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 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0304260F / *Airborne SIGINT Enterprise*							
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	-	117.859	93.546	108.528	0.000	108.528	120.214	88.975	93.607	95.794	Continuing	Continuing
675180: *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*	-	45.066	42.774	42.439	0.000	42.439	43.345	41.598	45.233	46.344	Continuing	Continuing
675183: *Common Development (Airborne SIGINT Development - Common Development)*	-	44.824	28.698	42.849	0.000	42.849	59.307	29.483	30.103	30.773	Continuing	Continuing
675185: *COMPASS BRIGHT*	-	20.484	14.545	15.313	0.000	15.313	9.473	9.652	9.857	10.076	Continuing	Continuing
675186: *Special Programs (Airborne SIGINT Development - Special Platforms)*	-	7.485	7.529	7.927	0.000	7.927	8.089	8.242	8.414	8.601	Continuing	Continuing

Note

Project 675185, (COMPASS BRIGHT), changed from (Non-Traditional SIGINT (NTS))

A. Mission Description and Budget Item Justification

This program funds multi-domain, multi-Intelligence, Surveillance and Reconnaissance (ISR) research, development, test and evaluation (RDT&E) efforts in support of the National Defense Strategy (NDS), as applied by the Air Force in the Next Generation ISR Dominance Flight Plan. Specifically, Program Element (PE) 0304260F provides authorized and appropriated funding to Signals Intelligence (SIGINT) RDT&E efforts for utilization on airborne platforms.

The future ISR portfolio will consist of multi-domain, multi-intelligence systems to meet emerging ISR threats across the entire conflict spectrum. The Airborne SIGINT Enterprise (ASE) PE is integral to developing the SIGINT component of the multi-domain, multi-ISR system capable of maintaining the warfighter's decision advantage through all ranges of military operations, to include highly contested environments (HCE).

ASE Program funds are distributed to projects based on the development priorities established by the USAF SIGINT Capabilities Working Group (SCWG), which is chartered to guide the ASE capability investment. When required, the USAF may move funds between ASE projects, developing the highest priority projects in response to urgent (e.g., JUON) and emerging (e.g., JEON) warfighter needs.

The ASE Program participates in the development, integration, testing, and implementation of International and Air Force standards (e.g., North Atlantic Treaty Organization (NATO) standardization) to ensure Joint, Allied, and Coalition interoperability with ASE fielded systems. ASE funds lead the modernization efforts including existing airborne platform sensors, and where appropriate, their interfaces with the Air Force Distributed Common Ground System (AF DCGS). The ASE Program approach is a synergistic development effort providing Air Force-wide ISR capabilities consistent with the NDS.

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 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*

ASE will use the Air Force SIGINT Architecture (AFSA) for planning and decision-making. AFSA is focused on employing open architecture standards whenever possible, to allow maximum effectiveness, efficiency and flexibility of development upgrades with multi-domain interoperability. The primary goal is to produce an open system architecture-based, capability-focused SIGINT investment strategy for the USAF.

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 FY21 0.857M was expended for civilian pay expenses in this program element, and in FY22 1.742M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	127.876	97.546	0.000	0.000	0.000
Current President's Budget	117.859	93.546	108.528	0.000	108.528
Total Adjustments	-10.017	-4.000	108.528	0.000	108.528
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	-4.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-10.017	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	108.528	0.000	108.528

Change Summary Explanation

FY21 decrease due to approved BTR for higher Air Force priorities and current-for-cancel bill.
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.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0304260F / *Airborne SIGINT Enterprise*	Project (Number/Name) 675180 / *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*	

