



Qualtech Consulting Inc.

Who We Are



- Founded in 1996
- Based in Lakewood Ranch, Florida
- Todd R. White, President
- Solution Provider
 - ✓ Airborne Software Certification
 - ✓ Ground-Based Software Certification
 - ✓ Airborne Electronic Hardware Certification

Corporate Philosophy



- Provide our clients with a fully compliant DO-178C, DO-278A and DO-254 infrastructure based on best practices from industry, Authorities and DER's.
- Provide our clients with detailed processes and related documents that reflects this infrastructure.
- Provide our clients with Management Tools to help support data collection and provide visibility to the project team and transparency to the Authority.

Products & Services



➤ We Provide Our Clients With:

- ✓ Compliance Management Tools
- ✓ DO-178C, DO-278A & DO-254 Templates
- ✓ DO-178C, DO-278A & DO-254 DER Consulting
- ✓ World-Class Training

QCMS Tools



- **User / Web Security Management System**
- **Document Review Management System**
 - ✓ DO-178C, DO-278 & DO-254 Checklists
 - ✓ Comment / Review Results Management
 - ✓ CC1 & CC2 Lifecycle Data Management
- **Reviews & Analysis Management System**
 - ✓ DO-178C, DO-278 & DO-254 Transition Checklists
 - ✓ DO-178C, DO-278 & DO-254 Peer Review Checklists
 - ✓ Reviews Attendee Management System
 - ✓ Action Item Management System
- **Change Impact Analysis Management System**
- **Archive Management System**

QCMS Templates



➤ DO-178C Templates

- ✓ All Planning , Development & Verification Documents

➤ DO-278A Templates

- ✓ All Planning , Development & Verification Documents

➤ DO-254 Templates

- ✓ All Planning , Development & Verification Documents

Template Characteristics



- Comprehensive, Up To 90% Complete
- Approved By The FAA, EASA, TCCA
- Approved By All Major OEM's
- Used As Model For Official FAA Training Course
- Developed Over 15 Years → Current Best Practice

QCMS DER Consulting



- DO-178C, DO-278A & DO-254 Gap Analysis
- Certification Roadmap / Oversight
- FAA Compliance Finding (FAA Form 8110-3)
- Certification Liaison (FAA, EASA, TCCA, CAAC)
- DO-178C, DO-278A & DO-254 Training
- Subject Matter Expert (Conferences & Seminars)

QCMS Integration



- Provide comprehensive on-site training.
- Work with our client to implement a set of very detailed planning documents and standards, creating a fully compliant framework. Ensure that Quality understands process / role.
- Implement the QCMS Tools used to develop, store and manage all of the objective evidence of compliance. Suggest additional tools, such as Verification Tools (i.e., LDRA).
- Provide oversight and DER support (including SOI Reviews) to ensure that the processes are being followed and that all compliance evidence is being produced.

Our Expertise - Todd R. White



30 Years Experience:

- Hardware & Software Development
- Requirements, Design & Code Verification
- Configuration Management
- Quality / Process Assurance
- Product Certification

FAA Software (DO-178C / DO-278A) DER

- Level A,B,C,D Authority, 14 CFR Part 23, Commuter Aircraft
- Level A,B,C,D Authority, 14 CFR Part 25, Transport Aircraft
- Level A,B,C,D Authority, 14 CFR Part 27, Normal Rotorcraft
- Level A,B,C,D Authority, 14 CFR Part 29, Transport Rotorcraft

FAA Airborne Electronic Hardware (DO-254) DER

- Level A,B,C,D Authority, 14 CFR Part 23, Commuter Aircraft
- Level A,B,C,D Authority, 14 CFR Part 25, Transport Aircraft
- Level A,B,C,D Authority, 14 CFR Part 27, Normal Rotorcraft
- Level A,B,C,D Authority, 14 CFR Part 29, Transport Rotorcraft

Our Expertise - Todd R. White



RTCA NextGen Task Force:

- ✓ Appointed To Executive Committee

RTCA Special Committee 205 (Developed DO-178C / DO-278A & Related Supplements)

- ✓ Appointed To Executive Committee
- ✓ Formally Recognized by the RTCA President at the Committee's Closing Session

FAA / EASA / NASA National Software & Airborne Electronic Hardware Conference

- ✓ Speaker and Recognized Subject Matter Expert for DO-178C & DO-254

Appointed Supplier Airworthiness Specialist (DER) at Airbus

Appointed ODA Administrator at L-3 Communications & ODA Unit Member at Key OEM's

Selected By The Army FUSE Safety Review Board to Oversee \$350M Software Project

Partners and Collaborations



Logiccircuit

- DO-178C / DO-254 Compliant Product Development and Verification

LDRA

- LDRA Certification Services (LCS)

Xilinx

- Exclusive Subject Matter Expert for DO-178C and DO-254

National Instruments

- Exclusive Subject Matter Expert for DO-178C and DO-254

Mentor Graphics

- Exclusive Subject Matter Expert for Safety-Critical Development Projects

Leading DO-178C, DO-278A, DO-254, Systems/Safety and IMA DER's

- Marty Gasiorowski, Tammy Reeve, Kevin Meier, Steve Morton, Leanna Rierson

Other Key Relationships



FAA Headquarters

- Barbara Lingberg, Program Lead for DO-178C, DO-278A & DO-254
- Mike DeWalt, FAA National Resource Specialist for Software

FAA Aircraft Certification Offices

- Atlanta ACO
- Chicago ACO
- Denver ACO
- Los Angeles ACO
- Seattle ACO
- Ft. Worth ACO
- Wichita ACO

OEM's (where I have been delegated authority)

- Boeing
- Airbus
- Bombardier
- Embraer
- Cessna
- Gulfstream

Recent Certification Projects



- Federal Aviation Administration, DO-178C, DO-278 A and DO-254 Projects
- General Atomics, UAV, DO-178BC/ DO-254 Compliance for U.S. National Airspace
- Meggitt Sensing Systems, DO-178C, DO-278A and DO-254 Development Projects
- SAAB Aerospace, DO-254 Level A Development Projects
- Boeing, DO-254 Level A Aircraft Refueling System
- Lufthansa Systems, DO-278 / DO-200A Airport Moving Map Ground-Based Systems
- Eaton Corporation, DO-254 Level A/B Aircraft Steering Control Systems
- Airbus, DO-178B / DO-254 A380 / A400M Level A Developments
- HondaJet, DO-178B / DO-254 Supplier Support
- Rockwell Collins, DO-178B / DO-254 Development Projects
- United States Army, DO-178B Level A \$350M Development Project
- Piper Aircraft, DO-178B and DO-254 DER Certification Support
- General Electric Corporation, DO-254 Level A/B Projects
- Cessna Aircraft, DO-178B and DO-254 Level A Internal Development Projects
- McLaren Electronic Systems, Level A Engine Control System
- Northrop Grumman, DO-178B Level A Military Project with U.S. Army
- Thielert Aircraft Engines, DO-178B Level B STC Project with FAA / EASA
- Textron Defense Systems, DO-178B Level A Projects
- Gulfstream Aerospace, Various DO-178B Level A and B Internal Projects
- General Dynamics / HR Textron, DO-178B Level A UAV Project