Instructions for Use

Oil Replenishment / Sampling Record for Makila 1A1 Engines - MOD Form 737(Makila)
Makila Engine Oil Consumption Reference Table - MOD Form 737A(Makila)

1. **General**. The MOD Form 737(Makila) is used in conjunction with MOD Form 737A(Makila) to record the amount of oil added during replenishments, the oil consumption rate, and the EFD Sampling regime for the Makila 1A1 engine. The form is not to be used to record oil level checks carried out as part of Flight Servicing activity.

2. **Insertion and Removal. MOD Form 737(Makila)**

   a. **Insertion.** When raising a new MOD Form 737(Makila) enter the following in the appropriate boxes. Aircraft 'Mk', Aircraft 'Serial No', 'Makila Engine S/N', corresponding Electronic Engine Control Unit serial number ('EECU S/N'), 'Airframe Hrs at installation', 'Engine Hrs at installation', 'Position in Aircraft', 'N1 Cycles at installation'.

   b. If the EFDC sampling periodicity is different to that specified in the platform Topic 5A1 enter the details in the 'EFDC/SOAP/Period/Sample No' row eg SOAP/10.

   c. **Removal.** When full, replace the MOD Form 737(Makila) ensuring the Airframe Hrs, Consumption, Place and EFDC / SOAP details (if applicable) from the final entry are transferred to the new form. The completed MOD Form is to be dispatched to the Puma Force Docs Cell.

3. **Engine Replacement.** When an engine is replaced, the Supervisor is to:

   a. Dispatch the relevant MOD Form 737(Makila) to the Puma Force Docs Cell.

   b. Raise a new MOD Form 737(Makila), in accordance with Para 2.

4. **EECU Replacement.** When an EECU is replaced, the EECU Serial number in the relevant box is to be updated.

5. **Oil Replenishment**. Every oil replenishment is to be recorded as follows:

   a. Enter the 'DTG', 'Place' and current 'Airframe Hrs'.

   b. Enter the 'Rig Serial No', 'Oil Batch No' and amount of 'Oil Added (Litres)'.

   c. Annotate the 'Hot/Cold' details as appropriate (an engine is considered 'Cold' 30 minutes after shut down).

   d. Calculate the oil consumption rate using MOD Form 737A(Makila) as follows:

   Note: Hours run since last replenishment are to be rounded down to the nearest 15 minutes.

      (1) Using the Makila Engine Oil Consumption Reference Table MOD Form 737A(Makila) determine the oil consumption rate by plotting hours run since the last replenishment against the amount of oil added.

      (2) Transfer the calculated oil consumption rate into the MOD Form 737(Makila) 'Consumption (Litres/Hr)' row and the 'Engine Oil Consumption' chart to continue oil consumption trending.

      (3) If oil consumption rates enter the yellow area on the Makila Engine Oil Consumption Reference Table MOD Form 737A(Makila), engines are to be subject to Continuous Charge Mandatory Maintenance (CCMM) at 06:40 Fg Hr iaw Topic 2(R)1, Part 1, Leaflet 001. A limitation is to be raised in the aircraft Limitations Log MOD Format 703 limiting an aircraft to 06:40 Fg Hrs whereupon CCMM is required to enable a further 3:20 Fg Hrs within the Continuous Charge period.

      (4) If the engine oil consumption is identified as being above 0.3 Litres/Hr then the engine is not to be flown or ground run and P2G PT advice sought. 0.3 Litres/Hr is the Engine Design Organisation maximum engine oil consumption limit.

   e. Complete the 'Name' and 'AF/BF/Fault Invest' row.

6. **EFD / SOAP Sampling.** When an EFD / SOAP sample is taken:

   a. The 'DTG', 'Place', 'Airframe Hrs', 'Hot/Cold' and 'Name' rows are to be completed as necessary.

   Note: If oil replenishment is not carried out alongside sampling, transfer the oil consumption figure from the last replenishment and annotate the 'Engine Oil Consumption' chart.

   b. The sample number is to be entered into the 'EFDC /SOAP Sample No' row.

   c. On receipt of a Clearance signal, an appropriate entry is to be added into the 'Sample Type / Clearance' row eg Pass/Date or Fail/Date.