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
675180: *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*	-	45.066	42.774	42.439	0.000	42.439	43.345	41.598	45.233	46.344	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports design studies, engineering analysis, non-recurring engineering, and other efforts associated with the integration and modification of the RC-135 SIGINT sensors and their associated air and ground components. Through extensive utilization of commercial-off-the-shelf (COTS) based solutions to field needed capabilities, it also incurs a need for continuous identification of suitable replacements for components affected by Diminishing Manufacturing Sources and integration efforts consistent with the COTS technology cycle. These efforts provide required engineering for preliminary assessments of technical feasibility, operability, or military utility as well as specific engineering implementations integrated into the various baseline modifications. These funds will be disbursed among the RC-135V/W RIVET JOINT, the RC-135U COMBAT SENT, and the RC-135S COBRA BALL programs. Funding reflects the SCWG priorities and the accomplishment of other Airborne SIGINT Enterprise initiatives.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: RC-135 SIGINT Development	45.066	42.774	42.439	-	42.439
Description: Non-Recurring Engineering for the RC-135 signals intelligence systems. See Classified Budget Exhibits (PE 0305207F)					
FY 2022 Plans: - Developing SIGINT efforts for the RC-135 fleet to include new signal sets and upgrades to current capabilities. See PE 0305207F for classified details. Classified requirements POC is HAF AF/A2OO (704) 614-7317.					
FY 2023 Base Plans: - Will continue SIGINT development efforts for the RC-135 fleet to include new signal sets and upgrades to current capabilities. See PE 0305207F for classified details. Classified requirements POC is HAF AF/A2OO (704) 614-7317.					
FY 2022 to FY 2023 Increase/Decrease Statement: Decrease in funding is due to realignment of funds to higher Air Force priorities.					
Accomplishments/Planned Programs Subtotals	45.066	42.774	42.439	-	42.439

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675180 / *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*

C. 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
• APAF 05 Line Item DARP01: *RC-135*	191.332	207.596	212.828	-	212.828	219.499	220.967	224.045	228.860	Continuing	Continuing

Remarks

The funds within Program 0305207F procure all necessary aircraft modifications for the RC-135 program and include those funds necessary to field SIGINT capabilities developed under Project 675180 of the ASE. Not all procurement funds in #DARPO1: RC-135 are for ASE SIGINT projects.

D. Acquisition Strategy

Aircraft, aircraft sensor systems, and associated ground support system modifications planned include the procurement, fielding and logistical support for future RC-135V/W RIVET JOINT, RC-135U COMBAT SENT and RC-135S COBRA BALL baseline configurations. Development and integration is managed by the Big Safari Systems Group. They employ evolutionary acquisition approaches to field incremental capability improvements.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675180 / *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*

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
RC-135 SIGINT Development	SS/ Various	L3 Harris : Greenville, TX	-	45.066	Jan 2021	42.774	Jan 2022	42.439	Jan 2023	-		42.439	Continuing	Continuing	-
		Subtotal	-	45.066		42.774		42.439		-		42.439	Continuing	Continuing	N/A

Remarks

Above contract method/type will be CPFF and FFP

	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	-	45.066		42.774		42.439		-		42.439	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675180 / *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*

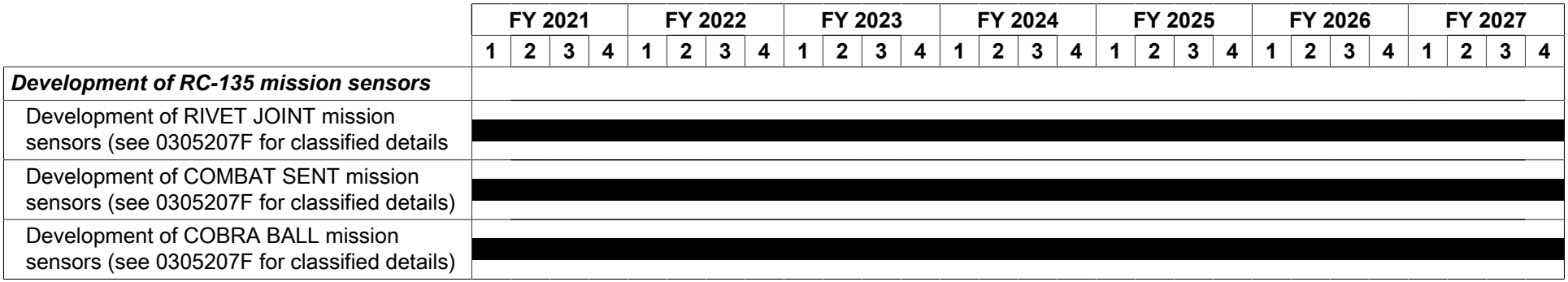

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675180 / *RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Development of RC-135 mission sensors				
Development of RIVET JOINT mission sensors (see 0305207F for classified details	1	2021	4	2027
Development of COMBAT SENT mission sensors (see 0305207F for classified details)	1	2021	4	2027
Development of COBRA BALL mission sensors (see 0305207F for classified details)	1	2021	4	2027

