208007F	Tactical Deception	07		14,338					U
200	0208064F	OPERATIONAL HQ - CYBER	07	5,323	2,115					U
201	0208087F	Distributed Cyber Warfare Operations	07	65,402	72,487					U
202	0208088F	AF Defensive Cyberspace Operations	07	29,255	18,449					U
203	0208097F	Joint Cyber Command and Control (JCC2)	07	35,060	79,079					U
204	0208099F	Unified Platform (UP)	07	91,886	91,893					U
208	0208288F	Intel Data Applications	07	1,224	493					U
209	0301025F	GeoBase	07		2,782					U
210	0301112F	Nuclear Planning and Execution System (NPES)	07	31,576	15,120					U
211	0301113F	Cyber Security Intelligence Support	07		5,224					U
218	0301401F	Air Force Space and Cyber Non-Traditional ISR for Battlespace Awareness	07	1,404	2,463					U
219	0302015F	E-4B National Airborne Operations Center (NAOC)	07	3,940	26,331					U

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Department of the Air Force
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
196	0207610F	Battlefield Abn Comm Node (BACN)	07		32,008		U
197	0207697F	Distributed Training and Exercises	07		4,007	4,628	U
198	0208006F	Mission Planning Systems	07		96,057	99,214	U
199	0208007F	Tactical Deception	07		14,338	17,074	U
200	0208064F	OPERATIONAL HQ - CYBER	07		2,115	2,347	U
201	0208087F	Distributed Cyber Warfare Operations	07		72,487	76,592	U
202	0208088F	AF Defensive Cyberspace Operations	07		18,449	8,367	U
203	0208097F	Joint Cyber Command and Control (JCC2)	07		79,079	80,740	U
204	0208099F	Unified Platform (UP)	07		91,893	107,548	U
208	0208288F	Intel Data Applications	07		493	1,065	U
209	0301025F	GeoBase	07		2,782	2,928	U
210	0301112F	Nuclear Planning and Execution System (NPES)	07		15,120		U
211	0301113F	Cyber Security Intelligence Support	07		5,224	8,972	U
218	0301401F	Air Force Space and Cyber Non-Traditional ISR for Battlespace Awareness	07		2,463	3,069	U
219	0302015F	E-4B National Airborne Operations Center (NAOC)	07		26,331	25,701	U

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Department of the Air Force
FY 2023 President's Budget
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220	0303131F	Minimum Essential Emergency Communications Network (MEECN)	07	38,298	58,165					U
221	0303140F	Information Systems Security Program	07	9,592	8,032					U
222	0303142F	Global Force Management - Data Initiative	07	1,294	452					U
223	0303248F	All Domain Common Platform	07		64,000					U
224	0303260F	Joint Military Deception Initiative	07							U
226	0304260F	Airborne SIGINT Enterprise	07	117,859	93,546					U
227	0304310F	Commercial Economic Analysis	07	3,887	3,770					U
230	0305015F	C2 Air Operations Suite - C2 Info Services	07							U
231	0305020F	CCMD Intelligence Information Technology	07	1,646	1,663					U
232	0305022F	ISR Modernization & Automation Dvmt (IMAD)	07	19,230	15,888					U
233	0305099F	Global Air Traffic Management (GATM)	07	4,133	4,672					U
234	0305103F	Cyber Security Initiative	07	368	290					U
235	0305111F	Weather Service	07	34,618	39,228					U
236	0305114F	Air Traffic Control, Approach, and Landing System (ATCALS)	07	5,729	15,749					U

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Department of the Air Force
FY 2023 President's Budget
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Total Obligational Authority
(Dollars in Thousands)

25 Mar 2022

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
220	0303131F	Minimum Essential Emergency Communications Network (MEECN)	07		58,165	41,171	U
221	0303140F	Information Systems Security Program	07		8,032	70,582	U
222	0303142F	Global Force Management - Data Initiative	07		452		U
223	0303248F	All Domain Common Platform	07		64,000		U
224	0303260F	Joint Military Deception Initiative	07			2,588	U
226	0304260F	Airborne SIGINT Enterprise	07		93,546	108,528	U
227	0304310F	Commercial Economic Analysis	07		3,770	4,542	U
230	0305015F	C2 Air Operations Suite - C2 Info Services	07			8,097	U
231	0305020F	CCMD Intelligence Information Technology	07		1,663	1,751	U
232	0305022F	ISR Modernization & Automation Dvmt (IMAD)	07		15,888	13,138	U
233	0305099F	Global Air Traffic Management (GATM)	07		4,672	4,895	U
234	0305103F	Cyber Security Initiative	07		290	91	U
235	0305111F	Weather Service	07		39,228	11,716	U
236	0305114F	Air Traffic Control, Approach, and Landing System (ATCALS)	07		15,749	8,511	U

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Department of the Air Force
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Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
237	0305116F	Aerial Targets	07	438	1,528					U
240	0305128F	Security and Investigative Activities	07	415	223					U
241	0305146F	Defense Joint Counterintelligence Activities	07	4,881	8,733					U
243	0305179F	Integrated Broadcast Service (IBS)	07	8,848	21,335					U
244	0305202F	Dragon U-2	07	36,593	35,846					U
245	0305206F	Airborne Reconnaissance Systems	07	133,247	108,291					U
246	0305207F	Manned Reconnaissance Systems	07	14,679	14,799					U
247	0305208F	Distributed Common Ground/Surface Systems	07	14,126	24,568					U
248	0305220F	RQ-4 UAV	07	163,278	83,124					U
249	0305221F	Network-Centric Collaborative Targeting	07	15,022	17,224					U
250	0305238F	NATO AGS	07	36,664	19,473					U
251	0305240F	Support to DCGS Enterprise	07	33,486	40,421					U
252	0305600F	International Intelligence Technology and Architectures	07	13,603	14,473					U
253	0305881F	Rapid Cyber Acquisition	07	4,098	4,326					U
254	0305984F	Personnel Recovery Command & Ctrl (PRC2)	07	2,122	2,567					U

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                        Department of the Air Force
                        FY 2023 President's Budget
                     Exhibit R-1 FY 2023 President's Budget
                        Total Obligational Authority                25 Mar 2022
                          (Dollars in Thousands)
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
237	0305116F	Aerial Targets	07		1,528	1,365	U
240	0305128F	Security and Investigative Activities	07		223	223	U
241	0305146F	Defense Joint Counterintelligence Activities	07		8,733	8,328	U
243	0305179F	Integrated Broadcast Service (IBS)	07		21,335	22,123	U
244	0305202F	Dragon U-2	07		35,846	20,170	U
245	0305206F	Airborne Reconnaissance Systems	07		108,291	55,048	U
246	0305207F	Manned Reconnaissance Systems	07		14,799	14,590	U
247	0305208F	Distributed Common Ground/Surface Systems	07		24,568	26,901	U
248	0305220F	RQ-4 UAV	07		83,124	68,801	U
249	0305221F	Network-Centric Collaborative Targeting	07		17,224	17,564	U
250	0305238F	NATO AGS	07		19,473	826	U
251	0305240F	Support to DCGS Enterprise	07		40,421	28,774	U
252	0305600F	International Intelligence Technology and Architectures	07		14,473	15,036	U
253	0305881F	Rapid Cyber Acquisition	07		4,326	3,739	U
254	0305984F	Personnel Recovery Command & Ctrl (PRC2)	07		2,567	2,702	U

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Department of the Air Force
FY 2023 President's Budget
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255	0307577F	Intelligence Mission Data (IMD)	07	6,266	6,169					U
256	0401115F	C-130 Airlift Squadron	07	48,698	12,552					U
257	0401119F	C-5 Airlift Squadrons (IF)	07	22,742	17,507					U
258	0401130F	C-17 Aircraft (IF)	07	11,653	16,360					U
259	0401132F	C-130J Program	07	6,179	24,112					U
260	0401134F	Large Aircraft IR Countermeasures (LAIRCM)	07	4,949	5,540					U
261	0401218F	KC-135s	07	4,583	3,564					U
262	0401318F	CV-22	07	17,823	17,189					U
263	0408011F	Special Tactics / Combat Control	07	7,457	6,640					U
264	0708055F	Maintenance, Repair & Overhaul System	07	20,422	26,921					U
265	0708610F	Logistics Information Technology (LOGIT)	07	32,122	11,071					U
266	0708611F	Support Systems Development	07	10,318						U
267	0804743F	Other Flight Training	07	1,281	5,999					U
268	0808716F	Other Personnel Activities	07		5,000					U
269	0901202F	Joint Personnel Recovery Agency	07	2,019	1,841					U
270	0901218F	Civilian Compensation Program	07	3,093	3,560					U
271	0901220F	Personnel Administration	07	1,536	3,368					U

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Department of the Air Force
FY 2023 President's Budget
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
255	0307577F	Intelligence Mission Data (IMD)	07		6,169	6,332	U
256	0401115F	C-130 Airlift Squadron	07		12,552	407	U
257	0401119F	C-5 Airlift Squadrons (IF)	07		17,507	6,100	U
258	0401130F	C-17 Aircraft (IF)	07		16,360	25,387	U
259	0401132F	C-130J Program	07		24,112	11,060	U
260	0401134F	Large Aircraft IR Countermeasures (LAIRCM)	07		5,540	2,909	U
261	0401218F	KC-135s	07		3,564	12,955	U
262	0401318F	CV-22	07		17,189	10,121	U
263	0408011F	Special Tactics / Combat Control	07		6,640	6,297	U
264	0708055F	Maintenance, Repair & Overhaul System	07		26,921	19,892	U
265	0708610F	Logistics Information Technology (LOGIT)	07		11,071	5,271	U
266	0708611F	Support Systems Development	07				U
267	0804743F	Other Flight Training	07		5,999	2,214	U
268	0808716F	Other Personnel Activities	07		5,000		U
269	0901202F	Joint Personnel Recovery Agency	07		1,841	2,164	U
270	0901218F	Civilian Compensation Program	07		3,560	4,098	U
271	0901220F	Personnel Administration	07		3,368	3,191	U

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                        Department of the Air Force
                        FY 2023 President's Budget
                     Exhibit R-1 FY 2023 President's Budget
                        Total Obligational Authority                  25 Mar 2022
                          (Dollars in Thousands)
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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
272	0901226F	Air Force Studies and Analysis Agency	07	1,151	1,248					U
273	0901538F	Financial Management Information Systems Development	07	6,740	4,852					U
274	0901554F	Defense Enterprise Acntng and Mgt Sys (DEAMS)	07	39,628	54,400					U
275	1201921F	Service Support to STRATCOM - Space Activities	07	991						U
276	1202140F	Service Support to SPACECOM Activities	07	8,983	6,737					U
9999	9999999999	Classified Programs		14,909,669	17,011,053					U
		Operational Systems Development		20,022,756	23,240,309					
278	0608158F	Strategic Mission Planning and Execution System - Software Pilot Program	08							U
279	0608410F	Air & Space Operations Center (AOC) - Software Pilot Program	08							U
280	0608920F	Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro	08							U
281	0208087F	Distributed Cyber Warfare Operations	08							U
282	0308605F	Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	08							U

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FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	Sec
272	0901226F	Air Force Studies and Analysis Agency	07		1,248	899	U
273	0901538F	Financial Management Information Systems Development	07		4,852	5,421	U
274	0901554F	Defense Enterprise Acntng and Mgt Sys (DEAMS)	07		54,400		U
275	1201921F	Service Support to STRATCOM - Space Activities	07				U
276	1202140F	Service Support to SPACECOM Activities	07		6,737	13,766	U
9999	9999999999	Classified Programs			17,011,053	17,240,641	U
		Operational Systems Development			23,240,309	23,090,569	
278	0608158F	Strategic Mission Planning and Execution System - Software Pilot Program	08			100,167	U
279	0608410F	Air & Space Operations Center (AOC) - Software Pilot Program	08			177,827	U
280	0608920F	Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro	08			136,202	U
281	0208087F	Distributed Cyber Warfare Operations	08			37,346	U
282	0308605F	Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	08			240,926	U

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	Sec
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283	0308606F	All Domain Common Platform (ADCP) - Software Pilot Program	08							U
284	0308607F	Air Force Weather Programs - Software Pilot Program	08							U
285	0308608F	Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program	08							U
		Software and Digital Technology Pilot Progr		----------	----------	----------	----------	----------	----------	
		Total Research, Development, Test & Eval, AF		36,022,139	41,592,913				47,500	

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FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Appropriation: 3600F Research, Development, Test & Eval, AF

				FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request	S e c
Line No	Program Element Number	Item	Act				
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283	0308606F	All Domain Common Platform (ADCP) - Software Pilot Program	08			190,112	U
284	0308607F	Air Force Weather Programs - Software Pilot Program	08			58,063	U
285	0308608F	Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program	08			5,794	U
		Software and Digital Technology Pilot Progr		----------	----------	----------	
						946,437	
		Total Research, Development, Test & Eval, AF		----------	----------	----------	
				47,500	41,640,413	44,134,301	

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Department of the Air Force
FY 2023 President's Budget
Exhibit R-1 FY 2023 President's Budget
Total Obligational Authority   25 Mar 2022
(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 Enactment**	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****
Applied Research	214,494	286,505				
Advanced Technology Development		238,584				
Advanced Component Development & Prototypes	1,335,818	1,598,560				
System Development & Demonstration	3,638,636	3,167,810				
Management Support	537,965	471,142				
Operational System Development	4,624,888	5,680,275				
Software & Digital Technology Pilot Programs	155,067	154,529				
Total Research, Development, Test & Evaluation	10,506,868	11,597,405				

Summary Recap of FYDP Programs

Research and Development

Space	6,969,975	7,034,096				
Classified Programs	3,536,893	4,563,309				
Total Research, Development, Test & Evaluation	10,506,868	11,597,405				

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                    Department of the Air Force
                    FY 2023 President's Budget
                 Exhibit R-1 FY 2023 President's Budget
                    Total Obligational Authority                    25 Mar 2022
                      (Dollars in Thousands)
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Summary Recap of Budget Activities	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment	FY 2023 Request
Applied Research		286,505	243,737
Advanced Technology Development		238,584	564,215
Advanced Component Development & Prototypes		1,598,560	2,992,458
System Development & Demonstration		3,167,810	5,335,659
Management Support		471,142	424,943
Operational System Development		5,680,275	6,103,307
Software & Digital Technology Pilot Programs		154,529	155,053
Total Research, Development, Test & Evaluation		11,597,405	15,819,372

Summary Recap of FYDP Programs			
Research and Development			816
Space		7,034,096	10,845,198
Classified Programs		4,563,309	4,973,358
Total Research, Development, Test & Evaluation		11,597,405	15,819,372

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Master Program Element Table of Contents (by Budget Activity then Line Item Number)

Appropriation 3600: Research, Development, Test & Evaluation, Air Force

Appropriation 3600: Research, Development, Test & Evaluation, Air Force

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											**Date:** April 2022	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*						**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*						

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	100.167	0.000	100.167	83.221	83.638	83.480	85.262	0.000	435.768
685029: *Strategic Mission Planning and Execution System (SMPES)*	-	0.000	0.000	100.167	0.000	100.167	83.221	83.638	83.480	85.262	0.000	435.768
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY 2018 National Defense Authorization Act (Sections 873/874) directed the Office of the Secretary of Defense (OSD) to streamline software development. The OSD pilot initiative authorized all programmatic lifecycle funding to be tracked utilizing Budget Activity 08 (BA08) Software and Digital Technology Pilot Programs, beginning in FY 2021. Pilot programs enable the execution of modern software development practices encompassing development, procurement, modification and maintenance activities.

