

STEVEN McCLAIN

Program & Manufacturing Engineering Leader — Aerospace Hardware, Rate Production & Customer Programs

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Aerospace programs supported: Impulse Space · Relativity Space · Northrop Grumman · Blue Origin · Lockheed Martin · ULA · Boeing · Honeywell · Janicki

SUMMARY

Hands on program and manufacturing engineering leader with 10 years across aerospace hardware and regulated production. I own hardware programs from kickoff through delivery — technical interface to the customer, schedule and risk ownership, anomaly resolution. Currently leading the development to production transition for flight propulsion hardware (GEM 63 solid rocket motor nozzle components, V-22 components) at a sustained ship rate, and serving as responsible engineer on new customer hardware including a fuel dome for Impulse Space and structures for Relativity Space. Leadership span runs from hands on 5–6 person engineering teams to directing a 200 person regulated operation.

PROFESSIONAL EXPERIENCE

Votaw Engineering · California

Feb 2026 – Present

Process Engineer — Production Systems & Customer Programs

- **Own customer programs from kickoff through delivery** for GEM 63 solid rocket motor nozzle components and V-22 flight hardware — built the manufacturing methods and floor flow holding a sustained ship rate of 2 nozzle sets/month.
- **Responsible engineer on new customer hardware for Impulse Space (fuel dome) and Relativity Space (launch-vehicle structures)** — process plan, fixturing, and NC programming from technical kickoff through first article; serve as the technical point of contact on active builds.
- Serve as technical interface to Lockheed Martin, Blue Origin, and Northrop Grumman on contracted programs — requirements, schedule, and issue resolution.
- **Built a custom MES from scratch** (SQL Server / Python) providing live production visibility; created and manage all plant data analytics — delivery, yield, capacity, and WIP.
- Lead a 5-person team (manufacturing/design engineers plus IT): set team and individual goals and drive progress to completion.
- Resolve technical anomalies and NCR dispositions with design engineering and quality — root-cause investigation through corrective action closure.

Aero Precision Engineering Inc. · California

2020 – Feb 2026

Engineering Manager

- **Managed engineering for precision-machined aerospace structural components** across the Relativity Space, Northrop, Blue Origin, Lockheed, ULA, Boeing, Honeywell, and Janicki supply chains; supervised sheet metal fabrication and programmed 4/5-axis machining (NX, Mastercam).
- Managed a 6 person team of machinists and engineering staff; also owned and ran the company's entire IT function.
- Designed fixtures, tooling, and flight hardware; served as technical interface for engineering to manufacturing transfer; owned customer technical relations with Northrop Grumman and Janicki.
- Maintained travelers, routings, manufacturing BOMs, and inspection criteria under formal AS9100 configuration management, keeping builds aligned to released engineering revisions.
- Developed Python/SQL tools on Epicor/E2 ERP data to track delivery, yield, and capacity trends — earlier visibility into production risk.

PMD Laboratory · California

2016 – 2020

Operations Manager

- Directed a ~200 person operation in a regulated CLIA/FDA environment; standardized procedures and operating metrics improved throughput 18% while maintaining full regulatory compliance.

CORE COMPETENCIES

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| ▪ Program Ownership, Kickoff to Delivery | ▪ Engineering Team Leadership (5–200) | ▪ AS9100 & Configuration Management |
| ▪ Customer Technical Interface | ▪ Cross-Functional Coordination | ▪ NCR / MRB & RCCA (5 Why, 8D) |
| ▪ Anomaly Resolution & Root Cause | ▪ MES Development & Live Visibility | ▪ Metrics Frameworks & Documentation |
| ▪ Development-to-Production Transition | ▪ Python / SQL Production Analytics | ▪ Precision Machining (3/4/5-Axis) |
| ▪ Scaling to Meet Rate | ▪ ERP (Epicor / E2) · NX · Mastercam | ▪ Fixture & Flight Hardware Design |

EDUCATION & CERTIFICATIONS

Mechanical Engineering & Physics · GD&T & Blueprint Interpretation · Lean Six Sigma Green Belt (in progress)