

## Numerical Results for the Symmetrical Condensed TLM Node

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*R. Allen, A. Mallik and P. Johns. "Numerical Results for the Symmetrical Condensed TLM Node." 1987 Transactions on Microwave Theory and Techniques 35.4 (Apr. 1987 [T-MTT]): 378-382.*

Numerical calculations have been made in order to test the accuracy of the recently derived three-dimensional symmetrical condensed TLM node for electromagnetic. Demonstrations of its use in these areas are given. Analysis of dispersion characteristics shows that the velocity error bound for the new symmetrical condensed node is likely to be less than that for the expanded node. Predictions of the surface currents on an F-111 aircraft due to the scattering of an incident plane wave are in good agreement with other computed codes and measurements. Lastly, the introduction of stubs into the scattering node allows generalization to a cylindrical mesh, which is tested by finding coaxial cavity modes.

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