Proposed FY19 AVS RED Portfolio (as of 2/24/17)

***SAS Emerging & Future KEY:** E1 = Real-Time System-Wide Safety Assurance; E2 = Dependability of Increasingly Complex Systems; E3 = Certification of Advanced Materials and Structural Technologies; E4 = High-Density Energy Storage, Management, and Use; F1 = Commercial Space Integration with the National Airspace System; F2 = General Aviation's Role in Safety Systems Development; F3 = Identification and Funding of Strategic Research and Development; F4 = Effects of Breakthrough Medical Technologies on FAA Medical Certification Standards*

CA#	FY 2019 Requirement Title	Executive Summary	Initial FY19 Contract Target	First Fiscal Year of Programmed Funding	Sponsor Outcome Target Date (planned)	SAS Emerging and Future*	S/O
	Fire Research and Safety		$ 3,000				
A11A.FCS.1	Aircraft Fire Safety	This research will provide the information necessary to make regulatory and policy decisions regarding the use of new materials for aircraft construction, as well as installed systems (e.g., fuel cells), and transportation	$ 3,000	FY15	9/30/2020	E1,E3,E4	AIR
A11A.FCS.4	Halon Replacement Fire Extinguishing Agent Research	No acceptable halon replacement agents have been found for cargo compartment and engine/APU. The Halon Replacement ARC recommended FAA expend additional resources to identify alternate agents.	$ -	FY19	1/1/2022		AIR
	Propulsion and Fuel Systems		$ 1,100				
A11B.PS.1	Advanced Damage Tolerance and Risk Assessment Methods for Engine Life-Limited Parts	The overall objective of this work is to develop advanced damage tolerance and risk assessment methods and data that can be used to reduce the risk of failures of high-energy rotors and other life-limited engine components.	$ 1,100	FY2010	9/30/2021	E1,3	AIR
A11B.PS.3	Volcanic Ash Engine Ingestion	There is still no scientific data on how in-flight exposure to volcanic ash will impact engines nor what measures should be taken once exposure has occurred.	$ -	FY13	1/1/2022		AIR
A11B.PS.4	Nondestructive Evaluation (NDE) for Critical Engine Components	Guidance and technical information including data to support future FAA rulemaking on damage tolerance and NDE compliance requirements are needed for critical nickel and titanium alloy rotating hardware.	$ -	FY2010	0		AIR
	Advanced Material.s/Structural Safety		$ 3,359				
A11C.SIC.1	Damage Tolerance of Composite Structures	Composite DT research addresses critical damage threats (accidental damage, environmental effects, and fabrication defects), COS issues, large scale test & analysis protocol for composite/metal assemblies, and new design features, materials & processes.	$ 700	FY2010	9/30/2019	E3	AIR
A11C.SIC.3	Crashworthiness Issues Unique to Composite Materials	Composite fuselage and wing structures play a role in aircraft crashworthiness. Understanding their energy absorption and resistance to structural failures will help ensure occupant safety in the event of a survivable crash.	$ 200	FY2013	9/30/2020	E1,E3	AIR
A11C.SIC.2	Composite Maintenance Practices	Composite DT research addresses critical damage threats (accidental damage, environmental effects, and fabrication defects), COS issues, large scale test & analysis protocol for composite/metal assemblies, and new design features, materials & processes.	$ 360	FY2010	9/30/2019	E3	AIR
A11C.SIC.5	Structural Integrity of Adhesive Joints	The purpose of this research is to understand the characteristics of adhesive bonds, and how they need to be measured and controlled to ensure a consistently sound structure.	$ 630	FY2011	9/30/2021	E3	AIR
A11C.SIC.7	Composite Materials Handbook 17 (CMH-17, formerly MIL-HDBK-17)	Document best industry practices for aerospace applications to ensure aviation safety.	$ -	FY2010	9/30/2023		AIR
A11C.SIC.12	Continued Operational Safety (COS) and Certification Efficiency (CE) for Emerging Composite Technologies	This research addresses four key issues for emerging composite technologies derived from Continued Operational Safety (COS) and Certification Efficiency (CE) experiences with expanding composite applications.	$ 1,469	FY17	9/30/2021	E3	AIR

