



## SAFA Advisory Notice AN-2020/01 – 29.07.2020 Post fitting of larger oil coolers to Rotax powered WM aircraft

### **Background**

In December 2019, a pilot in WA flying his Airborne XT-912 WM aircraft experienced a loss of oil pressure followed by an engine seizure and made an emergency landing in dense coastal bush. The aircraft was extensively damaged but thankfully there was no injury.

In June, a defect report was lodged concerning a similar occurrence with another Airborne XT-912. In this case, the oil cooler split on the intake side resulting in a loss of oil pressure. The pilot killed the engine immediately and made a safe landing without any damage or injury.

### **Findings**

In both cases, the same Rotax after-market oil cooler was fitted to assist with flying in hotter climate and to also assist with higher workloads while conducting towing operations.

In the second case mentioned above, the intake spigot separated completely from the cooler and was 90 hours old. The age of the first unit was 2 hours.

The oil coolers fitted reportedly appear to have thinner mounting plates and to be a weaker design with a thinner top tank where joined to the intake fitting.

All pilots should be aware that they cannot modify their aircraft unless the modification is approved by the manufacturer. This includes parts from the engine manufacturer that are not the same part number as that fitted by the aircraft manufacturer. Doing so will place the aircraft outside of certification and may lead to insurance being voided.

Any proposed modifications to an aircraft must be sent to the manufacturer for approval. The proposal must include a detailed description, drawings, and photographs so the manufacturer can understand what the modification entails and enable a determination as to whether the modification complies with all relevant design standards.

Owners of Rotax 912 powered aircraft should refer to the following Service Information from Rotax, particularly the **Notice at 1.1**:

[https://legacy.rotaxowner.com/si\\_tb\\_info/serviceinfo/si-pac-014.pdf](https://legacy.rotaxowner.com/si_tb_info/serviceinfo/si-pac-014.pdf)