Description of Services

Patmos Engineering Services is an independent engineering consulting company founded by Jeff and Tammy Reeve. Patmos engineering consists of well qualified individuals with vast working knowledge of the industry, FAA process, hardware design, verification methodologies (traditional, through state-of-the-art advances), research methods, and tools. Patmos provides engineering consulting services for both FAA certification and digital design for commercial and aviation related systems. Patmos is incorporated and has been in operation for 9 years. Jeff and Tammy Reeve have a combined 40+ years experience in digital hardware design and certification. The goal of Patmos is to provide integrity and honesty in engineering practices and activities. More information can be found at www.patmos-eng.com

Hardware Design Services:

Patmos includes Jeff Reeve, who holds four patents in digital design and is considered an expert in his field. Jeff Reeve is a Xilinx certified expert and has also worked with all families of devices including Altera, Actel, Xilinx, Lattice, etc. This expertise positions Patmos to provide services for all phases of the hardware design life cycle. Jeff's experience includes several DO-254 certified projects providing help with both design and testing, including developing independent test benches for Level A and B DO-254 projects meeting all "elemental analysis" objectives required per appendix B of DO-254. As a result, Jeff can fill the difficult-to-find role of independent verification required by DO-254 for Level A and B systems.

FAA DER DO-178B/DO-254 Certification Services:

Tammy Reeve is the company's certification expert. Tammy's extensive designated engineering representative (DER) experience in applying DO-254 to products and systems with a variety of devices and criticality level puts Patmos in a unique situation to provide a technically complete and accurate representation and assessment of the DO-254 compliance and certification issues for your product. Tammy and Patmos is truly a leader in the certification field. Patmos engineering services was awarded the FAA contract for developing the FAA Academy DO-254 Complex Electronic Hardware (CEH) training course. Tammy Reeve has been selected as the primary developer for this material, and along with FAA experts in this area, will be delivering this required training to other DERs as well as FAA personnel throughout 2008. This puts Tammy Reeve and Patmos in a leadership role within the DER community and at the forefront of certification issues and policy being written and applied by the FAA.

The certification services provided by Patmos include:

- Approval of Software data items to RTCA DO-178B/ED-12B (8110-3 form approvals)
- Approval of Hardware FPGAs and ASICs to RTCA DO-254 and FAA generic Issue Papers (8110-3 form approvals)
- Development and evaluation of software and hardware processes for compliance to current FAA guidance
- Training for processes compliant with current FAA guidance in DO-254 and DO-178B
- Evaluation and development of certification plans and approaches for approval by certifying bodies (FAA, EASA, etc.) – i.e., Gap analysis.
- Software and hardware tool qualification evaluation and development in accordance with both DO-178B and DO-254
- TSO/PMA process review and liaison between applicants and approval authorities to ensure understanding and efficiency in the approval process
- Assistance in developing "Partnership for Safety Plans" with the FAA for streamlining certification activities and reducing data transmittal requirements for your company