

ABSTRACT

Many modern antenna systems radiate in a complex structural environment such as a ship, an aircraft, or the rooftop of a building. Usually, the computation of the direct fields from the antenna is straightforward. However, the calculation of the fields scattered by the structural environment is often more difficult, and requires far more computational resources. It is therefore important to develop a procedure, which can utilize the best techniques in combination with one another, for the calculation of the radiating fields of these modern antenna systems in an accurate manner. Typically, electromagnetic codes are available to analyze both the direct radiation from the antenna and the scattering from the structural environment. The issue to be addressed is an efficient method for transferring information from the antenna code to the environmental code.