Feasibility investigation of adopting a parabolic reflector on a helicopter for satellite communication

P. Benedetti

Abstract

Aerial platforms are nowadays equipped with a large variety of instrumentations for many different applications. The project activity described is mainly focused on the study and analysis of mounting a parabolic reflector, properly designed for satellite communications, on a helicopter platform. In particular the activity is related to the electromagnetic field perturbation analysis when the orientation of the radiating antenna changes, thus trying to keep line-of-sight with the satellite with which it communicates.

Reference Bibliography: Evolutionary Optimization [28]-[53]; Evolutionary Optimization and Array Synthesis [1]-[27]; Array Synthesis [54]-[91].


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Supervisors: Prof. A. Massa, Dr. F. Robol.