

CORE COMPETENCIES

- **High-energy laser & directed energy** — HEL power architecture and scaling, airborne pod integration, beam-control subsystem trades, weapon-system control segments.
- **Power electronics & system design** — power conversion and distribution, pressure-tolerant power, battery-powered architectures, precision hardware for harsh environments.
- **Navy sonar & acoustics** — planar and conformal arrays, towed arrays, dipping sonar, torpedo seekers, transducer R&D, acoustic test and acceptance.
- **Undersea autonomy (AUV/UUV)** — vehicle electrical architecture, long-endurance and in-mission recharge, subsea surveillance payload integration.
- **Systems engineering & technical leadership** — architecture ownership, design-review authority, integration risk, manufacturing transition, program execution.

PAST PERFORMANCE

- General Atomics Electromagnetic Systems** 2025 – present
Senior Manager, Power Electronics & System Design. Leads the group supporting high-energy laser and electro-optical programs ranging from \$50M to \$350M+. Technical lead on a \$90M Reaper-mounted HEL program, driving the team through PDR and approval to advance to integration and flight demonstration.
- L3Harris Technologies** 2021 – 2025
Chief Engineer / Senior Manager. Directed Navy sonar programs (MK54, LWWAA, HELRAS, TB-29, TB-34A) and led a \$50M/yr engineering facility, securing over \$150M in new contracts. Championed advanced textured-ceramic transducer R&D and interfaced directly with NUWC and ONR.
- Terradepth** 2020 – 2021
Lead Electrical Engineer. Led electrical development of long-endurance AUVs, including a novel heavy-fuel generator for autonomous in-mission battery recharging — producing one of the longest-endurance vehicles in its class.
- Lockheed Martin** 2014 – 2019
Senior Electrical Engineer, Advanced Technical Leadership Program. Senior lead hardware engineer on the Layered Laser Defense prototype (Weapon System Control Segment); led seven engineers across directed energy, BMD vertical launch, and SM-3 Block IIA integration and test.

DIFFERENTIATORS

- Twenty years carrying defense and maritime hardware from concept through integration, test, manufacturing, and fleet delivery — not analysis alone.
- Rare span across all three of directed energy, undersea autonomy, and Navy acoustics, with the power electronics common to them.
- Chief-engineer and P&L experience: has owned technical, fiscal, and operational accountability for a \$50M/yr engineering facility.
- Active Top Secret clearance; direct working history with NUWC, ONR, and DoD prime contractors.
- Advisory model sized for startups and small teams that need senior judgment without a full-time bench.

ENGAGEMENT MODES

- Architecture & design review**
Independent senior review of system architecture, power conversion, and integration risk ahead of PDR/CDR.
- Trade-space analysis**
Quantified trades on HEL power, pressure-tolerant and battery power, sonar front-ends, and maritime autonomy.
- Program & technical due diligence**
Independent assessment of a directed-energy or undersea program claim for investors, primes, and program offices.
- Fractional chief engineer**
Ongoing design authority and review cadence for teams shipping defense or maritime hardware.

COMPANY DATA

PRINCIPAL	Andrés M. Pino, M.S.E.E.
EDUCATION	M.S. Electrical Engineering, Johns Hopkins University · B.S. Electrical Engineering, University of Central Florida
CLEARANCE	Active Top Secret
LOCATION	San Diego, California
NAICS (PROPOSED)	541330 Engineering Services · 541715 R&D in Physical, Engineering & Life Sciences · 541690 Other Scientific & Technical Consulting
UEI / CAGE	<TBD — add once SAM.gov registration completes>
BUSINESS TYPE	<TBD — e.g. sole proprietor / LLC, small business>