



**Official Program**  
**Third Annual AEHS Convention**  
**Windsor Locks, Connecticut**  
**July 6 - 9, 2006**

## Message from the Vice President

Welcome to our third annual AEHS Convention.

As we learn from past Conventions we are continually striving to improve. Constant tweaking and changes based on your input has resulted in better and more enjoyable conventions.

You will notice that for this year we have two field trips—one to the New England Air Museum and one to Pratt & Whitney. Some exciting news has developed over the P&W visit. Although it was not originally on the cards, it appears that we can visit the P&W museum. If you have never seen this facility before you are in for a real treat. Rare artifacts such as the liquid cooled sleeve valve engines, experimental cylinder designs, experimental engines plus rare pieces such as the 20 cylinder water cooled Yellow Jacket are on display. For the New England Air Museum visit we will enjoy a “behind the scenes” tour where a lot of the really good stuff is stashed.

Another special treat is having the panel discussion with retired P&W engineers who designed and developed the engines that we all are familiar with; R-2800, JT3D, R-4360 etc. This will be a once in a lifetime opportunity to chat with and question these movers and shakers who were there when it was all happening.

And don't forget to mingle and shoot the breeze with fellow enthusiasts and experts during breaks and happy hours. We are indeed fortunate in having Pete Law attend. Those of you who attended the 2005 Convention will agree that a conversation with Pete is an education. Likewise, Kevin Cameron will be in attendance. Kevin, as many of you know, is a walking encyclopedia of technical information. For the Rolls-Royce aficionados don't miss the opportunity to chat with Dave Birch. Dave has traveled all the way from England for our Convention so this is yet another great opportunity to socialize with THE expert on Rolls-Royce. So don't be shy, introduce yourself to these folks, they would love to talk to you.

This Convention offers a golden opportunity to escape the daily grind of work, stick 'n ball game talk, mowing the grass and instead talk about and indulge yourself in your favorite subject while enjoying your preferred adult beverage. Doesn't get much better than that. It is indeed a pleasure and honor having you attend.

Graham White

## Partial Lists of Engines

### New England Air Museum

Allison V-1710-81  
 Anzani B  
 Armstrong-Siddeley Genet  
 BMW 801-ML  
 Boeing 502 cutaway  
 Bradley V-8  
 Chrysler XIV-2220-1  
 Curtiss D-12  
 Curtiss OX-5  
 Detroit Aero 2 cylinder  
 Elbridge 4 cylinder  
 Fiat A 12\*  
 General Electric J47-GE-13  
 General Electric TF34-GE-100  
 General Electric YT58-GE02A  
 Gnome B-2  
 Gnome Omega  
 Guiberson T-1020  
 Hall Scott A-2  
 Harriman 4 cylinder  
 Heath-Henderson B-4  
 Hispano Suiza (Wright-Martin built)  
 Isotta Franchini Asso 750  
 Junkers Jumo 004B cutaway  
 Lawrance J-1  
 Liberty V-12  
 Lycoming T53-L-11B  
 Nakajima NK-9H Homare  
 Packard 1A-1551  
 Pratt & Whitney J42  
 Pratt & Whitney PL1A-1  
 Pratt & Whitney R-1340 Wasp C  
 Pratt & Whitney R-1535-96 Twin Wasp Jr  
 Pratt & Whitney R-1830 Twin Wasp  
 Pratt & Whitney R-2800-39 Double Wasp  
 Pratt & Whitney R-4360 Wasp Major  
 Pratt & Whitney Wasp (Roscoe Turner Boeing 247-D)  
 Pratt & Whitney Wasp A  
 Pratt & Whitney Wasp C cutaway  
 Rolls-Royce Nene II cutaway  
 Rolls-Royce V-1650-1  
 Smith 2 cylinder  
 Union Aero Engine\*  
 Westinghouse J34 cutaway  
 Wright Brothers 4 cylinder  
 Wright R-1820-45  
 Wright R-2600-13  
 Wright R-3350-23  
 Wright T-3A Tornado

### Pratt & Whitney Museum (All are P&W)

H-2600 24 Cylinder	1940
H-3130 24 Cylinder	1938
J42-P-8	1948
J48-P-5	1951
J57 (JT3-A)	1950
J91 (JT9)	1958
JT8D	1960
JT10	1956
JTF10A-1 (TF30)	1961
JTF14	1962
R-985 Wasp Jr C	1936
R-1340-B Wasp	1929
R-1690 Hornet C	1933
R-1690 Hornet E	1937
R-1830 C3 Twin Wasp	1946
R-1830-SB3-G Twin Wasp	1936
R-1860 Hornet B	1928
R-2000-25D13-G Twin Wasp	1946
R-2060 Yellow Jacket	1932
R-2180-S1A-G Twin Hornet	1936
R-2270	1930
R-2800-30W Double Wasp	1948
R-2800-65 Double Wasp	1944
R-2800-CB16 Double Wasp	1950C
R-4360-53 Wasp Major	1952
R-4360-57 Wasp Major	1954
R-4360-TSB1G Wasp Major	1943
RCJ-2 RAMJET	1954
TF30-P-6	1963
T32 (PT1)	1945
TF33 (JT3D)	1957
T34 (PT2)	1953
T34-P-12 (PT2)	1953
XT57-P-1 (PT5)	1955
YJ57-P-3	1951
XJ75-P-3	1954