The Strategic Mission Planning and Execution System (SMPES) entered into the pilot program in FY 2022. SMPES, PE 0608158F, includes Research, Development, Test & Evaluation (RDT&E), Air Force, Other Procurement, Air Force (OPAF), and Operation and Maintenance (O&M), Air Force funds transferred from the following program elements (PE): 0303255F, O&M, Nuclear Planning and Execution System (NPES) Legacy sustainment; 0301112F, OPAF and RDT&E, NPES; 0101318F, O&M, Mission Planning & Analysis System (MPAS) sustainment and Global Adaptive Planning - Collaborative Information Environment (GAP-CIE); 0101313F, OPAF, Integrated Strategic Planning & Analysis Network (ISPAN); and 0101324F, RDT&E, ISPAN Increment 5.

SMPES programmatic capabilities include:

Integrated Strategic Planning and Analysis Network: ISPAN provides full-spectrum global strike, and coordinated space, missile defense, and information operations capabilities to meet both deterrent and decisive national security objectives. ISPAN is one of the most complex classified computer systems in the Department of Defense (DoD), and the only national force level planning system. Located at U.S. Strategic Command (USSTRATCOM), ISPAN develops and delivers software for nuclear strategic deliberate and adaptive planning, as well as, supports the Nuclear Posture Review and Unified Command Plan. In coordination with other Combatant Commands, Services, and appropriate U.S. Government agencies, USSTRATCOM provides operational space support, integrated missile defense, global command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), and specialized planning expertise to the joint warfighter to deter and detect strategic attacks against the U.S. and its allies.

ISPAN Increment 5 (INC5): ISPAN INC5 conducts continuous, ongoing agile software development activities to foster a secure software development environment. INC5 funding enables the program office to purchase software licenses for developer tools and development environments for unclassified, secret, and top-secret agile software development. The agile software development staff maintains hardware, system configuration, storage, back-up and recovery for contractor development and systems integration. INC5 supports agile processes including code repositories, configuration management, continuous integration/continuous delivery (CI/

PE 0608158F: *Strategic Mission Planning and Execution...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*	

CD) pipelines, automation testing, automation validation and delivery. The agile developer environment meets classified, security regulations/criteria and promotes competition.

Mission Planning and Analysis System: MPAS consists of 17 separate subsystems that enable USSTRATCOM to accomplish its unique mission of developing Joint Staff Level I through Level IV nuclear and conventional attack options for national and theater requirements.
ISPAN Increment 4 modernized MPAS software and enabled program users to complete planning requirements in a more agile and timely manner. ISPAN INC5 succeeded ISPAN Increment 4 and provides new capabilities of resilience and consequence of execution analysis.

Global Adaptive Planning Collaborative Information Environment: GAP-CIE is a web-based, collaborative, and joint operation planning (JOP) application that enables combatant commanders and strategic leaders to rapidly integrate course of action development. GAP-CIE supports strategic and operational situational awareness of global events, crisis action planning, and campaign/contingency plan development for DoD planners. Through GAP-CIE, combatant command staffs, subordinate commands, and other agencies work in partnership to plan operations, develop orders, and share awareness dashboards online.

GAP CIE includes two functional components: GAP-CIE planning environment; and the Global Situational Awareness Tool (GSAT). The planning environment provides deliberative planning, crisis action planning, and decision support tools. GSAT allows commanders to view geospatial, temporal, and relational planning data. Collectively and collaboratively, the planning environment and GSAT within GAP-CIE enable subject matter experts to instantaneously share situational awareness perspectives.

Nuclear Planning and Execution System: NPES develops and delivers a software system to conduct nuclear command and control (NC2) adaptive planning and execution at fixed and mobile sites in real time. NPES an automated information system that supports all phases of nuclear conflict and provides for various levels of support of all command and control software engineering (C2SES) projects.

NPES Legacy encompassed cyber related investments necessary for a successful operational application/system delivery, for fixed command centers, distributive sites and mobile platforms. NPES Recapitalization (Recap) succeeded NPES Legacy and provides communication interfaces with software development, data management, software re-engineering and operations to include requirements validation and training. NPES Recap modernizes decision support, knowledge management, information visualization, an integrated-fused depiction of global battle space, and common missile event picture.

Decision Support System (DSS): DSS will develop and deliver software that directly supports POTUS. DSS will improve situational awareness, aggregate strategic-level information, and provide a common visual display that is resilient and mobile.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon systems capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605830F.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force				Date: April 2022	

Appropriation/Budget Activity	R-1 Program Element (Number/Name)
3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	96.100	0.000	0.000	0.000
Current President's Budget	0.000	0.000	100.167	0.000	100.167
Total Adjustments	0.000	-96.100	100.167	0.000	100.167
• 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	-96.100			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	100.167	0.000	100.167

Change Summary Explanation

The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY2023 cannot be made in a relevant manner.

FY 2022 Funding returned to Legacy PE after Denial of BA08.

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Strategic Mission Planning and Execution System - Development	0.000	0.000	48.619	0.000	48.619
Description: Funds will be used for Section 804 Beta Phase development and fielding activities to develop software architecture for the previously listed individual programs. Funding will be used to plan and execute strategies to deliver war fighting outcomes by leveraging NDAA Section 804, and Continuous Integration/ Continuous Delivery software practices. This PE now contains four previous efforts, and have been combined into one effort under the BA-08 Pilot Program. Focusing on efficiency, all programs within the portfolio have targeted at least 20% of funding, on developing and implementing enterprise solutions which can be used across all product lines within the portfolio. ISPAN Increment 5: Modernizes the Mission Planning and Analysis System software (MPAS) that develops Joint Staff Level I through Level IV nuclear and conventional attack options for national and theater requirements. GAP-CIE: This system provides contingency and crisis action planning, allowing multiple combatant command staffs, other agencies and subordinate commands to collaborate online.					

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*		**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
NPES: Is a National C2 automated information system (AIS) that supports all phases of nuclear conflict. Decision Support Service (DSS): Directly supports the senior leader decision making calculus. DSS will improve situational awareness, aggregate strategic-level information, provide a common visual display, be resilient, and mobile. DSS is supported by WHMO, OSD, NLCC, and CJCS. ***FY 2022 Plans:*** Funds will be used for Section 804 Beta Phase development and fielding activities to develop software architecture for the previously listed individual programs. Focusing on efficiency, all programs within the portfolio have targeted at least 20% of funding on developing and implementing enterprise solutions, which can be used across all product lines within the portfolio. NPES: NPES Recap developer will produce sufficient new software capability to enable the user representatives to conduct operational testing & evaluation. It will be the 4th year of SW development with plans to reduce the NPES Recap SW developer teams. FY22 NPES Recap will fund Program Management Office (PMO) in-house software development resources to promote competition, a secure developmental environment, and enable developers to build and integrate software at the Top Secret level as part of the agile software development effort. DSS: Funds will be utilized to complete user interface design and implementation of nuclear response option screens, as well as, the database interfaces that automate the interface capability. Prototype development to host simultaneous users and build network strings (development, test and production) at the application host site. Incorporation of USSTRATCOM data source interfaces to develop and field a cross-domain solution capability to support data transport on classified (secret and top secret) domains continues. ISPAN Increment 5: Funds will be used for Section 804 Beta Phase development and fielding activities to develop the hardware and software architecture for MPAS, Increment 5 modernization; to include alternate site stand-up, cybersecurity improvements, and continue the life-cycle procurement of commercial based hardware and software components for the MPAS effort. ***FY 2023 Base Plans:***					

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force		Date: April 2022		
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*		R-1 Program Element (Number/Name) PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*		

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funds will continue to be used for Section 804 Beta Phase development and fielding activities to develop software architecture for the previously listed individual programs. Focusing on efficiency, all programs within the portfolio have targeted at least 20% of funding on continued development and implementation of enterprise solutions which can be used across all product lines within the portfolio. This initiative realigns funding from various appropriations for selected Software Pilot Programs to a new Software and Digital Technology Budget Activity (BA) "BA-08" in the Components' respective Research, Development, Test & Evaluation (RDT&E) appropriations as a BA-08 Pilot Program. NPES: NPES Recap developer will produce sufficient new software capability to enable the user representatives to conduct operational testing & evaluation. it will be the 4th year of SW development with plans to reduce the NPES Recap SW developer teams. FY23 NPES Recap will continue to fund Program Management Office (PMO) in house software development resources to promote competition, a secure developmental environment, and enable developers to build and integrate software at the Top Secret level as part of the agile software development effort. DSS: Funds will be utilized to complete prototype development. Prototype development includes high availability failover capability to support NC2 operational requirements and POTUS-level event conferences. Funding will also be utilized to refine and implement cybersecurity requirements, situational awareness picture development, incorporation of classified capabilities, and integration into NPES architecture. ISPAN Increment 5: Funds will be used for Section 804 Beta Phase development and fielding activities to develop the hardware and software architecture for MPAS, Increment 5 modernization; cybersecurity improvements, and continue the life-cycle procurement of commercial based hardware and software components for the MPAS effort. *FY 2023 OCO Plans:* No OCO requested *FY 2022 to FY 2023 Increase/Decrease Statement:* FY 2022 funds returned to Legacy PEs after denial of BA08.					
Title: Strategic Mission Planning and Execution System - Procurement *Description:* Procurement will be used to execute modification and maintenance activities. This includes	0.000	0.000	4.956	0.000	4.956

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force				Date: April 2022		
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*			**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*			

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
funds transferred from PE 0101324F (AF RDT&E ISPAN Increment 5), PE 0301112F (AF RDT&E and AF Other Procurement NPES Recapitalization), PE 0303255F (NPES Legacy sustainment), 0101313F (Other Procurement ISPAN), and 0101318F (MPAS sustainment). Focusing on efficiency, all programs within the portfolio have targeted at least 20% of funding, on developing and procuring enterprise solutions which can be used across all product lines within the portfolio. *FY 2022 Plans:* Funds will be used for Section 804 Beta Phase development and fielding activities to develop the hardware and software architecture; to include alternate site stand-up, cybersecurity improvements, and continue the life-cycle procurement of commercial based hardware and software components for the effort. FY 2022 funds returned to Legacy PEs after denial of BA08. *FY 2023 Base Plans:* Funds will continue to be used for Section 804 Beta Phase development and fielding activities to develop the hardware and software architecture; cybersecurity improvements, and continue the life-cycle procurement of commercial based hardware and software components for the effort. *FY 2023 OCO Plans:* No OCO requested *FY 2022 to FY 2023 Increase/Decrease Statement:* Funding decrease is a result of an allocation reduction. FY 2022 funds returned to Legacy PEs after denial of BA08.					
Title: Strategic Mission Planning and Execution System - Sustainment *Description:* This is an OSD pilot initiative in which all lifecycle funding will be tracked under BA08, Software / Digital Technology Pilot Programs. Pilot programs will test the ability to execute modern software development practices encompassing development, procurement, modification and maintenance activities. The SMPES pilot program in PE 0608158F, BA08 includes funds transferred from PE 0303255F (AF O&M NPES Legacy sustainment), and 0101318F (O&M MPAS sustainment).	0.000	0.000	46.592	0.000	46.592

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force			**Date:** April 2022		
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*			**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*		

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
Focusing on efficiency, all programs within the portfolio have targeted at least 20% of funding on developing, procuring, implementing and sustaining enterprise solutions, which can be used across all product lines within the portfolio. ***FY 2022 Plans:*** Funds will be used for Section 804 Beta Phase development and fielding activities to develop the hardware and software architecture to include alternate site standup for MPAS, Increment 5 modernization; cybersecurity improvements, and continue the life-cycle procurement of commercial based hardware and software components for the MPAS effort. ***FY 2023 Base Plans:*** Funds will continue to be used for Section 804 Beta Phase development and fielding activities to develop the hardware and software architecture for Mission Planning Analysis System (MPAS), Increment 5 modernization, cybersecurity improvements, and continue the life-cycle procurement of commercial based hardware and software components for the MPAS effort. ***FY 2023 OCO Plans:*** No OCO requested. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY 2022 funds returned to Legacy PEs after denial of BA08.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	100.167	0.000	100.167

D. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

E. Acquisition Strategy
 Assistant Secretary of the Air Force (Acquisition, Technology & Logistics) (SAF/AQ) designated ISPAN Inc 5 as a FY 2016 NDAA Section 804 Rapid Fielding program and delegated Milestone Decision Authority (MDA) to the Air Force Program Executive Officer (AFPEO) Digital.

 Increment 5 will develop and modernize software for the combatant commanders using an Agile DevOps Continuous Delivery / Continuous Integration (CD/CI) acquisition strategy with development contracts that are negotiated and awarded in a competitive environment. The program will consider the best contract options to

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*	

implement the Agile DevOps CD/CI strategy. Other activities are also accomplished through the use of various contracting vehicles such as Military Interdepartmental Purchase Requests (MIPRs).

Continuous, ongoing agile software development activities; producing a secure software development environment located in existing space at Offutt AFB. Software development environment will meet classification/security regulations/criteria, which will promote competition.

The PEO is the AF PEO Digital. Air Force Life Cycle Management Center at Hanscom AFB (AFLCMC/HB) and the 55 CONS at Offutt AFB are the contracting authorities for ISPAN and provide contracts, legal, and financial management support.

