

Backgrounder

Boeing Commercial Airplane Group Douglas Products Division Public Relations 3855 Lakewood Boulevard Long Beach, CA 90846

www.boeingmedia.com

BOEING 717 -- THE WORLD'S BEST 100-SEAT AIRPLANE

The Boeing 717 twinjet is designed to meet airlines' needs for a cost-effective 100-passenger transport to serve high frequency or low traffic short- to medium-range routes in the growing regional jet market.

Originally launched in October 1995 as the MD-95, the airplane was designated the Boeing 717 following the merger of McDonnell Douglas and The Boeing Company in 1997. AirTran Airlines is the launch customer, and will take delivery of the first airplanes in the summer of 1999.

With a wing span of 93.4 feet (28.5 meters) and overall length of 124 feet (37.8 meters), the 717 is similar in size and configuration to the DC-9 Series 30, its highly successful predecessor in regional airline services around the world. Maximum takeoff weight for the 717 will be 114,000 pounds (51,710 kg) compared to 108,000 pounds (48,988 kg) for the DC-9 model. Non-stop range will be up to 1,807 statute miles (1,570 n.mi./2,905 km).

Like the DC-9, the 717 features a five-across coach-class seating arrangement. It will incorporate an all new interior with illuminated handrails and larger overhead baggage racks.

The two-crew cockpit incorporates the industry's most modern and proven avionics technology, configured around six interchangeable liquid crystal display units and advanced Honeywell VIA 2000 computer systems similar to those in other new Boeing jetliners.

Flight deck features in the 717 include an Electronic Instrument System, a dual Flight Management System and a Central Fault Display System. Global Positioning System; Category IIIb automatic landing capability for bad weather operations; and Future Air Navigation Systems are available as optional features.

Two advanced BMW/Rolls-Royce BR715 high-bypass ratio engines will power the 717. The BR715 engine is rated at 18,500 pounds of takeoff thrust, with lower fuel consumption, reduced exhaust emissions and significantly lower noise levels than the power plants on comparable airplanes.

The 717 is designed to meet replacement and expansion needs in the 100-seat category, potentially numbering thousands of airplanes. Four airplanes are in final assembly at the Douglas Products Division in Long Beach. Flight testing is scheduled to begin in summer 1998, with airline deliveries beginning in 1999.

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562-593-3269





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BOEING 717 SPECIFICATIONS

CREW	2, plus cabin attendants
CAPACITY	
Passengers	March Council Municipal
Typical, Two Class Cargo Holds	106 935 ft. ³
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	26.5 m ³
DIMENSIONS	
Wingspan	93.4 ft.
Length Overall	28.45 m 124.0 ft.
Longin Overall	37.81 m
Height Overall	29 ft. 1 in.
	8.92 m
WING AREA	
Including Aileron	1,000.7 ft. ² 92.97 m ²
Sweepback (1/4 chord)	24.5°
AIRPORT NOISE	
(measured against Stage 3/Chapter 3)	
Sideline Takeoff	-7dB
Approach	-7dB -6.4dB
ENGINE EMISSIONS	-0.445
(measured against ICAO limits)	
Carbon monoxide	-70%
Nitrogen Oxides Smoke	-40%
FLAPS	-42%
FLAPS	Double Slotted
SLATS	Full span leading edge, 2-position
SPEED BRAKE	Wing mounted spoilers

-more-

B717 Specifications

REVERSERS	Pivot door-type
ENGINES (2) Type - BMW/Rolls Royce Thrust STANDARD DELIVERY DATA	BR715 18,500 lb.
Design Gross Maximum Ramp Weight	115,000 lb. 52,163 kg.
Maximum Takeoff Weight	114,000 lb. 51,710 kg.
Maximum Landing Weight	102,000 lb. 46,266 kg.
Maximum Zero Fuel Weight Operator's Empty Weight	96,000 lb. 43,545 kg. 68,278 lb. 30,970 kg.
FUEL CAPACITY (@ 6.7 lb./gal.)	3,673 gal. 13,892 L
PERFORMANCE Space Limited Payload	26,940 lb. 12,220 kg.
Cruise Level Flight Speed FAA Takeoff Field Length	.76 M 504 mph 6,200 ft.
(MTOW, S.L., Temp =30°C) FAA Landing Field Length (MLW, S.L.) Design Range (Domestic reserves @ 106 passengers/baggage)	1,890 m. 4,740 ft. 1,445 m. 1,807 st. mi. 1,570 n. mi. 2,905 km.

