

# **SF2555 Ultra-light Vehicle Occurrence Investigation**

## **Executive Summary**

On March 16, 2023, a Shark LSA ultra-light vehicle (control number: SF 2555 of Shun Feng Flying Association) with one operator and one occupant on board, took off from private owned Shun Feng air field at 1500 local time. The ultra-light vehicle crashed on the sandbank of the Zhuo Shui River at around 1517 local time. The vehicle was burned out and destroyed, the on-board operator and occupant were all deceased during the crash.

## **Conclusion**

1. During the initial climb of the occurrence vehicle after low approach to the runway 07 at low altitude over the threshold, the operator failed to comply with and maintain the initial climb speed specified in the flight manual. The vehicle stalled due to the high pitch angle and steep turn. When the initial stall buffeting phenomenon occurred, the operator not only failed to quickly and effectively execute the stall recovery procedure to increase the speed, but continued retracting the flaps while making a left turn when the speed was insufficient, resulting in a stall after the buffeting and caused the crash.
2. The activity airspace is a legal airspace for ultra-light vehicles, however, the occurrence maneuver was outside the operations hours permitted by the Civil Aviation Administration, and the association failed to contact relevant units regarding the occurrence maneuver in accordance with the activities guideline.
3. The weight and balance of this occurrence was within the limits. However, the weight and balance placards in the cockpit of the occurrence vehicle did not include the front and rear seat/luggage weight limit label, which could cause the operator to misuse the data of placards and cause the rear seat occupant to exceed the weight limit.

## **Transportation Safety Recommendations**

### **To: Shun Feng Flying Association**

1. Strengthen operator flight training and management, to improve operator situation awareness and ability to recover in stall conditions, and ensure that operators comply with relevant procedures and restrictions in the flight manual.
2. To operate within the permitted operations hours in the airspace approved by the Civil Aviation Administration, and contact relevant units for flight in accordance with the activities guideline.
3. Post necessary weight and balance placards in the cockpit so that operators can clearly identify and follow them to ensure that the vehicle's center of gravity is maintained within the operating limits.

### **To: Civil Aeronautics Administration, Taiwan**

1. Supervise the Shun Feng Flying Association to strengthen personnel training and management, and to ensure that operations and flights are carried out in compliance with the flight manual and activities guideline.

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