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2023 Air Force							**Date:** April 2022	

Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0608158F / *Strategic Mission Planning and Execution System - Software Pilot Program*	**Project (Number/Name)** 685029 / *Strategic Mission Planning and Execution System (SMPES)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
(ISPAN) Inc 5	Various	Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Jan 2022	25.087	Jan 2023	-		25.087	Continuing	Continuing	-
(NPES) Primary Development	Various	NG : Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Nov 2021	6.163	Nov 2022	-		6.163	Continuing	Continuing	-
(DSS) Prototype Development	C/T&M	NG: Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Nov 2021	8.819	Jan 2023	-		8.819	Continuing	Continuing	-
		Subtotal	-	0.000		0.000		40.069		-		40.069	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
(ISPAN) Dev Ops Support	Various	Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Nov 2021	1.507	Nov 2022	-		1.507	Continuing	Continuing	-
(ISPAN) Engineering and Technical AMS	C/CPFF	Not specified: TBD : TBD	-	0.000		0.000	Nov 2021	4.740	Nov 2022	-		4.740	Continuing	Continuing	-
(NPES) Dev Ops Support	C/CPFF	Various : Offutt AFB, NE	-	-		0.000	Apr 2022	5.704	Apr 2023	-		5.704	Continuing	Continuing	-
(MPAS) DevOps Support	C/CPAF	Various: Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Nov 2021	37.166	Nov 2022	-		37.166	Continuing	Continuing	-
(GAP-CIE) Dev Ops Support - Global Adaptive Planning Collaborative Information Environment	C/CPFF	Various : Offutt AFB, NE	-	-		0.000	Nov 2021	5.530	Nov 2022	-		5.530	Continuing	Continuing	-
(NPES) Technical Engineering Services	Various	Various : Offutt AFB, NE	-	0.000		0.000	Nov 2021	1.450	Nov 2022	-		1.450	Continuing	Continuing	-
(DSS) DevOps Support	Various	TBD: Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Feb 2022	0.406	Jan 2023	-		0.406	Continuing	Continuing	-
(DSS) Engineering Test Support	C/CPAF	KBR Wyle: Offutt AFB : Offutt AFB, NE	-	0.000		0.000	May 2022	0.110	Apr 2023	-		0.110	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force												Date: April 2022		
Appropriation/Budget Activity 3600 / 8					**R-1 Program Element (Number/Name)** PE 0608158F / Strategic Mission Planning and Execution System - Software Pilot Program							**Project (Number/Name)** 685029 / Strategic Mission Planning and Execution System (SMPES)		

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
(DSS) Engineering Support	SS/ Various	MITRE: Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Feb 2022	0.406	Oct 2022	-		0.406	Continuing	Continuing	-
Subtotal			-	0.000		0.000		57.019		-		57.019	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test and Evaluation Item (ISPAN)	Various	Not specified. : TBD	-	0.000		0.000	Nov 2021	0.086	Nov 2022	-		0.086	Continuing	Continuing	-
(NPES) T&E	C/CPAF	Various: Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Dec 2021	0.617	Dec 2022	-		0.617	Continuing	Continuing	-
Subtotal			-	0.000		0.000		0.703		-		0.703	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Systems Engineering and Operations (ISPAN)	Various	Offutt AFB : Offutt AFB, NE	-	0.000		0.000	Nov 2021	2.376	Nov 2022	-		2.376	Continuing	Continuing	-
Subtotal			-	0.000		0.000		2.376		-		2.376	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	0.000	0.000	100.167	-	100.167	Continuing	Continuing	N/A

Remarks
 FY2022 funds returned to Legacy PEs after denial of BA08

Exhibit R-4, **RDT&E Schedule Profile:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0608158F *I Strategic Mission Planning and Execution System - Software Pilot Program*	**Project (Number/Name)** 685029 *I Strategic Mission Planning and Execution System (SMPES)*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SMPES																												
ISPAN Inc 5 - continuous agile software development, rapid fielding																												
NPES - continuous agile software development, rapid fielding																												
DSS Support																												
GAP-CIE - continuous agile software development, rapid fielding																												

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
SMPES				
ISPAN Inc 5 - continuous agile software development, rapid fielding	1	2022	4	2027
NPES - continuous agile software development, rapid fielding	1	2022	4	2027
DSS Support	1	2022	4	2027
GAP-CIE - continuous agile software development, rapid fielding	1	2022	4	2027

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force										**Date:** April 2022	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*					**R-1 Program Element (Number/Name)** PE 0608410F *I Air & Space Operations Center (AOC) - Software Pilot Program*						
COST ($ in Millions)	**Prior Years**	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Cost To Complete**	**Total Cost**
Total Program Element	-	0.000	0.000	177.827	0.000	177.827	171.359	172.969	176.854	180.788	Continuing	Continuing
684596: *AOC - Software Pilot Program*	-	0.000	0.000	177.827	0.000	177.827	171.359	172.969	176.854	180.788	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2023, PE 0608410F, Air & Space Operations Center (AOC), Project 684596, AOC WS Modifications, was transferred from RDT&E, AF, PE 0207410F, Air & Space Operations Center (AOC), Project 674596, AOC WS Modifications, OPAF PE 0207410F, Air & Space Operations Center (AOC), Line Item 834530, AOC, and OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11C, Combat Enhances Forces, in order to a participate in DoD's Budget Activity 08 (BA08) for Software and Digital Technology Pilot Program.

A. Mission Description and Budget Item Justification

The FY 2018 National Defense Authorization Act (Sections 873/874) directed the Office of the Secretary of Defense (OSD) to streamline software development. The Air & Space Operations Center (AOC) - Software Pilot Program is an OSD pilot initiative in which all lifecycle funding is tracked under Budget Activity 08 (BA08), Software and Digital Technology Pilot Programs, beginning in FY 2021. Pilot programs enable the execution of modern software development practices encompassing development, procurement, modification and maintenance activities. This program includes RDT&E, procurement, and Operations and Maintenance funds transferred from PE 0207410F, Air & Space Operations Center (AOC).

The AOC WS, AN/USQ-163 Falconer, the senior element of the Theater Air Control System (TACS), is the weapon system that the Commander, Air Force Forces (COMAFFOR) provides the Combined/Joint Force Air Component Commander (C/JFACC) for planning, executing, and assessing theater-wide air and space operations. The C/JFACC provides air, space and cyber support to the Combined/Joint Forces Commander (C/JFC) by coordinating, deconflicting, and assessing the progress of various weapon systems to advance the C/JFC's campaign. The AOC WS develops operations strategy and planning documents. The weapon system also disseminates tasking orders; executes day-to-day peacetime and combat air, space and cyber operations; and provides rapid reaction to immediate situations by exercising positive control of friendly forces. This program is part of the overarching Kessel Run portfolio and is dependent on the All Domain Common Platform (ADCP). The ADCP provides an extensible cloud-based Infrastructure and Platform as a Service (IaaS/PaaS) hosting platform built to deliver highly resilient mission applications and data to Airmen deployed around the world.

In FY 2023, funding supports continued software engineering capacity required for AOC WS Modifications to support and enable the transition from legacy systems (e.g., Theater Battle Management Core System - Force Level (TBMCS FL) and AOC 10.1) to Block 20 modernized capabilities while delivering, enabling and operating an extensible cloud-based Infrastructure and Platform as a Service (IaaS/PaaS) hosting platform. AOC WS Modifications are required for the AOC to keep pace with evolving COTS/GOTS components, DoD directives, support operational energy security and efficiency objectives, changes in the underlying IT environment, and to remain interoperable, certified, supportable, and compliant through software engineering solutions, integration, testing, fielding, training, and sustainment of new capabilities and upgrades to the AOC WS. Also in FY 2023, AOC WS Modifications activities evolve the AOC utilizing Agile Methodologies and embracing DevOps

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force	Date: April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608410F *I Air & Space Operations Center (AOC) - Software Pilot Program*

practices to deliver improved capabilities in support of mission requirements at Geographic and Global (formerly Functional) AOCs, as well as Support and Manpower Augmentation units, keeping the AOC current and interoperable with the Combatant Commands (CCMDs), cyber requirements, and next generation weapon systems/ weapons.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY $0.000M was expended for civilian pay expenses in this program element, and in CY $0.000M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary ($ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	186.915	0.000	0.000	0.000
Current President's Budget	0.000	0.000	177.827	0.000	177.827
Total Adjustments	0.000	-186.915	177.827	0.000	177.827
• 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	-186.915			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	177.827	0.000	177.827

Change Summary Explanation

FY2023: The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY 2023 cannot be made in a relevant manner.

C. Accomplishments/Planned Programs ($ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: AOC WS Modifications - Development	0.000	0.000	79.549	0.000	79.549
Description: Plan and execute strategies to deliver war fighting outcomes by leveraging commercial best practices for agile software development, scale a modern Infrastructure as a Service/Platform as a Service (IaaS/PaaS) solution to the AOC WS enterprise, implement improved solutions for platform architecture and					

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* I BA 8: *Software and Digital Technology Pilot Programs*		**R-1 Program Element (Number/Name)** PE 0608410F I *Air & Space Operations Center (AOC) - Software Pilot Program*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Continuous Integration/Continuous Delivery (CI/CD) pipeline, enable objectives that support operational energy and security efficiencies and maintain continuous Authority to Operate (ATO). Conduct software engineering solutions by leveraging agile engineering methodologies to engineer, integrate, and test modifications to the AOC WS leveraging test-driven development. Utilize CI/CD processes to provide engineering solutions, test, and deliver enhanced operational C2 capabilities including support of multi-domain operations. ***FY 2022 Plans:*** See PE 0207410F, Air & Space Operations Center (AOC), Project Number 674596, AOC WS Modifications. ***FY 2023 Base Plans:*** - Enable the continued transition from legacy applications such as TBMCS FL and AOC 10.1 to Block 20 Modernized capabilities - Continue supporting software engineering capacity required for AOC WS Modifications to enable transition from legacy AOC 10.1 baseline to AOC WS Block 20 modernized capabilities - Continue to optimize Operational Energy (aviation fuel) use and increase combat capability through operations software development ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Funding increased due to transfer from RDT&E, AF, PE 0207410F, Air & Space Operations Center (AOC), Project 674596, AOC WS Modifications.					
Title: AOC WS Modifications - Procurement ***Description:*** Provides hardware, software, technical documents, fielding support, Capital Equipment Replacement (CER) (e.g., replacing end of life/end of support Direct Mission Support (DMS) and 3rd Party components), core radio system and initial training to standardize the AOC WS to keep it interoperable, supportable and compliant (e.g., certification and accreditation). Also includes integration, test and fielding for cyber security improvements and existing 3rd Party modernized improvements/modifications. ***FY 2022 Plans:*** See PE 0207410F, Air & Space Operations Center (AOC), Line Item 834530, AOC. ***FY 2023 Base Plans:***	0.000	0.000	19.142	0.000	19.142

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*		**R-1 Program Element (Number/Name)** PE 0608410F *I Air & Space Operations Center (AOC) - Software Pilot Program*

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
- Integration/fielding of improvements/upgrades of existing 3rd Party applications as well as newly developed replacement applications, CER and baseline updates. Address commercial end-of-life and DMS components including components associated with C2 applications (3rd Party COTS/GOTS) - Support moving the AOC WS toward a cloud-based commercially managed Infrastructure and Platform as a Service (IaaS/ PaaS) - Provide Baseline Releases, periodic maintenance upgrades, emergency fixes, cyber security improvements and other activities (e.g., testing activities) *FY 2023 OCO Plans:* N/A *FY 2022 to FY 2023 Increase/Decrease Statement:* Funding increased due to transfer from OPAF PE 0207410F, Air & Space Operations Center (AOC), Line Item 834530, AOC.					
Title: AOC WS Modifications - Sustainment **Description:** Operations and Maintenance efforts sustain the fielded AOC WS including critical 3rd party applications and provides the foundation to transition to AOC WS Block 20. Supports current fielded capabilities such as TBMCS for joint-partner interoperability and enterprise use cases as required during transition to Block 20. Provides critical integration and sustainment support to legacy 3rd party systems, infrastructure support, on-premise technical support and assistance, addresses cybersecurity requirements, hardware/software license renewals, release engineering services, help desk activities, testing operational, performance, functional and security requirements, quality assurance, configuration management, and documentation support. *FY 2022 Plans:* See OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11C, Combat Enhances Forces. *FY 2023 Base Plans:* - Continue sustainment and integration activities to the current AOC WS baseline and support Block 20 Operational C2 presentation of capability as it is delivered *FY 2023 OCO Plans:* N/A *FY 2022 to FY 2023 Increase/Decrease Statement:*	0.000	0.000	79.136	0.000	79.136

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C. Accomplishments/Planned Programs ($ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funding increased due to transfer from OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11C, Combat Enhances Forces.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	177.827	0.000	177.827

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• OPAF 03 834530: *Air & Space Operations Center (AOC)*	15.383	23.019	2.611	-	2.611	0.000	0.000	0.000	0.000	Continuing	Continuing
• OPAF 03 833140: *Strategic Command And Control*	0.000	3.541	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDTE 07 0303248F: *All Domain Common Platform*	0.000	64.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDTE 08 0308606F: *All Domain Common Platform (ADCP) - Software Pilot Program*	0.000	0.000	190.112	-	190.112	175.196	190.889	187.666	188.307	Continuing	Continuing

Remarks

E. Acquisition Strategy

The acquisition strategy builds on agile software engineering solutions and modification of existing capabilities using evolutionary acquisition to standardize and modify the AOC WS. The initial capability was AOC WS Increment 10.0, which fielded the 10.0 configuration to five operational sites, plus a Help Desk and a Formal Training Unit. The second increment, Increment 10.1, upgraded these locations to an integrated baseline and fielded the baseline to additional operational and reserve units worldwide. AOC WS Modifications will leverage commercial best practices of Agile DevOps to scale out a modern virtual private cloud to the AOCs and scale up additional software product teams in support of retiring TBMCS FL and other legacy mission critical applications allowing for eventual disposal of the AOC 10.1 infrastructure. This enables dynamic resource allocation based on current warfighter needs. AOC operates under authority FY20 NDAA, Section 800, Software Acquisition Pathway, following DoDI 5000.87, Operation of Software Acquisition Pathway Guidance. The desired end state is continuous delivery of all AOC WS software.

