



# Aerospace Pioneers: Boeing leaders through the years

First U.S. International Airmail Flight in Boeing Model C with William Boeing (right) and Eddie Hubbard

# The Four Founders of Boeing



**William E. Boeing**

Boeing, 1916 to 1934

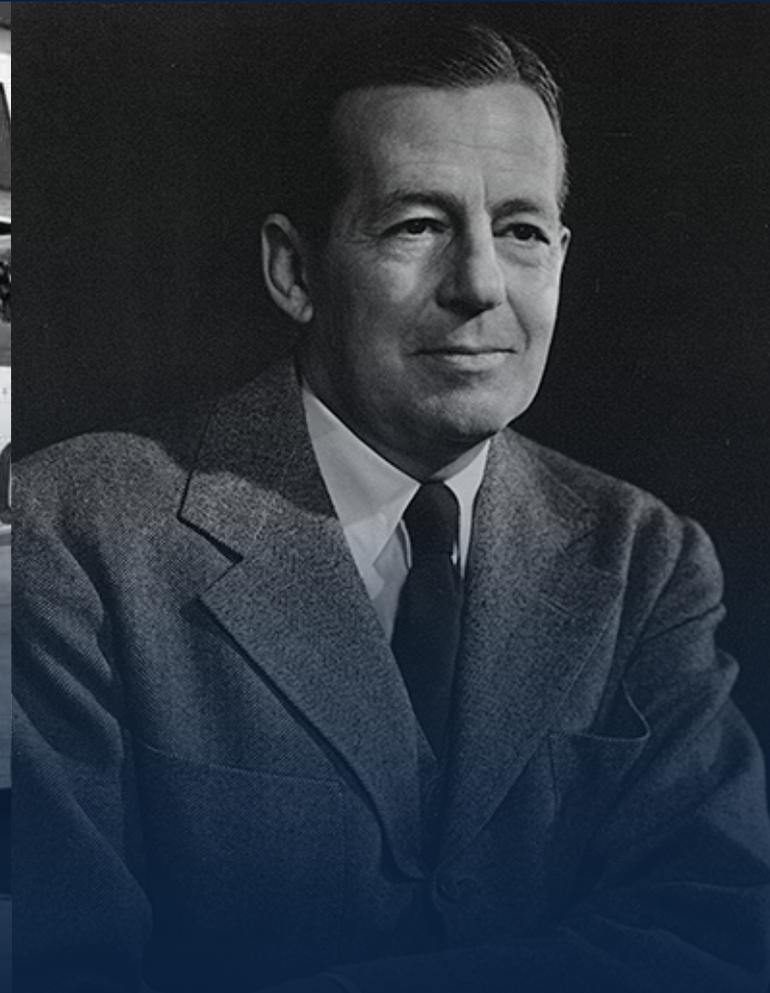
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**James Smith McDonnell**

McDonnell Aircraft Corp., 1939 to 1967  
McDonnell Douglas Corp., 1967 to 1980

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**Donald W. Douglas Sr.**

Douglas Aircraft Co., 1921 to 1967  
McDonnell Douglas Corp., 1967 to 1981

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**James H. Kindelberger**

North American Aviation, 1934 to 1962

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# The Boeing Company



Boeing Red Barn under guard during World War I

# William E. Boeing



## Executive Biography

William E. Boeing left Yale University in 1903 to take advantage of opportunities in the risky and cyclical, but financially rewarding, Northwest timber industry. That experience would serve him well in aviation.

Under his guidance, a tiny airplane manufacturing company grew into a huge corporation of related industries. When post-Depression legislation in 1934 mandated the dispersion of the corporation, Boeing sold his interests in the Boeing Airplane Co. but continued to work on other business ventures.

He became one of America's most successful breeders of thoroughbred horses. He never lost his interest in aviation, and during World War II he volunteered as a consultant to the company. He lived until 1956, long enough to see the company he started enter the jet age.

William E. Boeing was a private person, a visionary, a perfectionist and a stickler for the facts. The wall of his outer office bore a placard that read: "2329 Hippocrates said: 1. There is no authority except facts. 2. Facts are obtained by accurate observation. 3. Deductions are to be made only from facts. 4. Experience has proved the truth of these rules."

According to his son, William Boeing Jr., Boeing was a fast and avid reader and remembered everything he read. He was also a perfectionist. While visiting his airplane building shop at the Duwamish shipyard in 1916, Boeing saw a set of improperly sawed spruce ribs. He brushed them to the floor and walked all over them until they were broken. A frayed aileron cable caused him to remark, "I, for one, will close up shop rather than send out work of this kind."

[Expanded William Boeing biography \(PDF\)](#)

## COMPANY HISTORY

### Boeing, 1916 to 1934

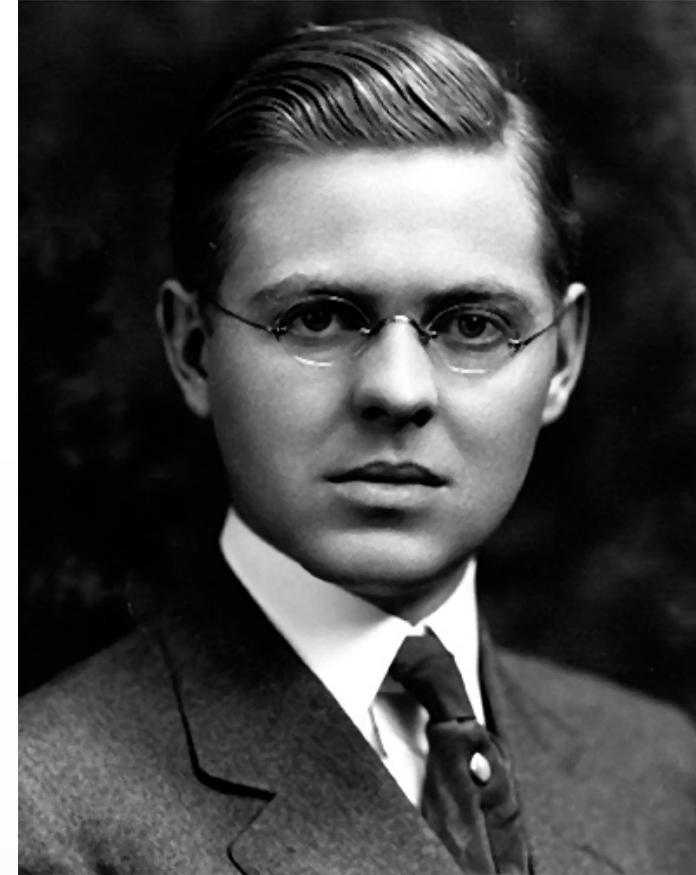
**Company Founder and Owner**

**President:** July 1916 to May 1922; January 1925 to February 1926

**CEO:** July 1916 to February 1926

**Chairman of the Board:** July 1916 to May 1922 (Acting);  
May 1922 to July 1934

# Edgar N. Gott



## Executive Biography

Edgar N. Gott, born in 1887, graduated with a Bachelor of Science in chemical engineering from the University of Michigan in 1909. Eight years later he was named vice president of Pacific Aero Products Co., Seattle, Wash., which became the Boeing Airplane Co. a year later. He was the first cousin of the company founder, William Boeing.

Gott was president of the company between 1922 and 1925 and led the company out of the slump following World War I. Under his guidance, the company developed its first biplane fighters and established itself as a designer and manufacturer of military aircraft.

Gott left the company in 1925, but continued his career in the aviation industry with other manufacturers. During World War II, he chaired the San Diego war transportation and war housing commissions. He died in 1947.

## COMPANY HISTORY

### Boeing, 1916 to 1925

**General Manager**

**President:** May 1922 to January 1925

# Philip G. Johnson



## Executive Biography

Philip G. Johnson joined the Boeing Airplane Co. in 1917 after graduating from the University of Washington School of Engineering. Within three years he was head of plant operations. The following year he became company vice president, and in 1926, when he was only 31 years old, he was named president of the company.

With the merger of all the Boeing holdings, Johnson went on to run United Air Lines and later the Boeing conglomerate, as president of United Aircraft and Transport Co.

Johnson left the company in 1933 to go to Canada to help establish Trans Canada Airlines, but returned in 1939 as president to apply his production genius to the Boeing Airplane Co.'s massive wartime efforts. When he died suddenly of a stroke on Sept. 14, 1944, while overseeing operations at the Boeing plant in Wichita, Kan., he was mourned by factory workers, generals and presidents.

## COMPANY HISTORY

### Boeing, 1917 to 1933, 1939-1944

#### General Manager

**President and CEO:** February 1926 to August 1933;  
September 1939 to September 1944

# Clairmont L. Egtvedt



## Executive Biography

Clairmont L. Egtvedt joined Boeing as a draftsman and mechanical engineer in 1917 after graduating from the University of Washington School of Engineering. He became company vice president and general manager in 1926 and was company president from Aug. 2, 1933, to Sept. 9, 1939. During that period he also was acting chairman of the board, appointed after William Boeing resigned in 1934.

