

George "Wyatt" Tubb, P.E.

Mr. Tubb joined ETA International in 2009 after graduating from Texas A&M University with a B.S. in Mechanical Engineering. He has 13 years of experience on a large variety of mechanical engineering projects. The projects include: designing, fabricating and operating test systems for flexible pipes, developing a downhole memory tool, designing and operating a pressure vessel that simulates downhole conditions, designing a 2-stage rifle trigger, and designing fatigue resistant bolted joints. He is proficient in SolidWorks, Autodesk Nastran FEA, VA Structural Analysis, and OrcaFlex®. He has also managed multiple large scale multi-year testing programs for developing new technologies for the Oil and Gas Industry.

EDUCATION

BS Mechanical Engineering Texas A&M University, 2008

EMPLOYMENT HISTORY

2009-Present: ETA International Inc., Senior Engineer

AFFILIATIONS

Registered Professional Engineer, Texas Lic # 116112
American Society of Mechanical Engineers
Society of Petroleum Engineers – Scholarship Chairmen
API17J/B Flexible Pipe Revision Committee

PATENTS / PUBLICATIONS

Patent No. 9,208,694 B2 - "Security Door Breach Training System"

Patent No. 9,569,980 - "Security Door Breach Training System"

Patent No. 9,267,750 B1 - "Drop-in Adjustable Trigger Assembly with Camming Safety Linkage"

Patent No. 11,021,946 B2 - "Systems and Methods for Measuring Loads Applied to Downhole Structures"

TYPICAL PROJECT EXPERIENCE

Mr. Tubb's project experience includes the following categories.

Bolted Joint Design and Failure Analysis

Design multiple fatigue resistant bolted joints for test frames.

Bolted joint failure analysis of solar panel installation.

Oilfield Equipment Development

Designed, manufactured, tested, and installed a downhole tool with on board DAQ system for 10,000 ft well depth.

Built custom flow loop to test electronic submersible pumps with high gas to liquid ratios while monitoring temperature and vibration levels at 600 Hz.

Offshore Flexible Pipe Testing

Design, fabrication, and operation of pipe test systems capable of:

- 1.1 Million lb Tension
- 3.8 Million ft-lb Moment
- 37,500 psi Pressure
- 260° F Temperature

Design, fabrication, and operation of a Dynamic Test Rig capable of 100 Million Fatigue Cycles:

- 580,000 lb Tension
- 50,000 ft-lb Bending Moment
- 30 degree Bending Angle
- 2 Million Cycles Completed to-date

Structural Design & Analysis

Design and Nastran® / VA Structural analysis of power plant platforms, lifting frames, structural docks, jib beams, tension and compression frames, and fatigue test frames.

Working knowledge of AISC Steel Construction Manual and AWS D1.1 Structural Welding Code with a focus on fatigue and NDT.

Military/Firearm Product Development

Designed, manufactured, and tested device for simulating tactical door breaching.

Designed, manufactured, and tested multiple aftermarket firearm products including: T7T 2-stage Rifle Trigger, Vortex LoPro Bubblelevel, and Distance Reduction Indicator.

Pressure Vessel Design

Designed, manufactured, tested, and operated a pressure vessel capable of:

- 5,000 psi pressure
- 300° F Temperature
- Leak Tight Penetrations in Vessel Wall

Test Program Manager

- Downhole Tool \$400K+
- Slot Cell \$400K+
- RPSEA Dynamic Fatigue \$800K+
- R166 Dynamic Fatigue \$1.5 Million+