

STOCHASTIC GOAL PROGRAMMING FOR
REPAIR & MOINTENANCE OF FLYING SYSTEMS

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ABSTRACT

In this paper, stochastic linear goal programming and nonlinear goal programming are employed to determine the minimum shortage and overage of work hours for repair shops (repair center) of flying system where requisite to repair different types of jobs are random variables with normal distributions. The relative importance of shops is considered and the actual as well as teh theoretical reliability measures of a center are presented. Also, a case study of a center in the Egyptian air force in the period 1986-1989 is investigated.

Key Words: Flying system, repair shops, stochastic programming, stochastic goal programming, chance-constrained programming (CCG), decision maker (DM), and reliability measures.