Abstract Submitted for the MAR07 Meeting of The American Physical Society

1.6 MHz Sonofusion Model and Measurement ROGER S. STRING-HAM, First Gate Energies PO Box 1230, Kilauea, HI 96754 — Years of data collected by First Gate, involving various sonofusion systems, gains some support from recent extrapolations of hot fusion research. Consider the 10^4 k/sec of the high density low energy jet plasma of deuterons that originates from the collapse of the transient cavitation bubble (TCB), in D₂O that implants a target foil. And compare it to the jet plasma of Tokamak type plasmas with all their stability problems. Also consider the relevance of the imploding wire technology where the magnetohydrodynamic pressures exceed the crystal forces that bind atoms in wire conductors and inertial confinement fusion (ICF). Applying this developed technology to the TCB jet plasmas of sonofusion makes the transition between hot and "cold" fusion more attractive. Our measurements show there is no long range radiation (gammas or neutrons) and ⁴He is the fusion product. These problems are addressed via coherence in the implanted high density transient deuteron Bosons (and proton Fermions) clusters in the heat producing target.

> Scott Chubb Naval Research Laboratory

Date submitted: 04 Dec 2006

Electronic form version 1.4