AOC WS Modifications will leverage a modular contracting strategy that focuses on evolving needs, continuous market research and streamlined solicitation procedures. AOC Modifications leverages both small and large business contracts for specialized services and enterprise AOC support to adopt commercial best practices for software development and to scale out a modern Infrastructure as a Service/Platform as a Service (IaaS/PaaS) solution. Activities are also accomplished via Military Interdepartmental Purchase Requests (MIPR). Additionally, significant technical expertise will be sought after via modular contracting approach and provided by

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force	**Date:** April 2022
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Government Agencies, DoD Laboratory, Federally Funded Research and Development Centers (FFRDC), Academia, and Engineering & Professional Acquisition Support Services contractors as well as commercial industry partners.

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Product Development ($ in Millions)

				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
AOC WS Modifications Development	C/Various	Various : Multiple	-	-		-		48.288	Dec 2022	-		48.288	0.000	48.288	48.288
AOC WS Modifications Materials	C/Various	Various : Mutiple	-	-		-		10.530	Dec 2022	-		10.530	0.000	10.530	10.530
AOC WS Modifications Sustainment	C/Various	Various : Multiple	-	-		-		41.524	Dec 2022	-		41.524	0.000	41.524	41.524
AOC WS Modifications Other Transaction	Various	Pivotal : Multiple	-	-		-		0.000		-		0.000	0.000	0.000	0.000
Subtotal			-	-		-		100.342		-		100.342	0.000	100.342	N/A

Support ($ in Millions)

				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
AOC WS Modifications Direct Mission Support	C/TBD	Various : Various	-	-		-		31.538	Dec 2022	-		31.538	0.000	31.538	31.538
AOC WS Modifications Civilian Direct Cite Authorizations for Product Development	Allot	AFLCMC/FZA : TBD	-	-		-		14.637	Oct 2022	-		14.637	0.000	14.637	-
Subtotal			-	-		-		46.175		-		46.175	0.000	46.175	N/A

Management Services ($ in Millions)

				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
AOC WS Modifications Engineering Services	Various	Various : Various	-	-		-		4.724	Oct 2022	-		4.724	0.000	4.724	4.724
AOC WS Modifications Program Support	C/Various	Various : Various	-	-		-		26.586	Dec 2022	-		26.586	0.000	26.586	26.586
Subtotal			-	-		-		31.310		-		31.310	0.000	31.310	N/A

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	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	177.827	-	177.827	0.000	177.827	N/A

Remarks

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	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AOC WS Modifications																												
AOC WS Modifications Kessel Run																												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0608410F *I Air & Space Operations Center (AOC) - Software Pilot Program*	**Project (Number/Name)** 684596 *I AOC - Software Pilot Program*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
AOC WS Modifications				
AOC WS Modifications Kessel Run	1	2023	4	2027

Note
 See PE 0207410F, Air & Space Operations Center (AOC), Project Number 674596, AOC WS Modifications for prior years development events.

PE 0608410F: *Air & Space Operations Center (AOC) - So...*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											**Date:** April 2022	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*						**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro*						

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	136.202	0.000	136.202	139.000	141.596	143.246	146.432	Continuing	Continuing
685178: *DEAMS Continuous Capability Development*	-	0.000	0.000	136.202	0.000	136.202	139.000	141.596	143.246	146.432	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2023, DEAMS Continuous Capability Development (CCD) budget controls have been realigned from Research, Development, Test & Evaluation (RDT&E) Program Element (PE) 0901554F Project 675178, Operations & Maintenance (O&M) AG/SAG 042A, and Other Procurement Line Item 834470 and consolidated into Budget Activity 8 in PE 0608920F in order to participate in the DoD's Software & Digital Technology Pilot Program.

A. Mission Description and Budget Item Justification

The FY 2018 NDAA Sections 873/874 directed OSD to streamline software development. In FY 2022, DEAMS was included in an OSD pilot initiative in which all lifecycle funding will be tracked under BA08, Software and Digital Technology Pilot Programs. No FY 2022 Pilot programs were initiated, resulting in the shift of the request from FY 2022 to FY 2023. Pilot programs will test the ability to execute modern software development practices encompassing development, procurement, modification and maintenance activities. The DEAMS pilot program in PE 0608920F, RDT&E, Air Force, BA08 includes Air Force RDT&E, Other Procurement, and Operations & Maintenance funds transferred from PE 0901554F.

DEAMS is a commercial-off-the-shelf (COTS), Oracle-based software implementation which provides an auditable, modern accounting and finance management capability. It is the Department of the Air Force's (DAF) core accounting and financial management solution and is a key component of the DAF's long-term business process improvements needed to sustain auditability and correct financial system weaknesses. DEAMS is deployed at 170 installations world-wide supporting 17,000 users at all Air Force Major Commands, within the U.S. Space Force, and at Unified Commands where the DAF is the executive agent.

DEAMS is a joint DAF and United States Transportation Command (USTRANSCOM) Enterprise Resource Planning (ERP) Program that replaces numerous inefficient and/or obsolete legacy accounting and finance systems and provides core funds execution management functions consistent with financial management laws, regulations and policy, general ledger, funds management, payments, receivables, cost and revenues, and fiduciary reporting.

The DAF is planning to increase DEAMS usage within the acquisition community to include acquisition program management offices, laboratories, test centers, and air logistics complexes. These deployments will add an additional 4,500 users for a total of 21,500 users.

DEAMS is compliant with the Clinger-Cohen Act and the DoD's Business Enterprise Architecture (BEA). DEAMS is the key to DAF's compliance with the Financial Improvement and Audit Readiness (FIAR) requirement. This requirement supports performance of a full financial audit as required by title 10 U.S.C. Chapter 9A, Sec 240-D.

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Soft ware Pilot Pro*	

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY 2021 0.212M was expended for civilian pay expenses in this program element, and in FY 2022 0.216M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
Previous President's Budget	0.000	135.263	0.000	0.000	0.000
Current President's Budget	0.000	0.000	136.202	0.000	136.202
Total Adjustments	0.000	-135.263	136.202	0.000	136.202
• 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	-135.263			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	136.202	0.000	136.202

Change Summary Explanation

FY 2022 and prior years funding was executed in PE 0901554F - Project Number 675178, PE 0901554F - Line 834470, and OMAF Operating Forces, Activity Group, Service-wide Activities, Sub-Activity Group 42A, Administration.

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
Title: DEAMS Continuous Capability Development (CCD) Product Development	0.000	0.000	57.965	0.000	57.965
Description: DEAMS CCD system capabilities will be developed and enhanced through completion of iterative development cycles in accordance with an Agile software development strategy. Development activities include requirements analysis, design, build, test, data conversion, migration from legacy system as required, implementation into the DEAMS baseline, and the resolution of deficiency reports and defects. Activities also include various Advisory and Assistance Services (A&AS) and Program Management Administration (PMA) activities to support the aforementioned development efforts.					

PE 0608920F: *Defense Enterprise Accounting and Manage...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro*	

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
FY 2022 Plans: See PE 0901554F, Defense Accounting and Management System (DEAMS), Project Number 675178, DEAMS Continuous Capability Development. *FY 2023 Base Plans:* - Will continue incremental planning and support initiatives to organize CCD backlog requirements into capability-delivering epics. - Will continue to develop additional Business Intelligence (BI) functionality to enhance reporting capability - Will continue to implement governance capabilities to effectively shape system behavior to DAF finance business rules and workflow - Will continue to implement additional Treasury Direct Dispersing capability to bring DEAMS into compliance with OUSD Treasury Disbursing and Collections Initiatives including, but not limited to implementing Military Cost Pay Accounting, implementing acquisition data standards for contract writing systems, and developing accounting capability for base supply purchases - Will continue to implement Oracle's Splunk platform as an OSD Cybersecurity pilot program to more effectively manage data and enhance decision-space and system performance - Will continue Operational Test and Evaluation as required by supporting the Adaptive, Relevant Testing concept; expanding automated test activities to decrease time in test and increase product quality; and test, validate, and coordinate capability deployments to the user community - Will continue to leverage Agile methods and cadence to resolve existing/new defects and add enhancements in the production environment - Will continue to research, design, and build a secure and continuous process for development and delivery of capabilities (Dev/Sec/Ops) - Will continue to restructure the system architecture to improve performance of the End of Day/End of Month processing - Will continue migration/development/transition activities to implement Cloud solution - Will continue to refine near-term technical requirements/tools to ensure smooth operation of DEAMS and mature development capabilities - Will continue to reduce technical debt and modernize system by implementing improved software development methods and solutions - Will develop the G-Invoicing, Contract Writing, Reporting Phase 2, TDD Phase 2 and ICAM (Audits) capabilities *FY 2023 OCO Plans:*					

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force	**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro*

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** - There is no significant increase/decrease in baseline funding between FY 2022 and FY 2023. - For FY 2022, see PE 0901554F, Defense Accounting and Management System (DEAMS), Project Number 675178, DEAMS Continuous Capability Development.					
Title: Deployment ***Description:*** DEAMS will ultimately deploy to approximately 4,500 additional financial managers assigned to major acquisition programs, sustainment centers, reimbursable laboratories, and launch facilitates at 15 Air and Space Force locations. The system is currently deployed to all DAF locations, in full or partial capacity; all future deployments will complete the functionality at these locations. ***FY 2022 Plans:*** See PE 0901554F, Defense Accounting and Management System (DEAMS), Line Item 834470, DEAMS. ***FY 2023 Base Plans:*** - Will purchase software licenses for scheduled FY 2023 deployments (exact quantity will vary based on backlog priority) - Will deploy Misc. Payments capability to 64 ANG, USAFE, PACAF, and AFMC installations ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** - Funding decreased due to a reduction in software license buys in FY 2023. - For FY 2022, see PE 0901554F, Defense Accounting and Management System (DEAMS), Line Item 834470, DEAMS.	0.000	0.000	1.842	0.000	1.842
Title: DEAMS Continuous Capability Development (CCD) Support and Sustainment ***Description:*** DEAMS capabilities will be sustained through numerous Operations & Support activities designed to execute an iterative steady-state software sustainment process. Sustainment activities include day-to-day operations and support, production environment management, system performance, monitoring and tuning, technical debt reduction, refreshes/updates to databases, and information processing capabilities. Activities	0.000	0.000	76.395	0.000	76.395

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro*	

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
also include various A&AS and PMA activities to support the aforementioned sustainment operations as well as operational support at multiple Data Centers (DISA/Oracle). ***FY 2022 Plans:*** See OMAF Operating Forces, Activity Group, Service-wide Activities, Sub-Activity Group 42A, Administration. ***FY 2023 Base Plans:*** - Will obtain Capability Support ATP and transition to BCAC Capability Support phase - Will continue to release new capability into production using Agile methodology and established cadence - Will continue to optimize performance by conducting tuning activities and removing unused code and interfaces - Will continue to deploy fixes to address defects and user-identified problems - Will continue to ensure system security and support the Risk Management Framework (RMF) through continuous monitoring activities - Will continue to support 24/7 operations for current and expanding global user community through activities such as Help Desk operations, functional expertise, technical support, and license maintenance - Will continue to improve system efficiency by supporting continuous processes for secure development and delivery of capabilities (Dev/Sec/Ops) and posturing the production system architecture for cloud migration - Will continue to onboard Scaled Agile Framework (SAFe) 5.0 methodology and continue to implement the scalable requirements - Will continue production environment migration to Oracle Cloud Infrastructure (OCI) - Will continue with Oracle eBusiness Suite 12.2.10 upgrade - Will continue Solaris 11 upgrade - Will upgrade DB/SOA Environments - Will perform Disaster Recovery Test - Will implement Splunk Automation - Will upgrade Privileged Access Management ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** - There is no significant increase/decrease in baseline funding between FY 2022 and FY 2023.					

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*		**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Soft ware Pilot Pro*

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
- For FY 2022, see OMAF Operating Forces, Activity Group, Service-wide Activities, Sub-Activity Group 42A, Administration.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	136.202	0.000	136.202

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• OPAF 03 834470: *Defense Enterprise Accounting & Mgt Sys*	1.078	3.103	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.181
• RDTE 07 0901554F: *Defense Enterprise Acntng and Mgt Sys (DEAMS)*	39.628	54.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	94.028

Remarks

FY 2022 and prior years funding was executed in PE 0901554F - Project Number 675178, PE 0901554F - Line 834470, and OMAF Operating Forces, Activity Group, Service-wide Activities, Sub-Activity Group 42A, Administration.

E. Acquisition Strategy

In FY 2021, the Department of the Air Force declared Increment I complete. DEAMS will transition to the Capability Support Phase in FY 2023. Implementation is accomplished via continuous capability development as requirements are prioritized by the associated Program and Functional Management Offices and organized in the requirements backlog. DEAMS capabilities are developed and sustained in accordance with the selected Agile software implementation strategy. Development activities include requirements analysis, design, build, test, data conversion, migration from legacy system as required, implementation into the DEAMS baseline, and the resolution of deficiency reports and defects. Sustainment activities include day-to-day operations and support, production environment management, and numerous system performance improvement initiatives. This strategy has been refined to enable continual enhancements and process improvements for the life of the system.

The DEAMS program will develop functionality on cadence and release on demand. User experience and mission impact will be considered when determining release dates during the execution cycle.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force													**Date:** April 2022	
Appropriation/Budget Activity 3600 I 8					**R-1 Program Element (Number/Name)** PE 0608920F I Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro						**Project (Number/Name)** 685178 I DEAMS Continuous Capability Development			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DEAMS: Rapid Acquisition System Integrator	C/FFP	CACI-ISS, Inc. : Chantilly, VA	-	-		-		10.000	Dec 2022	-		10.000	Continuing	Continuing	-
DEAMS: Direct mission Support (DBA Support, Architecture Services, FMO SME Support, HW/SW)	Various	Various : Various	-	-		-		37.881	Jan 2023	-		37.881	Continuing	Continuing	-
Subtotal			-	-		-		47.881		-		47.881	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DEAMS: Rapid Acquisition System Integrator O&S	C/FFP	CACI-ISS, Inc. : Chantilly, VA	-	-		-		26.000	Dec 2022	-		26.000	Continuing	Continuing	-
DEAMS: Direct Mission Support (Help Desk, DBA Support, FMO SME Support, Environments)	Various	Various : Various	-	-		-		39.279	Jan 2023	-		39.279	Continuing	Continuing	-
DEAMS: Production Licenses	C/FFP	Not specified. : TBD	-	-		-		3.000	Nov 2022	-		3.000	Continuing	Continuing	-
DEAMS: License Maintenance	C/FFP	Not specified. : TBD	-	-		-		8.000	Jan 2023	-		8.000	Continuing	Continuing	-
Subtotal			-	-		-		76.279		-		76.279	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DEAMS: Test Services from AFOTEC, JITC,	Various	Various : TBD	-	-		-		1.000	Jan 2023	-		1.000	Continuing	Continuing	-

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 I 8	**R-1 Program Element (Number/Name)** PE 0608920F I *Defense Enterprise Account ing and Management System (DEAMS) - So ftware Pilot Pro*	**Project (Number/Name)** 685178 I *DEAMS Continuous Capability Development*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LDTO and other miscellaneous Test services															
Subtotal			-	-		-		1.000		-		1.000	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DEAMS: Program Support	Various	Various : TBD	-	-		-		11.042	Jan 2023	-		11.042	Continuing	Continuing	-
Subtotal			-	-		-		11.042		-		11.042	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	136.202	-	136.202	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Account ing and Management System (DEAMS) - So ftware Pilot Pro*	**Project (Number/Name)** 685178 *I DEAMS Continuous Capability Development*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DEAMS CCD Requirements Implementation																												
Capability Support Authority to Proceed								█																				
Capability Support Phase (Continuous Capability Development)								███████████████████████████████████████																				

PE 0608920F: *Defense Enterprise Accounting and Manage...*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0608920F *I Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro*	**Project (Number/Name)** 685178 *I DEAMS Continuous Capability Development*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
DEAMS CCD Requirements Implementation				
Capability Support Authority to Proceed	1	2023	1	2023
Capability Support Phase (Continuous Capability Development)	1	2023	4	2027

Note

FY 2022 and prior years funding was executed in PE 0901554F - Project Number 675178, PE 0901554F - Line 834470, and OMAF Operating Forces, Activity Group, Service-wide Activities, Sub-Activity Group 42A, Administration.

