

Aircraft Engine
Historical Society



Program

Sixth Annual AEHS Convention
Indianapolis, Indiana
July 15 - 18, 2009

Welcome!

The Sixth Annual Aircraft Engine Historical Society convention gives a unique glimpse into the world of Allison—its history, piston engines, gas turbines, propellers and other engineering achievements.

The Rolls-Royce Heritage Trust Allison Branch focuses on the collection, preservation, protection and exhibition of the history of the Indianapolis operations and engineering site-formerly known as Allison.

We will have a rare opportunity to explore the archives, storage, restoration, and display areas of the recently-renovated Rolls-Royce Heritage Trust Allison Branch Museum. The James A. Allison exhibition hall contains several dozen engines including the piston Liberty and V-1710, turboprops like the T-40 and T-56, jet engines such as the 578-DX unducted fan, regenerated gas turbines, and the AE1107 that powers the V-22 Osprey tilt rotor

Please enjoy the presentations, tours and company of other engine enthusiasts.

Schedule of Events

Wednesday July 15

12 noon to 5:00pm Registration in the hotel lobby. Visit with other conventioners.
6:00pm to 9:00pm Reception. Light hors d'oeuvres served plus a cash bar.

Thursday July 16

8:00am to 8:30am Welcome and introductions
8:30am to 9:00am Break
9:00am to 11:00am Presentation — John Leonard: A Summary of Allison History
11:00am to 12 noon Lunch program (lunch provided by the AEHS)
Presentation — Paul Draper of Roush Engineering: Rebuilding the Modern Merlin
12 noon to 5:00pm Tour of Allison Museum
5:30pm until Dutch dinner — optional participation but highly recommended

Friday July 17

8:00am to 9:30am Presentation — Dan Jensen: History of the Model 250 Turbine Engine
9:30am to 10:00am Break
10:00am to 11:30 Presentation — Dan Whitney: Supercharging the Allison V-1710
11:30am to 12:30pm Lunch with informal special interest sessions (lunch provided by the AEHS)
12:30pm to 1:00pm Travel to Speedway Museum
1:00pm to 5:00pm Tour of Speedway Museum
6:00pm to 9:00pm Banquet at Days Inn Airport. After dinner speaker — Dave Newill:
Learned Along the Way - Connections in Early Aircraft Engine History!

Saturday July 18

9:00am to 10:30am Presentation — Tom Fey: Aeroproducts Contra-Rotating Propellers
10:30am to 11:00am Break
11:00am to 12 noon Silent auction winners announced, 2010 Convention discussion, goodbyes.

Presenters' Biographical Sketches

Tom Fey is research pharmacologist (drug hunter) from the suburbs of Chicago who has a life-long interest in engines and the automobiles, motorcycles, boats, trains, and aircraft they power. The great piston era of the 1940s and '50s and Unlimited class air racing are of particular interest. The first glimpse of the contra-rotating propellers on the RB-51 world speed record holder began an unnatural fascination with propeller technology. Tom has written articles for air racing newsletters, prototyped and published several electric radio controlled aircraft designs, contributed to *Torque Meter*, and gave a talk on propeller design at the 2005 AEHS convention. With two kids almost out of college, a patient wife, and a dog named Doolittle, he has a bit more time for restoring propellers, touring on bicycle, researching obscure topics to figure out how things work, and unleashing those findings upon the AEHS membership.

