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TITLE: Radiation, Scattering, and Guidance of Electromagnetic Fields by Arbitrarily Shaped Structures Embedded in Layered Dielectric Media

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The validation of the waveguide-excited microstrip patch antenna code has been completed. The code is presently being applied to achieve impedance-matched antenna configurations. Also, various avenues are being explored to further increase the efficiency of the code. An effort has been initiated to incorporate curved isoparametric finite elements into the mixed potential integral equation formulation for arbitrarily shaped microstrip structures. This approach should allow us to more accurately model irregular microstrip geometries and to reduce the computational effort.

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