

AJ2199 Ultra-light Vehicle Occurrence Investigation

Executive Summary

On January 7, 2021, a Flight Design CTLSi ultra-light vehicle of KaiXiang Aerosports Association, control number AJ2199, departed from Runway 26 of Jiehao activity field in Gaoshu Township, Pingtung County at about 1420L to perform orientation flying. There were one operator and one occupant aboard. The vehicle lost contact 10 minutes after takeoff and crashed in the mountainous area of Sandimen Township. The vehicle was destroyed and two people on board sustained fatal injuries.

Conclusion

1. The operator did not comply with the regulations for operating ultra-light vehicle by visual flight, and flew under the instrument meteorological conditions, which caused the occurrence.
2. The KaiXiang Activity Instruction Manual stipulates that operating vehicles must comply with visual meteorological standards, but there is no relevant procedure to prevent operators from flying illegally.
3. KaiXiang uses the radio communication system as the real-time positioning and reporting mechanism for ultra-light vehicles. This system is a passive monitoring mechanism, which needs to be reported by the operator, so that the ground personnel can obtain information such as the vehicle position.

Safety Recommendations

To: **KaiXiang Aerosports Association**

1. Review the operations and training of weather observation and weather data interpretation to enhance members' awareness of visual meteorological standards.
2. Evaluate mechanisms to prevent deliberate violations of visual meteorological standards for flight activities, such as procedures of control station clearance or weather logging,

to ensure that all operators comply with relevant regulations.

To: **Civil Aeronautics Administration, Taiwan**

1. Require KaiXiang and other activity associations to review the operations and training of weather observation and weather data interpretation to enhance members' awareness of visual meteorological standards.
2. Require KaiXiang and other activity associations to evaluate mechanisms to prevent deliberate violations of visual meteorological standards for flight activities, such as procedures of control station clearance or weather logging, to ensure that all operators comply with relevant regulations.
3. Evaluate the use of automatic dependent surveillance-broadcast (ADS-B) or other remote identification equipment as a management mechanism for real-time positioning and reporting of ultra-light vehicles.

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