



# A PIONEER OF MODERN HELICOPTER TECHNOLOGY: THE BO105 CELEBRATES ITS 50TH BIRTHDAY

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This month marks 50 years since the BO105 embarked on its maiden flight, on 16 February 1967, in Ottobrunn near Munich. Conceived as a two-tonne-class light multi-purpose helicopter, cutting-edge technologies and materials led to the BO105 being the first helicopter to feature a rigid, hingeless rotor head made of titanium and glass-fibre-reinforced rotor blades.

“The BO105 has made a name for itself above all for its versatility, robustness and reliability. The fact that it is still being used 50 years after its maiden flight speaks volumes for the high quality of this helicopter. As a pioneer of modern helicopter technology, the BO105 continues to influence our product range today,” said Wolfgang Schoder, CEO of Airbus Helicopters in Germany. What became known as the Bölkow rotor significantly reduced maintenance costs when compared to traditional rotor heads with flapping and lead-lag hinges, as fewer moving parts were required. Furthermore, the BO105’s special rotor system enabled it to perform with a higher degree of agility and manoeuvrability –

## capabilities for which it is still renowned today.

Since the helicopter's first delivery in 1970, more than 300 customers around the world have purchased a total of some 1,400 aircraft which have been operated in air rescue, as a police and military helicopter, as well as for VIP, passenger and cargo transportation. The largest customer was the German Armed Forces with more than 200 orders. Some of these aircraft remained in service until December 2016.

Some 400 aircraft – around a third of the total number of helicopters manufactured – are still in service today. The longest-serving BO105 carries out aerial work on the Falkland Islands. In total, the BO105 fleet has clocked up more than 8 million flight hours around the world. Airbus Helicopters continues to offer comprehensive service for the light helicopter and guarantees the delivery of spare parts in the long term.

In particular the H135 and H145 light helicopters went on to profit from the BO105's technological achievements. The current successor model to Airbus' BO105 is the H135. With its hingeless and bearingless rotor head, it has an advanced rotor system with a high carbon-fibre content to extend its service life. In addition, the H135 boasts further innovative features, such as a glass cockpit, an autopilot system and the shrouded Fenestron tail rotor system to further improve the safety and sound levels of the helicopter. In its role as a pioneer of technological progress, Airbus is working on future-focused programmes also today: among them are the X6 helicopter for the heavy segment, which is set to enter service during the next decade, or the City Airbus project, an air taxi for major urban areas.

### 50 YEARS BO105

#### History

The BO105 was the most innovative light helicopter of its time. With the introduction of its hingeless main rotor head, the BO105 paved the way for the bearingless rotor systems of today's helicopters. With some 400 aircraft still in service today the BO105 is appreciated around the world for its versatility, reliability and quality.

Year	Event
1983	Official start of development
1987	First flight
1988	Start of serial production
2001	End of serial production
1984	1 million flight hours
1970	First delivery to ADAC

#### Key figures

- Maximum range: **575 km (310 NM)**
- Maximum takeoff weight: **2,400 kg**
- Maximum speed: **270 km/h (146 kts)**

#### Did you know that the BO105...

- ...reached a speed record of 404 km/h in 1975?
- ...broke a long-distance record by flying more than 1,714 km?
- ...was the first helicopter to perform a loop? And is still a guest in many aerobatics shows.
- ...was used as a "polar hell" for a research programme in the Antarctic?
- ...is a movie star in several action films? (e.g. James Bond/Spectre, The Expendables 3)

#### BO105 missions

Some 300 customers worldwide acquired more than 1,400 BO105. The entire fleet has reached more than 8 million flight hours. Airbus continues to provide service support and spare parts.

Mission Type	Percentage
Military	37%
Civilian	45%
Parapublic	18%

#### Global fleet distribution

Region	Count
Europe	612
Americas	381
Asia	299
Africa	77
Oceania	38

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You can find more information, photos and a video about the BO105 and its history on the following website: [http://www.airbushelicopters.com/website/en/ref/50-years-BO105\\_418.html](http://www.airbushelicopters.com/website/en/ref/50-years-BO105_418.html)

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