1025-20-48 **Jennifer Taback*** (jtaback@bowdoin.edu), Dept. of Mathematics, Bowdoin College, Box 8600 College Station, Brunswick, ME 04011, and **Melanie Stein** and **Matt Horak**. *Computing word length in alternate presentations of Thompson's group F.*

Much of the literature on Thompson's group F relies on the computations of word length with respect to the generating set $\{x_0, x_1\}$. Fordham, Belk and Bux, and Guba and Sapir all discuss methods of computing this word length. I will present a procedure for computing the word length of elements of F with respect to a set of "consecutive" generators of the form $\{x_0, x_1, ..., x_n\}$. The three methods for computing word length with respect to $\{x_0, x_1\}$ are all special cases of this algorithm. Using this method, one can see that the group has dead-end elements of depth dependent on n in these presentations. (Received January 10, 2007)