Warfield groups are direct summands of simply presented abelian groups or, alternatively, are abelian groups $G$ possessing a nice decomposition basis $X$ such that $G/\langle X \rangle$ is simply presented. The concept of decomposition basis was generalized to the notion of partial decomposition basis by Jacoby in order to extend Barwise and Eklof’s classification of torsion groups in $L_{\infty \omega}$ to Warfield groups. In this talk, we explore some algebraic characteristics of the class of groups with partial decomposition bases. We prove a characterization of subgroups possessing a partial subbasis and discuss applications. (Received July 23, 2014)