Corporate Overview

- Orion Aerospace & Defense Systems, Inc. (DBA: Orion ADS), a privately held Oregon corporation, is a small, veteran-owned business providing engineering, logistics, management, and consulting services to the aerospace and defense marketplace.

- We are headquartered in Southern Oregon's beautiful Applegate Valley and have East Coast operations based in suburban Boston Massachusetts.

- We work with the U.S. Government, allied nations and industry to develop, produce, integrate and support world-class, state-of-the-art defense technologies, products and systems to meet the current and future needs of our warfighters, ensuring their dominance as a world force while being a good steward of the tax-payers' dollars and client's shareholder investments.

Core Services & Operating Model

- We provide services directly to the military service branches, and DoD contractors ranging from small companies new to the DoD market, to large, established 1st tier Prime Contractors. We are typically engaged by organizations needing to leverage our capabilities to:

  - Supplement/extend internal capabilities/capacity
  - Support development of internal capabilities/capacity
  - Fill capabilities gaps…without posing any competitive threat or risk to the client

- We work confidentially and collaboratively with our clients to realize their tactical and strategic goals across a wide range of technologies and platforms.

- We are NOT a "body shop" but do take on efforts having definitive work scope & deliverables ranging from advising/supporting pieces of programs to essentially executing whole programs on behalf of the client.

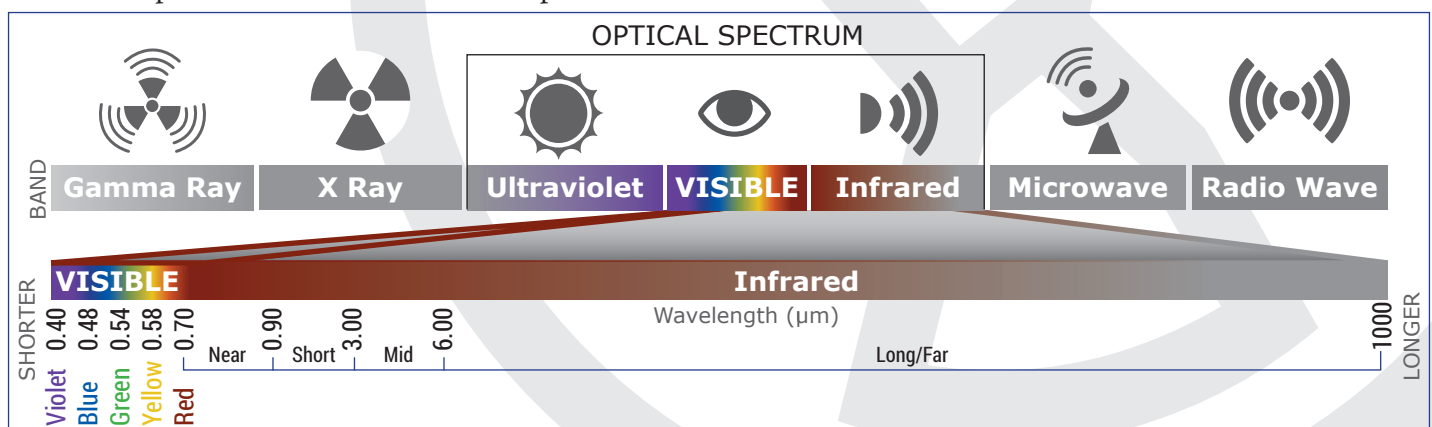## Technology, Market, Platform and Life Cycle Domain Expertise

Our staff have decades of experience spanning the following Technology, Market, Platform and Life Cycle domains.

TECHNOLOGIES: Reconnaissance, Surveillance, Targeting Acquisition, Navigation and Threat Warning Systems spanning the electromagnetic spectrum including microwave, infrared (cooled & uncooled), visible, ultraviolet, and X-ray electro-optical systems and applications

MARKETS: U.S. Air Force, U.S. Navy, U.S. Marine Corp, U.S. Army, Federal Agencies, Defense Prime Contractors, Foreign Military and Commercial/Industrial markets

PLATFORMS: Manned & Unmanned Ground Vehicles, Manned and Unmanned Air Vehicles, Maritime Vessels and Man Portable Applications

LIFE CYCLE: Concept Development and Evaluation, Advanced Technology and Product Development, System Design and Development, Qualification, Design To Production Transition, Production, Fielding, Operations & Maintenance and Disposal