Egtvedt was officially named board chairman in 1939, as Phil Johnson became company president. But when Johnson died suddenly in September 1944, Egtvedt reassumed the duties of president until William Allen was appointed to the position in September 1945. Egtvedt then returned to the chairmanship.

Under Egtvedt's direction, the Boeing Airplane Co. began building larger and more complex airplanes including the Clipper, the Stratoliner, the Flying Fortress and the Superfortress.

He retired from Boeing April 24, 1966, and lived until 1975.

## COMPANY HISTORY

### Boeing, 1917 to 1966

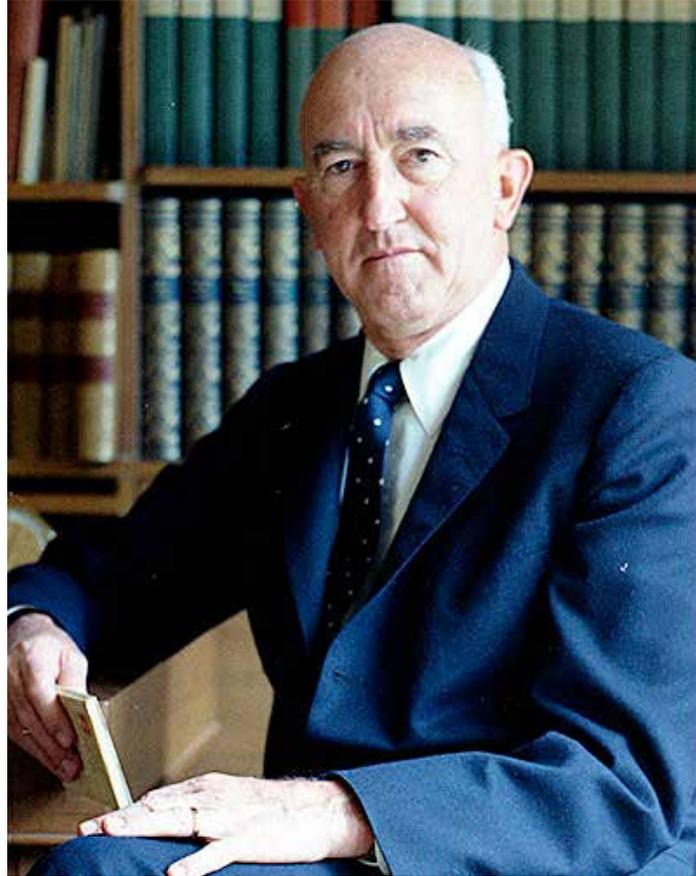
#### General Manager

**President:** August 1933 to September 1939;  
September 1944 to September 1945 (Acting)

**CEO:** September 1933 to September 1939;  
September 1944 to September 1945

**Chairman of the Board:** July 1934 to September 1939 (Acting);  
September 1939 to April 1966

# William M. Allen



## Executive Biography

William M. Allen was born in Lolo, Mont., and graduated from Harvard Law School. During the 1920s, he joined the law firm providing attorneys for the Boeing Airplane Co. and became a member of the company's board of directors.

He served as company president from Sept. 1, 1945, to April 29, 1968, taking the helm when the end of World War II brought production to a standstill. Allen guided Boeing back to success, from the era of propeller-driven aircraft into the age of jets, intercontinental missiles and spacecraft.

He was responsible for the introduction of the jet transport and oversaw the beginning of the 747 program. Allen was an innovator who encouraged diversification, and he helped create The Boeing Company's place in the U.S. space program. He became chairman in 1968 and chairman emeritus in 1973. In 1978, the board named Allen honorary chairman. He died in October 1985.

## COMPANY HISTORY

### Boeing, 1945 to 1972

**Company Attorney:** 1925 to 1945

**President:** September 1945 to April 1968

**CEO:** September 1945 to April 1969

**Chairman of the Board:** April 1968 to September 1972

**Chairman Emeritus**

# Thornton A. Wilson



## Executive Biography

Thornton "T" Arnold Wilson was born in Sikeston, Mo., on Feb. 8, 1921, and came to work for Boeing in 1943, the year he graduated from Iowa State University with a degree in aeronautical engineering. He joined the team of engineers designing the radically new B-47 swept-wing bomber and went on to become project engineer for the B-52 heavy bomber.

Wilson headed the Minuteman intercontinental ballistic missile program. He became company president in 1968 and chief executive officer a year later. As CEO, he was responsible for developing and producing the 757 and 767 jetliners, helped consolidate the company's business base and led Boeing toward preeminence in the global marketplace.

Wilson was president of the company until Sept. 29, 1972, when he was appointed chairman of the board. He became chairman emeritus Dec. 3, 1988, and resigned from that position in 1993. He died on April 10, 1999.

## COMPANY HISTORY

### Boeing, 1943 to 1987

**President:** April 1968 to September 1972

**CEO:** April 1969 to April 1986

**Chairman of the Board:** September 1972 to December 1987

**Chairman Emeritus**

# Malcolm T. Stamper



## Executive Biography

Malcolm Stamper was born April 4, 1925, in Detroit, Mich. He served as a naval officer during World War II and later attended Georgia Tech, where he earned a degree in electrical engineering and also played guard for the 1944 and 1945 Yellow Jackets football team. He went on to study law at the University of Michigan.

Stamper joined Boeing in 1962 as director of the company's aerospace electronics operations. In 1965, he was elected company vice president and named general manager of the Turbine Division.

A year later Stamper was named president and general manager of the 747 Division, where he was responsible for running the program from startup to the first flight, as well as overseeing the construction of Boeing's Everett, Wash., facilities. Later, as vice president-general manager of the Boeing Commercial Airplane Company, Stamper directed all the activities involving production, sale and development of the 707, 727, 737, 747 and SST.

He served as president of the company and a member of the Board of Directors from 1972 until 1985, when he became vice chairman of the board. He retired in 1990. He died on June 14, 2005.

## COMPANY HISTORY

### Boeing, 1962 to 1990

**President:** September 1972 to February 1985

**Vice-Chairman of the Board**

# Frank A. Shrontz



## Executive Biography

Frank Shrontz joined Boeing in 1958 with a law degree from the University of Idaho and an MBA from Harvard. He left the company in 1973 to accept a high-level Defense Department position and, in 1976, became assistant secretary of the Air Force. He rejoined Boeing in January 1977 as corporate vice president of Contract Planning and Administration.

From September 1978 until May 1982, he was vice president and general manager of the 707/727/737 Division of Boeing Commercial Airplane Company and, in April 1984, became its president.

Shrontz was elected president of The Boeing Company in February 1985. He was elected chief executive officer in April 1986 and became chairman of the board in January 1988. He became chairman emeritus Feb. 1, 1997, following his retirement as chairman of the board.

## COMPANY HISTORY

### Boeing, 1958 to 1997

**President:** February 1985 to August 1992

**CEO:** April 1986 to April 1996

**Chairman of the Board:** January 1988 to January 1997

**Chairman Emeritus**

# Philip M. Condit



## COMPANY HISTORY

### Boeing, 1965 to 2004

**President:** August 1992 to August 1997

**CEO:** April 1996 to December 2003

**Chairman of the Board:** February 1997 to December 2003

## Executive Biography

Elected president and member of the board of directors of Boeing in 1992, Phil Condit added the title of chief executive officer in 1996. In 1997, he was elected chairman. He was the seventh chairman since the company was founded in 1916.

Condit resigned from his position as chairman and chief executive officer of The Boeing Company on Dec. 1, 2003. He retired from the company in March 2004.

Under Condit's leadership, several mergers and acquisitions transformed the company into a broad-based, global enterprise. The acquisition of Rockwell Aerospace, the merger with McDonnell Douglas and the addition of Hughes Space & Communications established a company with great strength and breadth.

Condit's career spanned more than 35 years of service to Boeing in almost 20 assignments. Condit joined Boeing in 1965 as an aerodynamics engineer on the Supersonic Transport (SST) program. He was promoted to lead engineer for the Boeing 747 high-speed configuration airplane in 1968 and was named the 747 performance lead engineer in 1971. Within a year, he advanced to manager of the quiet short-haul system development program, and then became manager of 727 marketing in 1973. He entered the Sloan Fellowship program at the Massachusetts Institute of Technology in 1974. Upon completion of his year of study at MIT, he returned to Boeing as manager of new program planning in 1975. A year later, he became director of program management for the 707/727/737 Division. He was named 757 chief project engineer in 1978, and director of 757 engineering in 1981.

