



## W. TOM THWEATT, JR.



W. Tom Thweatt, Jr., is a Senior Principal with Long International and has over 40 years of engineering, construction, and management consulting experience. He has extensive experience in major U.S. and international refining, chemical, petrochemical, offshore oil & gas development, pipeline, infrastructure, and thermal/hydroelectric power generation projects ranging from US\$40 million to US\$12 billion. He has worked extensively in projects that were executed by multi-national joint ventures on both the owner's and the contractor's sides. Mr. Thweatt has served on Joint Venture and Consortium Executive Committees and has participated directly in claims negotiations and settlement agreements in excess of US\$100 million.

Before joining Long International, Mr. Thweatt served as Vice President and Director of Engineering for Techint, S.A., a major EPC contractor based in Buenos Aires, Argentina. He served as a member of the Techint *Comite Direccion*, the governing committee responsible for all strategic and operational decisions, and was in responsible charge of worldwide engineering operations for all proposals and projects.

Before relocating to South America, Mr. Thweatt served as Senior Vice President, Refining and later as Senior Vice President, Worldwide Operations, for Parsons Energy and Chemicals Group Inc., based in Houston, Texas. He had profit and loss responsibility for engineering, procurement, construction, estimating and project controls for all proposals and projects executed by the company's four major operating centers in Houston, Texas; Reading, Pennsylvania; Pasadena, California; and London, England.

### EDUCATION

B.S. Mechanical Engineering, University of Texas at Austin, 1971  
Duke University Executive Advanced Management Program  
Multiple short courses on technical and administrative management topics

### PROFESSIONAL REGISTRATIONS

Registered as a Professional Engineer (not active) in Texas in 1975 (No. 39307)

### PROFESSIONAL AFFILIATIONS

American Society of Mechanical Engineers  
National Society of Professional Engineers

### LANGUAGES

English as native tongue  
Fluent in Spanish



## **TECHNICAL EXPERIENCE**

Representative U.S. and international technical experience includes:

- Management of equipment design division for a major U.S. contractor
- Management of \$1 billion construction project's Inspection Department in Algeria
- Manual and computerized static and dynamic pipe stress analyses
- Manual and computerized towers and reactors designs and analyses
- Organizer and speaker/instructor for multiple ASME pressure vessel design seminars
- Membership on ASME Boiler and Pressure Vessel Code Committee, Subgroup General Requirements
- Project Engineering Manager on petroleum refining projects
- Project Manager, Senior Project Manager, Project Director and Program Director on petroleum refining, chemical and petrochemical projects
- Vice President of Engineering
- Senior Vice President of Operations
- Company Director and Vice President of Engineering
- Contracts reviews, negotiations, signings and post-award contract management
- Development of engineering and project management plans and procedures
- Development and maintenance of corporate technical standards and procedures
- Company representative on Construction Industry Institute management board
- Construction claims preparation, analysis, and negotiations of eventual settlements

## **PROJECT EXPERIENCE**

Mr. Thweatt has served as Project Engineer, Project Engineering Manager, Project Manager, Senior Project Manager, Project Director, Program Director and dispute resolution consultant on major domestic U.S. and international projects. Representative projects include the following:

### **Petroleum Refining, Chemical and Petrochemical, Power Generation Projects**

- Preparation of an Expert Report in support of the owner's claim of gross negligence and fraud against the contractor on a major refinery on the US gulf coast. Testified in arbitration.
- Served as a Tribunal-appointed expert to assist the Tribunal in an owner-vs-contractor arbitration on a refinery megaproject in Europe. Prepared an Expert Report and testified in arbitration.
- Performed a mid-project management review of a \$15 billion Canadian dollars (US \$12 billion) fully-modularized oil sands project in western Canada on behalf of the owner.
- Preparation of an Expert Report regarding methodology used for estimating installation costs of a cross-country pipeline in Louisiana. Testified in deposition. Case settled before trial.
- Preparation of an Expert Report in support of the owner's entitlement to claims against the EPC contractor for defects in the contractor's design and fabrication of an offshore platform in the Gulf of Mexico. Topsides facilities were fully modularized. Testified in arbitration.
- Performed an analysis and prepared an expert report in support of the owner's entitlement to claims against the EPC contractor involving the standard of care in its management of the design and construction of



a nitrogen plant project in Mexico. Issues involved design life requirements of the plant components, prudent industry practices performance standards, and alleged improper design by the contractor. Prepared an expert report and testified in arbitration.

