Mihai Stoiciu* (mstoiciu@williams.edu), Department of Mathematics and Statistics, Williams College, Williamstown, MA 01267. *Bounds for the Pseudospectra of Various Classes of Matrices and Operators. Preliminary report.

We investigate the $\varepsilon$-pseudospectra of various classes of non-normal matrices and operators. In particular, we are interested in the shape of the pseudospectrum, regarded as a subset of the complex plane. We provide explicit lower and upper bounds for the $\varepsilon$-pseudospectra of bi-diagonal and tri-diagonal matrices and operators. (Received January 18, 2015)