PE 0608920F: *Defense Enterprise Accounting and Manage...*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											**Date:** April 2022	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*					**R-1 Program Element (Number/Name)** PE 0208087F *I Distributed Cyber Warfare Operations*							

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	37.346	0.000	37.346	0.000	0.000	0.000	0.000	0.000	37.346
688EBC: *AF Defensive Cyber Systems (AFDCS) - EBC*	-	0.000	0.000	37.346	0.000	37.346	0.000	0.000	0.000	0.000	0.000	37.346

A. Mission Description and Budget Item Justification

This exhibit and funds request as shown are due to a database error. A technical adjustment will be requested to correct.

No Budget Activity 8 funds are requested for Program Element 0208087F.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	37.346	0.000	37.346
Total Adjustments	0.000	0.000	37.346	0.000	37.346
• 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 Adjustments	0.000	0.000	37.346	0.000	37.346

Exhibit R-2A, **RDT&E Project Justification:** PB 2023 Air Force										**Date:** April 2022	
Appropriation/Budget Activity 3600 *I* 8				**R-1 Program Element (Number/Name)** PE 0208087F *I Distributed Cyber Warfare Operations*				**Project (Number/Name)** 688EBC *I AF Defensive Cyber Systems (AFDCS) - EBC*			
COST ($ in Millions)	**Prior Years**	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Cost To Complete**	**Total Cost**
688EBC: *AF Defensive Cyber Systems (AFDCS) - EBC*	-	0.000	0.000	37.346	0.000	37.346	0.000	0.000	0.000	0.000	0.000	37.346
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

 This exhibit and funds request as shown are due to a database error.

 No Budget Activity 8 funds are requested for Program Element 0208087F.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
Title: N/A	-	0.000	37.346
Description: N/A			
FY 2022 Plans: N/A			
FY 2023 Plans: N/A			
FY 2022 to FY 2023 Increase/Decrease Statement: N/A			
Accomplishments/Planned Programs Subtotals	-	0.000	37.346

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 N/A

PE 0208087F: *Distributed Cyber Warfare Operations*
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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2023 Air Force			**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0208087F / *Distributed Cyber Warfare Operations*	**Project (Number/Name)** 688EBC / *AF Defensive Cyber Systems (AFDCS) - EBC*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
N/A	TBD	Not specified. : TBD	-	-		-		37.346		-		37.346	Continuing	Continuing	-
		Subtotal	-	-		-		37.346		-		37.346	Continuing	Continuing	N/A

Remarks

 This exhibit and funds request as shown are due to a database error.

 No Budget Activity 8 funds are requested for Program Element 0208087F.

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	37.346	-	37.346	Continuing	Continuing	N/A

Remarks

PE 0208087F: *Distributed Cyber Warfare Operations*
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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0208087F / *Distributed Cyber Warfare Operations*	**Project (Number/Name)** 688EBC / *AF Defensive Cyber Systems (AFDCS) - EBC*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
N/A										███	███																	

PE 0208087F: *Distributed Cyber Warfare Operations*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0208087F / *Distributed Cyber Warfare Operations*	**Project (Number/Name)** 688EBC / *AF Defensive Cyber Systems (AFDCS) - EBC*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
N/A	1	2023	4	2023

Note

This exhibit as shown is due to a database error.

No Budget Activity 8 funds are requested for Program Element 0208087F.

PE 0208087F: *Distributed Cyber Warfare Operations*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											Date: April 2022	

Appropriation/Budget Activity	R-1 Program Element (Number/Name)
3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	PE 0308605F *I Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	240.926	0.000	240.926	202.751	137.776	142.565	156.908	Continuing	Continuing
682001: *AFDCS Continuous Capability Delivery*	-	0.000	0.000	225.865	0.000	225.865	202.751	137.776	142.565	156.908	Continuing	Continuing
688EBC: *Enhanced Budget Control*	-	0.000	0.000	15.061	0.000	15.061	0.000	0.000	0.000	0.000	0.000	15.061

Note

In FY23, the DAF realigned $240.9M from Program Element (PE) 0208088F AF Defensive Cyberspace Operations (AFDCO) to PE 0308605F AF Defensive Cyber Systems (AFDCS) in order to consolidate efforts under a single Budget Activity 8 (BA08) Software and Digital Technology Pilot Program. This consolidation helps accelerate integration and modernization required to address the evolving cyber threat. Prior to FY23, funding was contained in PE 0208088F Projects 677821; 677822; 677823; Operations & Maintenance (O&M) AG/SAGs 12D/11V, and Other Procurement Line Item 834320.

In FY23, $15.061M was realigned to Budget Activity 08, PE 0308605F Project 682EBC to transparently define specific resources to be realigned in FY24 to USCYBERCOM for Enhanced Budget Control in accordance with FY21 NDAA, Section 1746.

A. Mission Description and Budget Item Justification

This effort is not a new start. The FY 2018 NDAA Sections 873/874 directed OSD to streamline software development. The Air Force Defensive Cyber Systems (AFDCS) effort is an OSD pilot initiative in which all lifecycle funding will be tracked under BA08, Software and Digital Technology Pilot Programs. Pilot programs will allow the DAF to execute modern software development practices encompassing development, procurement, modification and maintenance activities within a single appropriation.

Air Force Defensive Cyber Systems (AFDCS) sustains, enhances, and integrates three defensive cyber weapon systems: Cyberspace Vulnerability Assessment/ Hunter (CVA/H); Cyber Defense Analysis (CDA); and AFCERT (ACD). AFDCS provides and equips USAF operational units, predominantly Cyber Protection Teams, Mission Defense Teams, and network defenders with the capabilities required to protect USAF networks and systems. End users comprise over 2,000 operators across the country from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command(AFRC). AFDCS coordinates and executes resources needed to assess, analyze, and respond to Air Force network security incidents, intrusive activity, malicious logic (i.e., viruses) and vulnerabilities. AFDCS provides continuous monitoring and defense of Cybersecurity Service Provider (CSSP) assigned to the Department of Defense (DoD), AF classified, and unclassified computer networks. AFDCS conducts defensive cyberspace operations by monitoring, collecting, analyzing, and reporting on sensitive information released from friendly unclassified systems, such as computer networks, telephones, email, and USAF websites. AFDCS conducts vulnerability assessments, network intrusion analysis, systems vulnerability analysis, and protects against the advanced persistent threat through fielded Hunter teams. Hunter teams provide worldwide defensive cyberspace operations on AF classified and unclassified networks.

PE 0308605F: *Air Force Defensive Cyber Systems (AFDCS...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0308605F *I Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	

The systems within AFDCS are managed through an Agile software development procurement and sustainment process that includes working from a prioritized backlog managed by the Program Management Office (PMO) according to priorities provided by MAJCOM and operational users.   Priorities are updated at least every 3-months . Priorities can be adjusted, and usable capability produced after every iteration. This approach allows the program to focus on current operational priorities, achieve early return on investment of taxpayer dollars, mitigate risk, reduce waste, effectively respond to change, and continuously improve processes.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY $0.103M was expended for civilian pay expenses in this program element, and in CY $0.228M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	240.926	0.000	240.926
Total Adjustments	0.000	0.000	240.926	0.000	240.926
• 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 Adjustments	0.000	0.000	240.926	0.000	240.926

Change Summary Explanation

In FY23, the DAF realigned $240.9M from Program Element (PE) 0208088F AF Defensive Cyberspace Operations (AFDCO) to PE 0308605F AF Defensive Cyber Systems (AFDCS) in order to consolidate efforts under a single Budget Activity 8 (BA08) Software and Digital Technology Pilot Program. Prior to FY23, funding was contained in PE 0208088F Projects 677821; 677822; 677823; Operations & Maintenance (O&M) AG/SAGs 12D/11V, and Other Procurement Line Item 834320. Respective FY22 funding totaled $232.13M. FY23 increased to $240.93M due to economic adjustments prior to realignment to Budget Activity 8, PE 0308605F for participation in the DoD's Software & Digital Technology Pilot Program.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force											Date: April 2022	
Appropriation/Budget Activity 3600 / 8				**R-1 Program Element (Number/Name)** PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program					**Project (Number/Name)** 682001 / AFDCS Continuous Capability Delivery			
COST ($ in Millions)	**Prior Years**	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Cost To Complete**	**Total Cost**
682001: AFDCS Continuous Capability Delivery	-	0.000	0.000	225.865	0.000	225.865	202.751	137.776	142.565	156.908	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Air Force Defensive Cyber Systems (AFDCS) sustains, enhances, and integrates three defensive cyber weapon systems: Cyberspace Vulnerability Assessment/ Hunter (CVA/H); Cyber Defense Analysis (CDA); and AFCERT (ACD). AFDCS provides and equips USAF operational units, predominantly Cyber Protection Teams, Mission Defense Teams, and network defenders with the capabilities required to protect USAF networks and systems. End users comprise over 2,000 operators across the country from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command(AFRC). AFDCS coordinates and executes resources needed to assess, analyze, and respond to Air Force network security incidents, intrusive activity, malicious logic (i.e., viruses) and vulnerabilities. AFDCS provides continuous monitoring and defense of Cybersecurity Service Provider (CSSP) assigned to the Department of Defense (DoD), AF classified, and unclassified computer networks. AFDCS conducts defensive cyberspace operations by monitoring, collecting, analyzing, and reporting on sensitive information released from friendly unclassified systems, such as computer networks, telephones, email, and USAF websites. AFDCS conducts vulnerability assessments, network intrusion analysis, systems vulnerability analysis, and protects against the advanced persistent threat through fielded Hunter teams. Hunter teams provide worldwide defensive cyberspace operations on AF classified and unclassified networks.

This effort funds the development, sustainment, maintenance, additional hardware and software as well as recapitalization for various systems in AFDCS to enhance defensive cyberspace capabilities, computer and network systems security, damage assessment and recovery, cyber threat recognition, attribution, and mitigation, and active response methodologies in response to evolving threats and changes to cyber environment. These areas of emphasis are realized through research and development, test and acquisition in the areas of proactive defense, defensive counter cyberspace, cyberspace intelligence, surveillance and reconnaissance, command and control situational awareness, persistent network operations, as well as decision support, recovery, and digital forensics. Investment into the current weapon systems are also intended to meet the scope and scale of USCYBERCOM directed Cyber Protection Teams and AF Mission Defense Teams.

Funding provides the AFDCS Operators with the development and sustainment of capabilities to identify compromised information from network intrusions and to determine potential impacts and necessary operational adjustments resulting from information disclosures.

Daily intrusions to the AF network are analyzed using complex Commercial off the Self (COTS) and Government off the Self (GOTS) forensic tools to identify a multitude of counter defensive and defensive tools and techniques that are required to strengthen AF cyber security. AFDCS will work with Air Force Research Laboratory (AFRL), Air Force CyberWorx, and other Federal Research and Development (R&D) entities in order to take cutting edge solutions to the technology readiness level (TRL) needed for rapid deployment of new capabilities to counter critical cyber weapon system vulnerabilities.

AFDCS funding also provides essential compute and store capacity and USAF unique application development for the ELICSAR big data platform, a capability federated with other Service efforts under the Unified Platform program.

PE 0308605F: Air Force Defensive Cyber Systems (AFDCS...
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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: AFDCS Continuous Capability Delivery (CCD) Development - RDT&E	-	0.000	9.508

Description: AFDCS CCD system capabilities will be developed and enhanced through completion of iterative development cycles in accordance with an Agile software development strategy. Development activities include requirements analysis, design, build, test, data conversion, vulnerability, compliance, defense and non-technical assessments, best practice reviews, penetration testing, and the resolution of deficiency reports and defects. Development and integration of solutions supporting defensive cyber modernization and AF Cyber Needs Forms in the area of AFDCS capabilities and technologies to meet capability gaps required by Cyber Protection Teams and Mission Defense Teams. Test and Evaluation provides both developmental testing of new capabilities and the test environments for validating the capabilities. Engineering support to conduct AFDCS assessment of non-secure telecommunications during peace time and contingency operations. Additional developments include projects to prevent, detect, and respond to adversarial penetration in AF networks. Activities also include various Advisory and Assistance Services (A&AS) and Program Management Administration (PMA) activities to support the aforementioned development efforts.

FY 2022 Plans:
FY22 Plans consolidated from PE 0208088F, AF Defensive Cyberspace Operations, Projects 677821 Cyberspace Vulnerability Assessment, 677822 Cyberspace Defense Analysis, and 677823 AFCERT.

- Continue development and integration of technologies to conduct vulnerability assessments, network intrusion analysis and systems vulnerability analysis.

- Continue development and integration to support modernization of DCO capabilities and technologies to support Cyber Protection Teams and Mission Defense Teams.

- Continue support of development of data loss prevention technologies and support to insider threat detection capabilities. Support technology areas that prevent adversaries' attempts to get into our networks.

- Continue to develop and test technologies to prevent, detect, and respond to adversarial penetration in AF networks.

