Dr. Samuel Holmes

DRT Associate

- **Vortex induce vibration, CFD, structural response and failure, explosive effects.**
- Ph.D. Applied Mechanics, Drexel University
- ASME Member
- ICTS Member
- Over 40 years' experience in fluid mechanics, structural response and failure and explosive effects.
- 50 professional publications
- President and Principal Engineer for Red Wing Engineering Inc. where he is currently working on studies involving spar vortex induced motion, drilling riser vibration and failure, submarine hydrodynamics and lightweight fiberglass watercraft design
- Lead engineer for ACUSIM Software Inc. where he supervised application and research projects for offshore engineering studies of floating platform vortex induced motions and riser vortex induced vibrations
- Principal Engineer for Applied Research Associates Inc. where he was the lead for projects that included numerical analysis of floating platform motion in response to waves, the prediction of explosive effects of enhanced explosives and analysis of oil platform design and failure analysis, the impact of airplanes on the world trade center (for NIST)
- Lead numerous R&D projects with respect to the study of fluid mechanics, dynamic structural response and failure, finite element analysis, composite materials, explosive effects, vehicle crashworthiness, and shock physics.