CHAPTER 8

SCOPE FOR FUTURE WORK

The outcomes of Life Usage Monitoring should also be studied for all possible operating conditions and also for many possible engines. The results of LUMS must be compared with the actual engine performance and wear out conditions. The LUMS is useful for finding out the damage accumulation of only the compressor section; it may be developed for other critical components of engines also.

In this thesis work, the MTBF analysis is limited to a small sample size that is failure history of 25 engines only. The sensitivity analysis must be carried out with the real time data to ensure the effectiveness and efficiency of the proposed model.

The number of possible solutions can be increased if the total input size and subgroup size are varied. Then any heuristic approach can be implemented to obtain the best among the best possible solutions. The proposed mathematical model is only for a single operator. The accuracy of the results may be analyzed for input data from multiple operators.

This thesis work has considered only the normal operating period for failure analysis. The failure pattern will vary as the engines become older and older. Hence, the age of the engines may also be considered as a factor for variation. All such variations may also be taken into consideration for future analysis.