



THE FLYING BULLS

## **PRESS INFORMATION**

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### **BO105 CBS-5 (Super Five)**

#### **Reg. D-HUDM**

In 1961, engineers Ludwig Bölkow and Emil Weiland decided to develop a revolutionary helicopter to serve as a model for many others due to its new rotor head. Four years later, Ludwig Bölkow founded the Bölkow GmbH, which later merged with Messerschmitt AG and Hamburger Flugzeugbau and turned into Messerschmitt-Bölkow-Blohm GmbH (MBB). With over 30 years of production and more than 1,400 created, the BO105 is one of the most successful and most produced multi-purpose helicopters together with the American Bell UH-1.

The BO105 was the first helicopter worldwide that used a rigid rotor head without a flapping hinge and a swivel joint. Made of titanium with inner elastomer elements, the rotor blades were fiberglass-reinforced, light and very aerodynamic. With its twin-engines and redundant systems, the BO wasn't only a pretty light helicopter but it was also cheap as it didn't require a lot of maintenance. The BO has always had a reputation for being extremely flexible and has been used by military and police alike as well as for mountain rescues and disaster prevention.

The BO105 CBS-5 (the "S" stands for 'stretched') underwent several modifications and received, for example, different main rotor blades to reduce vibrations. As a result, the loading capacity increased by around 150 kg and the useful load by around 130 kg. The take-off weight of 2,600 kg in external loads was increased by 100 kg in the longer version of the BO. The climb rate was increased by 1.6 m/s and the cruise speed by 15 km/h. Just like the shorter models, the BO105 CBS-5 has a Rolls-Royce/Allison twin-engine and a total of 810 horsepower. It reaches 235km/h and a height of 5120 meters (16.800 ft). At 8,81 meters the BO105, registered D-HUDM, is 24.4 cm (10 inches) longer than its fully aerobatic twin sisters – a little extra space that benefits passengers in the back seats.



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The BO105 CBS-5 is used as media helicopter for the Red Bull Air Race. The long cabin of the D-HUDM offers plenty of room for film and TV recording equipment.

A boom tripod with a Cineflex Camera attached to the skids of the BO records beautiful landscape shots helped by the aviation skills of the Flying Bulls. 500 of the 1,400 BO105 models left the factory halls in Manching and Donauwörth labeled "CBS", a long version for clients who, according to Bavarian standards, enjoy a "little bit extra".



## Technical Specifications

### BO 105 CBS-5

Registration	D-HUDM
Manufacturer	Messerschmitt-Bölkow-Blohm (Airbus Helicopters)
Year of construction	1993
S/N	S 883
Power plant	2x Allison 250-C20B
Power	2x 420 HP/PS
Cruising speed	120 kts / 220 km/h
Max. speed	145 kts / 270 km/h
Service ceiling	17.000 ft / 5.182 m
Max. endurance	2h 30 min
Fuel on Board	570 l
Fuel Consumption	approx. 200l / h
Length Airframe	28,9 ft / 8,8 m
Total length (incl. main rotor)	38,9 ft / 11,9 m
Height	9,8 ft / 3 m
Diameter main rotor	32,2 ft / 9,8 m
Diameter tail rotor	6,2 ft / 1,9 m
Empty Weight	3.534 lbs / 1.603 kg
MTOW	5.512 lbs / 2.500 kg
Seats	1 pilot / 4 passengers