

MARTIN BOYD

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TECHNICAL WRITER

Consistent Content Provider | Copywriting | Science & Research Communicator
Simply communicate business complexity.

Self-driven writer with a background in electronic engineering and electronic technical support, with specialties in radio and video electronics and with a love of science and the Maker Culture. Comprehend difficult engineering and science concepts and explain them to the general layman. Conceive and document company processes. Build WordPress websites. Excel in written and spoken public communications and compelling content creation.

Known for identifying impending disaster and creating processes and roadmaps to mitigate and avoid difficulty.

- **Technical Writing**
- **Documentation**
- **WordPress website creation**
- **Content generation**
- **Forms and processes**
- **Public relations**
- **Proposals**
- **Standards and guidelines**
- **Social media**

PROFESSIONAL EXPERIENCE

Electronic Engineer | Tech Writer

2015-2016

- Freelance technical / content writer for UpWork.
- Current embedded systems projects:
 - Aquaponics water management system – water circulation, level, monitoring, alarms and remote control.
 - Temperature controlled soap curing oven – using a programmable temperature profile to cure handmade soaps.

PELCO BY SCHNEIDER ELECTRIC

Fresno / Clovis California

2007 - 2014

Electronic Engineer 2

- Published two white papers, changing the way Schneider Electric treats the Pelco Division in recognition of the necessity of decreased product development cycles in response to uncertainty in high tech markets. Author, editor, and co-researcher.
 - *"Impact of Multicore Processors on the Video Line of Business"*, which demonstrated the necessity of heterogeneous multicore processors in digital video surveillance.
 - *"The Impact of Advancing Processing Power on the Capabilities of the Surveillance Industry"*, which identified cell phone technology as the new driver of digital video surveillance.
- Current Product Engineering – analyzed and tested product problems and solutions, corrected with engineering change orders.
- Introduced new products to the Manufacturing process through the creation of Manufacturing and Production inspection and assembly procedures and by developing working relationships to train Production personnel and debug company procedures.
- Researched and documented a method of pressure sensor software design that reduced hardware costs for an intelligent pressure / temperature sensor used in core product lines. Coded firmware based on this method.
- Electronic engineer representative for company process team. Established and documented new processes. Wrote process training procedures. Initiated cross-departmental procedures.
- Supported customer contract by analyzing and documenting product failures. Produced a Microsoft Access database of failures for future analysis. Composed failure reports and layman explanations of faults.

PELCO

Fresno / Clovis California

1996 - 2007

Electronic Engineer 1

- Documented product backlog to successfully justify the creation of a Sustaining Engineering team. Initiated a current product management program. Performed product triage and created engineering change orders.
- Published the executive proposal, *"Necessity of Manufacturing Change"*, explaining the legal necessity for a major change in manufacturing processes. Executive staff accepted and acted on this proposal, saving 40 million dollars of yearly European sales.
- Published white paper, *"Lead Free Manufacturing"*, which explained European product directives, and created a detailed product roadmap to meet these directives. Executive staff accepted and implemented this roadmap.
- Identified a temporary exemption to EU product directives. Documented a recommendation of a legal process to meet this exemption. Executive staff followed this recommendation, allowing EU sales to continue during product transition period.
- Established new engineering design processes, modified the part management system, and backed changes for Production and Technical Publications. Collaborated across departments to create "Lead-Free" versions of existing products.
- Researched hardware patents in support of patent disputes, wrote refutation documents to support Pelco patents.

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ADDITIONAL EXPERIENCE

CVAAS – Community Organization

Fresno / Clovis California

2008 - Present

Co-founder and President

- Founded, organized and currently managing an organization to support and represent the local freethought community.
- Public relations management. Persuade local news organizations to give newspaper, radio and television interviews. Create written and radio advertising and purchase advertising space in print and on the air.
- Design organization WordPress-based website, generate content and graphics for website and social media.
- Create podcasts from recording to producing.
- Organize and advertise events of interest to the freethought community, host guest speakers in person or virtually
- Guest presenter and lecturer at local and remote events and in classroom environments.

CENTRAL VALLEY COALITION OF REASON

Fresno / Clovis California

2008 - Present

Member organization

- Worked with the United Coalition of Reason to create a public relations campaign for local freethought organizations.
- Worked with outside lobbying organization to lobby the Fresno City Council to change council proceedings.

MILITARY EXPERIENCE

UNITED STATES AIR FORCE

Pacific Air Forces and Air Combat Command

Staff Sergeant (E5) AFSC 2E178 Ground Radio Communications Craftsman

- Established and managed a Military Auxiliary Radio System (MARS) station, with a volunteer staff of 40 people.

TOOLS & SKILLS

Platforms Microsoft Windows, Ubuntu Linux, Mozilla Firefox, Google Chrome & Android, Raspbian (Raspberry Pi)

Office MS Office suite: Word, Excel, PowerPoint, Access, Outlook, Visio, Project

Applications PDF: Adobe Reader, Foxit PDF reader, Adobe Acrobat, PDF printer

Linux: Open Office, LibreOffice, ProjectLibre

Publishing Scrivener, Scribus, Scribfire, Blogjet, Microsoft Publisher, WordPress, VEX (XML editor),

Graphics & CAD GIMP, Inkscape, Visio, Cerious Thumbsplus, ViaCad, LibreCAD, Sketchup, Autodesk Sketchbook, Wacom

Audio & Video Audacity, Adobe Audition, VLC

Programming IDE: Slickedit, MPLAB, Eclipse, Arduino

Languages: Microchip RISC, ANSI C, C++, Verilog

Tools: GCC, GIT, Subversion

Applications Electronics: Altium, Protel, KiCad, Eagle, LTSpice

Project management: JIRA, Confluence, Agilefant, Windchill, Mindjet mindmapping

Tools: Oscilloscope, voltmeter, datalogger, multichannel DSO, X-ray inspection, CAD-based debugging, JTAG, ICE, ICD

EDUCATION

- 160 college credits toward a Bachelor Degree in Electronics Engineering. University of California, Fresno
- Ground Radio Communications Specialist certification. (Technician, 992 classroom hours)
- Advanced Digital Techniques certification. (Technician, 168 classroom hours)
- Air Force Leadership, Management, and Quality Awareness certifications. (Management, 238 classroom hours)

ACTIVITIES & INVOLVEMENT

- Amateur radio operator: General class, call sign KD6TXV
- Maker Culture: fascinated by the integration of electronic control systems into permaculture and aquaponics.
- Professional organizations: IEEE & IEEE Communications Society; ARRL – national association for amateur radio