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James E Carter* (carterj@cofc.edu), Department of Mathematics, College of Charleston, 66 George Street, Charleston, SC 29424-0001, and **Cornelius Greither** and **Henri Johnston**. *On the restricted Hilbert-Speiser and Leopoldt properties.*

Let G be a finite abelian group. A number field K is called a Hilbert-Speiser field of type G if for every tame G -Galois extension L/K , the ring of integers \mathcal{O}_L is free as an $\mathcal{O}_K[G]$ -module. If \mathcal{O}_L is free over the associated order $\mathcal{A}_{L/K}$ for every G -Galois extension L/K , then K is called a Leopoldt field of type G . It is well-known (and easy to see) that if K is Leopoldt of type G , then K is Hilbert-Speiser of type G . The converse does not hold in general. However, we show that a modified version does hold for many number fields K (in particular, for K/\mathbb{Q} Galois) when $G = C_p$ has prime order. Finally, we show that even the modified converse is false in general, and we give examples which show that the modified converse can hold while the original does not. (Received February 09, 2009)