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CA#	FY 2019 Requirement Title	Executive Summary	Initial FY19 Contract Target	First Fiscal Year of Programmed Funding	Sponsor Outcome Target Date (planned)	SAS Emerging and Future*	S/O
	Aircraft Icing		$ 3,335				
A11D.AI.1	Research on Ice Crystal Icing Conditions to Support Means of Compliance	Perform experimental and analytical research providing data and information that can be used in the development of physical models that represent the trajectory, impact, adhesion, accretion, and release of ICI within a turbine engine compressor.	$ 970	FY 2013	10/1/2022	E1,E3	AIR
A11D.AI.2	Safe Operations and Take-off in Aircraft Ground Icing Conditions	Conduct research to maintain safe winter ground operations, evaluate effects of changing ground operations and develop test and analyses methods to support these changes, and address effects of technology changes for fluids and de/anti-icing procedures.	$ 740	FY2010	9/30/2020	E1,E3	AFS
A11D.AI.5	SLD engineering tools development and validation	Certification methods need improvement to be effective in the supercooled large drop icing conditions described in amdt 25-140, effective Jan 2015. Research is needed to develop new/improved compliance means to assure effectiveness of the regulations.	$ 1,625	FY16	9/29/2022	E1,E3	AIR
	Digital System Safety & ASISP		$ 3,023				
A11D.SDS.1	Onboard Network Security and Integrity (Aircraft Systems Information Security Protection)	Aircraft manufactures and modifiers are installing systems with network-centric architectures that allow increased wired and wireless connectivity to aircraft systems within an aircraft and to networks external to the aircraf	$ 2,100	FY 2015	9/30/2020	E1,E2	AIR
A11D.SDS.5	Development Assurance Techniques for System Elements	This research will analyze the new SDS commercial technologies, tools and components to develop guidance and policy for their safe introduction into civil aviation.	$ 923	2017	4/2/2025	E1,E2	AIR

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	Continued Airworthiness - Systems		$ 5,871				
A11E.ES.6	Wireless Control in the Aircraft Avionics, Flight Controls and Cabin Systems	Wireless control of aircraft avionics, flight controls and cabin systems have been rapidly evolving. Little experience with wireless technologies in critical systems exist to identify associated risks and impacts.	$ -	FY019	12/10/2021		AIR
A11E.ES.7	Novel and Unusual Electric Aircraft Systems	Research to ensure that novel and unusual more electrical airplane (MEA) technology is safely introduced onto traditional, current and future aircraft electrical architectures.	$ 1,356	FY19	9/30/2023	E4,F2	AIR
A11E.FCMS.8	Integrated Flight Path Control to Address GAJSC/FAA GA Safety Interventions	Develop requirements and guidance for the certification of augmented flight path control (Fly-by-Wire) for Part 23 and Hybrid Vehicles that accommodates advances in sensors, processors and technology.	$ 600	FY 2017	10/1/2022	E2,F2	AIR
A11E.FCMS.9	Low Energy Alerting and Awareness Systems	This requirement will provide information required to evaluate and certify low energy alerting and awareness systems for intended function and mitigation of loss-of-control scenarios.	$ 950	FY17	12/1/2025	F2	AIR
A11E.FCMS.11	Displays and Alerting for Airplane Systems State Awareness	This research will reduce the accident rate due to loss of airplane state awareness (ASA) and LOC-I byimproving flight crew awareness of low airplane systems state through more effective displays and alerting.	$ 640	FY18	12/31/2026	F2	AIR
A11E.FCMS.13	Transfer of UAS Technology for Enhancement of GA Safety	There are UAS safety systems available that could dramatically improve GA aircraft safety. These systems are small, lightweight, and inexpensive. Lessons learned from UAS research shows that these safety devices can easily transition into GA manned a/c.	$ 650	FY2018	10/1/2021	F2,F4	AIR
A11E.FCMS.14	Flight Control Automated Interventions	Explore technology development and streamlined certification processes to promote industry implementation / improvement of automated systems that prevent accidents.	$ -	FY19	8/3/2020		AIR
A11E.FCMS.15	System Aspects of Aeroelastic Damping Augmentation	Recent programs have relied on flight control systems to augment the structural damping to meet the FAA requirement. The FAA needs guidance to ensure that such systems provide adequate performance and reliability.	$ -	FY2019	12/16/2020		AIR
A11E.RS.5	Wire Strike Avoidance	To significantly decrease wire strikes in rotorcraft.	$ 550	FY18	3/20/2022	F2	AIR
A11E.RS.6	Rotorcraft high mount side floats for ditching stability.	Additional floatation devices are needed in order to prevent the total inversion of the helicopter after a capsize event	$ 1,125	FY19	3/20/2022	E1,E3,F2	AIR