Condit was named vice president and general manager of the 757 Division in 1983. Later that year, he became vice president of the Renton Division, which built the 707, 727, 737 and 757 airplanes. In 1984, Condit was promoted to vice president of sales and marketing for Boeing Commercial Airplane Company, serving during a period of exceptional sales. He was appointed executive vice president of Boeing Commercial Airplane Company in 1986 and, in 1989, executive vice president and general manager of the New Airplane Division, which subsequently became the 777 Division.

Condit is the author of several published papers on commercial aircraft technology and holds a patent, awarded in 1965, for the design of a flexible wing called the sailwing. He also led the team that launched the wide-body Boeing 777 airplane, and he pioneered management concepts that integrated design/build teams of customers, suppliers and employees to design and produce the 21st-century jet. The 777 "Working Together" team has received numerous aeronautical awards, including the prestigious Collier Award.

He received a bachelor's degree in mechanical engineering from the University of California at Berkeley in 1963; a master's degree in aeronautical engineering from Princeton University in 1965; a master's degree in management from Massachusetts Institute of Technology in 1975; and, in 1997, a doctorate in engineering from Science University of Tokyo, where he was the first Westerner to earn such a degree. A proponent of lifelong learning, he often met with students and teachers, and introduced a unique program to encourage and reward Boeing people who pursue learning throughout their careers. Condit was the co-chair of Achieve, a nonprofit organization that helps states raise academic standards. In recognition of his commitment to education, the United Negro College Fund awarded him the prestigious Frederick D. Patterson Award in 1999.

Condit served on the board of Hewlett-Packard Company, is co-chairman of the Trans Atlantic Business Council, and was chairman of the Business Roundtable. Elected a member of the National Academy of Engineering in 1985, he is also an honorary fellow of the Royal Aeronautical Society and an honorary fellow of the American Institute of Aeronautics and Astronautics. He belongs to the Society of Automotive Engineers and has chaired the NASA Advisory Council's Aeronautics Advisory Committee. A Distinguished Eagle Scout Award winner, Condit is past president of the Chief Seattle Council of the Boy Scouts of America and now serves on the national board. In 1999, he received the Aerospace Industry Distinguished Good Scout Award from The Boy Scouts of America, Los Angeles Area Council. He was recognized with the award for his volunteer efforts in the community and in scouting programs. Since 1997, he has been a member of the board for Seattle's A Contemporary Theater (ACT) and currently serves as chairman.

He has won numerous awards for engineering and management achievements, including the Japan America Society's 1997 Kokusai Shimin Sho, or International Citizens Award, for global leadership in the private sector; the Financial World Chief Executive Officer of the Year award for 1997; the 1997 Ronald H. Brown Standards Leadership Award for advancing international standards; the 1998 Peter F. Drucker Strategic Leadership Award; the 1998 University of California, Berkeley, Distinguished Engineering Alumnus Award; in June 1999, the Distinguished Eagle Award from the Air Command and Staff College; and the 1999 International von Karman Wings Award from The Aerospace Historical Society.

A native of Berkeley, Calif., Condit was born on Aug. 2, 1941. He has been an aviation enthusiast his entire life and earned a pilot's license at the age of 18.

# Harry C. Stonecipher



## Executive Biography

Harry Stonecipher was elected president and chief operating officer of Boeing in August 1997. He was elected vice chairman of Boeing in May 2001 and retired June 1, 2002. Stonecipher returned from retirement when he was named president and chief executive officer of The Boeing Company in December 2003. He resigned from that position in March 2005.

Stonecipher's career began at General Motors' Allison Division, where he started as a lab technician. In 1960, he joined General Electric's Evendale Aircraft Engine Product Operations, where GE produces large jet engines. He began as an evaluation engineer and progressed through the ranks in engineering, product support, marketing and program management.

He became vice president and general manager of the division's commercial and military transport operations in 1979 and then headed the entire division from 1984 to 1987. While leading GE's engines business, Stonecipher also served on the board of directors of General Electric Financial Services.

During his career at GE, Stonecipher participated in the development, support, sale and introduction of a number of engines for civilian and military application. He played a vital role in GE's providing propulsion for passenger aircraft (manufactured by Boeing, McDonnell Douglas and Airbus) and for military aircraft.

In 1987, Stonecipher left GE to become corporate executive vice president of Sundstrand, a worldwide market leader in the design and manufacture of technology-based products for aerospace and industrial markets. Shortly after joining Sundstrand, Stonecipher was elected president and chief operating officer and a member of the company's board of directors. He became president and chief executive officer in 1989 and assumed the additional office of chairman in 1991.

During his seven and a half years at Sundstrand, Stonecipher repaired the company's seriously damaged customer relationship with the U.S. Department of Defense. He also instituted self-directed work teams and developed outstanding relations with the union work force. The company's financial position greatly improved, and the quality-improvement processes implemented by Stonecipher's team helped Sundstrand's aerospace products become some of the most reliable systems in the world.

In September 1994, Stonecipher was elected president and chief executive officer of McDonnell Douglas in St. Louis, Mo. At that time, McDonnell Douglas was one of the United States' top defense contractors and a world leader in the development and production of aircraft, missiles, space systems and defense-electronics products.

Stonecipher is credited with enhancing the company's relationships with all McDonnell Douglas stakeholders — including customers, suppliers and employees. He started a broad-based employee incentive plan and a "continuous learning policy." Stonecipher's team instituted high-performance work teams, established centers of excellence, refocused the corporation on quality and developed an award-winning advertising campaign.

McDonnell Douglas' financial performance soared under Stonecipher, with the stock increasing from \$18.48 just prior to his arrival to more than \$70 just before the company merged with Boeing in August 1997.

In late 1996, with aerospace-industry consolidation well under way, Stonecipher requested and received authorization from the McDonnell Douglas board to negotiate a merger with Boeing. At completion of the merger in August 1997, Stonecipher was elected president and chief operating officer and a member of Boeing's board.

Stonecipher received the Wings Club Distinguished Achievement Award for 2001. Other awards include the America-Israel Chamber of Commerce and Industry tribute in furthering US-Israel trade in March 2002, U.S. Army Association's John W. Dixon Award for more than forty years of defense and aeronautical industry leadership in February 2002, the annual Rear Admiral John J. Bergen Leadership Medal for Industry from the Navy League in November 1996 for his contributions to advancements in military aviation, the Air Force Association's John R. Allison Award in September 1996 for outstanding contributions to national defense by an industrial leader, and the Air Force Association's General Ira C. Eaker Historical Fellow Award in April 1996. In May 2002, he received an Honorary Doctorate Degree of Science from Washington University in St. Louis, Mo. In March 1998, he was named a Fellow in The Royal Aeronautical Society.

## COMPANY HISTORY

### Boeing, 1997 to 2002, 2003 to 2005

#### Chief Operating Officer

**President:** August 1997 to March 2005

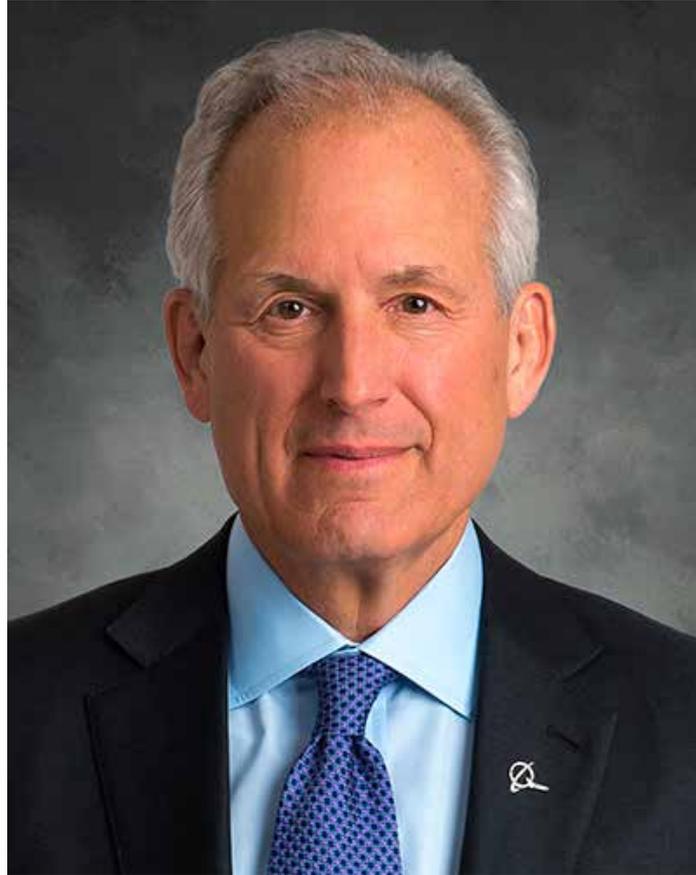
**Vice Chairman:** May 2001 to June 2002

**CEO:** December 2003 to March 2005

### McDonnell Douglas Corp., 1994 to 1997

**President and CEO:** September 1994 to August 1997

# W. James McNerney Jr.



## Executive Biography

W. James (Jim) McNerney Jr. joined Boeing as chairman, president and CEO on July 1, 2005. He served as president until December 2013, CEO until July 2015 and chairman until March 2016.

