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AIRWORTHINESS
A VERTICAL LINE TO THE LEFT OF THE TEXT INDICATES A CHANGE.
ENGINE TBO EXTENSION

1. An engine may be run for a period stated, provided that the manufactures' modification and inspection requirements, current at the time of the last overhaul, were incorporated and that the maintenance instructions subsequently issued by the manufacturer or by the Director in respect of the particular engine type, are complied with.
2. The overhaul of an engine must include all engine-driven accessories, including generator and associated voltage regulator, except that where such items form part of the component grouping system of an approved maintenance schedule, they may be removed for overhaul as indicated in the schedule.
3. The duration of engine ground runs need not be entered in the logbooks, the periods between complete overhaul being calculated as the sum of operations from take-off to touch-down.
4. Notwithstanding for the foregoing, all piston engines of 400 brake horsepower or less fitted to aircraft of 2 730 kg mass or less, which have completed the recommended overhaul period may continue in service for a further period of operation not exceeding 20% of the hours recommended, subject to:
 - 4.1.1. A study shall be carried out of the total engine life including all previous engine complete or top overhauls to determine which replacement parts were replaced and which parts were repaired or modified;
 - 4.1.2. An inspection to assess the condition of the engine to a schedule approved by the Executive Director immediately prior to the increase and at each 50 hours thereafter carried out and certified by an appropriately licensed aircraft maintenance engineer;
 - 4.1.3. Sampling and analysis of engine lubricants and oil filters shall be carried out at least two 50-hour intervals preceding the TBO and every 50 hours during the extension.
 - 4.1.4. The embodiment of all modifications, airworthiness directives and special inspections specified by the manufactures for the engine type;

Note: In no case shall any mandatory restrictions be exceeded and the compliance with mandatory bulletins, modifications and inspections shall be completed at the specified times;

 - 4.1.4.1. 50 hour oil and filter changes must be carried out and recorded during extension;
 - 4.1.4.2. the extension will not be given for more than 100 hours at a time.

5. In order to monitor the performance of engines which continue in service beyond the recommended overhaul periods, the certifying aircraft maintenance engineer authorising the extension, and the engineer responsible for each 50 hour inspection thereafter, shall complete in duplicate a log book entry embracing the following information:

- 5.1. Aircraft Registration
- 5.2. Engine Type
- 5.3. Engine Serial Number
- 5.4. Total Hours Run Since New
- 5.5. Total Hours Run Since Overhaul
- 5.6. Total Hours Run Since Top Overhaul
- 5.7. Fuel Consumption
- 5.8. Oil Consumption
- 5.9. Cylinder Compression
- 5.10. Ground Run Performance Figures
- 5.11. Result of oil sample analysis
- 5.12. General Condition
- 5.13. Engine recommended TBO
- 5.14. Dates of all previous TBO extension approvals

The Logbook entry mentioned in paragraph (5) above shall be certified by the engineer authorising the extension and it will be countersigned by an inspector of the Namibia Civil Aviation Authority before the aircraft is returned to service.

The following statement shall be appended to the logbook entry referred to in paragraph (5) above:

I hereby certify that I have examined the logbook and history of the engine serial number-----
-----Since it was overhaul (or since new) and I am satisfied from this survey and an inspection of the engine that it is fit to operate for a further ----- hours and hereby authorise such an extension of the TBO

Signature: ----- Name: -----

AMO Approved Number: ----- Date: -----

Authorisation by Inspector of the Namibia Civil Aviation Authority Signature: -----
---- Name: ----- Date: -----