Note

Requirements documentation is classified. Classified requirements POC is HAF AF/A2/6UO (703) 614-7317

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0304260F / *Airborne SIGINT Enterprise*	Project (Number/Name) 675183 / *Common Development (Airborne SIGINT Development - Common Development)*	

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
675183: *Common Development (Airborne SIGINT Development - Common Development)*	-	44.824	28.698	42.849	0.000	42.849	59.307	29.483	30.103	30.773	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Common Development project supports airborne SIGINT design studies, engineering analysis, non-recurring engineering (NRE), program management, and other efforts associated with support to the fielded Airborne Signals Intelligence Payload (ASIP) and the development of future SIGINT sensors and their associated air and ground components. The Common Development project also supports the development and integration of new sensor capabilities, quick reaction capabilities, and replacement components affected by Diminishing Manufacturing Sources and Material Shortages (DMSMS).

Development supports the ASIP system and follow-on SIGINT sensors. The ASIP sensor provides a common SIGINT system, allowing for maximum coverage of the electromagnetic spectrum through the use of an integrated high and low band system. Future SIGINT sensors are being developed through the implementation of open architecture concepts, and enabling the rapid integration of new signals of interests. Future SIGINT sensor efforts will address the NDS and Next Generation ISR Dominance Flight Plan identified needs for multi-ISR systems in order to sustain SIGINT operations in a highly contested environment.

This project also supports overarching Airborne SIGINT Enterprise Program common development to include, but not limited to, the Air Force SIGINT Architecture maintenance, SIGINT modeling and simulation efforts, and technology development and risk reduction through the Air Force Research Lab managed Open Architecture Technology Lab (OATL). Capability improvements needed to exploit service identified signals of interest will be identified as priorities by the Air Force SCWG. This project provides the warfighter increased SIGINT combat capability via rapid acquisition. Capability enhancements are implemented as soon as the ASE technology achieves satisfactory risk levels. ASE developed Sensors will be integrated and tested on available platforms, funding permitting.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver technology and sensor capabilities. The use of such program funds would be in addition to civilian pay expenses budgeted in program element 0605831F. In FY20 0.177M and in FY21 0.246M was expended for civilian pay expenses in this program element.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Common SIGINT Development	44.824	28.698	42.849	-	42.849
Description: Develop and test common open architecture compliant SIGINT system for multiple SIGINT platforms, to include ASIP support and follow-on SIGINT sensors using an open system architecture to the					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675183 / *Common Development (Airborne SIGINT Development - Common Development)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
maximum extent possible. Additionally, will advance testing capabilities through the Open Architecture Technology Lab for current and future SIGINT sensors. ***FY 2022 Plans:*** - Continue to develop new signals capabilities and enhancements. Details are classified. - Continue to enhance OATL infrastructure to support future SIGINT sensor development and testing. - Leverage sensor development activities to support off-the-shelf ASIP DMS solution. - Continue to evaluate open architecture compliance of SIGINT sensor prototypes in the OATL. ***FY 2023 Base Plans:*** - Will continue to develop new signals capabilities and enhancements. Details are classified. - Will continue to enhance OATL infrastructure to support future SIGINT sensor development and testing. - Will Leverage sensor development activities to support off-the-shelf ASIP DMS solutions. - Will continue to evaluate open architecture compliance of SIGINT sensor prototypes in the OATL. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY23 increase due to continued development, integration and testing of airborne SIGINT Modernization capability, coupled with continued development of OATL. Increase also a factor of FY22 funding rephased to FY23-24 to align funds to program schedule					
Accomplishments/Planned Programs Subtotals	44.824	28.698	42.849	-	42.849

C. 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
• APAF 05 Line Item HAWK00: *RQ-4 Mods*	126.340	117.382	0.000	-	0.000	-	-	-	-	167.265	410.987
• RDTE 07 PE 0305202F: *Dragon U-2*	1.840	3.920	0.000	-	0.000	-	-	-	-	0.000	5.760

