CHESAPEAKE ENGINEERING SYSTEMS LLC

dba Hampton Roads Aviation Services

SOFTWARE · ENGINEERING · AVIATION

CAPABILITY STATEMENT

DoD & Federal · 2026

Chesapeake Engineering Systems (CES) is a Virginia minority-owned small business that **builds mission software, engineers and fabricates aircraft hardware, and maintains aircraft** from its own hangar at Hampton Roads Executive Airport (KPVG). One accountable team for the software, the part and the aircraft, 30 minutes from NAS Oceana, Naval Station Norfolk and Joint Base Langley-Eustis.

CORE COMPETENCIES

SOFTWARE, CYBER & AI

- Custom enterprise & web applications, APIs, legacy remediation
- MRO / maintenance-management and parts-traceability systems
- NIST SP 800-171 and CMMC Level 2 control implementation
- AI over technical publications; maintenance data analytics
- Records digitization: logbooks, AD/SB, life-limited parts

ENGINEERING & FABRICATION

- CAD modeling, drawing packages and tolerance analysis
- Reverse engineering of obsolete and DMSMS parts
- Prototype & low-volume brackets, trays, fixtures, tooling
- Avionics and equipment installation engineering

AVIATION SUPPORT · DBA HRAVS

- Line maintenance; annual, 100-hour and progressive inspections
- Avionics troubleshooting: transponder, pitot-static, comm/nav
- Insulated hangar space and aircraft management at KPVG

DIFFERENTIATORS

01 **Software from the hangar floor.** FAA A&P, IA and DME on staff define the requirements; our engineers ship the code.

02 **A working product, not slideware.** Our in-house MRO platform is available for a live demo.

03 **Design to metal.** One team digitizes the record, reverse-engineers the unsupported part and fabricates it.

04 **Secure by design.** NIST SP 800-171 controls built in from the first commit.

05 **Principal-led and local.** Direct access to the engineer, fast quotes, and on site at four major installations within 30 minutes.

COMPANY DATA

UEI	CAGE
LQB8B41AMFL3	12DD1

BUSINESS TYPE

Minority-Owned Small Business

NAICS (primary first)

541511	**Custom Computer Prog.**
541512	Computer Systems Design
541330	Engineering Services
541715	R&D, Engineering & Aircraft
332312	Fabricated Structural Metal
332710	Machine Shops
333413	Air Purification Equipment
336413	Aircraft Parts & Equipment
488190	Air Transportation Support
488119	Airport Operations

PSC

IT & software DA01 DA10 DJ01 DJ10 DH01 DH10 DF01 DF10 DG01 DG10 DG11

Engineering & R&D R425 AC13

Maint., mod & install J015 J016 J017 K015 K016 N015 N016

Inspection & test H215 H216 H315 H316 H317

Aircraft & engine parts 1510 1560 1680 2840 2920 2925 2930 2945 2990 2995 4920 5340

Lease, hangar & salvage X1BZ W015 W016 P200

PAYMENT & TEAMING

Government Purchase Card accepted · Prime, subcontractor or teaming partner

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CHESAPEAKE ENGINEERING SYSTEMS LLC

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CAPABILITIES MAPPED TO DOD REQUIREMENTS

Requirement area	What CES delivers	NAICS · PSC
Custom software & modernization	Full-stack enterprise and web apps, legacy code remediation, API and ERP integration, O&M	541511 · DA01
MRO & maintenance data systems	Work orders, technician authorization, parts and tool traceability, configuration status accounting; hosted or SaaS	541511 · DA01 · DA10
Cybersecurity & compliance	NIST SP 800-171 / CMMC Level 2 implementation, IAM, hardening, SSP and POA&M, RMF documentation	541512 · DJ01 · DJ10
AI, data & records	AI-assisted tech-pub authoring, search over manuals, reliability and MTBF analytics, records digitization	541512 · DA01 · DH01
Engineering, DMSMS & tech data	Reverse engineering of obsolete parts, CAD and drawing packages; maintenance manuals, QC procedures, training syllabi	541330 · 541715 · R425 · AC13
Prototype & low-volume parts	Brackets, mounts, avionics trays, fixtures, tooling and test jigs; machining and additive	332710 · 332312 · 336413 · 1560 · 1680
Aircraft maintenance & hangar	Inspection, testing, modification, AD compliance and avionics troubleshooting (14 CFR Parts 43/91); hangar at KPVG	488190 · 488119 · J015 · J016 · X1BZ

RELEVANT EXPERIENCE

COMPANY · CES / HRAVS

Aircraft workshop build-out — 2025

Equipped, wired and ventilated a 120 × 100 ft jet and piston-aircraft shop, incl. engine-overhaul and sandblasting equipment.

MRO & business-operations platforms — 2025–present

In-house production software: work orders, tiered technician authorization, parts traceability, CRM and procurement. Live demo available.

Aviation services & quality system · KPVG — 2025–present

FAA Parts 43/91 maintenance, inspections and avionics by A&P, IA and DME staff; authored the repair-station manual, QC procedures and training syllabi.

PRINCIPAL · DIGVIJAY SINGH · 25+ YEARS

Verizon · Senior Member of Technical Staff — 2001–2018

Technical lead for ~20 onshore/offshore developers on AAIS-DS, a mission-critical provisioning and activation system; raised SONET auto-activation from 0% to 30% in under a year; core FiOS team. U.S. Patent 8,060,602; Verizon Excellence Award.

Software engineering — 1996–2001

Scalable C++/ACE order-entry system (Object Solutions); SET 1.0 payment gateway (CyberCash); real-time field-dispatch modules (Utility Partners).

Education: MIT CTO certificate · MBA, Univ. of Florida · B.Tech. Aerospace, IIT Bombay

FACILITIES & TOOLS

- Insulated, access-controlled KPVG hangar
- 120 × 100 ft maintenance shop, ventilated for blasting
- Laversab air-data test set; calibrated tooling
- CAD, machining and additive fabrication

HOW TO BUY

- **GPC** and WAWF/PIEE accepted
- **Small-business set-asides** under any listed NAICS
- **Subcontract or team** to meet small-business goals
- **SBIR/STTR** for sustainment data and AI

READY TO SUPPORT

NAVAIR FRC Mid-Atlantic · NAVSUP FLC Norfolk · NAVFAC MIDLANT · DLA Aviation · AFLCMC · JB Langley-Eustis · USCG ALC · Hampton Roads primes

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