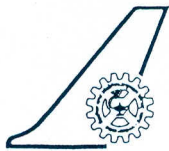


Documentation Sheet



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Title **Determination of Optimal Antenna Location on Aircraft Structures:
Final Technical Report**

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Abstract

The GCM-UTD code developed for the determination of optimal antenna location on aircraft structures is validated against classical results from open literature. This is followed by antenna radiation pattern prediction over the canonical surfaces and the hybrids to establish the capability of the code. Aircraft structures are shown to be amenable to quadric surface modeling, and preliminary studies are carried over four aircraft viz. Norman Freelance, Gulfstream IV, Falcon 900, and McDonnell Douglas MD-80. Finally two aircraft, NAL-Saras and Airbus A320 are selected from a pre-specified list for conformal antenna location studies.