During his tenure, the company recaptured the global lead in commercial airplane deliveries with steady increases in production and a comprehensive update of its product line, maintained a strong position in defense markets despite a downturn in U.S. military spending, restored Boeing's historic leadership in human spaceflight with major new program wins, and expanded its engineering and manufacturing footprint inside and outside the United States.

Also, with a relentless focus on internal productivity to fund investments in innovation and growth, Boeing's financial performance steadily improved under McNerney, with revenue rising 73% to a record \$90.8 billion in 2014 from \$52.5 billion in 2004, the year before he became CEO. Backlog and earnings per share tripled over the period, also to record levels.

Before Boeing, McNerney served as chairman of the board and CEO of 3M, then a \$20 billion global technology company with leading positions in electronics; telecommunications; industrial, consumer and office products; health care; safety; and other businesses. He joined 3M in 2000 after 19 years at General Electric Co.

McNerney joined GE in 1982. There, he held top executive positions including president and CEO of GE Aircraft Engines and GE Lighting; president of GE Asia-Pacific; president and CEO of GE Electrical Distribution and Control; executive vice president of GE Capital, one of the world's largest financial service companies; and president of GE Information Services. Prior to joining GE, McNerney worked at Procter & Gamble and McKinsey & Co., Inc.

In addition, McNerney was named the 2015 CEO of the Year by *Chief Executive* magazine and the 2008 National Management Association's Executive of the Year. He received the Juran Medal from the American Society for Quality (ASQ), the Wilson Center's Woodrow Wilson Award for Corporate Citizenship, the inaugural Turning Point Award from the U.S. Army War College Foundation, the Semper Fidelis Award from the Marine Corps Scholarship Foundation, the John W. Dixon Award from the Association of the U.S. Army, and an honorary Doctor of Science degree from Cranfield University.

A native of Providence, Rhode Island, McNerney earned a Bachelor of Arts from Yale University in 1971 and a Master of Business Administration from Harvard University in 1975.

## COMPANY HISTORY

### Boeing, 2005 to 2016

**President:** July 2005 to December 2013

**CEO:** July 2005 to July 2015

**Chairman of the Board:** July 2005 to March 2016

# Dennis A. Muilenburg



## Executive Biography

Dennis Muilenburg joined Boeing in 1985. He served as president from December 2013 to December 2019, as CEO from July 2015 to December 2019, and as chairman of the board from March 2016 to October 2019.

Until July 2015, Muilenburg served as vice chairman, president and chief operating officer of Boeing, where he supported the company's aerospace business operations and focused on specific growth enablers, including important global relationships, leadership initiatives and development program performance.

Before that, Muilenburg served as president and chief executive officer of Boeing Defense, Space & Security (BDS).

Earlier, Muilenburg was president of BDS's Global Services & Support business, vice president and general manager of the Boeing Combat Systems division, and program manager for Future Combat Systems. Prior to that, he served as vice president of Programs & Engineering for Boeing Air Traffic Management and director of Weapon Systems for the proposed Boeing Joint Strike Fighter aircraft. He also held program management and engineering positions on F-22, Airborne Laser, High Speed Civil Transport and the Condor reconnaissance aircraft, among others.

Muilenburg spent the first 15 years of his Boeing career in the Puget Sound region of Washington, where he held a number of program management and engineering positions in support of both the commercial airplanes and defense businesses.

A native of Iowa, Muilenburg earned a bachelor's degree in aerospace engineering and an honorary doctor of science degree from Iowa State University, as well as a master's degree in aeronautics and astronautics from the University of Washington.

## COMPANY HISTORY

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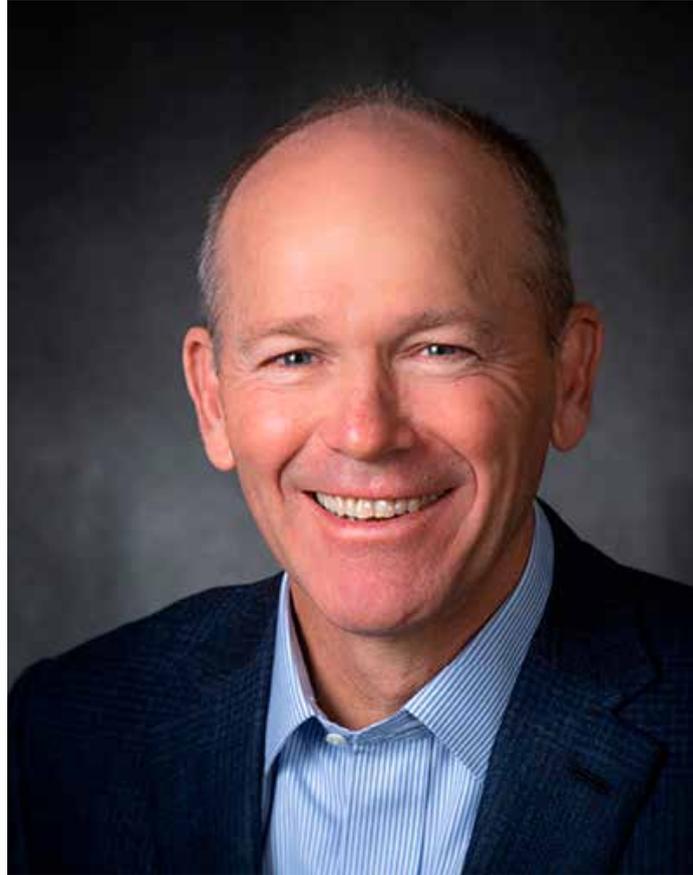
### Boeing, 1985 to 2019

**President:** December 2013 to December 2019

**CEO:** July 2015 to December 2019

**Chairman of the Board:** March 2016 to October 2019

# David L. Calhoun



## Executive Biography

David Calhoun is president and chief executive officer of The Boeing Company, a leading global aerospace company and provider of commercial airplanes; defense, space and security systems; and global services. The company employs more than 150,000 people worldwide, leverages the talents of a global supplier base, and is a top U.S. exporter for commercial and government customers in more than 150 countries.

Calhoun became Boeing president and chief executive in January 2020. He has served as a member of Boeing's Board of Directors since 2009 and served as board chairman from October to December 2019.

Calhoun has extensive expertise in a wide array of strategic, business, safety and regulatory matters across several industries as a result of his executive, management and operational experience.

Calhoun previously served as senior managing director and head of portfolio operations at The Blackstone Group beginning in January 2014. During his time with the investment firm, he focused on creating and driving added-value initiatives with Blackstone's portfolio company CEOs.

Previously, he also served as executive chairman of the board for Nielsen Holdings from January 2014 to January 2016. He joined Nielsen in 2006 as chief executive officer shortly after it was acquired through a consortium of private equity investors, including Blackstone. Throughout his seven-year Nielsen tenure, Calhoun led the company's transformation into a leading global information and measurement firm listed on the New York Stock Exchange and Standard & Poor's 500 Index.

Calhoun began his career at General Electric Company (GE), where he rose to vice chairman of the company and president and chief executive officer of GE Infrastructure, its largest business unit. During his 26 years at GE, he held a number of operating, finance and marketing roles and led multiple business units, including GE Transportation and GE Aircraft Engines.

Calhoun is a member of the board of directors of Caterpillar Inc. and a member of the Business Roundtable, an association of chief executive officers of leading U.S. companies. He also is a member of Virginia Tech's Pamplin Advisory Council and is co-author of the book "How Companies Win."

Calhoun has a bachelor's degree in accounting from Virginia Tech.

## COMPANY HISTORY

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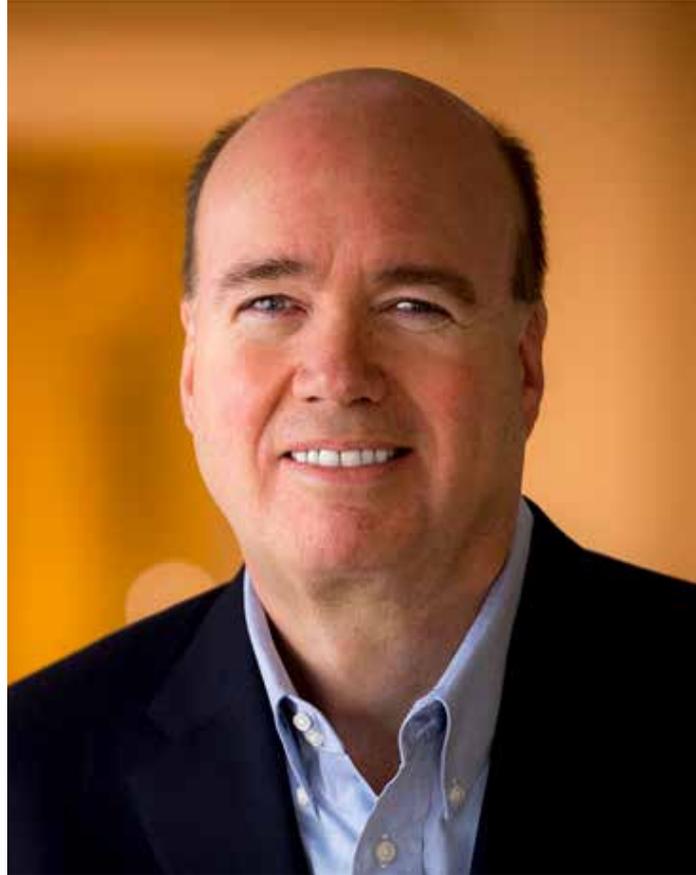
### Boeing, 2009 to Present

**Chairman of the Board:** October 2019 to December 2019

**President:** January 2020 to Present

**CEO:** January 2020 to Present

# Lawrence W. Kellner



## Executive Biography

Former Chairman and CEO, Continental Airlines, Inc.