\* Restored to running condition by AEHS member  
 "Sal" Salomon

# SCHEDULE OF EVENTS

## Thursday July 6

- 12 noon to 5:00pm Registration at the Ramada Inn lobby and shoot the breeze
- 6:00pm to 8:00pm Happy hour and socialize at the poolside Tiki party

## Friday July 7

- 9:00am to 9:30am Introductory comments
- 9:35am to 10:30am Panel discussion with P&W retirees. These are the folks who were there when it was all happening. Have your questions lined up!
- 10:30am to 11:00am Break and shoot the breeze
- 11:00am to 12 noon Continue panel discussion with P&W retirees
- 12 noon to 1:30pm Lunch break (provided). Special interest sessions
- 1:30pm to 2:00pm Travel to P&W Training Center in East Hartford
- 2:00pm to 4:30pm Visit P&W Training Center and Museum
- 6:30pm to 9:00pm Dinner on your own. Informal dinner for those wishing to participate. Details to be announced.

## Saturday July 8

- 9:00am to 10:30am Presentation - Dave Birch, "The Merlin's Breath"
- 10:30am to 11:00am Break and shoot the breeze
- 11:00am to 12 noon Presentation - Kim McCutcheon, "The Liquid-Cooled Engines of P&W"
- 12 noon to 1:30pm Lunch break (provided). Special interest sessions
- 1:30pm to 5:00pm Museum visit to New England Air Museum
- 6:00pm to 9:00pm AEHS Convention Dinner at Ramada Inn.  
After dinner speaker, Kevin Cameron.

## Sunday July 9

- 8:30am to 10:00am Presentation - Pete Law, "Unlimited Class Air Racing"
- 10:00am to 10:30am Break and shoot the breeze
- 10:30am to 11:00am Movie - *Contribution to Victory*
- 11:00am to 12:30pm Auction, critique, general discussion, AEHS state of the union and goodbyes.

## Speaker's Biographies

### **Dave Birch**

Dave Birch has had a life-long interest in aviation, and a few months after leaving school in 1954 began a trade apprenticeship with Rolls-Royce at its flight test establishment at Hucknall in Nottinghamshire. From 1963 he began to take an interest in the past achievements of Hucknall and over a period of time wrote articles on various aspects of its history and achievements. He remained in his trade until 1979 and then transferred to Derby to work in the RB211 service department, taking early retirement to concentrate on researching and writing Company history. Dave was one of the founders of the Rolls-Royce Heritage Trust and since 1983 has edited its magazine *Archive*. For the Trust he has written two books - *Rolls-Royce and the Mustang*, and *Rolls-Royce Armaments*, and co-authored two others, *The Rolls-Royce Crecy* and *The Rolls-Royce Meteor*. On this, his eighth visit to the United States, Dave is looking forward to meeting AEHS members and giving his presentation outlining the evolution of the Merlin's two-stage supercharger.

### **Kevin Cameron**

Harvard educated Kevin Cameron is probably best known as a motorcycle journalist. He has been the technical editor of *Cycle World* for many years where he enjoys an enthusiastic following of fellow gear heads. Kevin is renowned for explaining the most complex issues in layman's terms – a good indicator that he has a thorough grasp of all things technical. Many people do not realize that Kevin's technical knowledge goes far beyond motorcycles; he is equally conversant in aviation matters.

### **Pete Law**

Pete has enjoyed a fascinating career – primarily working in Lockheed's famous "Skunk Works". The first post-1949 Thompson Trophy Unlimited Class air race was held in Reno in 1964. Shortly after this inaugural event Pete became involved in Daryl Greenamyers' Bearcat project. Fellow Skunk Works engineer Bruce Boland was also involved. With these two brilliant engineers there is little wonder that Greenamyers' Bearcat quickly established itself as the world's fastest piston engined aircraft. It was on this project that Pete cut his teeth on systems such as cooling, carburetors, water injection systems, ram recovery designs...etc. Within a few short years Pete became indispensable on the Reno ramp as he was barraged with requests from racers on engineering problems. It would be impossible to list all of Pete's accomplishments in this brief bio but suffice to say he was intimately involved with aircraft such as the Red Baron RB-51, Super Corsair and Tsunami.

### **Kim McCutcheon**

Kim has been involved with aviation for more than 40 years. He began as a member of the Civil Air Patrol and paid for part of his college education with jobs in aviation. His computer career was spent developing data acquisition, machine control, communication and database applications for academia, medicine, industry and government. In 1993, Kim retired from his real job but soon lapsed back into old aviation habits. In 1995, he founded an aircraft maintenance organization. Shortly thereafter he began researching and writing about aircraft engines. Kim holds Commercial Pilot (ASME), Flight Instructor and Mechanic (A&P/IA) Certificates. He has authored several articles and a book on aircraft engines.



