EXPLORING ADVANCED TECHNOLOGIES FOR THE

FUTURE

COMBAT

SYSTEMS

PROGRAM

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This report summarizes the research findings of a short-time-frame study conducted by RAND Arroyo Center to support the Army Science Board (ASB) Summer Study 2000, “Technical and Tactical Opportunities for Revolutionary Advances in Rapidly Deployable Joint Ground Forces in the 2015–2020 Era.” The purpose of the RAND research was to explore a range of advanced technologies for potential contribution to the Future Combat Systems program; it is intended to be a think piece and is not a guide to the contractors charged with designing the Future Combat Systems. This research represents only one part of the ASB study, focusing specifically on force effectiveness in a notional small-scale contingency and on the associated spectrum of challenges that such a situation might entail. In conducting the study, the research team interacted with various members of the ASB, drawing extensively on their forward-looking ideas and ultimately integrating many of them into the research. High-resolution combat modeling and simulation was used to assess many key aspects of force performance, environmental factors, and system-of-systems interactions within the context of the scenario.

This work should be of interest to defense policymakers, military technologists, and concept developers.

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