



U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND – AVIATION & MISSILE CENTER

EXPRESS Virtual Industry Communication Event (ICE)
Systems Security Requirement (TORFQ 2020T-12)

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CCDC VISION AND MISSION



VISION

To be the scientific and technological foundation of the Future Force Modernization Enterprise through world-leading research, development, engineering and analysis.

MISSION

To provide the research, engineering, and analytical expertise to deliver capabilities that enable the Army to deter and, when necessary, decisively defeat any adversary now and in the future.





OUR MISSION



Deliver collaborative and innovative aviation and missile capabilities for responsive and cost-effective research, development and life cycle engineering solutions.



BY THE NUMBERS



12,054
FY19 Strength



3,036
Civilian

23
Military

~8,995
Contractor

Core Competencies

Technical Domain:

- Active and Passive Air Defense Sensor Technology (S&T)
- Aerial Autonomy
- Aerospace and Aerodynamics
- Capabilities Engineering
- Materials and Structures
- Fuzing, Guidance, Controls and Seekers
- Propulsion, Explosives, Energetics, Warheads

Capabilities Engineering:

- Software Engineering
- Weapons Assurance
- Modeling and Sim Design, Dev, VV&A
- Configuration Management
- Engineering Prototype Design and Dev
- Maintenance, Life Cycle Cost Reduction, and Logistics Engineering
- Manufacturing Tech and Production Support
- Multidiscipline Acquisition and Project Engineering
- Quality Engineering and Management
- Reliability, Availability, and Maintainability
- Sustainment, Industrial Base, and Obsolescence
- Systems Engineering, Integration, and Interoperability
- Test and Evaluation
- Air Defense Radar (Reimbursable)
- Airworthiness

FY19 Funding

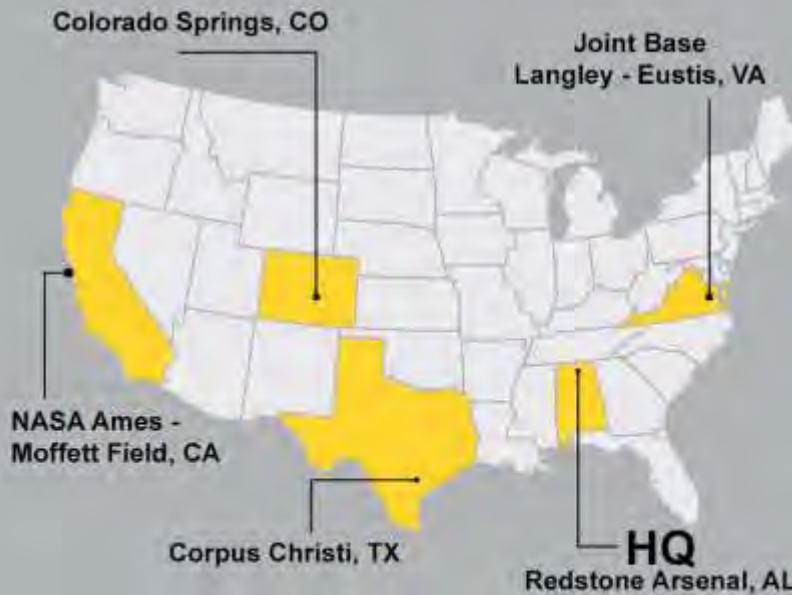
\$3.8B

6%
Aviation S&T

7%
Missile S&T

59%
Army

28%
Other





PRIORITIES



#1: People

People are the Army's greatest strength and its most important weapon system.



#2: Readiness

The Army must be ready to defeat any adversary, anywhere, whenever called upon, under any condition.



#3: Modernization

The Army must modernize to remain lethal and ready to fight tomorrow, against increasingly capable adversaries and near-peer competitors.



#4: Reform

The Army will improve the way we do business, including how we implement our top priorities, to make the Army more lethal, capable, and efficient.





S&T PRIORITIES ALIGNED WITH THE ARMY MODERNIZATION STRATEGY



**LONG RANGE
PRECISION FIRES**



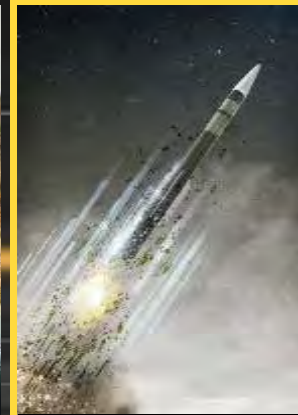
**NEXT GENERATION
COMBAT VEHICLE**



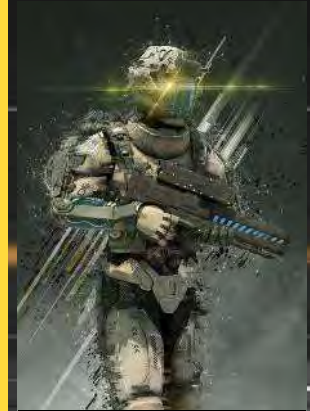
**FUTURE
VERTICAL LIFT**



**ARMY
NETWORK**



**AIR & MISSILE
DEFENSE**



**SOLDIER
LETHALITY**

Supporting Army and Joint Readiness now and in the Future MDO Environment

RESEARCH ISO FUTURE FORCE

Driving the discoveries and innovations which will be critical to realizing new capabilities for the Army of 2030 and beyond.

