

Principal Engineer

POSITION DESCRIPTION:

Support Client Director for Advanced Technology in the technical management and oversight of directed energy technology programs, specifically laser technology development programs. Serve as a laser subject matter expert. Expertise should include one or more of the following:

- * Technology for high power solid-state and chemical laser sources,
- * Ladar transmitters for active ranging and imaging (to include laser devices and front-end electronics),
- * Beam shaping and steering, high power beam conditioning and wavelength conversion, and/or
- * Fire control.

Technology topic areas include:

- * Laser source development options
- * Multifunctional lasers
- * Integration of functional components
- * Beam correction
- * Sources
- * Media
- * Thermal management
- * Scale-up and manufacturability

In addition, topics may include laser communications, non-linear optics, and other advanced electro-optical technologies that emerge from concept studies or are required to evaluate new and emerging concepts. Travel is required.

- * Assist the Client laser technology lead in researching promising technologies, developing requests for information to communicate with industry, and developing technical requirements for laser technology solicitations. Participate in subsequent reviews and provide technical advice during the source selection process.
- * Assist the Client directed energy lead in formulating development plans and acquisition strategies for new technology developments. Assist in defining Client and contractor roles in the efforts. Provide solutions to coordination issues that assist in the approval process for these plans and strategies.
- * Assist the Client lead in the technical management of promising laser technology programs. This includes frequent interaction with the technology developers, monitoring status and progress of each program, continual review of technical progress, conducting technical evaluations of the research in the context of CLIENT relevance, and providing status reports and recommendations to the Client lead.
- * Review technical reports and briefings provided by technology developers and perform analysis to verify results. Conduct performance analysis of proposed laser technology solutions against the range of possible threats.

* Construct technical briefs to communicate status of the programs to senior CLIENT leadership, to include program milestones, deliverables, technical details, and capability with respect to CLIENT needs. Coordinate with other CLIENT offices to provide laser technology input for Advanced Technology briefings.

* Assist the Client staff in technical working group meetings and integrated product teams to advocate the inclusion of laser technologies into the CLIENT. Work directly with CLIENT Element Program Offices to facilitate the transition of promising advanced laser technologies into their program of record and develop business and technology transition plans.

* Assist the Client lead in the technical review and release process for laser related technical paper approval, public release, and foreign disclosure requests.

* Assist the Client lead in management of laser technology programs to include tasks such as responding to external requests for information, technical document reviews, and informing senior management of program activities via weekly reports.

EXPERIENCE REQUIREMENTS:

- * MS in Chemistry, Physics, Electrical Engineering, Electro-optics, or related fields.
- * 15+ (10+ years if M.S.) experience with development and/or integration of lasers for weapon system applications.
- * Weapon system performance analysis experience. Ability to identify critical functions and components that affect laser component and weapon system level performance.
- * Hardware development and integration experience with lasers with military applications, preferably including technology transition.
- * Ability to arrange and present information in an understandable manner for individuals with a wide variety of technical expertise.
- * Strong Verbal and Written Communications Skills
- * Self-starter and quick learner/assessor of diverse technology, requiring minimal supervision
- * Proficient in Microsoft Office Suite applications
- * Final SECRET Clearance

Desired:

- * PhD in Chemistry, Physics, Electrical Engineering, Electro-optics, or related fields.
- * 15+ years general experience, and 10+ years specific experience with lasers and integration of lasers for weapon system applications
- * Top Secret clearance
- * Program Office or Missile Defense Agency experience