

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2019 Air Force	<b>Date:</b> February 2018
--	----------------------------

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 3: Advanced Technology Development (ATD)					PE 0303467F I SENSR Spectrum Pipeline SRF							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	6.904	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
632610: Activities	-	6.904	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

The Commercial Spectrum Enhancement Act (CSEA) of 2004 created the Spectrum Relocation Fund (CSEA, Title II of P.L. 108-494) to provide a centralized and streamlined funding mechanism through which Federal agencies can recover the costs associated with relocating their radio communications systems from certain spectrum bands, which were authorized to be auctioned for commercial purposes.

On January 29, 2015, the Federal Communications Commission completed an auction of Advanced Wireless Service licenses in the 1695-1710 Megahertz (MHz), 1755-1780 MHz, and 2155-2180 MHz bands (collectively, the "AWS-3" bands). On June 23, 2015, the Office of Management and Budget (OMB) notified Congress of the forthcoming transfer of \$5.030 billion to federal agencies with systems affected by the AWS-3 transition. Following the conclusion of the 30-day statutory waiting period, OMB transferred the funds to the federal agencies.

The Department of Defense (DoD) received \$3.500 billion of the auction proceeds and created a \$500 million Spectrum Access Research and Development Program (SAR&DP) to investigate new DoD technologies. The SAR&DP encompasses spectrum technology development that enables the DoD to perform its missions using spectrum-dependent systems in a manner that preferably enhances operational readiness and capability. Being able to operate in accordance with spectrum allocations resulting after the spectrum auction is a necessary, but not sufficient requirement for pursued technology solutions. DoD's transition out of or sharing of the auctioned bands can only be successful if the research and development solutions are sufficiently resilient (survivable and electronically protected) to operate in both the United States and congested/contested spectrum environments wherever forces will be deployed.

This program represents the Air Force investment within the SAR&DP.

This program is in Budget Activity 3, Advanced Technology Development because this budget activity includes development of subsystems and components and efforts to integrate subsystems and components into system prototypes for field experiments and/or tests in a simulated environment.

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force				Date: February 2018			
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 3: Advanced Technology Development (ATD)		R-1 Program Element (Number/Name) PE 0303467F I SENSr Spectrum Pipeline SRF					
B. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Previous President's Budget		0.000	0.000	0.000	0.000	0.000	
Current President's Budget		6.904	0.000	0.000	0.000	0.000	
Total Adjustments		6.904	0.000	0.000	0.000	0.000	
• 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		6.904	0.000	0.000	0.000	0.000	
Change Summary Explanation							
Other Adjustment of \$6.904 million in FY 2017 due to Air Force portion of the Department of Defense Spectrum Access Research and Development Program created from the auction of Advanced Wireless Service licenses.							
C. Accomplishments/Planned Programs (\$ in Millions)					FY 2017	FY 2018	FY 2019
Title: Air Force Spectrum Access Research & Development Program (SAR&DP)					6.904	0.000	0.000
Description: The SAR&DP encompasses spectrum technology development that enables Department of Defense spectrum-dependent systems to satisfy operational readiness and capability needs. Being able to operate in accordance with spectrum allocations resulting after the spectrum auction is necessary, but not sufficient, for pursued technology solutions. The Department of Defense transition out of or sharing of the auctioned bands can only be successful if the research and development solutions are effective (for example, survivable, electronically protected, et cetera) while operating in both the United States and congested/contested spectrum environments wherever forces will be deployed.							
FY 2018 Plans: N/A							
FY 2019 Plans: N/A							
FY 2018 to FY 2019 Increase/Decrease Statement: No change from FY 2018 to FY 2019. Budget for Air Force portion of the Department of Defense Spectrum Access Research and Development Program is created from the auction of Advanced Wireless Service licenses.							
Accomplishments/Planned Programs Subtotals					6.904	0.000	0.000

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2019 Air Force		<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 3: Advanced Technology Development (ATD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0303467F / <i>SENSR Spectrum Pipeline SRF</i>	
<p><b><u>D. Other Program Funding Summary (\$ in Millions)</u></b> N/A</p> <p><b><u>Remarks</u></b></p> <p><b><u>E. Acquisition Strategy</u></b> N/A</p> <p><b><u>F. Performance Metrics</u></b> Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.</p>		