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Electronic Warfare Requirements for Army Training Simulations at the Division Level

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Abstract: Simulations play an integral role in Army training, allowing soldiers to train on their required tasks in a simulated environment. However, the standard Army simulations do not allow for training on Electronic Warfare (EW). EW is expected to play a crucial role in future conflicts. This study seeks to derive the requirements for Army simulations training at a Division level related to offensive and defensive EW. The research began with reviewing doctrine regarding EW, with a focus on training and evaluation outlines. This review yielded a sequence of doctrinal actions associated with planning, preparing, executing, and assessing EW engagements. These doctrinal actions were reviewed and refined based on interviews with EW officers and other subject matter experts. In particular, these interviews also focused on the information necessary for completing each action; this information was used to derived functions for the simulation. This paper presents an overview of the model-based systems engineering methodology used for this analysis. It then discusses the functions associated with planning, preparing, executing, and assessing EW missions.

Keywords: Electronic Warfare, Combat Simulation, Simulations for Training