

AL2816 Ultra-light Vehicle Occurrence Investigation

Executive Summary

On August 6, 2022, an Ikarus C42B ultra-light vehicle of the Chinese Taipei Aviation League, with control number AL2816, took off from Jiehao activity field, Gaoshu Township, Pingtung County at 1710L. There were one operator and one occupant aboard. At about 1744L, it crashed on the sandbank of Ailiao River between Gaoshu Bridge and Nanhua Bridge. It burst into fire and the two people on board sustained fatal injuries.

Conclusion

1. The take-off location is a legal activity field, but part of the airspace during the said maneuver used was not compliance to the published maneuver area. Due to insufficient tracking information, the probable cause of the occurrence cannot be determined.
2. The operator was flying at a low altitude before the occurrence. If the vehicle encounters mechanical problems or emergencies during such flight, the reaction time will be marginal, leads to the safety margin to be insufficient, and there will be a considerable degree of risk.
3. The air-ground radio communication system in this case is a passive monitoring mechanism. Ground controllers can obtain the vehicle position only by verbal report from the operator, and the ground controller cannot confirm the reported position information of its correctness using this sole air-ground radio communication.

Transportation Safety Recommendations

To: Chinese Taipei Aviation League

1. Promote and instruct members to operate vehicles at an appropriate altitude within the approved airspace, based on the performance of the vehicle, and maneuver with vigilance to the environment to maintain flight safety.

To: Civil Aeronautics Administration, Taiwan

1. Supervise Chinese Taipei Aviation League and other activity associations to promote and instruct members to operate vehicles at an appropriate altitude within the approved airspace, based on the performance of the vehicle, and maneuver with vigilance to the environment to maintain flight safety.
2. Regarding the suitability of establishing remote identification devices as a real-time positioning and reporting mechanism for ultra-light vehicles, TTSB has issued a recommendation (TTSB-ASR-21-12-005) in the AJ2199 occurrence investigation report, and will not re-issue in this case.

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