

Norm Bachman III

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Professional Summary

Field Service Engineer with 25+ years of hands-on experience in industrial automation, controls, electronics, IT systems, and advanced technical troubleshooting. Strong background in installation, startup, commissioning, preventive maintenance, upgrades, and issue resolution for automated equipment and integrated systems. Experienced with Allen-Bradley PLC/HMI platforms, legacy control system modernization, VFD upgrades, and custom machine integration. Known for resolving complex technical issues, supporting customers in the field, and collaborating with engineering and service teams to improve reliability, restore production, and support safe operations.

Professional Focus

Field service, commissioning, controls troubleshooting, PLC/HMI integration, customer support, and continuous improvement for automated industrial equipment and systems.

Core Competencies

- **Field Service & Equipment Support:** On-site and remote support for installation, startup, commissioning, preventive maintenance, inspections, upgrades, and service reporting for automated packaging, palletizing, and related equipment.

- **Industrial Controls & Integration:** Skilled in supporting and modifying automation systems involving PLCs, HMIs, VFDs, sensors, field devices, interlocks, and custom machine integrations.
- **Advanced Troubleshooting:** Proven ability to diagnose and resolve complex, intermittent, and cross-functional electrical, controls, hardware, software, and communications issues.
- **Industrial Networking & Protocols:** Knowledge of TCP/IP, UDP/IP, DNS, DHCP, VLANs, Wi-Fi, RF communications, and industrial/fieldbus communication protocols.
- **Customer Support & Training:** Strong background in customer-facing technical support, emergency issue resolution, technical communication, service documentation, and operational training support.
- **Teamwork & Project Support:** Effective collaborator with engineering, service, and production teams in support of troubleshooting, FAT/SAT, upgrades, commissioning, and continuous improvement.

Technical Proficiencies

- **Industrial Controls & Automation:** Allen-Bradley PLC-5, SLC 500, CompactLogix, ControlLogix, GuardLogix, RSLogix 5, RSLogix 500, Studio 5000, PanelView Plus, FactoryTalk View Studio, ladder logic, PLC/HMI troubleshooting, automatic controls, system integration
- **Drives, Motors & Electrical Systems:** VFDs, servo systems, SEW-Eurodrive drives and gearmotor systems, motor controls, low-voltage and 3-phase electrical systems, soft starters, control panels, field wiring, I/O devices, sensors, safety interlocks, commissioning
- **Field Service & Troubleshooting:** Installation, startup, commissioning, preventive maintenance, inspections, upgrades, service reporting, remote support, emergency troubleshooting, root cause analysis, intermittent fault isolation, spare parts support

- **Industrial Networking & Communications:** TCP/IP, UDP/IP, DNS, DHCP, LAN/WAN, Wi-Fi, RF communications, VoIP, industrial communications, fieldbus protocols
- **Software & Computing:** PLC and HMI software support, embedded systems, VMware, Microsoft Windows, Windows Server, SQL
- **Electronics & Hardware:** Component-level electronic troubleshooting and repair, hardware/software fault isolation, interconnected systems diagnostics, industrial device replacement and adjustment
- **Documentation, Training & Support:** Technical documentation, FAT/SAT support, customer training, customer service, cross-functional collaboration, quality support
- **Additional Skills:** Welding, mechanical installation support, light millwright-style work, equipment fit-up and alignment

Professional Experience

Field Service, Columbia PSI (2025 – Present)

- Provide on-site and remote field service, installation, startup, commissioning, troubleshooting, preventive maintenance, inspections, upgrades, spare parts support, and service reporting for automated packaging and palletizing systems at customer sites across multiple states with regional and national travel.
- Integrated legacy Allen-Bradley PLC-5 logic from RSLogix 5 into a custom dual-line box erector electrical cabinet upgrade using Studio 5000 with CompactLogix and FactoryTalk View Studio with PanelView Plus to develop, troubleshoot, and optimize the upgraded control system and HMI application.
- Supported upgraded box erector machine integration with two ControlLogix-based palletizers and related downstream equipment.
- Perform SLC 500 PLC code changes, troubleshooting, and VFD upgrade support using RSLogix 500 and legacy Allen-Bradley software tools.