ANALYSIS

Conducting objective experimentation and systems analysis to support the equipping and sustaining of our Warfighters.

ENGINEERING

Providing lifecycle engineering expertise to support fleet development and readiness across warfighting battlefield operating systems.



ORGANIZATIONAL MISSIONS



- **Combat Capabilities Development Command (CCDC)** : To be the scientific and technological foundation of the Future Force Modernization Enterprise through world-leading research, development, engineering and analysis.
- **Aviation & Missile Center (AvMC)** : Deliver collaborative and innovative aviation and missile capabilities for responsive and cost-effective research, development and life cycle engineering solutions.
- **Software, Simulation, Systems Engineering and Integration (S3I)** : Develop and deliver responsive aviation and missile total life cycle systems engineering, prototyping, cyber, software, protective technologies, and systems simulation engineering to enable readiness and ensure modernization of the U.S. Army to optimize joint Warfighter capabilities at the point of need.



SYSTEM SECURITY ENGINEERING (SSE)



ACC: CONTRACT INTRODUCTION



- **Task Order Request for Quotation (TORFQ) 2020T-12**
- **The anticipated NAICS for this requirement is 541330**
- **This is a consolidated effort (details on slide 7)**
- **Milestone Schedule:**
 - **RFI Issued in eBuy – Actual: 28 July 2020**
 - **Draft TORFQ – Forecast: 18 November 2020**
 - **TORFQ – Forecast: 11 January 2021**
 - **Award – Forecast: 18 May 2021**



SSE OVERVIEW



SSE: Ken Pruitt, Associate Director

- **Mission:** S3I's SSE area develops and delivers responsive, cost effective system security assessments and technology solutions to enable readiness of Army Aviation and Missile systems and ensure weapon system assurance and resilience.
- **Vision:** A customer focused service provider that is recognized for system security engineering expertise and leadership across the acquisition life cycle.
- **Divisions**
 - Protective Technologies
 - Information Operations
 - Cyber Technologies



SSE REQUIREMENT OVERVIEW



- To provide systems security engineering as an integrated part of weapons system development and sustainment across the entire acquisition life cycle.
- To provide research, development, technology demonstrations, engineering and scientific expertise in the following disciplines: Weapon Systems Assurance (WSA); Cyber Technologies (CT), Protective Technologies (PT), and Information Operations (IO) in support of CCDC AvMC S3I AMS-U



CHANGES FROM THE PREVIOUS REQUIREMENT



Previous Requirements:

| | Task Order Number | Awarded | Ends |
|---|-----------------------|------------|-----------|
| Systems & Software Security Engineering (S3E) Support | W31P4Q-16-A-0003/0002 | 11/10/2016 | 11/9/2021 |
| Sensors and Protective Technology Development | W31P4Q-09-A-0018/0008 | 1/19/2017 | 1/18/2022 |
| Energy Storage Device and Sensor Development and Electronic System Validation Support | W31P4Q-16-A-0020/0001 | 1/19/2017 | 1/18/2022 |

New S3I Acquisition Strategy – Functional realignment of multiple contracts as a result of organizational changes



ORGANIZATIONAL CHANGES SINCE PREVIOUS REQUIREMENTS



| 2016 | 2018 | 2020 |
|--|--|---|
| Army Materiel Command (AMC) | Army Futures Command (AFC) | Army Futures Command (AFC) |
| Research, Development, and Engineering Command (RDECOM) | Combat Capabilities Development Command (CCDC) | Combat Capabilities Development Command (CCDC) |
| Aviation and Missile Research Development and Engineering Center (AMRDEC) – composed of 5 directorates (S3I, AED, ED, WDI, ADD) | Aviation & Missile Center (AvMC) | Aviation & Missile Center (AvMC) |
| Systems Simulation Software and Integration (S3I) – composed of SED, SSDD, CSD, and Protective Technologies (PT) as independent “sub” directorates/organizations | <p>S3I = SED + SSDD + PT merged together. CSD realigned as a separate organization reporting to Chief of Staff</p> <p>** Multiple internal changes from Branch Level up through Associate Director level</p> | <p>S3I (name change to Software, Simulation, Systems Engineering and Integration) - Tech Management + Prototype Integration Facility (PIF) were added</p> |



CHALLENGES



- Cyber is still evolving within the Army
- Limited Resources
- Insufficient Workforce
- Cyber viewed as an afterthought



SSE POCS



Army Contracting Command POC's:
Jeff Sullivan
Contracting Officer

Pam Brooks
Contract Specialist

S3I POC:
Erica Jones
Lifecycle Cyber Engineering Branch Chief



Web Site

<https://www.avmc.army.mil/>

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