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Thomas G. Lucas* (tglucas@uncg.edu), Department of Mathematics and Statistics, University of North Carolina Charlotte, Charlotte, NC 28223. *Additively regular rings and Marot Rings.*

A commutative ring R with set of zero divisors $Z(R)$ is said to be additively regular if for each pair of elements $a, b \in R$ with b regular (i.e., $b \notin Z(R)$), there is an element $c \in R$ such that $a + cb$ is regular. Also R is a Marot ring if each regular ideal (one not contained in $Z(R)$) can be generated by its regular element. An example by D.D. Anderson and J. Pascual shows that a ring may have a unique regular maximal ideal M where some invertible ideals (including M) are not principal. We will consider what happens for invertible ideals in Marot rings and additively regular rings that have only finitely many regular maximal ideals. Also we consider the regular ring of quotients $R_{(S)}$ and the large ring of quotients $R_{[S]}$ for a multiplicative subset $S \subseteq R$. For a prime P of a Marot ring R , D. Portelli and W. Spangher showed $R_{(S)} = R_{[S]}$ for $S = R \setminus P$. (Received January 14, 2016)