1086-01-637 **Jared E Antrobus*** (antrobusj1@nku.edu). *Mamba vs JN-25*. Preliminary report. During World War II, US Navy mathematician/codebreakers designed a codebreaking machine called Mamba to attack the Japanese naval cipher JN-25. Mamba was used to align recovered additives with captured messages. We will discuss the mathematical ideas behind Mamba and describe how patterns in JN-25 permitted US Navy codebreakers to break JN-25 messages. (Received September 10, 2012)