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## Cost to Increase Probability of Hit

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**Abstract:** This report addresses the marksmanship research conducted in conjunction with the Small Arms Ammunition Configuration (SAAC) study. This study seeks to model the relationship between cost and firing proficiency in Army marksmanship training to provide insight when comparing training and materiel solutions including advanced fire-control technology. The SAAC focused on materiel solutions that could improve overall marksmanship for Soldiers without reliance on training. The West Point cadet team worked to compare the costs of various marksmanship training to improve Soldiers' level of marksmanship proficiency. This study sought to develop cost profiles for marksmanship training based on historical data and training doctrine. The project has been limited by two factors: use of the Defense Training Management System to record training results, and results that record only a Soldier's marksmanship qualification level. This report includes recommendations for future work to improve marksmanship data collection for the future.

*Keywords:* Small Arms Ammunition Configuration, Probability of a Hit, Marksmanship