**Boeing director since:** 2011; Independent Chair (2019 to present)

### Professional highlights:

President, Emerald Creek Group, LLC (2010 to present)

Chairman and CEO, Continental Airlines, Inc. (2004 to 2009)

President and COO, Continental Airlines, Inc. (2003 to 2004)

**Independent:** Yes

**Other current public company directorships:** ExxonMobil

Mr. Kellner brings to the Board extensive airline industry experience developed during his 14 years of service in key leadership positions at Continental Airlines, including Chairman, Chief Executive Officer, Chief Financial Officer and Chief Operating Officer. Mr. Kellner possesses a deep understanding of strategic planning, customer requirements including with respect to products that improve fuel efficiency and reduce emissions, operational management, and sustainable aviation fuels in the airline industry. As CEO of Continental Airlines, Mr. Kellner led a highly regulated global airline committed to safety through strong training programs, as well as coordination and integration among pilots, civil aviation authorities and other internal and external stakeholders. He also has deep experience in successfully navigating numerous safety and regulatory compliance regimes around the world. In addition, Mr. Kellner has detailed finance and accounting knowledge gained principally from his experience as Chief Financial Officer at Continental Airlines and American Savings Bank. Mr. Kellner also brings to the Board corporate governance expertise from his past service as lead director of Marriott, chairman of Sabre, and on the boards of other Fortune 500 companies. As a result of his leadership experience in the airline industry, his record of independent leadership at Boeing and his distinguished service on other corporate boards, the Board elected Mr. Kellner to serve as Chair of the Board.

Mr. Kellner is Chair of the Board and a member of the Aerospace Safety Committee and the Governance & Public Policy Committee.

## COMPANY HISTORY

### Boeing, 2019 to Present

**Chairman of the Board:** December 2019 to Present

# McDonnell Douglas



Douglas DC-9-30 in Flight over California Coast

# Donald W. Douglas Sr.



## Executive Biography

Donald Wills Douglas, the second son of an assistant cashier of the National Park Bank, was born in Brooklyn, New York, April 6, 1892, and started his education at Trinity Chapel School in New York City. At the age of 17, Donald Douglas entered the U.S. Naval Academy at Annapolis, Maryland, where he spent much of his time building and testing model airplanes. Douglas' family, fellow midshipmen and professors thought his interest in aviation would pass. They were very surprised when he left the Naval Academy in 1912, before he graduated, to look for work in aeronautical engineering.

He soon realized he needed to learn more about his chosen career field and completed the four-year Bachelor of Science program at the Massachusetts Institute of Technology in only two years. Because of his academic performance, Douglas was immediately hired at MIT as an assistant professor in aeronautics.

In 1915, he became a consultant to the Connecticut Aircraft Co. and helped build the first Navy dirigible. In August of the same year, he joined the Glenn L. Martin Co., then in Los Angeles, as chief engineer. In 1916, he served briefly as chief civilian aeronautical engineer for the Army Signal Corps Aviation Section in Washington, D.C., and married Charlotte Marguerite Ogg in Riverside, California. He took her to Cleveland, where Martin had relocated. As chief engineer, Douglas was in charge of building for the U.S. Army the MB-1 twin-engine bomber, which first flew Aug. 17, 1918, and its transport derivative.

In chilly Cleveland, Douglas and his family missed the balmy California climate, so in January 1920 his wife took their two sons back to Los Angeles, and he joined them in March. Douglas was determined to make it on his own, in spite of having only \$600 and a family to support. To provide for his family, he worked as a laborer, hoeing potatoes and washing cars. His first aircraft order was from millionaire sportsman David R. Davis, who put up \$40,000 to build an airplane to make the first nonstop, coast-to-coast flight.

The Davis-Douglas Co. was formed to build the Cloudster, which did not complete the flight but did become the first aircraft to lift a useful load exceeding its own weight. It ultimately became the flagship of Claude Ryan's San Diego-to-Los Angeles airline.

Davis lost interest and sold out to Douglas, who incorporated The Douglas Co. in July 1921. He finally landed his own Navy contract — to build torpedo bombers, starting with the DT-1 (Douglas Torpedo, First).

By 1922, the company had delivered six aircraft for \$130,890. Douglas leased the abandoned buildings of the Herman Film Corp. at 2345 Wilshire Blvd. in Santa Monica, California, where he built the Douglas World Cruiser. By fall 1928, the company was worth \$25 million.

Despite the 1929 crash that started the Great Depression, Douglas kept his company alive and financially sound building military aircraft. In 1932, he started building the DC-1 and launched his career as a builder of transports. By 1940, sales of DC-2 and DC-3 transports and their military derivatives rose to nearly \$61 million.

To keep up with World War II production, Douglas built plants at Long Beach and El Segundo, California, and leased facilities in Chicago, Oklahoma City and Tulsa, Oklahoma. The leased plants were closed at the end of the war, but Douglas continued to produce commercial and military transports, jet fighters, missiles and rockets.

Donald Wills Douglas Sr. was company president until 1957, when his son, Donald Douglas Jr., took over that position. Donald Douglas Sr. remained chairman of the board. At the age of 75, on April 28, 1967, Douglas merged his company with the McDonnell Aircraft Co. and retired. He remained honorary chairman of the McDonnell Douglas board until his death on Feb. 1, 1981.

He lived for almost a century and presided over the birth, the growth and the evolution of the aerospace industry.

## COMPANY HISTORY

### Douglas Aircraft Co., 1921 to 1967

**President:** 1921 to 1957

**Chairman of the Board:** 1957 to 1967

### McDonnell Douglas Corp., 1967 to 1981

**Honorary Chairman**

# Donald W. Douglas Jr.



## Executive Biography

Donald W. Douglas Jr., son of aviation pioneer and Douglas Aircraft founder Donald Wills Douglas, was born on July 3, 1917, in Washington, D.C. He studied mechanical engineering at Stanford University and aeronautical engineering at the Curtiss-Wright Technical Institute in Glendale, California.

He started with the company in 1939 as an engineer in the strength group. His father wanted to make sure the younger Douglas got a solid foundation in the company, so Douglas Jr. spent his first several years in many different jobs in various departments.

In 1943, he was appointed manager of flight test, his first supervisory job. There, he supervised the flight testing of practically every type of aircraft built by Douglas during World War II, including the SDB Dauntless and C-54 Skymaster. Later, he was named director of the testing division. The post-war DC-6 and DC-7 airliners obtained type certification under his direction.

He was named vice president of the company in 1951 and elected to the board of directors in 1953. He was named president of Douglas Aircraft in 1957, a position he held at the time of the merger of McDonnell and Douglas in 1967. During this time he was responsible for the introduction of the DC-8 and DC-9 jetliners.

He served as a McDonnell Douglas senior vice president from 1967 until his retirement in 1974. In that position, he headed the Douglas Development Co., a wholly owned subsidiary formed to develop excess McDonnell Douglas real estate. In 1972 he was instrumental in the formation of a partnership with commercial developers to build Douglas Plaza, a 50-acre complex of retail and office buildings near Orange County Airport in Southern California.

After his retirement, he remained on the board of directors of McDonnell Douglas until 1989. He founded the Capistrano Bank in 1975, Biphase Energy Systems in 1976 and Douglas Energy Co. of Placentia, California.

He served as chairman of the board of governors of the Aerospace Industries Association, national vice president of the National Defense Transportation Association and as a member of the advisory board of the Association of the U.S. Army. Additionally, he was president of the Crescent Bay Council of the Boy Scouts of America, director of the Los Angeles World Affairs Council, and a member of the President's Committee on Youth Fitness.

For his contributions to aviation, he received the French Legion of Honor and the Order of Merit of the Republic of Italy.

Donald W. Douglas Jr. died on Oct. 3, 2004, at the age of 87.

