	PE	PE Title	Level	&E by Activity (in Project Title	Activity	FY 2021 PR	FY 2020	FY 2019
		FEInd	Level		,			
tegory USAF						Subtotal: \$626,503	Subtotal: \$581,260	Subtotal: \$429,791
00/1	0602204F	Aerospace Sensors	2	Cyber Technology	Agile Mission	\$5,916	\$5,291	\$3,448
	0602204F	Aerospace Sensors	2	Cyber Technology	Systems Protection Vulnerability	\$4,709	\$4,096	\$2,661
	0602204F	Aerospace Sensors	2	Electronic Component Technology	Mitigation Advanced Highly Integrated Microsystems for ISR	\$8,333	\$6,893	\$6,671
	0602204F	Aerospace Sensors	2	Electronic Component Technology	EO/IR Components	\$10,246	\$8,725	\$9,148
	0602204F	Aerospace Sensors	2	Electronic Component Technology	Electronic Devices	\$8,715	\$7,467	\$7,615
	0602204F	Aerospace Sensors	2	Electronic Component Technology	Trusted Electronics for ISR Mission Systems	\$13,692	\$12,157	\$9,674
	0602204F	Aerospace Sensors	2	Electronic Warfare Technology	EO/IR Threat Warning and CM Tech	\$47,593	\$49,714	\$23,869
	0602204F	Aerospace Sensors	2	Electronic Warfare Technology	PNT Contested/ Denied Environments	\$13,276	\$9,663	\$0
	0602204F	Aerospace Sensors	2	Electronic Warfare Technology	RF Electronic Technologies	\$23,378	\$17,631	\$0
	0602204F	Aerospace Sensors	2	RF Sensors and CM Tech	Multi-Band/Multi- Beam Tech	\$13,498	\$12,705	\$11,160
	0602204F	Aerospace Sensors		RF Sensors and CM Tech	RF Sensor Tech	\$11,377	\$10,567	\$9,256
	0602204F	Aerospace Sensors	2	Sensor Fusion Tech	Multi-Domain Sensing Effects	\$8,206	\$6,535	\$0
	0602102F	Materials	2	Materials for Electronics, Optics, and Survivability	DE Hardened Materials	\$13,075	\$12,672	\$11,643
	0602102F	Materials	2	Materials for Electronics, Optics, and Survivability	IR Detector and EM Devince Materials	\$11,354	\$11,090	\$10,111
	0602102F	Materials	2	Materials for Electronics, Optics, and Survivability	Laser Source Materials	\$1,376	\$1,344	\$1,226
	0602605F	Directed Energy Technology	2	Advanced Weapons & Survivability Technology	High Power Microwave and Unconventional Weapon Technologies	\$7,555	\$9,316	\$11,176
	0602605F	Directed Energy Technology	2	Advanced Weapons & Survivability Technology	High Power Microwave Effect Mitigation Research	\$23,732	\$22,704	\$19,442
	0602605F	Directed Energy Technology	2	Lasers and Imaging Technology	High Energy Laser Technology / DE Assessment	\$70,117	\$65,641	\$75,499
	0602605F	Directed Energy Technology	2	Lasers and Imaging Technology	Optical Space Situational Awareness and Satellite Vulnerability	\$26,709	\$26,718	\$23,462
	0603035F	Next Gen Effects Dev/Demos	3	EW QRC	EO/IR Threat Warning and CM Tech	\$1,777	\$2,615	\$5,485
	0603035F	Next Gen Effects Dev/Demos	3	EW QRC	PNT Contested/ Denied Environments	\$9,663	\$16,336	\$1,711
	0603035F	Next Gen Effects Dev/Demos	3	EW QRC	RF Electronic Technologies	\$9,520	\$10,503	\$10,289
	0603035F	Next Gen Effects Dev/Demos	3	RF Warning and CM Technology	Electronic Attack	\$6,775	\$11,691	\$8,113
	0207134F	F-15E Squadrons		F-15	F-15 Radar Enhancements	\$69,728	\$69,523	\$45,831
	0207133F	F-16 Squadrons		F-16	AESA Radar	\$38,842	\$59,149	\$1,994
