



**CRAIG E. HEATHCO, P.E.**  
**SENIOR CONSULTANT**

[rcwinn@engsys.com](mailto:rcwinn@engsys.com)

Mr. Craig Heathco is a mechanical engineer and Senior Consultant with Engineering Systems Inc. (ESI). ESI is a multidisciplinary company, which provides professional engineering services to industrial, legal and insurance firms, government agencies and trade organizations, and acts as consultants to other engineering firms. The laboratory capabilities are supplemented by cooperative agreements with other recognized facilities to provide a wide range of technical support capabilities, including metallurgical, materials, aeronautical, mechanical, structural, electrical, safety, automotive, and audio/visual services. Projects ranging from simple failure investigations to complex engineering studies are undertaken.

Mr. Heathco has over forty years' experience in gas turbine design and development that encompasses aviation, industrial, marine, and advanced military markets. He has successfully taken a broad range of commercial and military programs from initial concept through development and into production, which includes technical responsibility for their field support and safety of operation. His gas turbine experience extends from 40-horsepower auxiliary power units up to 10 megawatt propulsion systems with a diversity of applications from stationary power generation to supersonic flight. Mr. Heathco is a long-standing member of the American Helicopter Society and has authored and presented several professional papers on gas turbine design. He holds multiple gas turbine technology patents.

**Areas of Specialization**

Gas turbine engine design and failure analysis  
Certification of gas turbine engines  
Turbine engine fuel control analysis  
Turbine engine maintenance and repair practices  
Thermodynamics, heat transfer, and fluid dynamics

**Education**

B.S., Mechanical Engineering, Kettering University, 1976

**Licensed Professional Engineer (P.E.)**

State of Indiana ..... License No. 1100313

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## **Professional Affiliations/Honors**

### **American Helicopter Society**

Member

## **Positions Held**

### **Engineering Systems Inc., Colorado Springs, Colorado**

Senior Consultant, 2011 – present

### **Rolls-Royce North American Technologies, Indianapolis, Indiana**

System Design Specialist, Future Programs, 2008 – present

Chief Engineer, High Mach Engines, 2005 – 2008

Chief Design Engineer, Helicopter & Small Gas Turbines, 2002 – 2005

Director of Engineering, Energy and Marine Operations, 2002 – 1999

Chief Engineer, Industrial Engines, 1998 – 1999

### **Allison Engine Company, Indianapolis, Indiana**

Chief Engineer, Allison Mobile Power Systems, 1993 – 1998

### **Allison Division of General Motors, Indianapolis, Indiana**

Design Supervisor, LHTEC Program, 1986 – 1993

Supervisor, Small Engine Design, 1981 – 1986

Senior Project Engineer, 1979 – 1981

Project Engineer, 1977 – 1979

Co-Op Student, 1971 - 1975

## **Papers**

Advanced Technology for Turboshift Engines, AHS Propulsions Specialists Meeting, October 28, 2003, Williamsburg, Virginia.

CR601-K9 Gas Turbine Development, 13th Symposium on Industrial Applications of Gas Turbine Engines October 13, 1999, Calgary, Alberta, Canada.

Tilt Rotor Requirements on Engine Design and Qualification, AHS Technical Specialists Meeting, September 21, 1989, New Bern, South Carolina.

Installation Requirements for Small Gas Turbine Engines, ASME Beijing Exposition, September 1-10, 1985, Beijing, China.