



Sport Aviation Corp Ltd
Microlight Aircraft Defect Report

Reporter's Name: Aeroprakt Foxbat A22 LS - Engine loss of lubrication and seizure

Address: 12 January 2018

Aircraft Registration: This section will remain confidential

Microlight Type: Aeroprakt Model: Foxbat A22 LS

Total Time in Service: - Airframe: 312 Hours Engine: 312 Hours

Hours Since last Inspection: 12 Report date: 15/01/2018

Reporter:	Owner	<u>Inspector</u>	Safety Officer	Other	Circle One
Defect Type:	Airframe	<u>Engine</u>	Instruments	Other	
Location if Airframe:	Fuselage	Wings	Tail	Other	
Discovered During:	Preflight	Inspection	Maintenance	<u>Flight</u>	

Describe the defect in detail (attach photos if possible): The tube nut holding the barb sitting in place on the inlet of the oil supply to the engine came loose in flight. Resulted in loss of lubrication oil and engine seizure. Aircraft made an outlanding.

Describe the effects (if any) of the defect on airworthiness: The tube nut found to have loose clearance on its thread.

Damage to engine - Broken conrod (big-end) on No 1 cylinder causing seizure and break-out at the top of the crank-case

Describe remedial action taken and by whom: Engine replaced by Northland Aviation Ltd. I took extra step to lock-wire tube-nuts to prevent reoccurrence. I believe with 4 threads, loose nut, this nut is not secure and must be lockwired.

On analysis, I discovered that the Foxbat had not leaked oil prior to the failure. With the oil cooler mounted above the failed fitting, some oil would have leaked leaving evidence in the hangar.

Also preflight checks and engine monitoring did not show tell-tail signs prior to engine seizure.

The flight where the failure occurred was an evaluation flight prior to the student going solo. I interpret that this flight probably contained "Out of the Usual" flight manoeuvres that contained vibrations that may have led to this tube-nut coming loose.

I have already sent relevant photos but included is a photo of the nut as lockwired on return to service after engine replacement.

I recommend this action on all fittings of this type where tube nuts are used.

Further to my "Defect report" on the Foxbat

I have checked another aircraft of the same type:-

The oil line on the oil cooler on that aircraft was also loose. I advised the owner

to lock-tite the tube nut and also lock-wire it. He did so.

I believe all these aircraft have a weakness in this area and their owners should be advised.