



To war...

Bombers turned Boeing from a loss-maker to a leader in the Second World War. Production of the B-17 (1935) began in 1940 and 12,731 rolled off lines at Boeing, Douglas and Lockheed, to be joined by 3,970 B-29s (1942) built by Boeing, Bell and Martin. But Douglas was the big winner, building 7,477 A-20 Havocs (1939), 5,936 SBD Dauntlesses (1940) and 2,502 A-26 Invaders (1942), plus thousands of C-47 (1941) and C-54 (1942) transports. North American was not far behind, building 9,498 B-25 Mitchells (1940) and 15,586 P-51 Mustangs (1941), plus 15,498 T-6 Texan trainers (1938).

...and peace

Boeing, Douglas and North American laid off 255,000 people in 1946, as the end of the war decimated their workforces. Douglas responded with the DC-6 (1946), the first post-war airliner, but Boeing's Model 377 Stratocruiser (1947) was less successful. And while Boeing's fighter line ended with cancellation of the F8B (1945), Douglas launched a successful line of attack aircraft with the AD/A-1 Skyraider (1945).

McDonnell was about to take off. Its first aircraft, the XP-67 fighter (1944), was a failure, but the FH-1 Phantom (1945) launched a long line of jet fighters. North American's first jet fighter, the FJ-1 Fury (1946), led to the F-86 Sabre (1947), more than 6,000 of which were built worldwide.

Jets arrive

Boeing was still the bomber company, and German windtunnel data on swept wings resulted in the revolutionary B-47 (1947), which led to the B-52 (1952). In a bid to

diversify, Boeing applied its experience to the Model 367-80 – the "Dash 80" flying in 1954 as a prototype for both the KC-135 tanker (1956) and 707 airliner (1957). Douglas was slower to move to jets, flying the DC-8 in 1958, and the 707 won the sales war – and commercial aircraft dominance for Boeing.

Douglas's attack aircraft line continued with the A3D/A-3 (1952) and the A4D/A-4 (1953), of which 2,960 were built. North American followed the F-86 with the supersonic F-100 (1953), but its fighter line ended there. The F-107 (1957) lost to the Republic F-105 and the F-108 was cancelled in 1959. McDonnell fared better, following the F3H (1951) and F-101 (1954) with the F4H/F-4 Phantom II – 5,195 of which were built.

Into space

Boeing built the Bomarc surface-to-air missile (1952), but Douglas produced the USA's first operational SAM, the Nike Ajax (1951). Douglas and North American's Rocketdyne division worked together on the Thor intermediate-range ballistic missile (1957), while Boeing developed the Minuteman intercontinental ballistic missile (1961).

While Douglas developed the Thor into the Delta launch vehicle (1960), McDonnell was selected to build the Mercury capsule, which carried the first American into space in 1961, and later the Gemini spacecraft (1965). Boeing, McDonnell Douglas and North American built the Saturn V (1967), while North American produced the Apollo spacecraft that carried human beings to the moon in 1969.

Hughes Space & Communications was established in 1961 and built the first geosynchronous communications satellite, Syncom (1963).

THE FIRST:
The B&W seaplane of 1916 launched a long line of Boeing aircraft



PEASHOOTER: The pioneering monoplane fighter, 1932's P-26, was fast for its day



STRATOCRUISER: Boeing's 1947 Model 377 was the first widebody airliner



JET DEBUT: First flown in 1957, the 707 led Boeing to commercial aircraft dominance



SUPER SABRE: North American followed the famous F-86 with the supersonic F-100

MOON SHOT:
Boeing, McDonnell Douglas and North American played key roles on the Apollo programme