Remarks

Not all Other Program Funding is associated with SIGINT.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675183 / *Common Development (Airborne SIGINT Development - Common Development)*

D. Acquisition Strategy

SIGINT capabilities will be developed and integrated onto various platforms using an evolutionary acquisition approach to field incremental capability improvements, leveraging the OATL to incorporate platform agnostic, open system architecture. Requirements as validated and prioritized by the SCWG, will be executed through acquisition strategies employing maximum use of Middle Tier Acquisition (MTA) authorities to include Section 804 rapid prototyping. The ASIP DMS solution will be acquired and delivered by contracting with the appropriate vendor while leveraging any existing USG capabilities that have already been developed.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675183 / *Common Development (Airborne SIGINT Development - Common 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
ASIP Upgrades Increment 2 - Build A; SIL / Cyber Support	SS/CPIF	Northrop Grumman : San Jose, CA	-	1.053	Aug 2021	-		-		-		-	Continuing	Continuing	-
Open Architecture Technology Lab (OATL)	Various	Various : Various	-	8.496	Mar 2021	8.000	Mar 2022	8.000	Mar 2023	-		8.000	Continuing	Continuing	-
Global High-Altitude Open-system Sensor Technology (GHOST)	Various	Various : Various	-	29.471	Mar 2021	0.000	Apr 2022	0.000	Mar 2023	-		0.000	Continuing	Continuing	-
Future SIGINT Programs	Various	Various : Various	-	-		10.412	May 2022	28.363	Dec 2022	-		28.363	Continuing	Continuing	-
Air Force SIGINT Architecture (AFSA)	Various	AECOM : Annapolis Junction, MD	-	4.242	Feb 2021	5.000	Dec 2021	5.000	Dec 2022	-		5.000	Continuing	Continuing	-
		Subtotal	-	43.262		23.412		41.363		-		41.363	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
PMA	Various	Various : Dayton, OH	-	1.562	Feb 2021	5.286	Jan 2022	1.486	Jan 2023	-		1.486	Continuing	Continuing	-
		Subtotal	-	1.562		5.286		1.486		-		1.486	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	-	44.824		28.698		42.849		-		42.849	Continuing	Continuing	N/A

Remarks

- Funding increase due to returning to normal funding levels and supports future SIGINT sensor development and potential prototyping efforts ramping up in FY23.
- ASIP Increment 2 Build A development efforts and support efforts to maintain the ASIP Systems Integration Lab (SIL) and cybersecurity authority to operate were ended in FY21, and have begun transition to the airborne platforms.
- Open Architecture Technology Lab (OATL) technology development and risk reduction efforts will continue to demonstrate rapid technology insertion.

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675183 / *Common Development (Airborne SIGINT Development - Common Development)*