- Collaborate with engineering to document, troubleshoot, and resolve complex and intermittent controls, electrical, and integration issues affecting machine performance, reliability, and production.
- Support installation, commissioning, and integration of custom equipment upgrades, including Allen-Bradley PLC/HMI modifications and SEW-Eurodrive VFD, motor, and gearbox upgrades.
- Perform I/O checkout, sensor replacement and adjustment, field wiring verification, and troubleshooting of automatic controls and safety interlocks during installation, startup, and service work.
- Perform light mechanical and millwright-style installation support as needed, including equipment fit-up, adjustment, alignment, and modification assistance during field installs and upgrades.
- Follow LOTO, customer-specific safety procedures, training requirements, site access rules, and TWIC-related access requirements as needed for field assignments.
- Help build, test, troubleshoot, and integrate GuardLogix palletizer lines at Columbia PSI Denver headquarters; support FAT/SAT, customer training, documentation, spare parts, and design improvement initiatives.
- Train with and alongside coworkers to expand product, controls, and field service knowledge, while also sharing technical knowledge and supporting team development across service and integration activities.

Senior Field Engineer, Nortech Parking Systems LLC (2023 – 2025)

- Region-wide remote and on-site parking system automation, remote management, installation, and support.
- Computer / network / microcontroller / fieldbus / low-voltage / fiber.
- Vehicle gates & loops, card access, long range fobs, LPR systems, proximity sensors, RF remote control.
- POS systems, payment terminals, printers, scanners, QR codes.
- Troubleshooting, repair, maintenance, parts, consumables.

Field Service Engineer & QC Manager, Strategic Materials Inc (2017 – 2023)

- Provided nationwide remote and on-site technical support for mission-critical computer, network, and automation systems, specializing in a wide array of brands such as ABB, Allen-Bradley, EtherCAT, Modbus, INTERBUS, Siemens PROFIBUS, and Schneider Electric.
- Installed, configured, and maintained complex embedded systems and automation hardware/software solutions across multiple vendors, ensuring operational excellence.
- Spearheaded efforts to leverage technology and business process expertise to enhance system efficiency, quality, throughput, and uptime.
- Collaborated with cross-functional teams to design and implement cost-effective technical solutions for challenging problems, effectively minimizing scope creep and downtime.
- Created and maintained comprehensive technical documentation, including but not limited to network configurations, device calibrations, and maintenance requirements.
- Managed global spare parts inventory, focusing on maximizing system uptime and redundancy while minimizing costs and operational risks.

Maintenance Engineer & Fleet Manager, Digital Media Group LLC (2012 – 2017)

- Managed a large fleet of over 30 special-purpose and 20 company vehicles, including troubleshooting and 24/7 recovery and support.
- Performed hands-on technical repairs and upgrades, including engine and transmission rebuilds, to improve efficiency and uptime.
- Ensured continuity in facility operations through regular maintenance.
- Maintained vehicle logs, tracking systems, and spare parts inventory contributing to organizational efficiency.

Custom Solutions Engineer, North Brighton Computer (2010 – 2012)

- Provided specialized computer and laptop repair services for both hardware and software issues.

- Managed network troubleshooting and administration for a variety of client types.
- Conducted component-level electronic repairs for complex systems.
- Delivered custom website and graphic design services, staying current with industry technologies.

Special Projects Manager, Promo Products LLC (2005 – 2010)

- Worked on custom machine setups involving PLC reverse engineering and reprogramming.
- Managed special projects in collaboration with external vendors for issue resolution.
- Improved and expanded production processes through reverse engineering.
- Led graphic design and website management for promotional advertising.

Machine Setup/Repair Technician, Nortech System Inc (2003 – 2005)

- Contributed to the manufacturing of industrial wire and cable assemblies.
- Provided setup, repair, and operational training on production machines.
- Continually improved efficiency and quality through process revisions.
- Completed specialized training in soldering, wire harnessing, and machine repair.

Network System Specialist, BTS Unlimited LLC (2002 – 2003)

- Implemented and maintained computer hardware, software, and network infrastructures.
- Played a key role in the business's expansion into an internet service provider.
- Managed multi-city internet provider network, including server setup and maintenance.
- Responsible for network security and bandwidth management.

Education & Certifications

- [Advanced Degree](#) of Field Experience
- Federal [Amateur Extra Class](#) License
- MN Power Limited / Low Voltage Experience
- CompTIA A+ Professional Certification
- Microsoft MCDST Professional Certification
- Nortech Surface Mount Solder Certified
- Minnesota Graduate Equivalency Degree

Additional Information

- 25 years of relevant engineering and IT experience.
- Willingness to travel up to 75% of the time.
- Exceptional multitasking and organizational skills.
- Effective communication and customer service acumen.
- Comfortable working in challenging environments.

Online Presence

- **LinkedIn:** Visit my [LinkedIn Profile](#) as an IT / Automation / Field Engineer and discover my broad range of skills and field experience.
- **Portfolio:** Visit [Norm3.com](#) for examples of my work, hobbies, and project history, or to contact me.
- **QRZ:** Visit my [QRZ Amateur Radio Profile](#) if you're also interested in radios, field operations, mathematics, or electronics.

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