SEARCH FOR LOST TARGETS WITH UNRESTRICTED EFFORT

Abd-Elmoneim A. M. Teamah

Abstract

We consider search for a lost target which moves randomly among a finite set of different states and the object is to find the target as fast as possible. We assume that the target is valuable and therefore, the search effort, which is used in detecting the target, must be unrestricted. We obtain the solution which minimizes the probability of undetection target and searching effort, also we find that solution when the lost target is located. The stability of search is studied.