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Michael A. Jackson* (majackson@gcc.edu). *The strong symmetric genus of some D-type Generalized Symmetric Groups*. Preliminary report.

The strong symmetric genus of a finite group G is the smallest genus of a closed orientable topological surface on which G acts faithfully as a group of orientation preserving symmetries. A generalized symmetric group is a wreath product of a cyclic group of m elements by the symmetric group on n letters, $G(n, m) = C_m \wr S_n$. The D -type generalized symmetric groups are the index m subgroups $D(n, m) = (C_m)^{n-1} \rtimes S_n$. The strong symmetric genus for the alternating and symmetric groups was found by Marston Conder. The author has also found the strong symmetric genus of the generalized symmetric groups of type $G(n, 2)$, also known as the hyperoctahedral groups, $G(n, 3)$ and the D -type generalized symmetric groups $D(n, 2)$, which are the D_n finite Coxeter groups. In this talk, we will look at the strong symmetric genus of additional D -type generalized symmetric groups. Using Marston Conder's coset diagrams for generators of the symmetric groups and some results about generating the D -type generalized symmetric groups, we can find the strong symmetric genus of many of these groups. (Received September 15, 2013)