

0306 GT-400 Ultra-light VEHICLE FLIGHT OCCURRENCE INVESTIGATION REPORT

Executive Summary

In the afternoon of March 6, 20:11, one GT-400 ultra-light vehicle had a forced landing at rear side of no. 5-3 farmland Xinan, Qigu District, Tainan City, with one operator on board. The vehicle took off at 16:30 hours from Shierdian Road area (Flying Dragon Airfield), Annan District, Tainan City, and crashed at 16:50 hours onto farmland, located 7.5km north-west from the take-off location. Nose gear support was broken, fuselage beam was bent, the ends of 2 propellers at the vehicle's rear section were ruptured, and the operator was minor injured.

Analysis and Conclusions

Findings from the investigation showed that the operator had neither performance data about the occurrence vehicle's take-off, climb, cruise and loss of speed nor operating experiences in simulating forced landing. During flight the engine lost partial power, though the engine was still on before collision, the power output was not sufficient to maintain the rest of the flight, which led the vehicle to have forced landing. The landing field for forced landing chosen by the operator was too soft to conduct a landing roll, which led to substantial damage to the vehicle during crash. The occurrence operator did not have certified operator license, the ultra-light vehicle did not have inspection certificate, and the activity area and airspace were not in compliance with civil aviation regulations. The vehicle was installed with an engine that had no aircraft certification and the operator's operation was not in compliance with the safety information specified by the vehicle manufacturer.

Safety Recommendations

To Civil Aeronautics Administration, CAA

1. Reinforce to suppress illegal fields and illegal activities of ultra-light vehicles.
2. Reinforce to promote the significance of ultra-light vehicle's inspection and maintenance and the risk of installing engines without aircraft certification on vehicles.

To Ultra-light Vehicle Activity Associations and Chinese Taipei Aviators League

1. Proceed with relevant activities of following ultra-light vehicle related regulations.
2. Making the public know about the circumstance of having an engine installed in an ultra-light vehicle without aircraft certification, such as in this occurrence, the engine might lose power at any time; therefore, activity area and airspace shall be carefully chosen, operators shall be familiar with performance of relevant vehicles and follow emergency procedures to avoid similar occurrences.