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Matthew D Moore* (matthew.moore@vanderbilt.edu). *The Variety Generated by $\mathbb{A}(\mathcal{T})$ – Two Counterexamples.*

We show that McKenzie's $\mathcal{V}(\mathbb{A}(\mathcal{T}))$ does not have definable principal subcongruences or bounded Maltsev depth. When the Turing machine \mathcal{T} halts, $\mathcal{V}(\mathbb{A}(\mathcal{T}))$ is an example of a finitely generated semilattice based (and hence congruence \wedge -semidistributive) variety with only finitely many subdirectly irreducible members, all finite. This is the first known example of a variety with these properties that does not have definable principal subcongruences or bounded Maltsev depth. (Received August 13, 2013)