# GEOMETRIC PROGRAMMING AND CYCLIC
# AIRCRAFT MAINTENANCE & FLYING SYSTEM

Dr. Afaf El-Dash
Dept. of Math ; Helwan University

## ABSTRACT

The determination of the optimum effective measures, the most important objective of the decision maker for aircraft maintenance & flying systems is considered.

These measures are used to study the efficiency of the system or to design a new center to maintenance & flying of aircrafts. Also, by using these measures, the decision maker can evaluate again the systems efficiency when some military requirements occured.

Therefore, in this paper:

1- We apply the finite cyclic queues model due to "Ernest koenigsberg" to determine the effective measures of an aircraft maintenance & flying system.

2- Then we construct geometric programming model to conclude the optimum values of the effective measures.

3- Finally, a case study of one maintenance & flying center of _____ is presented.