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	Continued Airworthiness - Structures		$ 4,850				
A11E.MI.5	Maintenance and Inspection of Emerging Metallic Structures and Technologies	As new metallic technologies are introduced into commecial aircraft, the FAA must evaluate the ability of the certificate holder to maintain continued airworthiness.	$ -	FY 2019	11/1/2021		AIR
A11E.MI.6	Reliability of Structural Health Monitoring (SHM)	How does someone who wishes to utilize SHM on transport category aircraft validate the Probability of Detection (PoD) of the installed system to ensure that the system provides the required level of confidence and reliability	$ -	FY2019	9/30/2022		AIR
A11E.MI.7	Conditioned Based Maintenance (CBM) with Structural Health Monitoring (SHM)	The US Army has a CBM+ program and a handbook (ADS-79) providing guidance on how to modify their maintenance program based on material condition and actual usage. US civil OEMs are starting to consider CBM for the civil..	$ -	FY2019	9/30/2022		AIR
A11E.MI.8	Continued Airworthiness of Composite Aircraft	Deterioration of aircraft structure has been a major issue that has resulted in multiple regulations (121.1105, 1107, 1109 etc.) and the FAA needs to be proactive in studying the effects of age/environment on bonded structure	$ 450	FY 2014	11/1/2021	E3	AIR
A11E.SIM.3	Emerging Technology – Active Flutter Suppression	An active flutter suppression system was certified under special conditions because current regulations and guidance material were not adequate. However, this issue is still not fully understood as demonstrated by the issue of an AD after certification.	$ 200	FY 2014	10/1/2021	E2,E3	AIR
A11E.SIM.4	MMPDS Support and Design Values for Emerging Materials	Promote consistent and uniform level of safety throughout the aviation industry through standardization efforts for acceptable design and certification compliance data and tools. Enable the FAA to operate efficiently.	$ 130	FY2010	10/1/2019	E3,F4	AIR
A11E.SIM.5	Damage Tolerance and Durability Issues for Emerging Technologies	Provide data to address certification and continued airworthiness issues arising from industry introduction of emerging metallic structures technology including advanced materials and new fabrication and construction methods.	$ 1,650	FY2012	10/1/2023	E3	AIR
A11E.SIM.7	Thermal Residual Stresses in Metal-Composite Hybrid Structure	The purpose of this requirement is to obtain data to evaluate and account for thermally induced loads at metallic-composite interfaces in hybrid structure needed in full-scale test and analysis.	$ -	FY2019	10/1/2023		AIR
A11E.SIM.8	Metal Additive Manufacturing for Aircraft, Engine, and Propeller Applications	Provide data to address certification issues associated with the large variability in metal additive manufacturing (AM). Industry is aggressively pursuing AM for critical application though no in-service history exists.	$ 900	FY 2015	10/1/2023	E3	AIR
A11E.SIM.9	NASGRO Enhancement, Standardization and Material Properties Database Generation for Damage Tolerance Analysis	Promote consistent and uniform level of safety throughout the aviation industry through standardization efforts for validated material fatigue/fracture compliance data and DT tools. Enable the FAA to operate efficiently.	$ -	FY 2019	9/30/2020		AIR
A11E.SIM.10	Ag/SEAT Airframe Usage and Operational Loads Monitoring	Record the operational loads of Agricultural (Ag) and Single-Engine Air Tanker (SEAT) aircraft and process the data to address the risk associated with the fatigue cracks commonly found in primary structures of these airplane	$ 240	FY 2019	9/30/2024	E3	AIR
A11E.SIM.11	Effect of Turbulence on Aircraft Structural Loading	To quantify the effect of turbulence on structural integrity, and to provide a method for pilots to understand what specific values of turbulence intensity mean for their particular aircraft.	$ 405	FY 2019	10/31/2024	E2,E3	AIR
A11E.SIM.12	Probabilistic Damage Tolerance Based Fleet Risk Management for Small Airplanes	To improve the computer software SMART LD and SMART DT and develop other tools required to successfully implement probabilistic methods for risk assessment and risk management of general aviation.	$ 625	FY 2018	10/1/2021	E3,F2	AIR

