

Abstract Submitted  
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**Simulations And Observations Of Radiation In the Electron Cyclotron Frequency Range On the C-2 Device** E. TRASK, E.P. GARATE, Tri Alpha Energy, R.W. HARVEY, YU. PETROV, CompX, FOR THE TAE TEAM<sup>1</sup>, COMPX COLLABORATION<sup>2</sup> — Several different antennas have recently been fielded on Tri Alpha Energy's C-2 experimental system to measure radiation emission in the range of 1-60 GHz, where the fundamental electron cyclotron frequency is approximately 2.5 GHz at the edge of the field-reversed configuration (FRC). Initial power measurements are correlated with changes in plasma parameters, and have magnitudes consistent with known electron temperatures and densities. Genray simulations of rays launched above the edge electron cyclotron frequency indicate that externally launched waves couple to the plasma in the OXB scheme and may damp inside the separatrix.

<sup>1</sup>Tri Alpha Energy, Inc., P.O. Box 7010, Rancho Santa Margarita, CA 92688, USA

<sup>2</sup>CompX, P.O.Box 2672, Del Mar, CA 92014-5672, USA

Erik Trask  
Tri Alpha Energy

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