Executive Summary

0621HAWK Occurrence Investigation

On June 21, 2015, at 0816L, a CGS HAWK ARROW II ultra-light vehicle held by the member of Taiwan Aviation Big Player Sport Association, took off from runway 26 at Saijia Jiehao Airfield. There was only one operator on board.

According to the video recording of the flight, and the operator's statements, the ultra-light vehicle took off and flew along the river around the airfield at altitude of around 550 feet, and remained mostly in the permitted airspace. Twenty minutes after take off, at 0836L, the operator found the vehicle had lost control of the ailerons, thereafter he decided to make a forced landing at a haystack area next to Koushe River embankment. The operator controlled the heading of the vehicle by adjusting the engine torque and using the rudder, and then the vehicle crashed after the spiral descent. The operator suffered the bone fracture of both legs.

The Aviation Safety Council (ASC) is an independent agency responsible for civil aviation, public aircraft and ultra-light vehicle occurrences investigation. According to the Republic of China Aviation Occurrence Investigation Act, the ASC launched an occurrence investigation.

The Final Report was reviewed and approved by ASC's 38th Council Meeting on October 27, 2015.

There are a total of 1 finding and 2 Safety Recommendations from the Final Report.

Conclusions

The operator and the vehicle were not licensed to conduct ultra-light

vehicle activities, which violated the regulations governing the ultra-light vehicle activities. The aileron torque arm of the vehicle was not properly maintained and suffered serious corrosion, causing the failure of aileron torque arm in flight during normal operations, and losing control of ailerons. The operator subsequently decided to make a forced landing by circling descent, causing the vehicle to descend in steep bank attitude, thereby the vehicle crashed with high airspeed and descend rate, and led to the total loss of vehicle and the substantial injuries of the operator.

Safety Recommendations

To Civil Aeronautics Administration, CAA

 Require ultra-light vehicle associations to forbid the ultra-light vehicle activities with unlicensed operators or vehicle, and all fly activities shall be conducted in airspace permitted by CAA. (ASC-ASR-15-11-027)

<u>To Taiwan Aviation Big Player Sport Association (ultra-light vehicle</u> body corporate)

 Require all its members: Conducting all ultra-light vehicle activities with unlicensed operators or vehicle is forbidden. All fly activities shall be conducted in airspace permitted by CAA. (ASC-ASR-15-11-028)