- Analysis of the technical entitlement of defective work claims on an onshore and offshore partially-modularized gas plant project in Australia, and preparation of an expert report. Testified at trial in Australia.
- Analysis of the EPC contractor's entitlement to claims against the owner for change requests for changes that allegedly led to delay and disruption for a semi-submersible project with modularized topsides installed in the Gulf of Mexico. Testified in arbitration.
- Performed an analysis of the technical entitlement of over 400 change orders associated with an engineering and construction contractor's \$60 million claim on a magnesium oxide production plant. Determined the cause-effect relationship between the changed work and the resulting schedule impact and additional costs. Contractor alleged that the FIDIC-based contract provided relief under the Variations clause; the owner argued that it was a fixed price contract and no relief was available. Prepared for expert testimony at an ICC arbitration hearing in London prior to settlement of the dispute.
- Prepared an Expert Report refuting a contractor's claim for delay and disruption allegedly resulting from work associated with removal of lead-containing paint from the process plant modules and platforms of an offshore oil production facility installed in the Gulf of Mexico. Case settled prior to trial. This project also involved the defense against the owner's delay claim for recovery of lost profits due to the delay to the achievement of First Oil allegedly caused by the lead abatement program. Presented an Expert Report and testified in deposition, resulting in a successful settlement of the dispute.
- Analysis of defects associated with the engineering and construction of an offshore production facility with fully modularized topsides installed in the Gulf of Mexico. Identified as the lead technical expert for the owner in ICC arbitration.
- Analysis of a Japanese contractor's \$35 million change order, delay, and loss of productivity claims on a fully modularized LPG FPSO project being constructed in Japan for installation in West Africa.
- Analysis of a European/Japanese EPC firm's \$75 million claims on a refinery upgrade project in Belgium. Assessed the technical entitlement of over 100 change orders forming the basis of the claims.
- On behalf of the owner, performed an analysis of an \$85 million change order and delay claim regarding an offshore Compliant Piled Tower constructed in Texas and modularized topsides facilities fabricated in South Korea for installation offshore Angola.
- On behalf of the owner, evaluated a contractor's \$87 million delay and disruption/loss of productivity claim resulting from alleged design changes to a semi-submersible hull and mooring system project that was fabricated in Norway and installed in the Gulf of Mexico. Evaluated contractor's entitlement to unresolved change orders and contractor's alleged delays associated with owner interference, late owner approvals, ABS approval delays, and out of sequence work. Prepared an expert Report and testified in arbitration.
- Performed an analysis of alleged deficiencies in the design of a petroleum coke gasification and syngas plant, resulting in change orders, delay, and loss of productivity claims totaling \$25 million against the owner of a refinery in Kansas. The project involved the relocation of a coal gasification facility from California and redesign of the plant based on petroleum coke feed.
- Analysis of the adequacy of a cost estimate and construction risks associated with the upgrade of an LNG facility in Trinidad.
- Prepared an Expert Report regarding design defects that allegedly caused a failure of welds attaching the diplegs to the cyclone body in an FCC regenerator of a Texas refinery.



- Analyzed a claim associated with the placement of undersea oil & gas pipelines in the Gulf of Mexico. Prepared an expert report regarding technical issues of entitlement for cost overrun issues. Testified in arbitration.
- Performed an analysis of the delays associated with the punchlist work, mechanical completion, and startup/commissioning of a chemical plant in the Netherlands. Issues involved industry norms for pre-commissioning, mechanical completion, commissioning, start-up and operation of a process plant project, and whether the parties followed the contractual specifications for mechanical completion and turnover of the facility.
- On behalf of the contractor, evaluated defective design and project management performance problems associated with an offshore underwater gas extraction facility and offshore pipelines, and an onshore gas processing plant in Australia. The contractor was a joint venture of the design firm and the underwater pipeline installation company. Under an LSTK Contract, the contractor was responsible for carrying out the design, engineering, procurement, construction and commissioning of the project. The owner terminated the contractor and sought recovery of damages.
- Prepared an Expert Report evaluating safety violations that caused the electrocution of a worker during the construction of a water treatment plant in Iowa. The case settled prior to trial.
- Prepared an Expert Report evaluating safety violations that led to a hexane explosion with multiple fatalities in a Nebraska biofuels plant. The case settled prior to trial.
- As Project Engineering Manager, led the technical effort throughout the project from proposal preparation through to project execution and field assignment during the construction phase for a \$175 million expansion project that added a dual-train Hydrotreater and two trains of sulphur recovery to an existing refinery in Torrance, California.
- As Engineering Manager, led the technical project execution team for a fully-modularized project at a Coryton, England refinery that added a new Continuous Catalyst Regeneration (CCR) Unit and revamped the existing Hydrocracker and Naphtha Hydrotreater Units. The project was completed under budget and in accordance with an extremely aggressive construction schedule.
- As Project Manager, managed a \$400 million grass roots ethylene project at Point Comfort, Texas.
- As Senior Project Manager, managed a \$450 million major revamp of a Beaumont, Texas refinery.
- As Program Director, managed the 50:50 Joint Venture between Badger and Fluor to design and build the \$1.4 billion grass roots Shell Rayong Refinery in Map Ta Phut, Thailand.
- As Joint Venture Executive Committee member for Parsons Energy and Chemicals Group, oversaw two heavy crude upgrader refineries in Venezuela, the first of which was executed in Parsons' facilities and the second of which was executed in a Joint Venture partners' offices in Paris.