	0207417F	Airborne Warning and Control System (AWACS)	7	Airborne Warning & Control System (AWACS).	E-3 Electronic Protection	\$30,862	\$16,838	\$4,915
	0304260F	Airborne SIGINT Enterprises	7	Common Development	Common SIGINT Development	\$55,075	\$21,103	\$51,349

	PE	PE Title Leve		Project Title	Activity	FY 2021 PR	FY 2020	FY 2019
	0304260F	Airborne SIGINT Enterprises	7	COMPASS BRIGHT	COMPASS BRIGHT Tech Development	\$20,484	\$23,289	\$0
	0304260F	Airborne SIGINT Enterprises	7	RC-135 Airborne SIGINT Dev - Rivet Joint	RC-135 SIGINT Dev	\$45,066	\$33,396	\$50,577
	0207253F	Compass Call	7	Compass Call	Baseline Upgrade Development	\$15,854	\$15,888	\$13,466
Army					23	\$283,896	\$113,656	\$63,451
	0602146A	Network C3I Tech	2	CEMA Camouflage Technology	Multiple Activities	\$9,841	\$9,716	\$0
	0602146A	Network C3I Tech	2	EW Technology	EW Assessment Tech	\$655	\$578	\$0
	0602146A	Network C3I Tech	2	Energy Efficient Devices	Energy Efficient Electronic and Photonic Components	\$5,473	\$5,166	\$0
	0602146A	Network C3I Tech	2	Narrowband SATCOM Tech	Narrowband SATCOM Tech	\$999	\$0	\$0
	0602146A	Network C3I Tech	2	Robust, Resilient and Intelligent C3I Tech	Smart Networks and Distributed Sensing for C3I	\$280	\$5,337	\$0
	0602146A	Network C3I Tech	2	Stand-In Advanced RF Effects (STARE)	STARE	\$1,998	\$1,886	
	0603463A	Network C3I Advanced Tech	3	EW for Manuever Ops (EMO) Adv Tech	EW for Manuever Ops	\$1,637	\$2,846	\$0
	0603463A	Network C3I Advanced Tech	3	EW for Manuever Ops (EMO) Adv Tech	Simultaneous Countermeasures Active Recon and Surveillance (SCARS)	\$1,279	\$1,111	\$0
	0603463A	Network C3I Advanced Tech	3	UNT-Every Receiver is a Sensor Adv Tech	Multi-Intelligence Modernization supporting Multifunction Ops	\$2,997	\$2,827	\$0
	0603463A	Network C3I Advanced Tech	3	Narrowband SATCOM Adv Tech	Narrowband SATCOM Adv Tech	\$4,995	\$0	\$0
	0603463A	Network C3I Advanced Tech	3	NAWAR Advanced Tech	PNT Situational Awareness (SATCOM Adv Tech)	\$2,535	\$0	\$0
	0603463A	Network C3I Advanced Tech	3	NextGen HF Adv Tech	NextGen HF Adv Tech	\$6,994	\$5,568	\$0
	0603463A	Network C3I Advanced Tech	3	Stand-In Advanced RF Effects (STARE)	STARE	\$2,997	\$0	\$0
	0603457A	C3I Cyber Adv Dev	3	Offensive Cyber Operations Mirror Adv Tech	Offensive Operations	\$1,998	\$2,000	\$6,237
	0604021A	EW Tech Maturation	4	EW Tech Mat (MIP)	Systems Engineering and component Prototyping	\$20,558	\$15,761	\$0
	0603766A	Tactical Electronic Surveillance System - Adv Tech	4	Tactical Exploitation of National Capability - MIP	Multi-Domain Sensing System (MDSS)	\$86,800	\$0	\$0
	0603766A	Tactical Electronic Surveillance System - Adv Tech	4	Tactical Exploitation of National Capability - MIP	Tactical Intelligence Targeting Node (TITAN) Space Prototype	\$30,000	\$0	\$0
	0604270A 0304270A	EW Development EW Development		EW PMT EW Development - MIP	EW PMT Signal of Interest Upgrades	\$14,437 \$8,647	\$22,447 \$4,024	\$17,714 \$1,881
	0304270A	EW Development	5	Terrestrial Layer System MIP	Platform Integration	\$28,036	\$0	\$0
	0304270A	EW Development	5	Terrestrial Layer System MIP	Test Events	\$2,751	\$0	\$0
	0604270A	EW Development	5	Integrated EW Systems	IEWS - CREW	\$2,198	\$5,204	\$7,528