FY 2023 Plans:
- Will continue incremental planning and support initiatives to organize Continuous Capability Development (CCD) backlog requirements into delivered capabilities.

- Will continue development and integration of technologies to conduct vulnerability assessments, network intrusion analysis and systems vulnerability analysis

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 682001 / *AFDCS Continuous Capability Delivery*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
- Will continue development and integration to support modernization of AFDCS capabilities and technologies to support Cyber Protection Teams and Mission Defense Teams - Will continue support of development of data loss prevention technologies and support to insider threat detection capabilities. Support technology areas that prevent adversaries' attempts to get into our networks - Will continue to develop and test technologies for the AFDCS to prevent, detect, and respond to adversarial penetration in AF networks - Will continue development testing for AFDCS capability products and technologies prior to fielding - Will leverage Agile methods and cadence to resolve existing/new defects and add enhancements in the production environment - Will restructure the system architecture to improve performance - Will continue migration/development/transition activities to implement Cloud solution - Will refine near-term technical requirements/tools to ensure smooth operation of AFDCS and mature development capabilities - Will research, design, and build a secure and continuous process for development and delivery of capabilities (Dev/Sec/Ops) ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Funding for this effort is unchanged with respect to FY22 request in PE 0208088F, AF Defensive Cyberspace Operations, Projects 677821 Cyberspace Vulnerability Assessment, 677822 Cyberspace Defense Analysis, and 677823 AFCERT.			
Title: AFDCS Continuous Capability Development (CCD) Deployment - Procurement	-	0.000	87.048
Description: AFDCS CCD provides defensive counter cyberspace capabilities that protect the AFNet and DoD network enclaves, to include their associated computer systems, software applications and sensitive operational information against unauthorized intrusion, corruption, and/or destruction. AFDCS additionally provide for 24/7/365 monitoring and defense of US Air Force and US Central Command, and Third Party SIPR/NIPR computer networks against hostile attacks as well as intrusion detection, network traffic analysis, network forensics analysis, countermeasure development and execution, and incident response. Provides indication and warning, correlation, logging, vulnerability remediation, assessment, process management, blocking, vulnerability identification, investigation, and containment. Provides CSSP (Cyber Security Service Provider) system upgrades to the AFNet and several third party entities including Joint Strike Fighter, USTRANSCOM, and others. In accordance with Section 1815 of the			

Exhibit R-2A, **RDT&E Project Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0308605F *I Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 682001 *I AFDCS Continuous Capability Delivery*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities. AFDCS provides hardware, software, technical documents, fielding support, and Capital Equipment Replacement (CER) (e.g., replacing end of life/end of support Direct Mission Support (DMS) and 3rd Party components). Also includes integration, test and fielding for cyber security improvements and existing 3rd Party modernized improvements/modifications. AFDCS provides defensive cyber capability and CVA/H equipment (e.g. Garrison Interceptor Platform (GIP), Deployable Interceptor Platform (DIP), and Mobile Interceptor Platform (MIP)) for Air Force Cyber Protection Teams (CPTs) and Mission Defense Teams (MDTs). Equipment also includes an enhanced DIP which is capable of 10GB throughput in a small form factor (less than 50lbs and TSA carry-on compliant). *FY 2022 Plans:* FY22 plans consolidated from FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures: - Continue providing hardware refresh of the CVA/H subsystems and technical refresh of 15 existing MDTs and equip an additional 20 MDTs. - Continue procuring necessary hardware and software to combat the rapidly evolving cyber threats, as well as additional recapitalization projects to include Enterprise Voice Protection System (VPS)/Voice Over Internet Protocol (VoIP) Monitoring for 184+ AF Sites and regional management and collection servers at 3 Integrated Network Operations and Security Centers. - Continue supporting early system deployment of Enterprise-Data Loss Prevention (E-DLP) capability to overcome technological advances, and provide operators the ability to automatically detect, assess, and classify sensitive content using content-aware detection techniques - Continue acquiring and installing active defensive counter cyberspace operations and situational awareness capabilities in a Defensive Cyberspace Operations role to achieve cyberspace superiority for assigned missions. - Continue procure updates for Enterprise Logging, Data Wall, Data Analytics (via ELICSAR big data platform), and hardware/software upgrades needed to maximize operators' threat awareness.			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
- Continue acquiring commercial threat intelligence to speed decision-making against threats to the Air Force Network (AFNET). *FY 2023 Plans:* - Will continue to replace the subsystems fielded in FY20 for compliance with recent CVA/H hardware baseline standards for MDTs. - Will continue procuring necessary hardware and software to combat the rapidly evolving cyber threats, as well as additional recapitalization projects to include Endpoint Detection and Response (EDR) and to enable the ability to capture execution, local connections, system changes, memory activities, and other operations performed by endpoints; and Endpoint Packet Capture (PCAP) which provides indexing, searching, visualization, and extraction (ISVE) capability. - Will continue supporting early system deployment of Enterprise-Data Loss Prevention (E-DLP) capability to overcome technological advances, and provide operators the ability to automatically detect, assess, and classify sensitive content using content-aware detection techniques - Will continue acquiring and installing active defensive counter cyberspace operations and situational awareness capabilities in a Defensive Cyberspace Operations role to achieve cyberspace superiority for assigned missions. - Will continue procure updates for Enterprise Logging, Data Wall, Data Analytics (via ELICSAR big data platform), and hardware/software upgrades needed to maximize operators' threat awareness. - Will continue acquiring commercial threat intelligence to speed decision-making against threats to the Air Force Network (AFNET). *FY 2022 to FY 2023 Increase/Decrease Statement:* Funding for this effort is unchanged with respect to FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures.			
Title: AFDCS Continuous Capability Delivery (CCD) - Support and Sustainment *Description:* AFDCS capabilities will be sustained through activities designed to support continued operations of three weapon systems and integrated AFDCS capabilities activities include day-to-day operations and support, production environment management, system performance monitoring and tuning, technical debt reduction, refreshes/updates to databases, and information processing capabilities. Activities also include Advisory and assistance Services (A&AS) and Program Management Administration (PMA) activities to support the aforementioned sustainment operations as well as cloud compute and store costs.	-	0.000	129.309

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 682001 / *AFDCS Continuous Capability Delivery*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
FY 2022 Plans: FY22 Plans consolidated from FY22 request OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12D, Cyberspace Activities and OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11V, Cyber Sustainment - Continue supporting secure, reliable conduct of cyber defense operations and related air, land, maritime, and space cyberspace forces without prohibitive interference by an adversary. - Continue to sustain the operational capability of the Cyberspace Vulnerability Assessment/Hunter mission to support Cyber Protection Teams. - Continue 24/7 support to operations for over 2,000 operators from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) and expanding global user community. - Continue Hardware Refresh, Software License Renewal, Cybersecurity support, Sustaining Engineering Support, training development and support. - Continue maintenance and updates for Technical Orders, including updating, verifying, indexing, configuration control, storing, archiving, distributing, superseding, rescinding, and reinstating. - Continued Contractor Logistics Support (CLS) for Cyber sustainment to include for a program, system, training system, equipment or item. CLS is used to provide all or part of the sustainment functions. - Continue sustaining cloud-hosted data and applications at Unclassified, Secret and Top Secret classifications. - Continue sustaining procured enhanced software capabilities, system integration support and improvements for the AFDCS subsystems ACD, CDA, and CVA/H. *FY 2023 Plans:* - Will continue supporting secure, reliable conduct of cyber defense operations and related air, land, maritime, and space cyberspace forces without prohibitive interference by an adversary. - Will continue to sustain the operational capability of the Cyberspace Vulnerability Assessment/Hunter mission to support Cyber Protection Teams.			

PE 0308605F: *Air Force Defensive Cyber Systems (AFDCS...*
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Exhibit R-2A, **RDT&E Project Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 682001 / *AFDCS Continuous Capability Delivery*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
- Will continue 24/7 support to operations for over 2,000 operators from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) and expanding global user community. - Will continue Hardware Refresh, Software License Renewal, Cybersecurity support, Sustaining Engineering Support, training development and support. - Will continue maintenance and updates for Technical Orders, including updating, verifying, indexing, configuration control, storing, archiving, distributing, superseding, rescinding, and reinstating. - Will continue Contractor Logistics Support (CLS) for Cyber sustainment to include for a program, system, training system, equipment or item. CLS is used to provide all or part of the sustainment functions. - Will continue sustaining cloud-hosted data and applications at Unclassified, Secret and Top Secret classifications. - Will continue sustaining procured enhanced software capabilities, system integration support and improvements for the AFDCS. - Will continue to improve system efficiency by supporting continuous processes for secure development and delivery of capabilities (Dev/Sec/Ops) and posturing the production system architectures for integration. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY23 economic adjustments increased funding by $8.8M with respect to FY22 request OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12D, Cyberspace Activities and OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11V, Cyber Sustainment.			
Accomplishments/Planned Programs Subtotals	-	0.000	225.865

C. Other Program Funding Summary ($ in Millions)

 N/A

Remarks

D. Acquisition Strategy

 The AFDCS will use various existing and new contractual vehicles to procure commercial off the shelf cyber capabilities, leverag industry leading commercial
 capabilities, and professional services for integration and configuration support, new capability development and sustainment. Contract sources include Government-
 Wide Acquisition Contracts (GWACs) such as Alliant, Encore II, NASA Solutions for Enterprise-Wide Procurement IV (SEWP IV), and General Services Administration

Exhibit R-2A, **RDT&E Project Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 682001 / *AFDCS Continuous Capability Delivery*

(GSA) Federal Supply Schedules. AFDCS will also leverage Small Business Innovative Research (SBIR) and Air Force Research Laboratory (AFRL) contracts, FFRDCs, Advisory and Assistance Services (A&AS) contracts, and support from Test and Evaluation Enterprises. Wherever possible AFDCS will leverage competitive contracts and task orders to ensure cost efficiency and industry engagement. The use of multiple-award contractual vehicles will provide a wide range of commercially-available products and services to meet AFDCS requirements.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force													Date: April 2022		

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AFDCS: Enterprise Logging Ingest & Cyber Situational Awareness Refinery (ELICSAR)	C/FFP	CCSD : San Antonio, TX	-	-		-		26.297	Mar 2023	-		26.297	Continuing	Continuing	-
AFDCS: Enterprise Data Acquisition Transport & Analysis (ELX)	TBD	TBD : TBD, TX	-	-		-		30.700	Jul 2023	-		30.700	Continuing	Continuing	-
AFDCS: AFRL - CPAC B	C/FFP	CNF : San Antonio, TX	-	-		-		0.900	Feb 2023	-		0.900	Continuing	Continuing	-
AFDCS: AFRL - RAZOR	C/FFP	BAH : San Antonio, TX	-	-		-		2.900	Mar 2023	-		2.900	Continuing	Continuing	-
AFDCS: AFRL FIRESTARTER	C/FFP	AFRL : Rome, NY	-	-		-		1.700	Apr 2023	-		1.700	Continuing	Continuing	
AFDCS: WEB VULNERABILITY SYSTEM	C/FFP	Thundercat : San Antonio, TX	-	-		-		0.500	Mar 2023	-		0.500	Continuing	Continuing	-
AFDCS: SERVICE NOW	C/FFP	Technica : San Antonio, TX	-	-		-		3.000	Feb 2023	-		3.000	Continuing	Continuing	-
AFDCS: MITRE	C/FFP	MITRE : San Antonio, TX		-		-		4.000	Jan 2023	-		4.000	Continuing	Continuing	-
AFDCS: Cyber Threat Mitigation - Threat Intelligence	C/CPFF	VARIOUS : VARIOUS, TX		-		-		0.300	Jan 2023	-		0.300	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Data & Analysis	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		2.900	Jan 2023	-		2.900	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Sensor Optimization	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		0.390	May 2023	-		0.390	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Data Collection and Correlation	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		0.309	Apr 2023	-		0.309	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Intrusion Prevention Capabilities	C/FFP	VARIOUS : VARIOUS, TX		-		-		0.300	Aug 2023	-		0.300	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force												Date: April 2022		
Appropriation/Budget Activity 3600 / 8						**R-1 Program Element (Number/Name)** PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program						**Project (Number/Name)** 682001 / AFDCS Continuous Capability Delivery		

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	Award Date	FY 2022 Cost	Award Date	FY 2023 Base Cost	Award Date	FY 2023 OCO Cost	Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		74.196		-		74.196	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	Award Date	FY 2022 Cost	Award Date	FY 2023 Base Cost	Award Date	FY 2023 OCO Cost	Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AFDCS: Hardware and Architecture	C/FFP	Dell/Cisco/ VARIOUS : San Antonio, TX	-	-		-		6.000	May 2023	-		6.000	Continuing	Continuing	-
AFDCS: Production Licenses, renewals, and Maintenance	C/FFP	Fidelis/vmware/ VARIOUS : San Antonio, TX	-	-		-		8.000	May 2023	-		8.000	Continuing	Continuing	-
AFDCS: Sustainment (DBA Support, Architecture Services, SME Support, HW/SW)	C/FFP	BAH, Zivaro, Fidelis : San Antonio, TX	-	-		-		1.200	May 2023	-		1.200	Continuing	Continuing	-
AFDCS: Cloud Services	C/FFP	SAIC : Hanscom AFB, MA	-	-		-		1.700	May 2023	-		1.700	Continuing	Continuing	-
AFDCS: Contractor Logistics Support	C/FFP	Fidelis/vmware/ VARIOUS : San Antonio, TX	-	-		-		2.600	May 2023	-		2.600	Continuing	Continuing	-
AFDCS: Training and Technical Data	C/FFP	SMS : San Antonio, TX	-	-		-		0.400	May 2023	-		0.400	Continuing	Continuing	-
AFDCS: Compute and Store Cloud Services-ELICSAR-U	C/CPAF	Cloud One - HNI : Hanscom AFB, MA	-	-		-		27.554	Mar 2023	-		27.554	Continuing	Continuing	-
AFDCS: Compute and Store Cloud Services-ELICSAR-TS	C/CPAF	AMIC - DET : Lackland AFB, TX	-	-		-		4.047	Mar 2023	-		4.047	Continuing	Continuing	-
AFDCS: SEIM	C/FFP	Thundercat : San Antonio, TX	-	-		-		3.000	Jun 2023	-		3.000	Continuing	Continuing	-
AFDCS: SOAR	C/FFP	GovSmart : San Antonio, TX	-	-		-		0.900	Aug 2023	-		0.900	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force															Date: April 2022	
Appropriation/Budget Activity 3600 / 8						**R-1 Program Element (Number/Name)** PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program						**Project (Number/Name)** 682001 / AFDCS Continuous Capability Delivery				

