

CAAC ISSUED GUIDANCE ON UAV AIRWORTHINESS CERTIFICATION

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On January 23rd, 2019, the Airworthiness Department of Civil Aviation Administration of China (CAAC) issued the *Guidance on UAV Airworthiness Certification based on Operational Risks* (hereinafter abbreviated as "Guidance"), aiming at establishing a risk-based UAV airworthiness management system by the end of 2019. A total of five Chinese UAV companies were authorized as pilots to initiate and develop different UAV programs in exploring airworthiness standards and certification methods for UAVs for transporting cargos, inspecting powerlines and carrying passengers. EHang is a member of the CAAC specialized management group for civil UAVs, and also China's first company on the world's leading program for the piloting and testing of the cutting-edge passenger Autonomous Aerial Vehicles (AAV).

In recent years, the industry of civil UAVs is witnessing rapid growth in China. Going beyond aerial filming, the connection with 4G/5G network further expands various "UAV+" applications including logistics, smart city management, emergency rescue, urban air mobility, etc. Two days before the Guidance release on January 21st, China's President Xi Jinping specifically emphasized the importance of accelerating the legislation process for UAV industry on the provincial and ministerial seminars.

According to the Guidance, CAAC aimed to build up China's UAV airworthiness certification management with Chinese characteristics guided by three principles:

1. Exploring a certification method by closely orchestrating hierarchical certifications with different levels of operational risks.
2. Exploring a certification process by extracting CAAC certification standards and regulations from industrial standards.
3. Exploring a certification mode with a more tolerant, open and service-oriented mind by encouraging UAV companies to jointly participate the airworthiness management through integrated information system.

As long as UAV companies establish a qualified airworthiness system and its UAV products have met airworthiness standards, CAAC will issue the airworthiness certificate.

Meanwhile, the Guidance disclosed that China's UAV airworthiness management system based on operational risks is to be established preliminarily by the end of 2019. The further technology development and business mode innovation promise the ultimate trend of incorporating UAVs into the current civil aviation system. In the near future, it is expected by CAAC that the UAV industry will eventually be on a par with the general aviation industry, or even replace some applications of current general aviation aircraft in certain fields.

As the major program receiving CAAC authority attention, EHang's proprietary-developed AAVs represent the key element shaping the future urban air mobility, an emerging and promising industry that is expected to provide a new mobility method for humankind.

According to the UAV airworthiness certification procedures of CAAC, all UAV products of EHang, including the passenger AAVs, have so far completed the real-name registration. EHang is assisting CAAC in analyzing operational risks and jointly establishing relevant standards and basis based on the actual operational data.

"EHang AAVs witness a major innovation and breakthrough of China's UAV airworthiness management," said HU Huazhi, EHang Founder & CEO. "The urban air mobility that EHang AAVs have explored and pioneered persistently is no longer a future concept, it is a to-be realized 'China Innovation'. China and EHang have already become the forerunners in establishing a digitalized air eco-system with the innovative applications of urban air mobility, aerial logistics, smart city management, aerial media and other commercial solutions."

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