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A11E.SIM.13	Development of Control Surface and Stabilizer Freeplay Limits	To obtain data and develop the methodology and nonlinear models required to establish safe and realistic freeplay limits for transport category aircraft to avoid freeplay-induced vibrations and manage its consequent risks.	$ 250	FY 2019	9/30/2026	E3	AIR
	Aircraft Catastrophic Failure Prevention Research		$ 900				
A11F.PS.1	Advanced Analysis Methods for Impact of Composite Aircraft Materials in Rotor Burst and Blade Release	Research is needed to develop predictive analysis methods for assessing engine fragment impact into engine and fuselage materials to determine the containment and shielding capabilities of each for safety assessments and cert	$ 900	FY2013	12/31/2020	E1,3	AIR
	Flightdeck/Maintenance/Systme Integration Human Factors		$ 3,706				
A11G.HF.1	Enhancing Aviation Safety through Advanced Procedures, Training & Checking Methods, to include Jet Upset	Research is needed to characterize human factors/pilot performance considerations for air carrier pilot training and operational procedures. This research will inform development of guidance for training progams and flightcrew procedure development.	$ -	FY14	9/30/2021		AFS
A11G.HF.2	Avionics and New Technologies	This research supports the development and update of human factors regulatory and guidance material on evolving flight deck technologies including ADS-B, Cockpit Display of Traffic Information (CDTI), Airport Moving Map, and Electronic Flight Bags (EFB).	$ 1,000	FY various	6/30/2025		AIR
A11G.HF.4	Advanced Vision Systems (EFVS, EVS, SVS, CVS), Head-Up Displays (HUD), and Head Mounted Displays (HMD): Operational Standards & Approval Criteria	Research is needed to characterize human factors/pilot performance considerations using Advanced Vision Systems, HUD, and HMD for new low visibility concepts of operation. Research will inform operational requirements, standards, conditions & limitations.	$ 1,556	FY Various	12/31/2026	F3,F4	AFS
A11G.HF.7	Human Factors Research and Development for Improved Rotorcraft Operational Safety and Reducing Fatal Helicopter Accidents	Reduce fatal helicopter accidents associated with Human Factors pertaining to pilot training, technology, aeronautical decision making, CRM, scenaro based training and weather related factors.	$ -	FY 2016	9/30/2022		AFS
A11G.HF.8	Fatigue Mitigation in Flight Operations	Evaluate pilot fatigue data and the effectiveness of fatigue risk management approaches utilized by 121 and 117 certificate holders. Improve flightcrew member alertness through regulatory updates and educational materials associated with FRMP and FRMS.	$ 250	FY 2015	9/30/2020	E1	AFS
A11G.HF.10	Maintenance Human Factors to Support Risk-Based Decision Making (RBDM) and Maintenance Safety Culture	Maintenance human factors issues have been prioritized by multiple NTSB recommendations and highlighted in the AVS infoshare. This research program is designed to provide AFS-300 and the administrator the information needed for appropriate action.	$ 900	FY 2017	9/30/2019	E1,F2,F4	AFS