## COMPANY HISTORY

### Douglas Aircraft Co., 1939 to 1967

**Member, Board of Directors:** 1953 to 1967

**President:** 1957 to 1967

### McDonnell Douglas Corp., 1967 to 1989

**Member, Board of Directors:** 1967 to 1989

**Senior Corporate Vice President:** 1967 to 1974

# James Smith McDonnell



## Executive Biography

James Smith McDonnell was born in Denver April 9, 1899. He grew up in Little Rock, Arkansas, where his father, also named James McDonnell, was a successful cotton merchant and ran a general store.

Every morning before school, young James S. McDonnell delivered copies of the Arkansas Gazette on horseback. He graduated from Little Rock High School in 1917, just as World War I broke out. McDonnell served briefly as a private in the Army and then attended Princeton University, from which he graduated with honors in physics in 1921. While in college, he joined the Reserve Officers Training Corps.

After Princeton, he enrolled at the Massachusetts Institute of Technology for graduate studies in aeronautical engineering. While still at MIT, he continued his ROTC affiliation, passed the Army Air Service physical and passed much of the ground-school work required for pilots. In August 1923, McDonnell was commissioned as a second lieutenant in the Army Air Service Reserve and assigned to Brooks Field, Texas, for flight training. He graduated from MIT in 1925.

After earning his pilot's wings, McDonnell spent a year as a "gypsy pilot," doing odd jobs for people who owned airplanes.

Finally, he landed a job as aeronautical engineer and pilot with Huff-Daland Airplane Co. in Ogdensburg, New York. In 1928, McDonnell started his first company to build the single Doodlebug, but since it found no market, he spent the next 10 years working for several aircraft companies, finally as a chief engineer with the Glenn L. Martin Aircraft Co.

On June 30, 1934, he married Mary Elizabeth Finney, whose father, Dr. John Finney, was founder of the American College of Surgeons.

McDonnell resigned from Martin in 1938, determined to form his own company. On July 6, 1939, he incorporated the McDonnell Aircraft Corp. in St. Louis.

Within the next three decades, the company would become the leading producer of jet fighters and would build the first spacecraft to carry an American into orbit.

By the mid-1960s, McDonnell Aircraft Corp. was the largest employer in Missouri, and in 1967, it expanded its operation by merging with the largest employer in California, the Douglas Aircraft Co.

James S. McDonnell took over as chairman and CEO of the McDonnell Douglas Corp. In 1971, his nephew, Sanford N. McDonnell, became president, and James S. McDonnell was chairman of the board and CEO. His nephew took over as CEO in 1972. James Smith McDonnell remained chairman of the board of directors until his death on Aug. 22, 1980.

During his career, James Smith McDonnell received numerous awards and honorary degrees. His awards included the Robert Collier Trophy, the Guggenheim Medal, Founders Medal of the National Academy of Engineering and the NASA Public Service Award. He was remembered for his many civic duties, particularly his chairmanship of the United Nations Association of the United States. In 1958, the McDonnell Aircraft Corp. was the first organization in the world to celebrate United Nations Day as a paid holiday.

## COMPANY HISTORY

### McDonnell Aircraft Corp., 1939 to 1967

**President:** 1939 to 1962

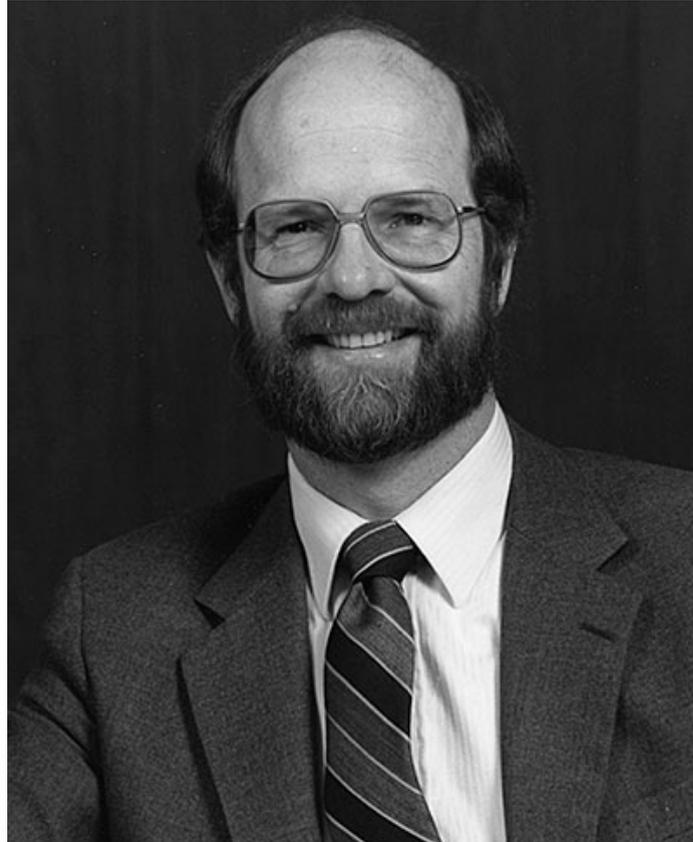
**Chairman and CEO:** 1962 to 1967

### McDonnell Douglas Corp., 1967 to 1980

**Chairman and CEO:** 1967 to 1972

**Chairman of the Board:** 1972 to 1980

# John F. McDonnell



## Executive Biography

John McDonnell served as chairman of the McDonnell Douglas Corp. from 1988 until its merger with Boeing in 1997. He served on the Boeing board of directors and served on its Compensation and Governance, Organization and Nominating committees.

Son of McDonnell Aircraft founder James S. McDonnell, John was born in Baltimore in 1938. He holds bachelor's (1960) and master's (1962) degrees in aeronautical engineering from Princeton University.

In 1959, he and his stepbrother, G. David Forney, successfully flew a single-engine Piper Comanche aircraft 18,000 miles around the coastlines of Central and South America. Both licensed pilots, the stepbrothers completed the 76-day journey without the use of any sophisticated navigational aids.

John joined McDonnell Aircraft in 1962 as a strength engineer on the Gemini manned spacecraft project. He then moved into contract administration and corporate finance. Later, he served as assistant to the vice president of finance at Douglas Aircraft Co. In 1968 he became vice president of McDonnell Douglas Finance Corp.

He returned to corporate headquarters in St. Louis in 1971 as staff vice president, fiscal. He was named corporate vice president for finance and planning the following year. In 1977 he became executive vice president.

John was elected president of the corporation in 1980 and became COO in 1987. He was named chairman and CEO in 1988. He held the CEO position until September 1994, when he brought in Harry Stonecipher as president and CEO of the corporation.

Among his many professional and civic affiliations, John is chairman of the Donald Danforth Plant Science Center board of trustees and serves as vice chairman of the board of trustees of Washington University in St. Louis.

John and his wife, Anne, were married in 1961. They have five children and four grandchildren.

## COMPANY HISTORY

### McDonnell Aircraft Corp., 1962 to 1967

### McDonnell Douglas Corp., 1967 to 1997

**President:** 1980 to 1987

**President and COO:** 1987 to 1988

**Chairman and CEO:** 1988 to 1994

**Chairman of the Board:** 1994 to 1997

### Boeing, 1997 to 2012

**Member, Board of Directors**

# Sanford N. McDonnell



## Executive Biography

Sandy McDonnell, former chairman emeritus of McDonnell Douglas Corp., was a past chairman and chief executive officer of the company. He was a board member from 1967 to 1994.

Born in 1922 in Little Rock, Ark., Sandy was a nephew of McDonnell Aircraft founder James S. McDonnell. He earned a bachelor's degree in economics from Princeton University in 1945, another in mechanical engineering from the University of Colorado in 1948, and a master's degree in applied mechanics in 1954 from Washington University in St. Louis, Mo. He served in the U.S. Army during World War II, spending two years on the atomic bomb program in Los Alamos, N.M.

Sandy joined McDonnell Aircraft in 1948 as a stress engineer. He held a variety of positions of increasing responsibility and was involved in the development of the F-101 Voodoo and the F-4 Phantom II jet fighters. In 1962 he was named vice president-general manager of all combat aircraft, and in 1966 he was named president of McDonnell Aircraft.

He was elected president of McDonnell Douglas in 1971, chief executive officer in 1972, and chairman of the board in 1980. He also served on the board's executive committee and as chairman of the McDonnell Douglas Foundation. His focus on ethics led to the development of the company's Code of Ethics, Philosophy and Five Keys to Self-Renewal program. He retired as chairman in 1988.

Sandy was a fellow of the American Institute of Aeronautics and Astronautics and past chairman of the board of governors of the Aerospace Industries Association. He was also a national president of the Boy Scouts of America.

In 1984 he was named St. Louis Man of the Year, becoming the first son to follow his father in receiving the prestigious award. In 1967 his father, financier William A. McDonnell, and uncle, James S. McDonnell, were co-recipients of the honor. Sandy was involved in many local and national organizations focused on ethics and citizenship.

