North American Aviation



Fate merger

Successor Rockwell International Founded 1928 Defunct 1996 Location Industry aerospace Parent <u>General Motors Corporation</u> (1933-1948)

North American Aviation was a major <u>US aircraft manufacturer</u>. The company was responsible for a number of historic aircraft, including the <u>T-6 Texan</u> trainer, the <u>P-51 Mustang fighter</u>, the <u>B-25 Mitchell</u> <u>bomber</u>, the <u>F-86 Sabre jet</u> fighter, and the <u>X-15 rocket plane</u>, as well as <u>Apollo Command and Service Module</u>, the second stage of the <u>Saturn V rocket</u>, the <u>Space Shuttle</u> orbiter and the <u>B-1</u> <u>Lancer</u>. Through a series of mergers and sales, North American Aviation is now part of <u>Boeing</u>.

History



The North American XB-70 Valkyrie

<u>Clement Melville Keys</u> founded North American on <u>December 6</u>, <u>1928</u>, as a <u>holding company</u> that bought and sold interests in various <u>airlines</u> and aviation-relation companies. However, the <u>Air Mail</u> <u>Act of 1934</u> forced the breakup of such holding companies. The upshot was that North American became a manufacturing company run by <u>James H. "Dutch" Kindelberger</u> (who had been recruited from <u>Douglas Aircraft Company</u>), although it retained <u>Eastern Air Lines</u> until 1938. <u>General Motors Corporation</u> took a controlling interest in NAA and merged it with its General Aviation division in 1933, but retaining the name North American Aviation.

Kindelberger moved the company's operations to southern <u>California</u>, which allowed flying yearround, and decided to focus on training aircraft, on the theory that it would be easier than trying to compete with established companies. Its first planes were the <u>GA-15</u> observation plane and the <u>GA-16</u> trainer, followed by the <u>O-47</u> and <u>BT-9</u>. The <u>BC-1</u> of 1937 was North American's first combat aircraft.



The North American P-51 Mustang

Like other manufacturers, North American started gearing up for war in <u>1940</u>, opening factories in <u>Columbus, Ohio</u>, <u>Dallas, Texas</u>, and <u>Kansas City, Kansas</u>.

North American's follow-on to the BT-9 was the <u>T-6 Texan</u> trainer, of which 17,000 were built, making it the most widely used trainer ever. The twin-engine <u>B-25 Mitchell</u> bomber achieved fame in the <u>Doolittle Raid</u> and was used in all theaters. The <u>A-36 Apache</u> was developed as a ground attack aircraft and dive bomber. Originally powered by an Allison engine, a suggestion by the <u>RAF</u> that North American switch to the <u>Rolls-Royce Merlin</u> engine may have been one of the most significant events in WWII aviation, as it produced the <u>P-51 Mustang</u>, considered by many to be the best American fighter of the war.

Post-war, North American's employment dropped from a high of 91,000 to 5,000 in 1946. Two years later in 1948, General Motors divested NAA as a public company. Nevertheless, it continued with new designs, including the <u>T-28 Trojan</u> trainer and attack aircraft, the odd-looking <u>P-82 Twin Mustang</u>, <u>B-45 Tornado</u> jet bomber, the <u>FJ Fury</u> fighter, <u>AJ Savage</u>, the revolutionairy <u>XB-70 Valkyrie</u> Mach-3 strategic bomber, Shrike Commander, and <u>T-39 Sabreliner</u> business jet.

The <u>Columbus</u>, <u>Ohio</u> division of North American Aviation was instrumental in the exclusive development and production of North American's <u>A-5 Vigilante</u>, an advanced high speed bomber that would see significant use as a Naval <u>reconnaissance</u> aircraft during the <u>Vietnam War</u>, the <u>OV-10</u> <u>Bronco</u>, the first aircraft specifically designed for forward air control (FAC), and <u>counter-insurgency</u> (COIN) duties, and the <u>T-2 Buckeye</u> Naval trainer, which would serve from the late 1950s until 2005 and be flown in training by virtually every Naval pilot for four decades. The Buckeye's name would be an acknowledgement to the state tree of Ohio, as well as the mascot of the <u>Ohio State University</u>.

