

## **Contact Information:**

University of Alabama in Huntsville 301 Sparkman Drive, Huntsville, AL 35899 chris.sautter@uah.edu Link to Reliability and Failure Analysis Lab webpage Link to personal webpage

## **Christopher Sautter**

Director



Reliability and Failure Analysis Lab

Director of the Reliability and Failure Analysis Lab at UA Huntsville. The lab is part of a larger initiative at the university to link the reliability discipline with the best commercial practices within the supply chain and sustainment of large systems. Current customers include major airframe manufacturers along with government agencies. The capabilities within the lab include static and dynamic testing along with environmental chambers.

As a member of the University of Alabama in Huntsville provided technical assistance to numerous government programs including Conditioned Based Maintenance (CBM), Reliability Centered Maintenance (RCM), Health and Usage Monitoring (HUMS), and Parts Marking. Assistance spanned the areas of logistic support to engineering analysis.

Responsible to lead the CH-47 UID/AIT (Unique

Identification/Automatic Identification Technology) program. This effort involved establishing a program for a legacy fleet that included selecting parts to be marked, providing engineering analysis, and marking the parts in the field.

Managed the Health and Usage Monitoring Systems (HUMS) program for the Cargo Helicopter Program Office (PMO) in Huntsville, AL. Responsibilities included formulating a Cargo Helicopter strategy for incorporating HUMS into the CH-47D and CH-47F fleets while serving as the interface with the commercial vendors for the Project Office.

Managed the RAM (Reliability, Availability, and Maintainability) for the ILS (Integrated Logistic Support) requirements for the LHX Helicopter program for the US Government from 1982 to 1985.

Current Chair of SAE G-11 Reliability Committee. This committee is responsible for writing standards and technical documents in the area of Reliability including Reliability Centered Maintenance (RCM) and Condition Based Maintenance (CBM).

Participated as an author for the ANSI Std 0009 on Reliability. This document was published in 2010 and is currently utilized by DoD in assessing their weapon systems.

Participated in the preliminary design contract selection process for the LHX as the sole military representative in the area of Reliability and Logistic Support resulting in a \$10 Million contract award. Overall evaluator and negotiator in the area of supportability and reliability for the production contract award for the T-800 Helicopter Engine.

## **RELEVANT PUBLICATIONS:**

- 1. "Downstream Wake Model of a Hovering Rotor", Robert Lichten Competition, 1986.
- 2. "Helicopter Aeronautics at the United States Military Academy", with Dr. Kip P. Nygren, Presented to the ASEE convention, June 1990.
- 3. "Defense Conversion in Russia, Taking a Regional Approach", OECD Observer, January 1995.
- 4. "Implementing the UID Policy", Defense AT&L, Jan-Feb 2004.
- 5. "Is Marking Parts Sufficient to Achieve an Enterprise UID Solution?", with Christopher Goes, AHS Forum 2007.
- 6. "Joint editor for the ANSI GEIA Reliability Standard, GEIA-STD-0009, August 2008. "A Systems Approach to Condition Based Maintenance", AHS CBM Specialists Meeting 2008.
- 7. "Reliability Analysis Required to Determine Condition Indicators for Implementation of Condition-Based Maintenance", with Dr. Bill Wessels, RAMS January 2009.
- 8. "The P-F Interval Key to the Transition from On-Condition to Condition Based Maintenance", with Ron Dalton, AHS CBM Specialists Meeting, Feb 2009.
- 9. "A Process Approach to Condition Based Maintenance (CBM)", with Nathan Rigoni, MARCON, February 2013.