1035-Z1-2011 G. Alan Cannon* (acannon@selu.edu), Department of Mathematics, Southeastern Louisiana University, SLU 10687, Hammond, LA 70402, and Gary Walls (gwalls@mail.wtamu.edu), Department of Mathematics, Physical Sciences, and Engineering, West Texas A&M University, Canyon, TX 79016. Simplicity of Endomorphism Centralizer Nearrings. Preliminary report.

Let (G, +) be a finite group written additively, but not necessarily abelian, and let S be a subsemigroup of endomorphisms of G. The set $M_S(G) = \{f : G \to G \mid f(0) = 0 \text{ and } f \circ s = s \circ f \text{ for all } s \in S\}$ forms a nearring under pointwise addition and function composition. The simplicity of the nearring $M_S(G)$ is investigated when S is the set of all inner automorphisms, automorphisms, or endomorphisms of G. (Received September 21, 2007)