Support ($ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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**
AFDCS: IOP	C/FFP	BAH : San Antonio, TX	-	-	-	-	-	1.700	Jan 2023	-	-	1.700	Continuing	Continuing	-
AFDCS: RFMS	C/FFP	Telos : San Antonio, TX	-	-	-	-	-	1.300	Apr 2023	-	-	1.300	Continuing	Continuing	-
AFDCS: Direct Cite Authority Civilian Pay	TBD	VARIOUS : VARIOUS, TX	-	-	-	-	-	0.387	Oct 2022	-	-	0.387	Continuing	Continuing	-
AFDCS: Sustaining Engineering Software Licenses	C/FFP	VARIOUS : VARIOUS, TX	-	-	-	-	-	21.742	Nov 2022	-	-	21.742	Continuing	Continuing	-
AFDCS: Contracted Logistics Support	C/CPFF	VARIOUS : VARIOUS, TX	-	-	-	-	-	8.155	Feb 2023	-	-	8.155	Continuing	Continuing	-
AFDCS: Tech Data Sustainment	C/CPFF	VARIOUS : VARIOUS, TX	-	-	-	-	-	0.278	Feb 2023	-	-	0.278	Continuing	Continuing	-
AFDCS: TRAINING	C/CPFF	VARIOUS : VARIOUS, TX	-	-	-	-	-	0.141	Feb 2023	-	-	0.141	Continuing	Continuing	-
AFDCS: Product Engineering Support	C/CPFF	VARIOUS : VARIOUS, TX	-	-	-	-	-	5.418	Feb 2023	-	-	5.418	Continuing	Continuing	-
AFDCS: Hardware Sustainment	Various	VARIOUS : VARIOUS, TX	-	-	-	-	-	3.865	May 2023	-	-	3.865	Continuing	Continuing	-
AFDCS: Cyber Security Support	C/CPFF	VARIOUS : VARIOUS, TX	-	-	-	-	-	0.525	Feb 2023	-	-	0.525	Continuing	Continuing	-
AFDCS: CVA/H Subsystems Upgrade	C/FFP	VARIOUS : VARIOUS, TX	-	-	-	-	-	10.039	Mar 2023	-	-	10.039	Continuing	Continuing	-
AFDCS: Hardware Procurement MDT	C/FFP	VARIOUS : VARIOUS, TX	-	-	-	-	-	19.958	Mar 2023	-	-	19.958	Continuing	Continuing	-
		Subtotal	-	-	-	-	-	128.909		-		128.909	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force														**Date:** April 2022	

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AFDCS: 47 CYBER TEST SQUADRON	C/Various	47 TEST SQDN : Lackland AFB, TX	-	-	-	-	-	1.800	Mar 2023	-	-	1.800	Continuing	Continuing	-
AFDCS: 46TH TEST SUPPORT	MIPR	46 TEST SQDN : EGLIN AFB, FL	-	-	-	-	-	0.400	Oct 2022	-	-	0.400	Continuing	Continuing	-
Subtotal			-	-		-		2.200		-		2.200	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AFDCS: Program Support Costs (PSC)	C/CPIF	CCSD : Lackland AFB, TX	-	-	-	-	-	17.000	Apr 2023	-	-	17.000	Continuing	Continuing	-
AFDCS: GPC/SHIPPING/TRAVEL	C/Various	VARIOUS : VARIOUS	-	-	-	-	-	0.700	Dec 2022	-	-	0.700	Continuing	Continuing	-
AFDCS: Engineering & Technical Assistance Support Services	Various	VARIOUS : VARIOUS	-	-	-	-	-	2.860		-	-	2.860	Continuing	Continuing	-
Subtotal			-	-		-		20.560		-		20.560	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	225.865	-	225.865	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 682001 / *AFDCS Continuous Capability Delivery*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AFDCS																												
AFDCS Development																												
AFDCS Deployment																												
AFDCS Support/Sustainment																												
AFDCS Test and Evaluation																												

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	**Project (Number/Name)** 682001 / AFDCS Continuous Capability Delivery

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AFDCS				
AFDCS Development	1	2023	4	2027
AFDCS Deployment	1	2023	4	2027
AFDCS Support/Sustainment	1	2023	4	2027
AFDCS Test and Evaluation	1	2023	4	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force										**Date:** April 2022	
Appropriation/Budget Activity 3600 / 8				**R-1 Program Element (Number/Name)** PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program				**Project (Number/Name)** 688EBC / Enhanced Budget Control			

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
688EBC: Enhanced Budget Control	-	0.000	0.000	15.061	0.000	15.061	0.000	0.000	0.000	0.000	0.000	15.061
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

In FY23, $15.061M was realigned to Budget Activity 08, PE 0308605F Project 682EBC to transparently define specific resources to be realigned in FY24 to USCYBERCOM for Enhanced Budget Control in accordance with FY21 NDAA, Section 1746.

This effort procures the Cyberspace Vulnerability Assessment/Hunter (CVA/H) kits for USCYBERCOM Cyber Protection Teams (CPTs). CVA/H kits are comprised of various commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) hardware and software required to perform the CVA/H missions in support of USCYBERCOM. The composition of procured items will vary from year-to-year and site-to-site based on operational requirements to achieve the weapon systems capabilities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: Enhanced Budget Controls	-	0.000	15.061
Description: This effort procures the Cyberspace Vulnerability Assessment/Hunter (CVA/H) kits for USCYBERCOM Cyber Protection Teams (CPTs). CVA/H kits are comprised of various commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) hardware and software required to perform the CVA/H missions in support of USCYBERCOM. The composition of procured items will vary from year-to-year and site-to-site to achieve the weapon systems capabilities. **FY 2022 Plans:** FY22 plans consolidated from FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures: - Continue providing hardware refresh of the CVA/H subsystems and technical refresh of CPTs. **FY 2023 Plans:** - Will continue to replace the subsystems fielded in FY20 for compliance with recent CVA/H hardware baseline standards for CPTs. **FY 2022 to FY 2023 Increase/Decrease Statement:**			

Exhibit R-2A, **RDT&E Project Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 688EBC / *Enhanced Budget Control*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
Funding decreased 1.559M with respect to FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures to align with current operational requirements.			
Accomplishments/Planned Programs Subtotals	-	0.000	15.061

C. Other Program Funding Summary ($ in Millions)
N/A

Remarks

D. Acquisition Strategy
Refer to Budget Activity 8, PE 0308605F, Project 682001, AFDCS Continuous Capability Delivery for description of acquisition strategy.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force													Date: April 2022		

Appropriation/Budget Activity 3600 / 8			R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program						Project (Number/Name) 688EBC / Enhanced Budget Control						

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFDCS: Hardware Procurement CPT	C/FFP	VARIOUS : VARIOUS	-	-		-		15.061	Mar 2023	-		15.061	Continuing	Continuing	-
Subtotal			-	-		-		15.061		-		15.061	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	15.061	-	15.061	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0308605F *I Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 688EBC *I Enhanced Budget Control*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AFDCS																												
Budget Control								████	████	████																		

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force				**Date:** April 2022	
Appropriation/Budget Activity 3600 / 8			**R-1 Program Element (Number/Name)** PE 0308605F / *Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program*	**Project (Number/Name)** 688EBC / *Enhanced Budget Control*	

<div align="center">Schedule Details</div>

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
AFDCS				
Budget Control	1	2023	4	2023

Note

In FY23, Budget Activity 8, PE 0308605F, Project 682001, AFDCS Continuous Capability Delivery funds in the amount of $15.061M were transferred to Budget Activity 8, PE 0308605F, Project 682EBC, in order to display budget controls which will be realigned in FY24 in accordance with the FY21 NDAA Section 1746.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											Date: April 2022	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs*					R-1 Program Element (Number/Name) PE 0308606F *I All Domain Common Platform (ADCP) - Software Pilot Program*							

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	190.112	0.000	190.112	175.196	190.889	187.666	188.307	0.000	932.170
682015: *All Domain Common Platform*	-	0.000	0.000	190.112	0.000	190.112	175.196	190.889	187.666	188.307	0.000	932.170
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2023, PE 0308606F, All Domain Common Platform (ADCP), Project 682015, was transferred from RDT&E, AF, PE 0303248F, All Domain Common Platform (ADCP), Project 675218, Applications Development, OPAF PE 0303248F, All Domain Common Platform (ADCP), Line Item 833140, Strategic Command and Control, and OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12A, Global C3I & Early Warning, in order to a participate in DoD's Budget Activity 08 (BA08) for Software and Digital Technology Pilot Program.

A. Mission Description and Budget Item Justification

This effort is not a new start. The FY 2018 NDAA Sections 873/874 directed OSD to streamline software development. The All Domain Common Platform (ADCP) is an OUSD(A&S) pilot initiative in which all lifecycle funding will be tracked under BA08, Software and Digital Technology Pilot Programs. Pilot programs will test the ability to execute modern software development practices encompassing development, procurement, modification and maintenance activities.

The All Domain Common Platform (ADCP) is an extensible cloud-based Infrastructure and Platform as a Service (IaaS/PaaS) hosting medium built to deliver highly resilient Command and Control (C2) mission applications and data to Airmen deployed around the world. The ADCP is a warfighting capability that enables any organization to build, deploy and monitor mission applications to the end state of production. Having applications operational in various environments ensures data is accessible as it is needed across Air Force mission sets. The ADCP's collection of technologies, services and tooling enables warfighter outcomes by abstracting away technical complexity and enabling the deployment of products onto its infrastructure.

ADCP is part of the overarching Air Force Life Cycle Management Center's Detachment-12 (Kessel Run) portfolio and this foundational system is the primary path to production for modernized C2 systems. ADCP is in collaboration with all primary customers of the platform and environment to include Air Operations Center (AOC), Intelligence Programs, the AF Rapid Capabilities Office (AFRCO), and others. ADCP is USAF's contributing platform to Joint All-Domain Command and Control (JADC2) for user-facing C2 capability with the resiliency requirements met through the escalating phases of warfare.

Funding directly supports design, development, enablement services, security, continuous authority to operate (cATO), engineering, network and platform architecture, prototyping efforts to increase platform, communications and network capabilities, data science, data engineering, reinforcement learning, machine learning, artificial intelligence, product management and program management to build functionality and scalability of the platform. ADCP uses Agile methodologies and DevSecOps practices to deliver improved capabilities at scale, in support of mission requirements. ADCP is an evolving, delivered and managed product distributed to customers ensuring the requisite tools and services needed to securely build, deploy and sustain successful C2 mission applications.

PE 0308606F: *All Domain Common Platform (ADCP) - Soft...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0308606F *I All Domain Common Platform (ADCP) - Software Pilot Program*	

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY 0.000M was expended for civilian pay expenses in this program element, and in CY 0.000M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	190.112	0.000	190.112
Total Adjustments	0.000	0.000	190.112	0.000	190.112
• 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 Adjustments	0.000	0.000	190.112	0.000	190.112

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
Title: ADCP Development	-	0.000	75.763
Description: Funding provided will support research and development efforts designed to enhance the scalability, performance, and reliability of the platform. These requirements will include design, enablement services, security, services necessary for continuous authority to operate (cATO), engineering, network and platform architecture, reliability testing, prototyping efforts to increase platform, communications, and network capabilities, data science, data engineering, reinforcement learning, machine learning, artificial intelligence, product and program management services. **FY 2022 Plans:** See PE 0303248F, All Domain Common Platform (ADCP), Project 675218, Applications Development **FY 2023 Plans:** - Complete construction of resilient production Kubernetes based platform on Unclass, SIPR and JWICS and migrate existing customers - Continue to deliver observability tooling in support of application customers as well as platform			

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0308606F *I All Domain Common Platform (ADCP) - Software Pilot Program*	

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
- Continue to support Continuous Integration/Continuous Delivery (CI/CD) pipelines - Continue migration to more containerized automated delivery - Continue to automate delivery and deployment operations - Continue to improve C2 mission application resilience and reliability and decrease lead time for new capability delivery ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Funding was increased due to transfer from PE 0303248F, All Domain Common Platform (ADCP), Project 675218, Applications Development.			
Title: ADCP Fielding ***Description:*** Provides the hardware, bench stock, software, technical documents, fielding support, and Capital Equipment Replacement required to ensure ADCP on-premise suites are operable and compliant. Funding will also be used to establish additional nodes to increase ADCP's functionality, redundancy, and resiliency. ***FY 2022 Plans:*** See PE 0303248F, All Domain Common Platform (ADCP), Line Item 833140, Strategic Command and Control ***FY 2023 Plans:*** - Conduct Capital Equipment Replacement of ADCP on-premises hardware suites to support its heightened security posture - Procure hardware and bench stock to assist in the care and upkeep of the hardware suites and network components at each location where on-premises hardware is operational - Establish a new on-premise hardware suite (notionally West Coast) ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Funding was increased due to transfer from PE 0303248F, All Domain Common Platform (ADCP), Line Item 833140, Strategic Command and Control.	-	0.000	30.738
Title: ADCP Sustainment ***Description:*** Provides resources for ADCP to sustain its multi-region cloud based Infrastructure and Platform as a Service (IaaS/PaaS) hosting medium. This funding directly supports business/software tools, licenses, cloud services at various classification levels, enablement services, management services to deliver an environment to support agile development (DevSecOps) and CI/CD services, security, continuous authority to operate (cATO), software engineering, site reliability, network and platform architecture, help desk support, communications and network capabilities, data science, data engineering, reinforcement learning, machine learning, artificial intelligence, warehouse services, product management and program management to build and maintain the functionality and scalability of the platform.	-	0.000	83.611

PE 0308606F: *All Domain Common Platform (ADCP) - Soft...*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*		**R-1 Program Element (Number/Name)** PE 0308606F *I All Domain Common Platform (ADCP) - Software Pilot Program*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
FY 2022 Plans: See OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12A, Global C3I & Early Warning *FY 2023 Plans:* - Maintain multi-region, multi-classification level cloud based IaaS and PaaS hosting medium required to securely build, deploy and sustain successful C2 and other mission applications - Continue to provide personnel, business/software tools, licenses, and management services required to maintain a software environment that supports DevSecOps and CI/CD of software - Maintain legacy IaaS hardware and software as applications migrate to modernized cloud environment - Expand help desk services to enable developers to utilize Kessel Run tools and services more efficiently and effectively *FY 2022 to FY 2023 Increase/Decrease Statement:* Funding was increased due to transfer from OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12A, Global C3I & Early Warning.			
Accomplishments/Planned Programs Subtotals	-	0.000	190.112

D. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

E. Acquisition Strategy
 The ADCP program is part of the Investment Master List (IML) and is operating as an approved Software Acquisition Pathway (SWP). The acquisition strategy is to continue efforts that are currently funded through PE 33248F. ADCP will also use Other Transaction Authority (OTA) to continue commercial best practices for software development and to continue scaling of the modern Infrastructure as a Service/Platform as a Service (IaaS/PaaS) solution. Activities are also accomplished via Military Interdepartmental Purchase Requests (MIPR). Additionally, significant technical expertise will be sought after via modular contracting approach and provided by Government Agencies, DoD Laboratory, Federally Funded Research and Development Centers (FFRDC), Academia, and Engineering & Professional Acquisition Support Services contractors as well as commercial industry partners.

