

1116-VC-2590 **Christopher Mathewson Stokes*** (mathewsonstokes@gmail.com), 9513 E. Flanders, Mesa, AZ
85207. *Conditions on flocking for the 3 Zone-Model.*

We study a model, which mimics the ideal behavior of a flock. The model is based on three rules: First that individuals align with their neighbors. Second, if two members of a flock are far away they will move closer to each other. Third, if two members are too close they will distance themselves in order to avoid collision. We investigate when this model will result in a “flock”, (meaning all members have the same velocity). We have discovered that with strong enough attraction combined with alignment flocking is guaranteed. (Received September 22, 2015)