OPTICAL SPECTRUM

BAND

| Gamma Ray | X Ray | Ultraviolet | VISIBLE | Infrared | Microwave | Radio Wave |

SHORTER — LONGER

VISIBLE | Infrared

Wavelength (µm)

Violet 0.40 | Blue 0.48 | Green 0.54 | Yellow 0.58 | Red 0.70 | Near 0.90 | Short 3.00 | Mid 6.00 | Long/Far 1000

Functional Domain Expertise

We have internal and external staff experienced, across a broad range of functional disciplines and technologies, successfully managing, developing, producing and supporting complex state-of-the-art defense systems.

Functional Domain Services & Work Products Matrix		
Functional Expertise	**Services Rendered**	**Work Product Outputs**

Program/Project Management & Consulting	• Strategic consulting, planning and relations services
	  • Market analysis
	  • Requirement definition
	  • Technology & product road mapping
	  • Customer & Supplier relations
	• Proposal support services
	  • Pursuit & capture planning & execution
	  • Proposal writing
	  • Rainbow reviews (Red team, Gold Team, Black Hats)
	  • Post Mortems
	• Program execution services
	  • Program planning & Integrated Program Master Schedule development
	  • Risk & Opportunity Identification Management & plans
	  • Sourcing Strategies
	  • Independent Program Reviews/Assessments
		• Market Analyses
		• Product technology selection Trade Studies
		• Technology & Product Roadmaps
		• Requirements definitions Capture Strategies & Plans
		• Program Plans & Integrated Program Schedules
		• Risk & Opportunity management plans and reports
		• Sourcing strategies & plans

Logistics Engineering & Management	Orion ADS provides a broad range of Integrated Logistics Support services tailored to each client's individual needs. This may range from a consulting/advising role to assumption and performance of entire logistics programs for the client. Our staff integrates and works collaboratively with client's engineering and operations teams. Our technical/engineering backgrounds minimizes support requirements from client resources while reducing technical risk. Our experience in the application of most current DOD, Military, industry and International Logistics standards and specifications provides high compliance confidence.	Logistics Management Information (LMI), Logistics Support Analysis (LSA) and Records (LSAR)
		• Provisioning Technical Documentation
		  • Provisioning Parts Lists (PPL)
		  • Engineering Data For Provisioning (EDFP)
		• Level Of Repair Analysis (LORA)
		• Life Cycle Cost (LCC)
		• Maintenance Concepts/Plans
		Operator and Maintenance Technical Manuals
		Operator and Maintenance Training
		Special Tools and Support Equipment development and production
		Packaging
		Product & Packaging marking (UID/RFID)

Human Factors Engineering (HFE) Safety & MANPRINT	Orion ADS integrates and collaborates with client engineering teams, end users and maintainers to define optimal human-machine interfaces, and infuse Human Factors Engineering principles in all aspects of a system's development. We provide services to our clients for compliance with MANPRINT requirements, including performing sub-domain (Manpower, Personnel, Training, Human Factors Engineering, System Safety, Health Hazards, Soldier Survivability) analysis and preparation of reports.	• Human Factors Analyses & Reports • User Jury Studies, Plans & Reports • Usability (Task based) Analyses • Field Excursions &Tests • Human Factors Surveys & Questionnaires • MANPRINT Plans & Assessments • Safety/Hazard Analysis Report (SSHAR) • Safety Analysis Report (SAR)
RAM-T & Producibility	Orion ADS provides Reliability, Availability, Maintainability, Testability (RAM-T)) and producibility support for client's programs. Efforts span initial requirements development, independent assessments of systems components, delivery of RAM-T domain reports to support of tests and demonstrations and FRACAS.	• Reliability Analyses, Predictions, requirements definitions, test/demonstration and FRACAS • Maintainability, availability and testability Analyses, Assessments and requirements definition • Producibility/ DTUPC analyses, reports and requirements definitions
Systems & Design Engineering	Systems Engineering • Operational needs assessments • Technology trades • Requirements development and allocation • Design analysis • Product test Design Engineering • Electrical • Mechanical • Optical • Software	Technical Trade Studies Concept of Operations (CONOPS) Product Specifications Physical/Functional Flows & Diagrams Test Plans, Procedures and Reports Design Analyses Drawings Models Software Prototypes