

### MEDALIST FOR 1998

*For outstanding leadership and innovative contributions in providing advanced aeronautical and space propulsion systems.*



**RICHARD J. COAR**

Richard Coar was born in Hanover, New Hampshire on May 2, 1921 and graduated from Tufts University with a Bachelors degree in 1942. He is the recipient of the prestigious George Westinghouse Gold Medal awarded by the American Society of Mechanical Engineers.

He is a member of the National Academy of Engineering and the American Society of Metals and has served on the Aeronautics and Space Engineering Board for the National Aeronautics and Space Administration. Mr. Coar also served as a technology export consultant for the Department of Defense.

After graduation from Tufts, he joined the engineering department at Pratt & Whitney, and in 1956 became the Chief Engineer at the Florida Research and Development Center in West Palm Beach, Florida, which was the space and military engine organization of the United Technologies Corporation.

In 1970, he was promoted to be the assistant general manager for the Florida Center. In 1971, he was made a vice-president, in 1976 he became the executive vice-president, and in 1983 he was named as president of the Florida Research and Development Center. In 1984, Mr. Coar became the executive vice president for the United Technologies Corporation until his retirement in 1986, following an outstanding career in rocket and air-breathing propulsion systems. He was one of the key individuals who led Pratt & Whitney into the business of gas turbine engine development and design. He was involved with every major P&W engine program.

During Mr. Coar's career, the high-speed J-58 turbine engine was developed to enable military aircraft to fly at speeds of Mach 3 plus. This engine used a unique combined cycle engine, wherein the low speed operation occurred with the flow passing through conventional gas-turbine components and the high-speed operation took place with a major portion of the flow passing through a ram-burner. The engine was used to power the SR-71 Blackbird and the Lockheed A-12.

## Daniel Guggenheim Medal

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It was also during his tenure that Pratt & Whitney developed the revolutionary, high performance hydrogen-oxygen RL-10 rocket engines which were used to launch the NASA Agena system which carried numerous satellites to earth orbit.

His contributions to engine systems research and development resulted in major steps forward for both air-breathing propulsion systems and for rocket engines.