JOHN D. PRATT, Ph.D., P.E.
Curriculum Vitae 3/4/2019
44 Argos, Laguna Niguel, CA 92677

Professional Summary

Dr. John Pratt, as Principal of Argos Engineering, provides litigation consulting in the areas of mechanisms, latches and fasteners.

Before retiring as an aerospace industry executive in 2005, Dr. Pratt co-invented and led the development of the post-9/11 secure (terrorist-proof) cockpit door decompression latches now installed on half the world's fleet of transport aircraft. Previously Dr. Pratt invented and commercialized the first viable blind fastening system for laminated composites. After 30 years, that system (Monogram Aerospace Fasteners' Composi-Lok®) remains one of the most-used structural blind fasteners for composite airframe assembly. Recent litigation consulting projects have included defective kitchen appliances, vehicle tonneau covers, aircraft engine cylinder head bolt failure analysis, helicopter and aircraft accidents, and various patent infringement cases.

Expertise

- Fasteners
- Latching Mechanisms
- Engineering, Structural
- Mechanisms
- Products Liability
- Wind Load Analysis

Education

Year	College or University	Degree
2001	University of California, Irvine	Ph.D. - Civil Engineering—Structural Mechanics (Airframe Joint Behavior)
1998	California State University, Fullerton	M.S.M.E.
1996	California State University, Fullerton	B.S.M.E.

Professional Experience

From: June 2005
To: Present
Organization: Argos Engineering, Laguna Niguel, CA
Title: Principal
Summary: Dr. Pratt provides litigation consulting including deposition and trial testimony, expert reports and failure analysis. Dr. Pratt has relationships with local laboratories for in-depth mechanical testing and metallurgical analysis as needed. He is heavily involved in testing exploding kitchen appliances such as Panini makers, blenders and pressure cookers. He also offers litigation consulting and expert witness services in the following areas:

- Fasteners and mechanically-fastened joint failures.
- Latching mechanisms and latched joint failures, including aircraft structural latches.

Professional Experience (continued)

- Wind-induced building damage.
- Mechanism kinematics and failure analysis.
- Metal forming (hot and cold forging) and processing (heat treatment, finishing).

From: August 2000
To: June 2005
Organization: Hartwell Corporation, Placentia, CA
Title: Vice President, Engineering
Summary: Dr. Pratt oversaw all new product development and engineering, including development of engine nacelle latches for the Airbus A380, A318, A400M, B787 and RJ700/900 Series aircraft. He also co-invented and led the development of the post-9/11 secure cockpit door decompression mechanisms presently in use on half of the world's fleet of commercial transport aircraft.

From: March 1988
To: August 2000
Organization: Textron Aerospace Fasteners, Santa Ana, CA
Title: Vice President, Research and Development (Started as Director R&D)
Summary: Dr. Pratt led the development of various solid shank and blind fastener systems. Founded Textron Sports Technology operation within TAF in 1995 and led that group until its relocation to a commercial Textron division in 1999.

From: February 1979
To: March 1988
Organization: Monogram Aerospace Fasteners, Los Angeles, CA
Title: Engineering Manager
Summary: Dr. Pratt led the product development and standardization efforts. Invented Composi-Lok (I & II), Visu-Lok II and other product lines, accounting for sales in excess of $250 million since 1983. Represented company at MIL-HDBK-5, NASC and other standardization activities.

From: August 1969
To: February 1979
Organization: Olympic Fastening Systems, Downey, CA
Title: Sr. Project Engineer, R&D (Started as Drafter Trainee)
Summary: Product development and manufacturing engineering activities, including fastener installation tooling and progressive header tooling. Designed hydraulic-pneumatic installation tools for Olympic's and competitor's product lines.

Professional Affiliations, Achievements & Awards

- Professional Engineering License (Mechanical Engineering), CA, 1979
- National Academy of Forensic Engineers (NAFE)
- American Academy of Forensic Sciences (AAFS)
- National Society of Professional Engineers (NSPE/CSPE)
- American Society of Mechanical Engineers (ASME)
- American Society of Civil Engineers (ASCE)
- American Society of Metals (ASM)

Patents & Publications

United States Patents

4,376,604	4,548,533	4,747,204	5,046,348	5,131,107	5,378,098	5,938,384	6,261,042	7,252,311	8,322,015	8,517,649	9,212,678
4,451,189	4,659,271	4,752,169	5,052,870	5,152,648	5,620,287	5,941,539	6,866,226	7,255,376	8,348,566	8,608,417	9,284,971
4,457,652	4,659,272	4,767,248	5,056,973	5,333,980	5,692,865	5,957,642	6,866,227	7,578,475	8,398,345	8,888,425	9,464,654
4,537,542	4,681,494	4,967,463	5,066,179	5,354,160	5,884,923	6,171,038	7,131,672	7,857,563	8,511,952	8,961,086	9,903,403

Publications:

1. "Fastening of Advanced Composites", NASA conference, 1983, Seattle, WA.
2. "Testing and Analysis of Mechanically-Fastened Lap Joints", Ph.D. Dissertation, John D. Pratt (2001)
3. “Analytical Modeling of Bolted Lap Joint Load-Elongation Behavior”, *Journal of Aerospace Engineering*, January 2002 (ASCE)
4. “Comparative Load-Elongation Behavior of Single-Bolted and Dual-Bolted Lap Joints”, *Journal of Aerospace Engineering*, April 2002 (ASCE)
5. “The Influence of Conical Head Geometry on the Slip Resistance of Bolted Joints”, *Journal of Aerospace Engineering*, October 2002 (ASCE)
6. “Rapid Decompression of Pressurized Aircraft”, *Journal of Failure Analysis and Prevention*, December, 2006 (ASM)
7. “Allowables-Based Flow Curves for Nonlinear Finite-Element Analysis”, *Journal of Failure Analysis and Prevention*, April, 2007 (ASM)