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	System Safety Management		$ 2,233				
A11H.SSM.11	Safety Oversight Management System (SOMS)	SOMS is a tool to integrate and analyze information from AOV oversight activities of the ATO. AOV will use the analytical capability for early identification of emerging safety trends in the NAS and for timely and effective safety oversight of the ATO.	$ 823	FY 2017	1/31/2022	E1	AOV
A11H.SSM.13	Integrated Domain Safety Risk Evaluation Tool (ID-SRET)	Focusing only on individual changes increases the possibility that hazards due to unanticipated consequences of multiple system and NAS change interactions may not be identified before deployment.	$ 940	FY17	1/31/2021	E2,F2,F4	AOV
A11H.SSM.18	NAS Asset Metadata System (NAMS)	This research will: 1. Analyze flight radar track data to match physical locations with times; 2. Analyze recordings of radio communications to identify, phase of flight, purpose of communication, and specific involved NAS assets.	$ 470	FY2019	1/31/2025	E1	AOV
A11H.SSM.19	General Aviation & Rotorcraft Airman Certification Standards for Maneuvers Training Research	This research would be to examine the maneuvers taught to pilots today as well as others that are not taught to gauge their applicability and usefulness to prevent LOC-I accidents/incidents.	$ -	FY2018	9/30/2021		AFS
	Terminal Area Safety		$ 1,400				
A11H.TAS.5	Helicopter Safety Improvements Using Advanced Vision Systems	Helicopter Advanced Vision Systems research seeks to examine sensor/display technologies in order to establish rule changes that allow helicopter operators to utilize these systems operationally in low visibility conditions.	$ -	FY2015	9/30/2018		AFS
A11H.TAS.7	Improving Go Around Safety	The purpose is to structure a logical go-around training curriculum that mitigates the operational go-around problems that have arisen.	$ 900	FY18	9/30/2023	E1	AFS
A11H.TAS.8	Keeping Yesterday's Incident From Becoming Tomorrow's Accident	The sponsor's need is to rapidly (within 24 hrs) be able to create a flight simulator training scenario based on an incident that happened in order to prevent a reoccurrence of it from becoming an accident.	$ -	FY19	3/31/2022		AFS
A11H.TAS.9	Wet Runway Wheel Braking Testing	Conduct testing to determine the reasons for significant reduced wet runway wheel braking in incidents and accidents as compared to definition of wet runway wheel braking in FAR 25.109/AC-25-7C, both grooved and non-grooved.	$ 500	FY19	12/31/2023	E1	AFS

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	Aeromedical Research		$ 4,282				
A11J.AM.1	Aerospace Medical Systems Analysis	The AM-1 requirement concerns the performance of aeromedical research activities that enable the development, maintenance, and epidemiological assessment of very large, comprehensive, and integrated datasets (big data).	$ 655	2019	9/30/2022	F3,F4	AAM
A11J.AM.2	Aeromedical Accident Prevention & Investigation	This requirement is meant to enable the update of standards, identification of key current and emerging medications requiring regulator action, and policy for specific aeromedical conditions that may affect human safety in the NAS.	$ 2,715	FY19	9/30/2023	F3	AAM
A11J.AM.3	CAMI Human Protection & Survival	This requirement is meant to address cabin safety, crash survival, and mitigation of risks posed by exposure to environmental stressors to assess and develop emergency procedures, safety equipment, and other strategies that enhance human safety.	$ 332	FY19	9/30/2022	E1	AAM
A11J.FCMS.1	CO2 Limit Research	FAA CAMI should conduct a study to determine the level of CO2 permitted in the cabin and flight deck that provides an acceptable level of safety	$ -	FY'19	1/1/2023		AIR
A11J.FCS.4	System level crashworthiness injury criteria and certification methodology	This program will develop data for the formation of a performance based crashworthiness/injury criteria, to support new regulatory standards	$ 250	FY16	7/1/2023		AIR
A11J.FCS.7	Effects of cabin seat pitch and alternative seat configurations on evacuation	This research will gather data necessary to assess different seating arrangements for the effect on compliance with the egress requirements.	$ -	FY18	7/1/2021		AIR
A11J.RS.1	Occupant Protection for Legacy Rotorcraft	New safety equipment/technology that can be retrofitted onto legacy rotorcraft to decrease fatalities.	$ 300	FY18	3/24/2025	E1	AIR
A11J.RS.2	Rotorcraft Injury Mechanism Analysis – Procedure Development and Validation	Develop procedures to gather and organize crash and injury information from rotorcraft accidents. Develop methods of using the data to identify causes of the injuries and potential mitigation strategies. Identify gaps in accident data collected.	$ 30	FY19	6/3/2024	F3	AIR

