

1046-S1-1578 **Doug M Fletcher*** (douglas.fletcher@usma.edu), Department of Mathematical Sciences, West Point, NY 10996, and **Gary Kramlich**, Fort Bragg, NC 28310. *How to Stop a British Ship: Projectile Motion, the Revolutionary War, and West Point.*

West Point's storied history began during the Revolutionary War when it was established to help prevent the British from using the Hudson River. The Americans constructed a great chain across the river and set up numerous artillery batteries on land. In theory, the great chain would stop British ships in the river so the artillery batteries could destroy them. Although the chain was never tested, the layout of the artillery batteries went through several changes in order to provide better support. The lesson itself requires two periods and incorporates the history of West Point with hands-on experience to motivate the concepts of projectile motions. During the first period, students get the opportunity to experience the challenges of firing from one of the batteries using a potato gun as an artillery piece. For the second period, the instructor presents different scenarios using historical information about the artillery pieces and their location at West Point. The students will determine whether or not they could have stopped a British ship using projectile motion equations. (Received September 16, 2008)