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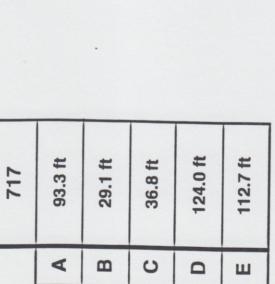
717-200 Program Major Supplier Partners

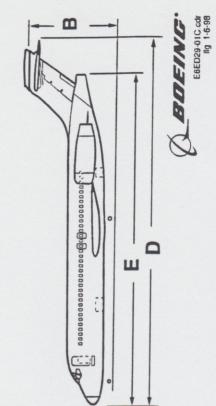
Component	Company	Location
Fuselage	Alenia	Rome, Italy
Avionics & Pneumatics	AlliedSignal	Torrance, California
Propulsion	BMW Rolls-Royce	Oberusel, Germany
Interior	Fischer Advanced Composites	Ried, Austria
Flight Guidance	Honeywell	Phoenix, Arizona
Wiring	Labinal	Cedex, France
Empennage	Aerospace Industrial Development Corp.	Taichung, Taiwan
Controls	Parker Hannifin	Irvine, California
Horizontal & Pylon	ShinMaywa Industries	Tokyo, Japan
Electrical	Sundstrand Corp.	Rockford, Illinois
Wing*	Hyundai Space & Aircraft Co.	Seoul, So. Korea
Nose	Korean Aerospace	Seoul, So. Korea
Landing Gear	Israel Aircraft Industries	Tel Aviv, Israel
APU	Auxiliary Power International Corp.	San Diego, California

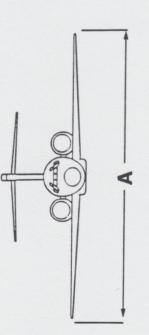
^{*} Initial wings being produced by Boeing's facility in Toronto, Canada

General Arrangement

717	93.3 ft	29.1 ft	36.8 ft	124.0 ft	112.7 ft
	A	8	C	D	ш











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DOUGLAS PRODUCTS DIVISION

The Douglas Products Division is a component of Boeing Commercial Airplane Group, producing passenger jetliners and cargo aircraft. Founded by Donald W. Douglas in 1920 and merged to become McDonnell Douglas Corporation in 1967, today's Douglas Products Division was established with the merger of Boeing and McDonnell Douglas in 1997. The division is based in Long Beach, Calif., with a worldwide network of employees supporting the division's in-service aircraft.

Douglas produces the long-range MD-11 trijet, and the MD-80 and MD-90 short-to-medium-range twin-engine commercial jetliners. The new Boeing 717-200, a 100-passenger twinjet, is in development, with deliveries scheduled to begin in 1999. The U.S. Air Force C-17 transport was developed at Douglas and is now a part of Boeing's Airlift and Tankers Programs.

Since its beginning in the back of a Los Angeles barbershop, Douglas has delivered more than 45,000 commercial and military airplanes. The long line of Douglas Commercial (DC) and McDonnell Douglas (MD) models have a history of more than 65 years of continuous commercial transport production.

The company's early days involved the production of limited numbers of airplanes for the U.S. government and private concerns including the first aircraft to circle the world, the Douglas World Cruisers, in 1924. The company was headquartered in Santa Monica, Calif.