PE 0308606F: *All Domain Common Platform (ADCP) - Soft...*
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force												Date: April 2022	
Appropriation/Budget Activity 3600 / 8						**R-1 Program Element (Number/Name)** PE 0308606F / All Domain Common Platform (ADCP) - Software Pilot Program						**Project (Number/Name)** 682015 / All Domain Common Platform	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ADCP Development	C/Various	Various : Multiple	-	-		-		50.086	Dec 2022	-		50.086	Continuing	Continuing	-
ADCP Fielding	C/Various	Various : Multiple	-	-		-		30.738	Dec 2022	-		30.738	Continuing	Continuing	-
ADCP Sustainment	C/Various	Various : Multiple	-	-		-		65.063	Dec 2022	-		65.063	Continuing	Continuing	-
		Subtotal	-	-		-		145.887		-		145.887	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ADCP Direct Mission Support	C/TBD	Various : Various	-	-		-		20.617	Dec 2022	-		20.617	Continuing	Continuing	-
ADCP Civilian Direct Cite Authority for Product Development	Allot	AFLCMC/FZA : TBD	-	-		-		11.122	Oct 2022	-		11.122	Continuing	Continuing	-
		Subtotal	-	-		-		31.739		-		31.739	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ADCP Engineering Services	Various	Various : Various	-	-		-		4.077	Oct 2022	-		4.077	Continuing	Continuing	-
ADCP Program Support	C/Various	Various : Various	-	-		-		8.409	Dec 2022	-		8.409	Continuing	Continuing	-
		Subtotal	-	-		-		12.486		-		12.486	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	190.112	-	190.112	Continuing	Continuing	N/A

Remarks

PE 0308606F: All Domain Common Platform (ADCP) - Soft...
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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308606F / All Domain Common Platform (ADCP) - Software Pilot Program	Project (Number/Name) 682015 / All Domain Common Platform

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
All Domain Common Platform																												
All Domain Common Platform																												

PE 0308606F: *All Domain Common Platform (ADCP) - Soft...*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0308606F *I All Domain Common Platform (ADCP) - Software Pilot Program*	**Project (Number/Name)** 682015 *I All Domain Common Platform*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
All Domain Common Platform				
All Domain Common Platform	1	2023	4	2027

Note

See PE 0303248F, All Domain Common Platform (ADCP), Project 675218, Applications Development for prior years development events.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											**Date:** April 2022	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*						R-1 Program Element (Number/Name) PE 0308607F *I Air Force Weather Programs - Software Pilot Program*						

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	58.063	0.000	58.063	60.468	63.029	69.041	70.458	0.000	321.059
682035: *Weather Data Analysis Inc 5*	-	0.000	0.000	58.063	0.000	58.063	60.468	63.029	69.041	70.458	0.000	321.059
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

PBES BPAC created (682035) instead of the 2 from the SAF/OSD guidance (683511 & 683512). WDA Inc 5 & WARPSpeed are both combined into this BPAC under the new PE until next round the change can occur due to PRCP lockout.

A. Mission Description and Budget Item Justification

1. Weather Data Analysis and Dissemination provides a cybersecure cloud computing-based platform supporting large-scale environmental data ingest, processing, and product generation, Continuous Integration/Continuous Delivery (CI/CD) and AI/ML environments for AFWS software development and deployment, and machine-to-machine dissemination of specific, mission-tailored weather data on-demand to support warfighter operations, weapon system interoperability, rapidly integrating into C2 nodes, and shortening the Combatant Commander kill chain. The Weather Data Analysis and Dissemination capability area includes activities for Weather Data Analysis Increment 5 (WDA Inc 5).

2. Product Tailoring Warfighter Applications (PTWA) provides software applications that provide and enhance environmental information to support rapid warfighter decision-making. PTWA includes the program, Weather Applications Rapid Production (WARPspeed), which is a suite of software applications developed and delivered across multiple security classification levels. WARPspeed encompasses weather workflow tools and decision aids used to tailor terrestrial and space environmental information, which include both Forecaster-in-the-Loop (FITL) and automated machine-to-machine processes enhanced by AI/ML. WARPspeed leverages the WDA Inc 5 cloud computing, data processing, and CI/CD and AI/ML platforms to rapidly develop, deliver, and sustain software capabilities, whether deployed into the AF Weather Virtual Private Cloud (AFW-VPC) or to warfighter processing nodes at the edge. The PTWA program Joint Environmental Toolkit (JET) subsumed several software and web development efforts previously aligned under the Weather Data Analysis and Dissemination capability area in FY 2021 and was renamed to WARPspeed. (NOTE: JET is not the same as WARPSpeed. JET was renamed as EWA and is not a component of WARPSpeed). PTWA and WARPspeed also include the machine learning Global Synthetic Weather Radar (GSWR) capabilities, which were previously aligned under Weather Forecasting.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force			Date: April 2022		

Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs	R-1 Program Element (Number/Name) PE 0308607F I Air Force Weather Programs - Software Pilot Program

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	58.063	0.000	58.063
Total Adjustments	0.000	0.000	58.063	0.000	58.063
• 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 Adjustments	0.000	0.000	58.063	0.000	58.063

C. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: WDA Inc 5	0.000	0.000	39.493	0.000	39.493

Description: WDA Inc 5 institutes a cloud computing-based platform enabling a transition from agile development to a CI/CD pipeline for software development and deployment efforts which will enable rapid updates to functionality and security measures. The WDA Inc 5 cloud computing platform will also provide an enterprise big data analytics capability and AI/ML platform, as well as supporting and funding development and deployment of web services, data management, platform monitoring, application on-boarding, and platform user management. Finally, the program will provide both classified and unclassified cloud computing platforms that communicate directly with C2 customers.

FY 2022 Plans:
FY 2022 funding will support the CI/CD pipeline modernization for weather software and applications and will further AI/ML platform integration and data integration to the AFW-VPC platform.

FY 2023 Base Plans:
Funding will support the CI/CD pipeline modernization for weather software and applications and will further AI/ML platform integration and new satellite data integration to the AFW-VPC platform.

FY 2023 OCO Plans:
N/A

FY 2022 to FY 2023 Increase/Decrease Statement:

PE 0308607F: Air Force Weather Programs - Software Pi...
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force			**Date:** April 2022		
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*			**R-1 Program Element (Number/Name)** PE 0308607F *I Air Force Weather Programs - Software Pilot Program*		

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**
New PE transfer of funds and re-alignment of 3600 and 3400 appropriations caused increase of funding amounts.					
Title: WARPSpeed	0.000	0.000	18.570	0.000	18.570
Description: WARPspeed develops and delivers a suite of software applications across multiple security classification levels to provide and enhance environmental intelligence to support rapid warfighter decision making. Major software developments include: the BIFROST Portal (formally Enterprise Environmental Platform (E2P)), Mission Services, Global Synthetic Weather Radar (GSWR), weather C2 visualization plug-ins and integration, and other forecast and climatology applications. *FY 2022 Plans:* Develop BIFROST Portal which will provide a single front entry point into the Air Force Weather Enterprise for all html-based capabilities for environmental content and services on all classification enclaves. Continue to enhance Mission Services, to include the continued development of environmental impacts web services. Continue to develop weather C2 visualization plug-ins to integrate weather data and software applications with various C2 systems. Continue BIFROST which will provide a single front entry point into the Air Force Weather Enterprise for all html-based capabilities for environmental content and services on all classification enclaves. *FY 2023 Base Plans:* Continue to enhance Mission Services, to include integration of contrails and cloud-free line of sight machine learning-based forecasts into environmental impacts web services. Continue to develop weather C2 visualization plug-ins to integrate weather data and software applications with various C2 systems. *FY 2023 OCO Plans:* N/A *FY 2022 to FY 2023 Increase/Decrease Statement:* New PE transfer of funds and re-alignment of 3600 & 3400 appropriations caused increase of funding amounts for FY23.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	58.063	0.000	58.063

PE 0308607F: *Air Force Weather Programs - Software Pi...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force	**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0308607F *I Air Force Weather Programs - Software Pilot Program*

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• RDTE 07 0305111F: *WEATHER SERVICE*	9.317	11.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.978

Remarks

E. Acquisition Strategy

WDA Inc 5: Sole Source, Small Business Innovation Research (SBIR) Phase III contract as primary contract activity, with augmenting pre-competed IDIQ contracts for specialized technical and software services.

WAPRSpeed: Multiple Firm Fixed Price and Cost Plus contracts procuring software development and sustainment services.

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2023 Air Force | **Date:** April 2022

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308607F / Air Force Weather Programs - Software Pilot Program	Project (Number/Name) 682035 / Weather Data Analysis Inc 5

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
WDA INC 5	Various	Not specified. : TBD	-	0.000		0.000		39.493	Feb 2023	-		39.493	Continuing	Continuing	-
Subtotal			-	0.000		0.000		39.493		-		39.493	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
WARPSpeed	Various	Not specified. : TBD	-	0.000		0.000		18.570	Feb 2023	-		18.570	Continuing	Continuing	-
Subtotal			-	0.000		0.000		18.570		-		18.570	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	0.000	0.000	58.063	-	58.063	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0308607F *I Air Force Weather Programs* *- Software Pilot Program*	**Project (Number/Name)** 682035 *I Weather Data Analysis Inc 5*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Weather Data Analysis																												
WDA Inc 5									███	███	███	███	███	███	███													
WARPSpeed									███	███	███	███	███	███														

PE 0308607F: *Air Force Weather Programs - Software Pi...*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 *I* 8	**R-1 Program Element (Number/Name)** PE 0308607F *I Air Force Weather Programs - Software Pilot Program*	**Project (Number/Name)** 682035 *I Weather Data Analysis Inc 5*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Weather Data Analysis				
WDA Inc 5	1	2023	3	2024
WARPSpeed	1	2023	3	2024

PE 0308607F: *Air Force Weather Programs - Software Pi...*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force										Date: April 2022	

Appropriation/Budget Activity
3600: *Research, Development, Test & Evaluation, Air Force* / BA 8: *Software and Digital Technology Pilot Programs*

R-1 Program Element (Number/Name)
PE 0308608F / *Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	5.794	0.000	5.794	5.935	6.145	6.418	6.648	Continuing	Continuing
682045: *Electronic Warfare Integrated Reprogramming*	-	0.000	0.000	5.794	0.000	5.794	5.935	6.145	6.418	6.648	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Develops software and data tools to perform Electronic Warfare Integrated Reprogramming (EWIR). EWIR provides analytical capabilities and reachback support for DoD acquisition, planning and mission execution activities. These capabilities ensure electronic warfare (EW) systems and integrated combat platforms correctly recognize and respond to enemy, friendly and noncombatant systems operating within the electromagnetic environment. The effort includes software and data tools used to identify electromagnetic spectrum emitter changes that impact combat defensive and electronic warfare systems and to conduct detailed analyses in support of operational mission planning, tactics, techniques and procedures (TTP) development, acquisition and test and evaluation. These analyses provide the means to understand the performance of systems in hostile environments, directly impacting the survivability of combat-coded USAF aircraft and aircrews. Funding for this exhibit directly supports efforts funded in PE 0207439F, Electronic Warfare Integrated Reprogramming (EWIR). Program funding was moved from PE 0207439F OMAF to PE 0308608F BA-8 RDTE as part of the BA-8 software pilot program.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary ($ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	5.794	0.000	5.794
Total Adjustments	0.000	0.000	5.794	0.000	5.794
• 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 Adjustments	0.000	0.000	5.794	0.000	5.794

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0308608F *I Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program*	

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2021**	**FY 2022**	**FY 2023**
Title: Software and Data Tool Development	-	0.000	5.794
Description: Software and data tool development in support of Electronic Warfare Integrated Reprogramming (EWIR). ***FY 2022 Plans:*** Software and data tool development in support of Electronic Warfare Integrated Reprogramming (EWIR). ***FY 2023 Plans:*** Software and data tool development in support of Electronic Warfare Integrated Reprogramming (EWIR). ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Program funding was moved from PE 0207439F OMAF to PE 0308608F BA-8 RDTE as part of the BA-8 software pilot program.			
Accomplishments/Planned Programs Subtotals	-	0.000	5.794

D. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

E. Acquisition Strategy
 Software and data tools in support of Electronic Warfare Integrated Reprogramming (EWIR) will be developed using a combination of contracted support and government teams.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force													**Date:** April 2022	
Appropriation/Budget Activity 3600 / 8						**R-1 Program Element (Number/Name)** PE 0308608F / Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program					**Project (Number/Name)** 682045 / Electronic Warfare Integrated Reprogramming			

Product Development ($ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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**
Software and Data Tool Development	C/CPAF	Various : Eglin AFB, FL	-	-		-		5.794	Apr 2023	-		5.794	Continuing	Continuing	-
Subtotal			-	-		-		5.794		-		5.794	Continuing	Continuing	N/A

	Prior Years	**FY 2021**		**FY 2022**		**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals	-	-		-		5.794	-	5.794	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308608F / *Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program*	**Project (Number/Name)** 682045 / *Electronic Warfare Integrated Reprogramming*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Software and Data Tool Development																												
Software and Data Tool Development											███	███	██															

Exhibit R-4A, **RDT&E Schedule Details:** PB 2023 Air Force		**Date:** April 2022
Appropriation/Budget Activity 3600 / 8	**R-1 Program Element (Number/Name)** PE 0308608F / *Electronic Warfare Integrated Reprogramming (EWIR) - Software Pilot Program*	**Project (Number/Name)** 682045 / *Electronic Warfare Integrated Reprogramming*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Software and Data Tool Development				
Software and Data Tool Development	3	2023	3	2024

PE 0308608F: *Electronic Warfare Integrated Reprogramm...*
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