GJ 2 Magnetic Properties of Ternary Rare Earth Stannides, Z. FISK,* Inst. for Pure & Applied Physical Sciences, Univ. of Calif., San Diego; J. P. REMEIKA and G. P. ESPINOSA, Bell Laboratories; S. B. OSEROFF, Instituto Venezolano de Investigaciones Científicas -- We report magnetic susceptibility measurements on heavy rare earth osmium stannides. These materials crystallize in the same structure as the re-entrant superconductor $ErRh_{1.1}Sn_{3.6}$. In the osmium series both Er and Tm form re-entrant superconductors, while Tb and Ho are non-re-entrant superconductors. The susceptibility data and supporting epr data indicate that the magnetic interactions are much smaller in the osmium stannides than the corresponding rhodium and cobalt stannides. The data also suggest that Tb may be a singlet ground state ion in the osmium stannides.

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