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	Unmanned Aircraft Systems Research		$ 2,454				
A11L.UAS.25	UAS Navigation Performance, Accuracy, and Reliability	-- **Requrement withdrawn by sponsor due to UTM via NASA**-- This research activity will support the development of standards and procedures for UAS navigation systems, which do not exist at This for UAS navigation systems.	$ -	17	10/1/2019		AFS
A11L.UAS.30	UAS Human Factors Control Station Design Standards	This research will focus on unique UAS safety concerns that are specific to unmanned aircraft. Unique HF aspects include: data link degradation and loss, decreased sensory cues, and remote pilot control handoffs.	$ 350	FY 2017	9/30/2019		AIR
A11L.UAS.31	High Visual Contrast for UAS	With the looming proliferation of UAS in the NAS, it is critical to reduce the risk of collision with manned aircraft. One risk reduction method will be to make Unmanned Aircraft (UA) easier for the pilots of manned aircraft to see and avoid the UA.	$ 162	FY 2018	3/1/2021	E1	AIR
A11L.UAS.43	UAS Flight Data Research in Support of ASIAS (Aviation Safety Information and Analysis Sharing) Program	This research will aggregate high quality UAS flight data with commercial and general aviation flight data and surveillance data, in order to develop enhanced safety analyses for NAS stakeholders and to support UAS integration in the NAS.	$ 341	FY19	12/15/2021		AVP
A11L.UAS.44	Air Carrier Operational Considerations for Unmanned Aircraft Systems	This research addresses safety concerns specific to Air Carrier Operations for UAS to include air carrier staffing, training, testing, duty and rest requirements. It could help establish a separate rulemaking activity specific to air carrier operations.	$ 574	FY 2019	8/2/2021	E2	AFS
A11L.UAS.45	Multiple UAS Command and Control by a Single Operator with a Single Control Station	This research will evaluate operator workload and performance, while operating multiple UA, to evaluate the safety and feasibility for multiple types of UAS operations.	$ -	FY 2019	12/31/2023		AFS
A11L.UAS.46	Air Traffic Control (ATC) Interaction with Airborne Detect and Avoid (DAA)	This research will assess the impacts of airborne Detect and Avoid (DAA) (being developed by RTCA Special Committee 228 [SC-228]) on Air Traffic Management. The research will (1) evaluate the interaction between DAA and Air Traffic Control (ATC) to ident	$ -	19	1/2/2020		AUS
A11L.UAS.47	Minimum Detect and Avoid (DAA) Display and Flight Path Information	This research supports the development of minimum requirements for Detect and Avoid (DAA) display and flight path guidance information required for UAS pilots to execute a maneuver to remain well clear.	$ 464	FY 2017	2/1/2021	E1	AIR
A11L.UAS.48	UAS Automation/Autonomy	This research will examine the interaction between UAS pilots and automated UAS to provide data for developing standards and best practices for pilot information management of UAS and address automation issues (e.g., mode awareness).	$ 562	FY 2018	6/30/2023	E2	AIR

Target = $ 39,512

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Weather							
A11K.WX.2	Terminal Area Icing Weather Information for NextGen	Winter weather terminal area operations need R&D support to address new icing regulations and NextGen operations. The new icing regulations (§ 25.1420) are now in effect (January 5, 2015). Revenue service aircraft will have	$ 1,430	FY2012 (Low level effort until FY2015. Significant funding reallocated to HIWC.)	9/23/2023		AFS
A11K.WX.3	Mitigating the Ice Crystal Weather Threat to Aircraft Turbine Engines	Convective weather high altitude ice crystal conditions are causing turbine engine and air data probe events on commercial aircraft. These conditions are not well understood and cannot be readily detected by current means. R	$ 770	FY 2011	9/30/2020		AIR
A11K.WX.9	Convectively Induced Turbulence - Extent, Severity, and its Impact on Aviation	What is the safe operational separation from thunderstorms for GA pilots? This research will answer that question through modeling and other analysis tools. The effort will establish guidelines used by GA pilots, controllers, AOCs, and meteorologists.	$ 407	FY17	10/1/2020		AIR
A11K.WX.10	Validation of Advanced Airborne Weather Hazards Detection	The RTCA Special Committee (SC)-230, Airborne Weather Hazard Detection, and the FAA have identified advanced airborne weather radar and Light Detection And Ranging (Lidar) as potentially valuable tools to help flight cre.....	$ 488	FY 2017	9/30/2020		AIR
A11K.WX.11	Weather Reporting Requirements and Dissemination for Helicopter Emergency Medical Services (HEMS) and Unmanned Aerial Systems (UAS) for off-Airport Operations	Weather reporting requirements and dissemination are highly defined in terminal environments. This research proposal seeks to increase weather observations density and quality to support HEMS and UAS operations in areas outside of terminals.	$ 405	FY 2019	10/31/2023		AFS
		BLI Total =	$ 3,500				
		Target =	$ 3,500				

CA#	FY 2019 Requirement Title	Executive Summary	Initial FY19 Contract Target			S/O
NextGen - Alternative Fuels						
-	NextGen - Alternative Fuels for General Aviation	-	TBD	-	-	AIR
		BLI Total =	TBD			
		Target =	TBD			