### **Corporate Management Experience**

Mr. Thweatt has held diverse positions in corporate management, including:

- Principal Engineer, Vessel Mechanical Section, The M.W. Kellogg Company
- Manager, Vessel Mechanical Section, The M.W. Kellogg Company
- Vice President, Engineering, ABB Lummus Global Houston Operations
- Senior Vice President, Refining, Parsons Energy & Chemicals Group Inc.
- Senior Vice President, Worldwide Operations, Parsons Energy & Chemicals Group Inc.
- Vice President and Director of Engineering, Techint, S.A., Buenos Aires, Argentina



**PROFESSIONAL EXPERIENCE**

**Long International, Inc.**

*Houston, Texas (September 2003 to Present)*

As a Senior Principal with Long International, Mr. Thweatt provides expert services in all facets of contract dispute analysis and resolution, litigation/arbitration/mediation support, and expert testimony.

**Techint S.A.**

*Buenos Aires (April 2001 to September 2003)*

As Vice President and Director, Engineering Business Unit, Mr. Thweatt was responsible for managing and directing engineering work on all domestic and international proposals and projects. Responsibilities included management of the engineering for all company proposals and projects and development of technical procedures, work processes, and technology to maintain and enhance Techint's competitive position in the EPC market place.

**Parsons Energy & Chemicals Group Inc.**

*Houston, Texas (December 1996 to April 2001)*

As Senior Vice President, Worldwide Operations, Mr. Thweatt was responsible for managing and directing approximately 3,500 operations employees in major execution centers in Houston, TX; Pasadena, CA; Reading, PA and London, plus ancillary and project offices throughout the world. Responsibility included P & L responsibility for all power and process plant projects. Executive Committee representative for two LSTK Upgrader projects and a large hydrogen manufacturing project in Venezuela.

As Senior Vice President, Refining, he was responsible for pursuit, acquisition, and execution of worldwide refining projects. With P & L responsibility for all refining projects, and as executive sponsor on key major projects, ensured allocation of all appropriate corporate resources to projects, and provided executive level liaison between Parsons, partners and clients.

**ABB Lummus Global**

*The Hague; Bombay; Houston (June 1993 to December 1996)*

Vice President, Engineering, Houston Operations (1995–1996) and Vice President, Program Director, Essar Refinery (1993–1995)

Mr. Thweatt was responsible for all project work, performed in both The Hague and Bombay, for the \$1.8 billion Lump Sum deep conversion refinery project located at Vadinar, Gujarat State, India. This is the largest privately held refinery in India.

**Badger B.V.**

*The Hague (December 1990 to June 1993)*

Mr. Thweatt was Project Director (Phase I) and later Program Director (Phase II) for Badger's 14-month Project Specification (Phase I) of work on \$1.4 billion TIC Rayong Refinery Project. Subsequently partnered with Fluor Daniel for the Phase II, EPC contract work. He served in Phase II as Program Director, responsible for all EPC activities of 50:50 joint venture between Badger and Fluor Daniel. This project included twenty-one process units, including Shell Soaker Visbreaker, HDS, NHT, UOP CCR Platformer, Hydrocracker, Hydrogen Manufacturing, PSA, and Sour Water Stripper.