Sandy and his wife, Priscilla, had two children. Sandy died in 2012.

## COMPANY HISTORY

### McDonnell Aircraft Corp., 1948 to 1971

**President:** 1966 to 1971

### McDonnell Douglas Corp., 1971 to 1997

**President:** 1971 to 1972

**President and CEO:** 1972 to 1980

**Chairman and CEO:** 1980 to 1988

**Chairman Emeritus:** 1988 to 1997

# North American Aviation

NORTH AMERICAN AVIATION INC.

# John Leland “Lee” Atwood



## Executive Biography

John Leland (Lee) Atwood joined North American Aviation Inc. in 1934, one year before the firm moved from Dundalk, Maryland, to Southern California. He previously worked at Douglas Aircraft in Southern California, builder of such venerable transports as the DC-3, so he would cross the country twice in a short time.

He soon became a vice president and in 1938 was named assistant general manager of the company. In 1941, he became first vice president; in 1948 he was elected president; in 1960 he became CEO at the retirement of Dutch Kindelberger; and in 1962 he became chairman of the board.

Atwood was born in Walton, Kentucky, on Oct. 26, 1904. He attended Hardin-Simmons University from 1924 to 1926, receiving a Bachelor of Arts, then completed postgraduate engineering courses at the University of Texas, earning a Bachelor of Science in 1928.

A number of leaders in the aerospace industry have described Atwood as “a chief engineer’s chief engineer.” His technical acumen was the driving force behind the company’s evolution into an aviation and space leader that produced more military aircraft than any other company (a record which stands to this day). Among those aircraft: the P-51 Mustang, a swift, agile World War II fighter with an especially impressive record in the aerial war in Europe; the B-25 Mitchell bomber, used by Jimmy Doolittle and his Tokyo Raiders to turn the tide of the war in the Pacific; the T-6 Texan, which almost every U.S. and British WWII pilot trained in; and the F-86 Sabre Jet fighter, which exhibited a superiority of 10-to-1 or better against Russian MiGs in Korea.

As the company’s aviation leadership continued after WWII, Atwood used his technical vision and managerial skills to establish his company as an indispensable national asset in new high-technology fields such as rocket propulsion, intercontinental ballistic missiles and the Apollo moon-landing program.

In 1967, Atwood merged North American with Rockwell of Pittsburgh to form North American Rockwell (later to become Rockwell International). During the consolidation, he provided leadership in his role as president and CEO of the new corporation, setting the stage for the company’s continuing aerospace leadership as producers of the Space Shuttle and the B-1 bomber.

Atwood retired in 1970 but remained on the board of directors until 1978. Even after that, he maintained an active involvement with the company and its programs, and the company continued to regard him as an invaluable resource.

Under Atwood’s leadership, the company and its employees captured three Collier Trophies, the aerospace industry’s most prestigious awards, for their work on the F-100 supersonic fighter, the X-15 spaceplane and the B-1 bomber.

Among numerous individual honors and awards bestowed on Atwood were a Presidential Citation from Harry S. Truman for his contributions during WWII; the Air Force Association’s Hap Arnold Trophy; and the Wright Brothers Memorial Trophy, awarded by the National Aeronautic Association. That association honored him again at a later date, declaring him an “Elder Statesman of Aviation” in ceremonies in 1976. Atwood was also an honorary fellow of the American Institute of Aeronautics and Astronautics — that organization’s highest rank.

Atwood died on March 5, 1999, at the age of 94.

## COMPANY HISTORY

### North American Aviation, 1934 to 1967

President

CEO

Chairman of the Board

### North American Rockwell, 1967 to 1978

President and CEO

# James H. “Dutch” Kindelberger



## Executive Biography

James Howard “Dutch” Kindelberger was born in Wheeling, West Virginia, on May 8, 1895, the son of steelworker Charles Frederick Kindelberger. Kindelberger started working in the steel industry with his father but, in 1916, when he was 21, went to study at the Carnegie Institute of Technology.

The United States entered World War I in 1917, and Dutch Kindelberger joined the Army to serve in the Aviation Section of the Signal Corps. He was a pilot instructor based at Park Field in Memphis, Tennessee.

After the war, Kindelberger looked for work in aviation. In 1919, he married Thelma Knarr and, in 1920, became chief draftsman and assistant chief engineer with the Glenn L. Martin Aircraft Co. in Cleveland. Five years later, he joined Douglas Aircraft in California as chief engineer. Kindelberger remained with Douglas for nine years, leading development of the DC-1 and the DC-2.

In 1934, Kindelberger became president and general manager of General Aviation, later renamed North American Aviation Inc., and served as general manager until 1948, when he became chairman and CEO. Under his guidance, North American Aviation broke technological barriers; produced propeller- and jet-powered fighters and bombers, military trainers, rocket engines and rocket-powered aircraft; and began its role as the prime contractor for the country’s space program.

Kindelberger retired in 1960 as CEO at the age of 65 and was succeeded by Lee Atwood. Kindelberger remained chairman of the board until his death two years later.

## COMPANY HISTORY

### North American Aviation, 1934 to 1962

President

General Manager

CEO

Chairman of the Board

Piasecki H-16 Transporter on the Ground



# Other Heritage Companies



Hughes XV-9A Hot Cycle Helicopter on Tarmac



PT-13D Stearman Kaydet in Flight

# Howard R. Jr. Hughes



## Executive Biography

Howard Robard Hughes Jr. was born in Houston on December 24, 1905.

The only child of Howard Robard Hughes Sr. and his wife, Allene Gano Hughes, he was taking flying lessons from crop dusters by the time he was 15 years old. He attended the California Institute of Technology and Rice University, although he never graduated.

In 1924, he inherited his family's estate, which included the successful Hughes Tool Co. Hughes then became a successful businessman, running several companies, including Transcontinental & Western Air (later Trans World Airlines). He helped design the Lockheed L-049 Constellation and flew the first "Connie" on a record-breaking cross-country flight.

During his early years, Hughes was known as a movie director and producer. In aviation, Hughes was recognized as an excellent pilot and established early speed records in his specially designed H-1 racing aircraft. In 1938, he was awarded the Collier Trophy for a record around-the-world flight in a Lockheed Model 14. Hughes also designed the XF-11, a twin-engine, twin-boom, high-altitude reconnaissance airplane, and was almost killed when the airplane crashed during its initial flight in 1946.

In 1942, he began building the H-4 Hercules as the HK-1, a massive troop and cargo-carrying flying boat, nicknamed the "Spruce Goose." Hughes took it on its only flight on Nov. 2, 1947. It flew 1 mile for about a minute at an altitude of 70 feet.

By 1976, the Hughes Tool Co. Aircraft Division was re-formed as Hughes Helicopters, which competed for both commercial and military helicopter contracts. The AH-64 Apache attack helicopter, still in Boeing production today, received the Collier Trophy in 1983, and Hughes Helicopters was acquired by McDonnell Douglas in 1984.

In 1963, Syncom, the first geosynchronous communications satellite, developed and built by Hughes Space and Communications Co., was launched; in 1966, the company launched the first meteorological geosynchronous satellite, ATS-1. In 2000, Boeing purchased Hughes Space and Communications.

Hughes was awarded the Harmon Trophy as the world's outstanding aviator in 1936 and 1938. He received the Congressional Gold Medal in 1939 for his 1938 around-the-world flight and, in 1940, the Octave Chanute Award. He was inducted into the Aviation Hall of Fame in 1973 and invested posthumously into the International Aerospace Hall of Fame in 1987.

Hughes died on April 5, 1976.

## COMPANY HISTORY

### Hughes Tool Co., Hughes Space and Communications Co., Hughes Helicopters, 1923 to 1976

Company Founder

President and CEO

# Elrey B. Jeppesen



## Executive Biography

Elrey Borge Jeppesen was born in Lake Charles, Louisiana, on Jan. 28, 1907, and grew up in Oregon. At the age of 14, he made his first flight in a Curtiss JN-4 “Jenny” and was immediately hooked.

Jeppesen saved the money he made delivering newspapers and groceries and hung around the airport working at odd jobs. He took flying lessons and soloed after flying for only two hours and 15 minutes. Jeppesen had been accepted into the Massachusetts Institute of Technology’s aeronautical engineering program, but in his last year of high school, he bought his own Jenny for \$500 and flew off with Tex Rankin’s Flying Circus instead.

He went on to work several jobs in the industry, including ferrying aircraft and doing aerial photography.

The onset of the Great Depression limited his flying hours. So in 1930, he joined Boeing Air Transport (BAT, later United Air Lines) as an airmail pilot flying the Model 40B between Salt Lake City and Cheyenne, Wyoming. In those days, pilots didn’t have anything in the way of charts, except for Rand McNally road maps. They flew anywhere from 50 to 300 feet above the ground, guiding mostly on terrain features and dead reckoning and following railroad tracks in bad weather. There was no radio or air traffic control.

