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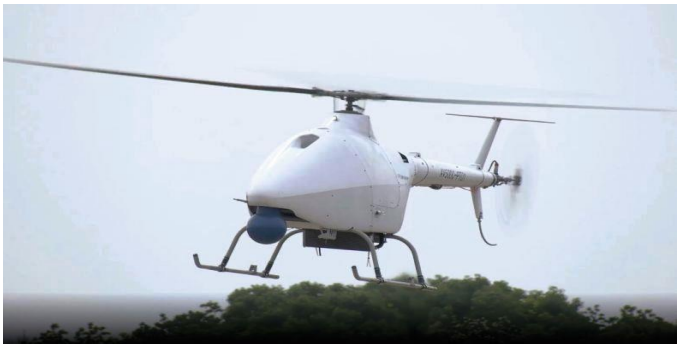
CHINESE UNMANNED HELICOPTERS FOR HIGH ALTITUDE: AV-500

New Variant of China's AV-500 Unmanned Helicopter for High-AltitudeUsage.

1. The Aviation Industry Corporation of China (AVIC) has successfully test flown a new variant of its AV-500 rotary wing vertical take-off and landing (VTOL) unmanned aerial vehicle (UAV) in May 2020. A prototype AR500C/ AV500C – with serial number AV500C-PT01 displayed on its tail – completed 20-minute maiden flight in Poyang County in China's north-eastern Jiangxi Province. The prototype was seen to be equipped with a nose-mounted dummy electro-optical infrared (EO/IR) sensor pod. While detailed specifications of this new variant are not known, the baseline AV-500 platform has maximum take-off weight of 500 kg with an overall length of 7.2 m – inclusive of a 5.7 m-long fuselage and tail section – height of 2.4 m and rotor diameter of 6.3 m. It has been flight tested to an altitude of more than 5000 m. It can carry a 175-kilogram payload and fly at a maximum speed of 170 km per hour.



2. **Comments.** The AR-500C/AV-500C is a further development of AV- 500B VTOL UAV, designed specifically for high-altitude operations. There are unconfirmed media reports that the PLA is using these UAVs for surveillance at India-China border in Ladakh area during current stand-off. A key difference from earlier AV-500B and AV-500W twin-rotor configuration models is that this variant has three-bladed main rotors. Another difference from earlier variants is its composite airframe featuring an aerodynamically optimized fuselage shell and enclosed tail boom. AV-500W is the armed reconnaissance version of AV-500 base model, and is marketed internationally as the U8EW. It successfully conducted a missile firing test in 2018. A helicopter drone is considered to be more flexible and offers unique advantages over traditional fixed wing drones.

Source: https://www.janes.com/defence-news/news-detail/8cfaa7e9-a740-4101-9058-2d31ca08b3f9