The Douglas Commercial family began with a sale to Transcontinental & Western Air (TWA), a U.S. airline of the early 1930s. The initial Douglas design resulted in the DC-1 prototype, which set a new record with virtually every flight. After the first DC-1 delivery in 1933, the larger and more powerful DC-2 first flew in May 1934, followed by 20 deliveries to TWA. The DC-2 was followed by the legendary 21-passenger DC-3, the backbone of many of the world's airlines at the time, and the four-engine, 80-passenger DC-4. Douglas was at the forefront of commercial aviation, a tradition continued with the DC-6, DC-7 and their derivatives.

In 1941, Douglas opened a new aircraft assembly plant adjacent to Daugherty Field, now the Long Beach airport. Douglas was a major supplier to allied air services in World War II, delivering more than 31,000 aircraft, including the C-47 Skytrain, SBD dive bomber, C-54 transport, A-20 and A-26 attack bombers and B-17 bomber. Military support after the war included high-speed research aircraft and the AD Skyraider, A3D Skywarrior and A4D Skyhawk attack planes, and F3D Skyknight and F4D Skyray fighters for the Navy and Marine Corps. The company also produced Air Force cargo transports, including the C-74, the C-124 Globemaster II, the C-133 Cargomaster, and A-3 and B-66 bomber and reconnaissance aircraft.

May 1958 saw the maiden flight of the first Douglas commercial jetliner, the four-engine DC-8, which established world speed, payload, and range records. In all, 556 DC-8s were delivered through 1972. The highly successful Douglas twinjet program followed, beginning with the DC-9, an airplane with aft-mounted engines that first flew in February 1965. Five commercial

models were produced, carrying from 75 to 139 passengers, as were two military derivatives. In all, 976 DC-9s were delivered through 1982.

The DC-10 trijet family entered service in 1971. Six models of the DC-10 were produced, in addition to the KC-10 military tanker/cargo aircraft, which was developed for the Air Force. A total of 446 DC-10s and KC-10s was delivered through 1989.

The MD-80 series entered airline service in October 1980. It was the first short- to medium-range jetliner to meet the most stringent federal noise standards and featured a digital flight guidance system integrated with the autopilot, and advanced composite engine nacelles. Four versions of the advanced twin jet aircraft, the MD-81, MD-82, MD-83 and MD-88, nominally seat 150 passengers, while the MD-87 seats 130 passengers.

The MD-11, a wide-cabin trijet, was introduced to service in 1990 and is available in passenger, freighter and convertible freighter models. An extended range (ER) feature is available on all versions. The capacity of the MD-11 is more than 100 tons for the freighter model or, nominally, 298 passengers. The MD-11 features a two-person digital cockpit, redesigned interior, advanced metals and composites, and aerodynamic improvements. Maximum non-stop range for the standard passenger MD-11 is up to 7,980 statute miles (12,842 km) or 8,300 statute miles (13,330 km) for the extended range version. The MD-11 freighter has a range of up to 4,540 statute miles (7,310 km.).

The MD-90 is an advanced twin-engine, mid-size, medium-range jetliner. The MD-90 has seating for 153 passengers in a mixed-class configuration and a range of approximately 2,400 statute miles (3,860 km). Deliveries to airlines began in February 1995.

In August 1997, McDonnell Douglas merged with The Boeing Company and Douglas Aircraft was renamed the Douglas Products Division.

Boeing announced a product strategy for the division in late 1997. The MD-80 and MD-90 twinjets will continue to be produced through mid-1999. The MD-11 was recognized as a premier performer in the world's air cargo marketplace and continues to be marketed.

In early 1998, the 717-200 was introduced as Boeing's entry into the regional jetliner marketplace. Now in early production, the 717-200 is a new 100-seat twinjet that will serve the world's short-range, high-frequency routes. It is being developed by an international team of supplier-partners, with flight test operations scheduled to start in 1998 and commercial service beginning in 1999. The new twinjet features low operating costs, high schedule reliability, efficient short-runway operations, fast turnaround at airport gates and the capability to achieve eight to 12 one-hour flights on a daily basis.

In addition to its headquarters plant near Long Beach Municipal Airport, Douglas has manufacturing and support facilities at Torrance, California; Salt Lake City, Utah; Melbourne, Arkansas; and Yuma, Arizona.

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