Relative Yields of $^{152}$Pr in Spontaneous Fission of $^{252}$Cf J.M. ELDRIDGE, Union University, Vanderbilt University, E. WANG, J.K. HWANG, J.H. HAMILTON, A.V. RAMAYYA, Y.X. LUO, Vanderbilt University, J.O. RAMMUSSEN, LNBL, S.J. ZHU, Tsinghua University, S.H. LIU, ORAU, G.M. TER-AKOPIAN, YU. TS. OGANESSIAN, JINR — The relative yields of $^{152}$Pr, resulting from the spontaneous fission of $^{252}$Cf, were studied. This study was done by means of $\gamma - \gamma - \gamma$, and $\gamma - \gamma - \gamma - \gamma$ coincidence data taken in 2000 by the multi-HPGe, Compton-suppressed, gamma detector array, Gammasphere, at Lawrence Berkeley National Lab. The coincidence data were analyzed by double- and triple-gating on transitions in $^{152}$Pr and obtaining the intensities of the $^{94-99}$Y (6n-1n channels respectively) transitions. These results were used to verify the new assignments by Wang et al. for the level scheme of $^{152}$Pr [1] by showing that both new bands peak at the same, 3n, Channel. This is consistent with neighboring isotopes of Pr.