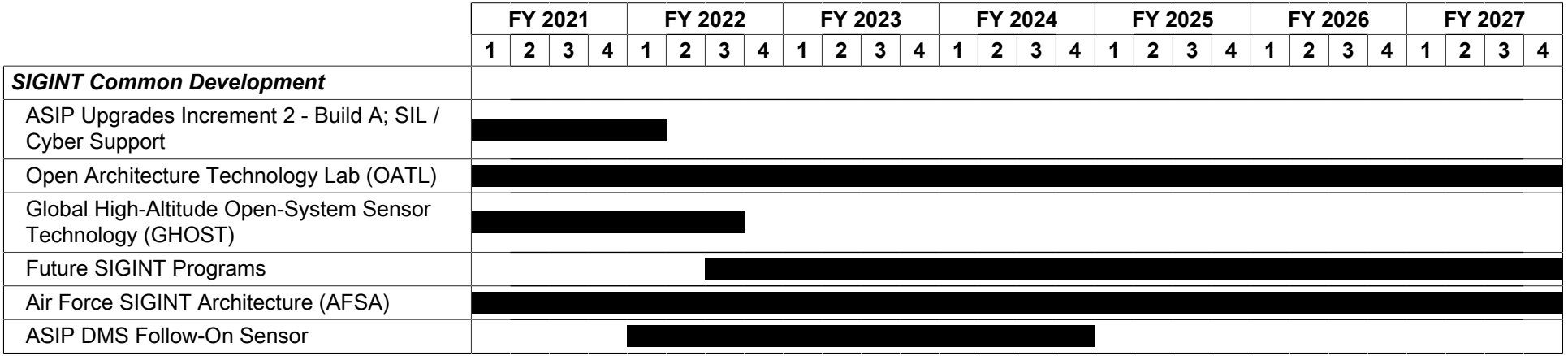

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675183 / *Common Development (Airborne SIGINT Development - Common Development)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SIGINT Common Development				
ASIP Upgrades Increment 2 - Build A; SIL / Cyber Support	1	2021	1	2022
Open Architecture Technology Lab (OATL)	1	2021	4	2027
Global High-Altitude Open-System Sensor Technology (GHOST)	1	2021	3	2022
Future SIGINT Programs	3	2022	4	2027
Air Force SIGINT Architecture (AFSA)	1	2021	4	2027
ASIP DMS Follow-On Sensor	1	2022	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0304260F / *Airborne SIGINT Enterprise*	Project (Number/Name) 675185 / *COMPASS BRIGHT*	

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
675185: *COMPASS BRIGHT*	-	20.484	14.545	15.313	0.000	15.313	9.473	9.652	9.857	10.076	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The COMPASS BRIGHT program develops, demonstrates, and rapidly transitions advanced Air Force specific SIGINT and MULTI-INT capabilities against emerging and future target signals of interest. This program pursues SIGINT technologies for program transition, to include Communications Intelligence (COMINT), Electronic Intelligence (ELINT), Audio, Analytics, Special Signals of Interest, and Radio Frequency Measurement and Signature Intelligence (MASINT). Compass Bright will pursue MULTI-INT capabilities such as but not limited to, cross-cue and fusion from other INTs such as GEOINT, in order to create a holistic ISR picture for the warfighter and the IC. The COMPASS BRIGHT program objective is to mature technologies for application in SIGINT and MASINT systems or subsystems. Production and integration of these developed technologies will be conducted by the appropriate programs. COMPASS BRIGHT projects are selected through a data call process, whereby the USAF evaluates proposals from the laboratories, platforms, and other government agencies, to select those projects that are most promising.

Operational Reconnaissance (Ops Recce) is part of the initiative to improve overall USAF intelligence, surveillance, and reconnaissance (ISR) capability through development and use of sensor data from non-traditional ISR platforms and innovative use of sensors. This program pursues Ops Recce capabilities for transition through development, testing, demonstration and implementation efforts across all platforms. The Ops Recce program objective is to provide increased battlespace awareness through the use of sensors/platforms to achieve effects beyond what those sensor/platforms were originally designed.

The program office authority extends to accomplishment of out-of-cycle COMPASS BRIGHT efforts. These tasks may be filtered through the SIGINT Capability Working Group (SCWG) outside the normal vetting process to expedite acquisition of high-end capabilities for the warfighter.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver technology and sensor capabilities. The use of such program funds would be in addition to civilian pay expenses budgeted in program element 0605831F.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: COMPASS BRIGHT Tech Development	20.484	14.545	15.313	-	15.313
Description: Develops projects in the SIGINT and MASINT areas for transition to the RC-135 fleet, other intelligence, surveillance, and reconnaissance platforms and Ops Recce.					
FY 2022 Plans: - Initiate, continue, and complete various SIGINT projects to include enhanced ELINT exploitation, COMINT, Audio exploitation, Ops Recce, signals of interest prosecution, and Non Traditional ISR (NTISR).					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675185 / *COMPASS BRIGHT*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
- FY23 Project selection process initiated. ***FY 2023 Base Plans:*** - Will initiate, continue, and complete various SIGINT projects to include enhanced ELINT exploitation, COMINT, Audio exploitation, Ops Recce, signals of interest prosecution, and NTISR. - FY24 Project selection process will be initiated. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY23 small increase to support SCWG approved projects and inflation adjustment.					
Accomplishments/Planned Programs Subtotals	20.484	14.545	15.313	-	15.313

C. 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
• APAF 05 Line Item DARP01: *RC-135*	191.332	207.596	212.828	-	212.828	219.499	220.967	224.045	228.860	Continuing	Continuing
• APAF 06 Line Item DARP01: *RC-135*	51.282	51.305	25.661	-	25.661	55.452	55.903	56.741	57.970	Continuing	Continuing

Remarks

D. Acquisition Strategy

Air Force Life Cycle Management Center/Intelligence, Surveillance, and Reconnaissance and Special Operations Forces Directorate (AFLCMC/WI) will execute COMPASS BRIGHT and Operational Reconnaissance efforts through technology development and demonstration contracts which leverage existing laboratory relationships and other existing contractual vehicles, with future development projects emphasizing full and open competition.

