



**JAMES C. FREELING, P.E.**  
*PRINCIPAL FORENSIC ENGINEER*



*EDUCATION*                    B.S., Mechanical Engineering  
Oregon State University, 1972

*REGISTRATIONS*            P.E., Mechanical Engineering  
State of Washington, No. 16708

P.E., Mechanical Engineering  
State of Oregon, No. 12653

*EXPERTISE*                    Construction Failure Analysis  
Construction Material Testing  
Rail Fracture Analysis  
Metallurgical Analysis  
Mechanical Design  
ASME Pressure Vessel Code Issues  
Bolting Failures  
Vehicle Accident Reconstruction  
Welding Failures

*MEMBERSHIPS*                American Academy of Forensic Sciences-Engineering: member  
ASNT Level 3 Engineer Radiographic Examination

***PROFESSIONAL SUMMARY***

Mr. Freeling spent three years with Hoffman Construction Company as one of their Field Piping Engineers. He prepared cost estimates for major regional piping projects and managed the projects at the project location. His duties included field quality control and technical support as piping related issues came up. He worked on project throughout Oregon and Washington. Underground. His projects included underground PVC water piping. Later at Hoffman, he was responsible for ASME Pressure Vessel design as design engineer at the Hoffman Fabrication Design Shop. He was responsible for ASME design calculations and fabrication inspections in the ASME licensed facility. His last position at Hoffman before leaving for a position in Corporate Engineering at Weyerhaeuser Co. was Project Manager at the main office location in Portland, OR. Mr. Freeling also authored a method to measure air infiltration of reactor building wall and roof panel seams at the Hanford Nuclear Project No. 2 in Hanford, Washington. His inspection credentials have included certification as an AWS Certified Weld Inspector, Ultrasonic, Magnetic Particle, Dye Penetrant, and Radiographic Level III Engineer by ASM examination. As a Test Engineer, he has conducted and supervised the testing of various products including steel rail, bolts, welds, flight recorders, structural assemblies, and various manufactured items.