	0604270A	EW Development	5	Multi-Function EW (MFEW)	MFEW Air Large	\$45,791	\$29,185	\$30,091
OSD					6	\$67,361	\$34,586	\$34,802
	061101E	Defense Research Sciences	1	Electronic Sciences	Ultra-Wide Bandgap Semiconductor	\$5,801	\$0	\$0
	0602303E	Information & Communications Technology	2	High Productivity, High Performance Responsive Arch	RF Machine Learning Sys (RFMLS)	\$6,576	\$16,277	\$21,329

	PE		Level	Project Title	Activity	FY 2021 PR	FY 2020	FY 2019
	0604875D	Joint Systems Architecture Dev	6	Electronic Warfare Executive Committee	EW EXCOM	\$4,084	\$5,501	\$995
	0603941D	Test & Evaluation / S&T	3	EW Test	EW Test	\$45,980	\$12,808	\$12,478
	0603338D	Defense Modernization and Prototyping	3	Emerging Capabilities Tech Dev	Electromagnetic Spectrum Dominance Focus Area	\$4,916	\$0	\$0
	0603338D	Defense Modernization and Prototyping	3	Emerging Capabilities Tech Dev	Silent Hammer	\$4	\$0	\$0
Navy					44	\$1,429,006	\$1,309,718	\$1,318,193
	0601153N	Defense Research Sciences	1	Defense Research Sciences	Sensors, Electronics and EW	\$52,862	\$48,804	\$47,295
	0602271N	Electromagnetic Systems Applied Research	2	Electromagnetic Systems Applied Research	Electronic Warfare Technology	\$42,634	\$43,534	\$37,706
	0602271N	Electromagnetic Systems Applied Research	2	Electromagnetic Systems Applied Research	EO/IR Technologies	\$7,559	\$7,141	\$7,102
	0602271N	Electromagnetic Systems Applied Research	2	Electromagnetic Systems Applied Research	Solid State Electronics	\$9,841	\$13,520	\$12,620
	0602271N	Electromagnetic Systems Applied Research		Electromagnetic Systems Applied Research	Vacuum Electronics Power Amplifiers	\$1,972	\$2,390	\$2,366
	0603271N	Electromagnetic Systems Advanced Tech		Electromagnetic Systems Adv Tech	Electronic and Electromagnetic Systems	\$4,180	\$4,180	\$4,180
	0603673N	Future Naval Capabilities Advanced Tech Dev	3	Future Naval Capabilities Adv Tech Dev	Information Warfare	\$50,169	\$61,814	\$73,074
	0603382N	Advanced Combat Systems Tech	4	EMW/SEWIP/SSEE Accelerator	EMW/SEWIP/SSEE Accelerator	\$21,508	\$23,630	\$14,389
	0604659N	Precision Strike Weapons Development Program	4	Air Launched Decoy Development	Miniature Air Launched Decoy (MALD)	\$79,724	\$105,306	\$74,732
	0604757N	Ship Self Defense (Engage: Soft Kill/ EW)	5	Advanced Offboard EW	AOEW-Decoy Development (DDE) Development	\$21,169	\$32,300	\$49,981
	0604757N	Ship Self Defense (Engage: Soft Kill/ EW)	5	Advanced Offboard EW	AOEW-Decoy Development (DDE) Gov Eng	\$23,645	\$19,898	\$20,710
	0604757N	Ship Self Defense (Engage: Soft Kill/ EW)	5	Nulka Decoy	Nulka Decoy Subsystem	\$5,291	\$5,090	\$3,805
	0604757N	Ship Self Defense (Engage: Soft Kill/ EW)	5	SEWIP Block 3	SEWIP Block 3 Dev	\$10,831	\$14,804	\$33,942
	0604757N	Ship Self Defense (Engage: Soft Kill/ EW)	5	SEWIP Block 4	SEWIP Block 3 Gov Eng	\$12,062	\$7,325	\$5,418
	0604757N	Ship Self Defense (Engage: Soft Kill/ EW)	5	Shipboard EW Improvement Program	EW Rapid Capability Insertion Process (EW RCIP)	\$16,375	\$15,865	\$10,913
	0604270N	Electronic Warfare Development	5	EW Counter Response	EMW Resource Allocation Mgmt (RAM)	\$640	\$125	\$0
