



Salinger

BENJAMIN A. COSGROVE

1927–2006

Elected in 1992

*“For contributions to the development and design of
commercial jet transport aircraft”*

BY JOHN WARNER AND PHIL CONDIT

BEN COSGROVE, major contributor to airline safety and a longtime Boeing engineering leader, died September 8, 2006. His contributions to the knowledge of aging aircraft and the techniques to ensure their integrity were groundbreaking.

Born in 1926 in Detroit, Michigan, Cosgrove played with model airplanes as a child—thus began a lifelong fascination with airplanes. After a stint in the Navy, he entered Notre Dame University and earned a B.S. in aeronautical engineering. He received the College of Engineering’s Honor Award in 1985 in recognition of his distinguished achievements in engineering, management, and service to the field of aviation. He received an honorary doctoral degree in engineering from Notre Dame in 1993.

Cosgrove’s career began at the Boeing Corporation in 1949, when he helped design the tail assemblies for the B-47. During his career he was associated with almost all of Boeing’s jet aircraft programs. He served as a stress engineer and structural unit chief on the B-47, the B-52, and the KC-135 tanker. For the 707, he worked on the fuselage design; for the 727, he helped

design the wings; for the 737, he dealt with stress issues; and for the 747, he was unit stress chief. He also worked on the U.S. supersonic transport program. In 1973 he became chief project engineer for the 707 and in 1976 was appointed director of engineering for the 707/727/737 division. This experience, particularly involving structures, won him a worldwide reputation.

Cosgrove was later promoted to chief project engineer and director of engineering for the 767 program. In June 1983 he was appointed director of engineering for the Everett Division (747/767 programs). The 767 had many innovations, such as the glass cockpit, and he was instrumental in making that program a success.

The veteran engineer was appointed vice president and general manager of the Engineering Division of Boeing Commercial Airplane Group in 1985. During this time, Cosgrove provided engineering staffing and oversaw technological progress on the 777. He paid close attention to and supported the first widespread use of computer-aided design for a commercial airplane.

In May 1989, Cosgrove was promoted to senior vice president. He also assumed the government affairs post, responsible for all liaison with regulatory agencies in matters of design and technology, and he was the senior executive on safety matters. Cosgrove retired in 1993.

Cosgrove was a member of the Aging Fleet Task Force, formed in 1988 after a structural failure in the fuselage of an aging Aloha Airlines 737. His integrity, technical knowledge of structures, and reputation helped convince airline leaders to replace parts on airplanes once they reached a certain age. According to one member of the task force, Cosgrove was able to speak his mind without hesitation—and airline presidents listened.

Cosgrove was honored by the National Aeronautical Association in 1991 with its Wright Brothers Memorial Trophy for lifetime contributions to commercial aviation, safety, and technical achievement. In 1992 he was inducted as a member of the National Academy of Engineering for his contributions

to the development and design of commercial jet aircraft. He subsequently served on nine different committees for the Academy.

Cosgrove was honored in 1983 by the Society of Aviation and Space Technology for his role in converting the Boeing 767 transport design from a three-man to a two-man cockpit configuration. In 1988 he received the Collier Award for significant contributions to aviation propulsion technology. And in 1988 the Society of Automotive Engineers awarded him the prestigious Franklin W. Kolk Award for development of the technologies used in the current family of airplanes. In 1989 the American Institute of Aeronautics and Astronautics (AIAA) awarded him the Ed Wells Technical Management Award for his efforts in addressing issues related to aging aircraft. In 1991 he received the annual Design News Magazine Special Achievement Award for his contributions to the industry.

Cosgrove was a member of the Society of Automotive Engineers Aerospace Council, the Daniel Guggenheim Medal Board, and the American Society of Mechanical Engineers Industry Advisory Board and was a fellow of both the AIAA and the Royal Aeronautical Society.

Benjamin Cosgrove was a legend both in the industry and at Boeing. He expected a great deal from his people, and his colleagues, and he motivated and inspired many an engineer. He was a structures guy through and through, and he never let anyone forget that structural design is the backbone of a successful airplane. He insisted on integrity and ethical behavior from his employees. He also worried about overdependence on computers. He instilled in all engineers the notion that understanding must be grounded in fundamentals and engineering principles and that good judgment was always the guide. His advice was: "Hold your fire until you know your business."

Cosgrove is survived by his wife, Virginia, and five children.