

## **B-AAA01397 Drone Occurrence Investigation**

### **Executive Summary**

At 0939 on January 17, 2023, an AXH-E230RS drone of the Eastern Branch of the Coast Guard Administration, registration number B-AAA01397, crashed on the beach of Doulan coast, Taitung County while returning from a flight test. There were no casualties.

### **Conclusion**

1. The occurrence was caused by the fracturing of tail rotor pitch links during flight, leading it impossible to control the flight attitude. No other evidence indicates the possible causal factors to the flight control computer nor the human operations.
2. The drone's tail rotor slider assembly may have suffered from poor manufacturing and assembly quality of the old model slider and other components. This issue caused friction and obstruction in the assembly during rotation, resulting in the pitch control yoke deforming and the pitch links fracturing, ultimately leading to the loss of control and consequently, the crash of the drone.
3. 3. Before the occurrence, the manufacturer re-designed the specification of the tail rotor slider due to the production line assembly problems, but failed to evaluate the suitability of old model parts still in use, which posed a risk to flight safety.

### **Safety Recommendations**

To: **AVIX Technology Inc.**

Strengthen the quality control of the design, manufacturing and assembly of drones, and evaluate the suitability of old model parts still in use after the design changes.

To: **Civil Aeronautics Administration, Taiwan**

Assure the AVIX Technology Inc., the design and modification of drones in compliance with applicable inspection standards.

The final report is in Chinese only and available for download at <https://www.ttsb.gov.tw>