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Luise-Charlotte Kappe* (menger@math.binghamton.edu), Department of Mathematical Sciences, SUNY at Binghamton, Binghamton, NY 13902-6000, and **David Garrison**. *On Some Subnormality Conditions in Metabelian Groups.*

We consider the group theoretical properties $B(n)$, having all cyclic subgroups n -subnormal, $U(n)$, having all subgroups n -subnormal, and $U(n,m)$, having all class m subgroups n -subnormal, and investigate the interdependencies of these properties for $n = 2$ and for $n > 2$ in the case of metabelian groups. It is shown that $U(2,2) = U(2)$ for non-torsion groups. With the help of GAP we give an example of a torsion group in $U(2,2)$ which is not in $U(2)$. For $n > 2$ we show that for metabelian non-torsion groups without elements of order $p < n$, we have $B(n) = U(n)$, if $n+1$ is not a prime, and $B(n) = U(n,n-1)$ in case $n+1$ is prime, and there exists a metabelian non-torsion group in this case which is in $U(n,n-1)$ but not in $U(n)$. For metabelian torsion groups we show that $B(n) = U(n,n-1)$, if the group does not contain elements of order $p < n+1$. With the help of GAP we provide various examples showing that under our assumptions $U(n)$ is a proper subclass of $U(n,n-1)$ and the restrictions on the element orders cannot be dispensed with. (Received September 10, 2007)