On an annual basis, the SIGINT Capabilities Working Group (SCWG) reviews developmental technologies against warfighter capabilities and requirements based on strategic roadmaps. Projects advancing the technological maturity of promising sensors and processing capabilities are reviewed and prioritized into a recommended list for senior executive direction to implement for the coming fiscal year.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675185 / *COMPASS BRIGHT*

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
Product Development	C/CPAF	Not specified. : TBD	-	0.000		-		-		-		-	Continuing	Continuing	-
COMPASS BRIGHT	Various	Multiple : Various	-	18.986	Nov 2020	11.107	Nov 2021	11.813	Nov 2022	-		11.813	Continuing	Continuing	-
Ops Recce	Various	Multiple : Various	-	0.000	Dec 2020	0.600	Jan 2022	0.600	Jan 2023	-		0.600	Continuing	Continuing	-
		Subtotal	-	18.986		11.707		12.413		-		12.413	Continuing	Continuing	N/A

Remarks

On an annual basis, the SIGINT Capabilities Working Group (SCWG) reviews developmental technologies against warfighter capabilities and requirements based on strategic roadmaps. Projects advancing the technological maturity of promising sensors and processing capabilities are reviewed and prioritized into a recommended list for senior executive direction to implement for the coming fiscal year.

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
Compass Bright PMA	Various	Various : Various, OH	-	1.001	Nov 2020	2.438	Jan 2022	2.500	Jan 2023	-		2.500	Continuing	Continuing	-
OPS Recce PMA	C/CPAF	Not specified. : TBD	-	0.497	Jan 2021	0.400	Jan 2022	0.400	Jan 2023	-		0.400	Continuing	Continuing	-
		Subtotal	-	1.498		2.838		2.900		-		2.900	Continuing	Continuing	N/A

	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
Project Cost Totals	-	20.484		14.545		15.313		-		15.313	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675185 / *COMPASS BRIGHT*

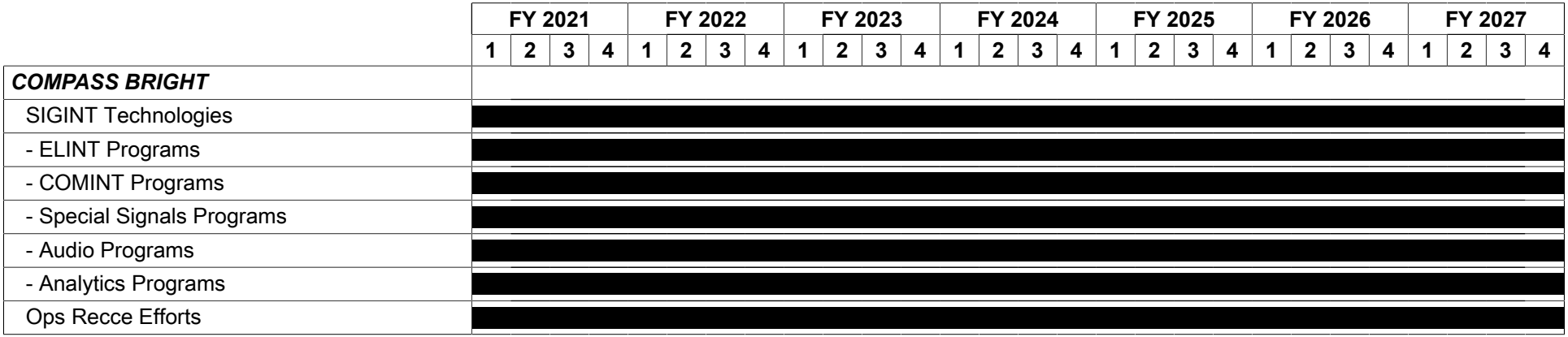

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675185 / *COMPASS BRIGHT*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
COMPASS BRIGHT				
SIGINT Technologies	1	2021	4	2027
- ELINT Programs	1	2021	4	2027
- COMINT Programs	1	2021	4	2027
- Special Signals Programs	1	2021	4	2027
- Audio Programs	1	2021	4	2027
- Analytics Programs	1	2021	4	2027
Ops Recce Efforts	1	2021	4	2027