**M. W. Kellogg Company**

*Houston; Arzew, Algeria; Bintulu, Malaysia; London; Yokohama, Japan  
(June 1975 to December 1990)*

Senior Project Manager (1989–1990)

Responsible for a major \$450 million refinery expansion project for Mobil in Beaumont, Texas. Project included UOP CCR Platformer, Hydrocracker, Crude, Hydrotreater, Delayed Coker, Hydrogen, PSA, Sulfur Recovery, and Coker Gas Plant Units.

Project Manager (1988–1989)

\$400 million Lump Sum ethylene project for Formosa Plastics Company in Point Comfort, Texas.

Project Engineering Manager and Deputy Project Manager (1986–1988)

In M.W. Kellogg's London office, responsible for all engineering activities on highly successful, fully modularized refinery expansion project. Project included a new UOP CCR Unit, plus major revamps of Hydrocracker and NHT units. Project was completed 5% below budget and start-up was achieved within schedule in 22-1/2 months from contract award.

Engineering Manager and Deputy Project Manager (1985–1986)

\$175 MM TIC LSTK expansion, Mobil's Torrance Refinery. Responsible for:

- Process units included UOP Unocal process two-train Hydrocracker, Hydrogen Manufacturing, two-train PSA, and 2 Claus Sulfur Recovery Units with Exxon Flexsorb Tail Gas Treating.
- Relocated to field during construction.
- Project was completed ahead of schedule, and Kellogg was awarded 100% of the potential early completion bonus.

Engineering Manager (1984–1985)

Shell Wood River refinery revamp project. Project included major revamps of several process units with offsites and utilities.

Section Manager, Vessels / Tanks / Exchangers Section (1982–1984)

Worldwide responsibility for design, procurement, fabrication inspection and delivery of vessels, tanks and exchangers. Responsibilities included:

- Served on the ASME Code Committee during this period, including the position of Secretary of Sub-Group General Requirements and later as Chairman of this Sub-Group.
- Major Kellogg projects during this period included Malaysia LNG, Shell Northwest Shelf LNG (Australia), many new and revamp FCCU projects, Saber Refinery at Corpus Christi, Texas, and numerous refinery upgrade projects.

Principal Vessel Engineer (1980–1982)

Working extensively in Bintulu, Malaysia and Yokohama, Japan, to resolve problems on 100,000 M<sup>3</sup> underground LNG storage tanks and 9% nickel cryogenic pressurized LNG vessels. Storage tanks problems involved cracking failure of foamglass insulating foundations; pressure vessel problems involved an in-service rupture of a vessel's longitudinal seam and internal welds cracking in nine other 9% nickel vessels.

Senior Chief Inspector (1978–1980)

Managed field inspection team of 75 inspectors for \$1 billion LNG-II construction project. Responsibilities included all aspects of field inspection, from installation of civil works through preparation of test packs and final turnover packages at Mechanical Completion.



Principal Vessel / Exchanger Engineer (1975–1978)

Principal engineer on various fertilizer and refinery projects, including expansion of the Saudi Aramco Ras Tanura tank farm in 1977.

**Howe-Baker Engineers**

Tyler, Texas (June 1972 to June 1975)

Project Engineering Manager

150 TPSD LSTK ammonia plant for Tipperary Corporation, Lovington, NM

Lead Project Engineer

Fully modularized refinery project for Dow Chemical Co., Saginaw MI.

Project Engineer

Various hydrogen manufacturing and crude desalting projects.

**Dow Chemical Company**

Freeport, Texas (June 1967 to June 1972)

Project Engineer (1970–1972)

Responsible for production de-bottlenecking, maintenance projects, and capital improvement projects in a magnesium/chlorine production plant producing \$50 MM of magnesium per year.

Co-op Engineer (1967–1969)

Worked alternate semesters, alternating with full-time school semesters.

**PUBLICATIONS AND SPEAKING ENGAGEMENTS**

“EPC Contract Risk Analysis Associated with Onshore Projects in Developing Countries,” with Richard J. Long, P.E., Long International, Inc., December 2012.

“Construction Claims in South America,” Lorman Construction Claims Seminar, Houston, Texas, February 2005.

“The Chemical Industry in the Coming Five Years,” AIChE Asia-Pacific Energy Conference, Taipei, 1995.

“Design of Supports for Horizontal Pressure Vessels,” ASME South Texas Section Design Seminars, 1975 and 1976.