	0604274N	Next Generation Jammer (NGJ)	5	NGJ	NGJ Mid-Band Integration	\$45,949	\$71,999	\$70,618
	0604274N	Next Generation Jammer (NGJ)	5	NGJ	NGJ Mid-Band Primary Hardward Dev	\$291,952	\$268,993	\$235,665
	0604274N	Next Generation Jammer (NGJ)		NGJ	NGJ Mid-Band Support & Mgmt	\$7,466	\$7,321	\$5,637
	0604274N	Next Generation Jammer (NGJ)		NGJ	NGJ Mid-Band Sys Eng	\$27,957	\$55,584	\$49,604
	0604274N	Next Generation Jammer (NGJ)		NGJ	NGJ Mid-Band T&E	\$104,356	\$87,987	\$65,205
	0604282N	Next Generation Jammer (NGJ) Increment II	5	NGJ Increment II	NGJ Low-Band Integration	\$28,111	\$9,345	\$0

PE	PE Title	Level	Project Title	Activity	FY 2021 PR	FY 2020	FY 2019
0604282N	Next Generation Jammer (NGJ) Increment II	5	NGJ Increment II	NGJ Mid-Band Primary Hardward Dev	\$100,625	\$38,641	\$56,150
0604282N	Next Generation Jammer (NGJ) Increment II	5	NGJ Increment II	NGJ Mid-Band Support & Mgmt	\$2,767	\$2,713	\$3,788
0604282N	Next Generation Jammer (NGJ) Increment II	5	NGJ Increment II	NGJ Mid-Band Sys Eng	\$3,170	\$3,672	\$541
0604234N	Advanced Hawkeye	5	E-2D Adv Hawkeye	Data Links	\$7,250	\$13,586	\$9,266
0604234N	Advanced Hawkeye	5	E-2D Adv Hawkeye	Integration, Test, and Training	\$100,681	\$82,741	\$68,235
0604234N	Advanced Hawkeye	5	E-2D Adv Hawkeye	Mission Systems	\$123,614	\$76,808	\$69,258
0604234N	Advanced Hawkeye	5	E-2D Adv Hawkeye	Sensors	\$59,967	\$25,571	\$23,934
0604269N	EA-18 Squadrons	5	EA-18G Development	EA-18G AEA System Enhancement (ASE) and Integrated Capabilities Package (ICP-3)	\$32,280	\$47,065	\$118,632
0604270N	EW Development	5	MAGTF EW Aviation Dev	Intrepid Tiger II (AN/ ALQ-231)	\$10,036	\$5,075	\$9,811
0605864N	Test & Evaluation Support	6	NAWC Weapons Division	Threat/Target Systems	\$11,713	\$11,804	\$11,454
0605866N	Navy Space & Electronic Warfare Support	6	EMC & RF Mgmt	Afloat EMSO Program (AESOP)	\$415	\$300	\$324
0605866N	Navy Space & Electronic Warfare Support	6	EMC & RF Mgmt	EMP Survivability	\$945	\$660	\$811
0605866N	Navy Space & Electronic Warfare Support	6	EMC & RF Mgmt	Real-Time Spectrum Operations (RTSO)	\$0	\$0	\$13,220
0605866N	Navy Space & Electronic Warfare Support	6	EMC & RF Mgmt	Shipboard Electromagnetic Compatibility Improvement Program (SEMCIP)	\$1,817	\$1,273	\$1,677
0304785N	Tactical Cryptologic Systems	5	Shipboard IW Exploit	Integrated Comms and Sys Increment II (ICADS)	\$6,431	\$8,300	\$8,838
0304785N	Tactical Cryptologic Systems	5	Shipboard IW Exploit	· · ·	\$7,982	\$10,888	\$8,148
0304785N	Tactical Cryptologic Systems		Shipboard IW Exploit		\$4,286	\$5,328	\$5,682
0304785N	Tactical Cryptologic Systems		Shipboard IW Exploit		\$34,609	\$18,732	\$16,717
0204136N	F/A-18 Squadrons	7	F/A-18 Radar Upgrades	Distributed Targeting-Counter Electronic Attack Software Dev	\$7,629	\$8,302	\$6,522
0204575N	Electronic Warfare Readiness Support	7	Information Warfare System	EW/IW/CNO and Countermeasures	\$37,089	\$30,591	\$45,188
0206625M	USMC Intelligence/ Electronics Warfare Sys	7	Intel C2 Sys	Comms Emitter Sensing Attacking Sys (CESAS)	\$4,255	\$5,193	\$9,990
0206625M	USMC Intelligence/ Electronics Warfare Sys	7	Intel C2 Sys	Tactical SIGINT Collection Sys (TSCS)	\$5,192	\$5,520	\$5,045