Note

On an annual basis, the SCWG reviews developmental technologies against warfighter capabilities and requirements based on strategic roadmaps. Projects advancing the technological maturity of promising sensors and processing capabilities are reviewed and prioritized into a recommended list for senior executive direction to implement for the coming fiscal year. As a result, the USAF will move funds between projects periodically to develop the highest priority projects in response to urgent and emerging warfighter needs.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0304260F / *Airborne SIGINT Enterprise*	Project (Number/Name) 675186 / *Special Programs (Airborne SIGINT Development - Special Platforms)*	

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
675186: *Special Programs (Airborne SIGINT Development - Special Platforms)*	-	7.485	7.529	7.927	0.000	7.927	8.089	8.242	8.414	8.601	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports special SIGINT studies as well as the development and integration of advanced SIGINT capabilities for special programs including, but not limited to: quick reaction capability sensors, the processing, exploitation, and dissemination associated with these systems, and other efforts approved by the USAF SCWG. Development efforts will include, but are not limited to: new signal sets, antenna improvements, sensitivity upgrades, and data distribution upgrades, and new/advanced deployment capabilities. This project provides the war fighter with near term combat capabilities with increased capability improvements accomplished as technologies and risks achieve satisfactory levels. Sensors will be integrated and tested on various platforms including the MQ-9A remotely piloted aircraft as funding permits.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: SIGINT Development	7.485	7.529	7.927	0.000	7.927
Description: Develop, update, and test SIGINT capabilities for QRC and normalized special programs SIGINT projects. ***FY 2022 Plans:*** - Modernizing SIGINT systems used by the MQ-9A and other platforms. ***FY 2023 Base Plans:*** - Will continue to modernize SIGINT systems used by the MQ-9A and other platforms. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Funding remained the same with slight increase to account for inflation adjustment.					
Accomplishments/Planned Programs Subtotals	7.485	7.529	7.927	0.000	7.927

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675186 / *Special Programs (Airborne SIGINT Development - Special Platforms)*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

SIGINT capabilities will be integrated to various classified platforms using an evolutionary acquisition approach. Capabilities and prototypes will be developed by Other Government Agencies and transitioned to select vendors as production needs develop.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675186 / *Special Programs (Airborne SIGINT Development - Special Platforms)*

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
Airborne SIGINT Development - Special Platforms	Various	Various : Various	-	7.265	Jan 2021	7.209	Jan 2022	7.590	Jan 2023	-		7.590	Continuing	Continuing	-
		Subtotal	-	7.265		7.209		7.590		-		7.590	Continuing	Continuing	N/A

Remarks

Upgrades the quick reaction capability sensors already on the MQ-1/9 fleet

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
Flight Test	Various	Various : Various	-	0.220	May 2021	0.320	May 2022	0.337	May 2023	-		0.337	Continuing	Continuing	-
		Subtotal	-	0.220		0.320		0.337		-		0.337	Continuing	Continuing	N/A

	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
Project Cost Totals	-	7.485		7.529		7.927		-		7.927	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675186 / *Special Programs (Airborne SIGINT Development - Special Platforms)*

	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
SIGINT Development																												
MQ-9 Sensor 1 Modernization																												
MQ-9 Sensor 2 Modernization																												
MQ-9 Sensor Upgrades																												

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0304260F / *Airborne SIGINT Enterprise*	**Project (Number/Name)** 675186 / *Special Programs (Airborne SIGINT Development - Special Platforms)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SIGINT Development				
MQ-9 Sensor 1 Modernization	1	2021	4	2027
MQ-9 Sensor 2 Modernization	1	2021	4	2027
MQ-9 Sensor Upgrades	1	2021	4	2027