Out of the 18 pilots flying the Cheyenne-Oakland (California) route, four were killed in the line of duty during the winter of 1930. The dangers of flying without any sort of guidance inspired Jeppesen to create his “Little Black Book”—a collection of navigational information for pilots to use during flight.

Jeppesen carefully scouted the various routes, taking photographs and writing notes. He climbed mountains and smokestacks, checked out emergency fields and the obstructions around them, and figured out different ways to get into and out of certain areas.

At first he just gave copies to his friends, but soon the demand became so great that he started to sell them. When low-frequency radio beacons became available in 1931, Jeppesen updated his black book to show pilots how to follow radio beacons, and added mileage reference charts and terrain elevation profiles.

In 1934, BAT became part of United Air Lines, and Jeppesen made headlines for his heroic efforts while piloting a United Air Lines Boeing 247. Flying over Illinois at dawn, Jeppesen spotted a burning barn and sheds. He kept circling the farmhouse until he woke up its sleeping occupants. Noted newscaster Walter Winchell heard about Jeppesen’s actions and sent him a bouquet of orchids as a reward. Jeppesen gave the flowers to his United flight attendant, Nadine Liscomb, whom he married two years later.

His chart business grew and Jeppesen, assisted by his wife, kept it going. He retired from United in 1954. In 1961, he sold the company to Times Mirror but remained as chairman. In 1974, Sanderson Films, a developer of training systems and pilot supplies that Times Mirror purchased in 1968, merged with Jeppesen’s company.

Jeppesen received numerous awards and honors throughout his career, and was inducted into the National Aviation Hall of Fame in 1990. He died in 1996, and Boeing bought Jeppesen Sanderson Inc. four years later.

## COMPANY HISTORY

### Jeppesen & Co., 1934 to 1974

Company Founder

President and CEO

# Frank N. Piasecki



## COMPANY HISTORY

### P-V Engineering Forum Inc., 1940 to 1946

Company Founder

President and CEO

### Piasecki Helicopter Corp., 1946 to 1955

Company Founder

Chairman

### Piasecki Aircraft Corp., 1955 to 2008

Company Founder

President and CEO

## Executive Biography

A trailblazer in the development of helicopters, Frank Nicholas Piasecki was born in 1919 in Philadelphia. He became fascinated at an early age with aviation technology, which at the time was an exciting new field.

He studied aeronautical engineering at the University of Pennsylvania and the New York University Guggenheim School of Aeronautics, graduating in 1940. While still in college, he founded the P-V Engineering Forum with a classmate, Harold Venzie. In 1943, Piasecki's group designed the PV-2, a single-seat, single-rotor helicopter that became the second successful helicopter to fly in the United States—the first was Igor Sikorsky's VS-300, which took to the skies in 1939.

Piasecki was the PV-2's first pilot, by happenstance. He was sitting in the aircraft while testing its systems when the tether broke and the helicopter became airborne. Despite having only 14 hours of flight time in fixed-wing aircraft and no experience in helicopters, Piasecki managed to bring the aircraft to a safe landing. Soon after, he became the first person in the United States to qualify for a helicopter pilot's license. Piasecki remained the chief test pilot for the PV-2, as well as chief engineer and company president.

To promote the PV-2, Piasecki participated in a short film, called "An Air Flivver in Every Garage." The film featured Piasecki landing the helicopter in locations such as a golf course and a gas station. He kept the PV-2 until 1965, when he donated it to the Smithsonian Institution, where it is still on exhibit.

Piasecki's efforts attracted the attention of a few private investors and most notably the U.S. Navy, which gave Piasecki a contract to design a large tandem-rotor helicopter capable of carrying heavy loads. In 1945, the HRP-1, first tandem-rotor helicopter and the first helicopter designed for the U.S. Navy, emerged. It was popularly called the "Flying Banana." Piasecki's tandem-rotor design laid the groundwork for many of today's successful helicopters, including the CH-47 Chinook.

Piasecki's company grew into the Piasecki Helicopter Corp. In 1955, Piasecki departed Piasecki Helicopter and formed Piasecki Aircraft Corp. to concentrate on the development of advanced vertical takeoff and landing systems. Boeing acquired his former company in 1960 as its Helicopter Division.

Piasecki was awarded more than 20 patents and received numerous other awards, honors and memberships, including Fellow of the Institute of Aeronautical Sciences, Honorary Fellow of the American Helicopter Society, recipient of Helicopter Foundation International's Heritage Hall of Fame Award, and donor of the Dr. Alexander Klemin Award, given annually by the American Helicopter Society for outstanding work in rotary-wing aeronautics.

In 1986, Piasecki was further honored when President Reagan awarded him the National Medal of Technology. In 2002, he was inducted into the National Aviation Hall of Fame, located at the U.S. Air Force Museum in Dayton, Ohio.

Piasecki died in 2008 at the age of 88 at his home in Haverford, Pennsylvania.

# Lloyd C. Stearman



## Executive Biography

Lloyd Carlton Stearman was born in Wellsford, Kansas, on Oct. 26, 1898, the son of Fred and Icie May (Grimm) Stearman, who came to Kansas from the Chicago area. According to the Wichita Eagle-Beacon, Lloyd Stearman had a quiet nature; loved classical music and played violin; and was conservative, practical and an “aircraft designer extraordinary.”

He attended schools in Harper, Kansas, prior to enrolling at Kansas State Agricultural College, Manhattan, to study architecture. He left college at the onset of World War I to join the U.S. Navy Reserve Flying Corps, and went to the University of Washington in Seattle and to San Diego for preliminary flight training. There he developed his love of flying.

After the war ended in November 1918, Stearman moved back to Wichita, where he found a job doing cubical structure design work for the S.S. Voigt architectural company. By 1920, he had become a mechanic at the newly formed E.M. Laird Airplane Co., building the “Swallow” biplane. In 1924, Laird reorganized the company to form the Swallow Airplane Manufacturing Co., with Stearman as chief engineer and Walter Beech as test pilot and salesman. Stearman and Beech worked on the prototype for a new airplane with a welded tubular steel fuselage, but it was not approved.

As a result, in 1925, Walter Beech, Lloyd Stearman and Clyde Vernon Cessna, an aeronautical engineer, formed the Travel Air Manufacturing Co. in Wichita, and the Travel Air commercial biplane first flew the same year. In October 1926, Stearman moved to Venice, California, where he did some stunt flying and met Fred Hoyt and Mac Short, also Kansas fliers. The trio formed Stearman Aircraft Inc. to build planes for the movie industry.

They built the first “Stearman” C-1 and the C-2. However, business was slow. A former investor, Walter Innes, convinced Stearman to take his company back to Kansas, helped by friends in Wichita who raised \$60,000 to facilitate the move.

The renamed Stearman Aircraft Co. in Wichita started out 1927 equipped only with two lathes (9 and 16 inches), a 20-inch drill press, five small bench drills, an 8-inch shear, a 4-inch roll and a beader. Nonetheless, it built the successful C-3, designed for both mail and passenger services. It was used by Charles A. Lindberg to survey the route for Transcontinental and Western Airways, and 136 were built. In 1931, the well-known Los Angeles flier, Ross Hadley, took the Model C-3B on a trip around the world.

In 1929, Stearman Aircraft joined the Boeing Airplane Co., Boeing Aircraft of Canada, Varney Air Lines, National Air Transport, Pacific Air Transport, Boeing Air Transport, Hamilton Standard Propeller, Sikorsky, Pratt & Whitney, Chance Vought, Northrop and United Airports of Connecticut as part of the United Aircraft and Transportation Corp., owned by William Boeing.

The C-3 was followed by the M-2 Speedmail in 1929, built for Varney Air Lines. Stearman’s first military aircraft, the Model 6 Cloudboy, sold to the U.S. Army Air Corps under the designation of YPT-9.

Lloyd Stearman continued as president of the Stearman division until 1930 and then resigned from the board in 1931.

In 1934, post-Depression legislation separated the Boeing Airplane Co. and its Stearman division from the United Aircraft and Transportation Corp. However, Boeing engineers used Lloyd Stearman’s drawings for the Cloudboy as the basis for the Model 70 trainer and the legendary World War II Stearman Kaydet trainer.

In 1932, Stearman joined a group in California who purchased the then-bankrupt Lockheed Aircraft Co. He left Lockheed in 1935 to work for several other companies, but he returned in 1955 to work on vertical takeoff aircraft and space vehicle projects through 1968. Then he started a new Stearman Co. in Los Angeles and continued to design aircraft and spacecraft until his death in 1975.

## COMPANY HISTORY

### Stearman Aircraft Co., 1927 to 1931

(merged with Boeing Airplane Co. in 1929)

**Company Founder**

**President and CEO**

