

1096-G5-2703 **Calla Glavin*** (calla.glavin@usma.edu), Department of Mathematical Sciences, West Point, NY 10996, and **Brian Macdonald** (brian.macdonald@usma.edu), Department of Mathematical Sciences, West Point, NY 10996. *Estimating Goal Probabilities in the NHL.*

We estimate the probability that an NHL shot will be a goal based on several details of the shot. Predictors include information like shot location, and whether or not the shot was a rebound shot. We also use the goalies and the shooters involved in each shot as predictors. The results of the model are used to analyze goalies, shooters, team offenses, and team defenses. For example, the coefficient for a goalie can be used to form an adjusted save percentage statistic for that goalie which accounts for the quality of shots that he faces. (Received September 18, 2013)