The <u>F-86 Sabre</u> started out as a redesigned Fury and achieved fame shooting down <u>MiGs</u> in the <u>Korean War</u>. Over 9,000 F-86s were produced. Its successor, the <u>F-100 Super Sabre</u>, was also popular.

The rocket engine division spun off into a separate company, <u>Rocketdyne</u>, in 1955, but North American designed and built the <u>X-15</u>.

The cancellation of the <u>F-107</u> and <u>F-108</u> programs in the late <u>1950s</u>, as well as the cancellation of the <u>Navaho</u> intercontinental cruise missile program, was a blow to North American from which it never

fully recovered. In 1960, the new CEO Lee Atwood decided to focus on the <u>space program</u>, and the company was the chief contractor for the <u>Apollo Command/Service Module</u> and the second stage of the <u>Saturn V</u>. However, the <u>Apollo 1</u> fire in January 1967 was partly blamed on the company, and in March they merged with Rockwell-Standard, then known as North American Rockwell. The company changed its name to <u>Rockwell International</u> and named its aircraft division North American Aircraft Operations in 1973.^[1]

Boeing merger

In December 1996, the defense and space divisions of <u>Rockwell International</u> (including the North American Aviation and Rocketdyne divisions) were sold to <u>Boeing</u>, which integrated the product lines into their <u>Integrated Defense Systems</u> division. Rocketdyne was eventually sold by Boeing to <u>UTC</u> <u>Pratt & Whitney</u>, in 2005.

Aircraft

- <u>NA-15 O-47</u>
- <u>NA-16</u>
- <u>NA-18</u>
- <u>NA-19 BT-9 for USAAC</u>
- NA-19A BT-9A for USAAC
- <u>NA-20 NA-16-2H for Honduras</u>
- <u>NA-21 XB-21</u>
- NA-22
- NA-23 BT-9B for USAAC
- NA-26 BC-1 for USAAC
- NA-27 NA-16-2H for Holland
- <u>NA-28 NJ-1 for USN</u>
- NA-29 BT-9C for USAAC
- NA-30 Y1BT-10 for USAAC
- NA-31 NA-16-4M for Sweden
- NA-32 NA-16-1A for Australia
- NA-33 NA-16-2K for Australia
- NA-34 NA-16-4P for Argentina
- <u>NA-35 Vega</u>
- <u>NA-36 BC-1 USAAC</u>
- NA-37 NA-16-4R for Japan
- NA-38 NA-16-4M for Sweden
- <u>NA-40</u>
- NA-41 NA-16-4 for China
- NA-42 NA-16-2A for Honduras
- NA-43 NA-16-1G for Brazil (Cancelled)
- NA-44 Light attack dive bomber
- NA-45 NA-16-1GV for Venezuela
- NA-46 for Brazil
- NA-47 NA-16-4RW for Japan
- NA-48 NA-16-3C for China
- <u>NA.49 & 61 NA-16-1E Harvard I</u>
- <u>NA-54 BC-2 USAAC</u>
- NA-56 for China

- NA-57 for France
- <u>NA-58 BT-14</u>
- NA-62 B-25 Mitchell
- NA-63 XB-28 Dragon
- NA.64 Yale for France
- NA-68 P-64
- NA-73 A-36 Apache
- NA-73 P-51 Mustang
- NA-88 AT-6C Texan
- NA-120 P-82 Twin Mustang
- <u>NA-121 T-6F Texan & SNJ-6</u>
- <u>NA-130 B-45 Tornado</u>
- NA-145 Navion
- NA-146 AJ Savage
- <u>NA-157 YF-93</u>
- <u>NA-159 T-28</u>
- NA-163 A2J Savage
- <u>NA-168 T-6G Texan</u>
- <u>NA-179 FJ Fury</u>
- NA-180 F-100 Super Sabre
- NA-190 F-86D Sabre Dog
- NA-212 F-107
- NA-233 A3J Vigilante
- <u>NA-240 X-15</u>
- NA-140 F-86 Sabre
- NA-241 T-2 Buckeye
- NA-244 FJ-4 Fury
- NA-257 XF-108 Rapier
- NA-265 Sabreliner
- NA-278 XB-70 Valkryie
- NA-300 OV-10 Bronco
- <u>X-10</u>
- North American Aviation history
- <u>Centennial of Flight page on North American</u>
- <u>Aerospace Legacy Foundation</u>