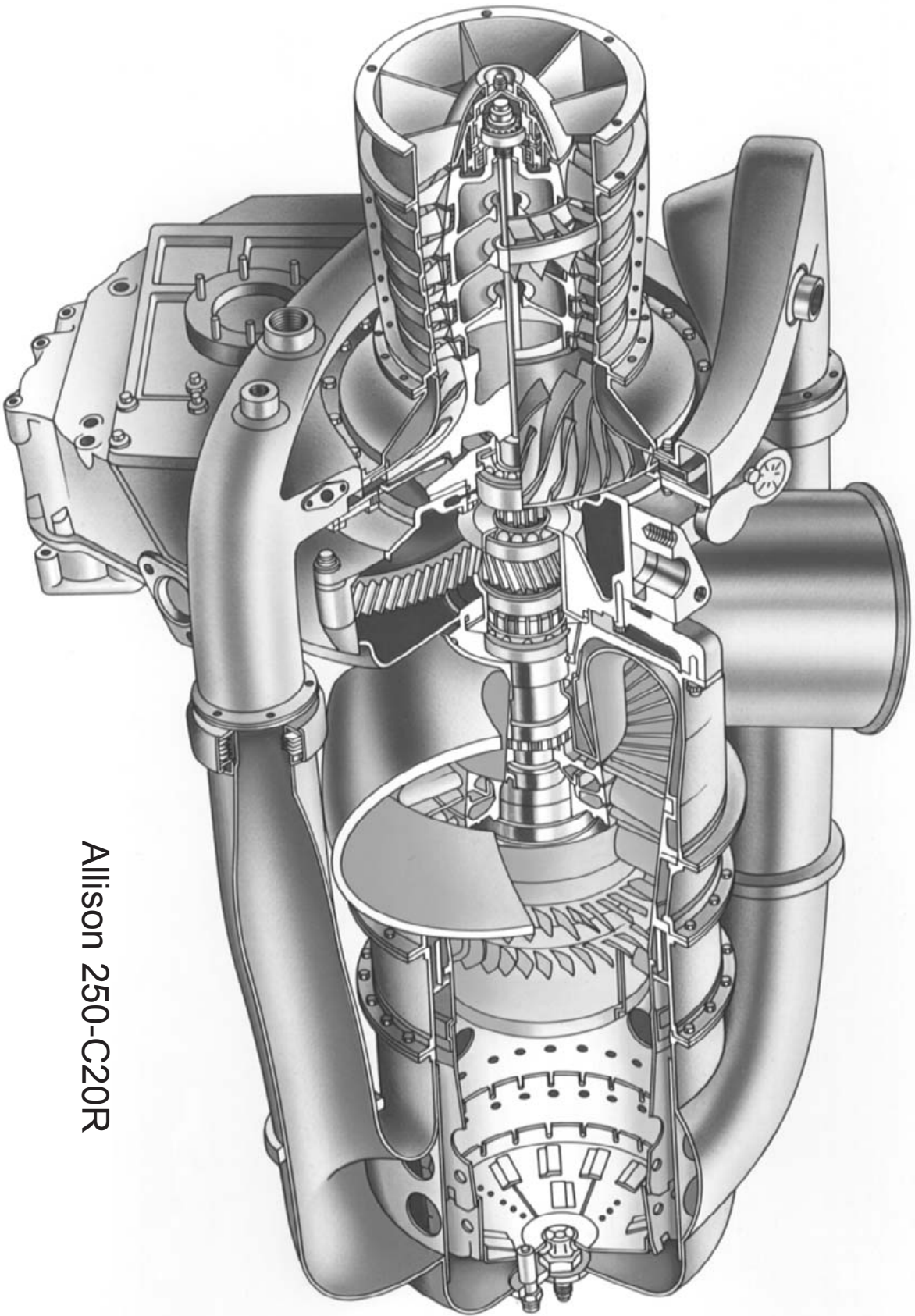
Daniel T. Jensen is currently Chief, Engineering Management Systems at Rolls-Royce Corporation in Indianapolis. He graduated with a BS in Aeronautical and Astronautical Engineering from the University of Illinois at Urbana-Champaign in 1988 and an MS in Mechanical Engineering from the University of Notre Dame in 1990. He has held positions in aircraft performance (Swissair); aircraft aerodynamics, stability and control, and propulsion installation (Boeing); and aircraft engine controls and mechanical design (Rolls-Royce). In 1999, Dan became the first American to be named Technical Assistant to the Director - Engineering and Technology for Rolls-Royce plc. He is a Lifetime Associate Fellow of the AIAA, chairs the AIAA Emerging Technologies Committee and is currently serving as President of the University of Illinois Aerospace Engineering Alumni Advisory Board. He has two patents and has authored and co-authored a number of technical papers.

John Leonard grew up in a family where both his father and grandfather were long time Allison employees starting in 1917. After attending Purdue University, he worked in engineering departments at McDonnell Douglas in St. Louis for 33 years. Aviation has long been one of John's hobbies in addition to his profession. In 1997, after retiring from McDonnell Douglas, he moved to Indiana and got a job at Rolls-Royce and worked 12 years in the controls department. He became the editor of the newsletter for the Allison Branch of the Rolls-Royce Heritage Trust, authored two AIAA papers and co-authored two other AIAA papers on Allison engines, and later researched and wrote a book on Allison engines titled, *The Allison Engine Catalog*.

David B. Newill grew up with Aviation Heritage - looking up at the Wright Patterson AFB traffic pattern from the age of five. Later, his parents found they could drop off Dave and a friend at the original Air Force Museum early on summer mornings with \$5 for food and pick two exhibit-exhausted boys when the museum closed. Dave was the Heritage Officer at the Air Force Academy - and found himself attending the Ribbon Cutting of the new National Museum of the U.S.A.F. to represent the Air Force of the future. Along the way he became an Air Force Pilot, KC-135, with Commercial, Instrument, SEL, MEL, Glider ratings. His logbook includes three hops in the Wright B flyer and a Dragon Rapide. Dave's image is found online showing how the cradle of the Wright glider works. He is a degreed engineer, with a Masters in Systems Mgt and an Associate Fellow of the AIAA. At Rolls-Royce he is the Sr. Executive, Marketing & Strategy for the Helicopter group and President of Rolls-Royce Heritage Trust, Allison Branch, Inc.

Dan Whitney is a retired Professional Mechanical Engineer with a career-long interest in the Allison V-1710 engine. During the Viet Nam war he served in the U.S.A.F. as a Chief of Aircraft Maintenance for a Wing of C-130s. He then began a career in the electric utility industry, first responsible for the operation and engineering of a large nuclear power plant and then for development of advanced gas turbines for power generation. His avocation remained aviation where he focused on the engineering basis of the V-1710. This led to writing the definitive *Vee's For Victory! The Story of the Allison V-1710*, published by Schiffer in 1998.

Dan has provided several articles for the AEHS Journal *Torque Meter*, other magazines and aviation journals as well as presenting at the annual AEHS conference. At present he operates a V-1710 on a trailer, complete with a propeller and systems configured as on the P-40 airplane. He is the past-president of the Aerospace Museum of California in Sacramento, California, where he supports the restoration and display of the museum's considerable engine collection. He and his family live in Sacramento and enjoy the many diverse aviation and cultural activities of the area.



Allison 250-C20R