

**TEAM-IN-THE-LOOP, SYNTHETIC SIMULATION: BRIDGING THE GAP
BETWEEN LABORATORY AND FIELD RESEARCH**

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The reported work demonstrates some recent results in an ongoing effort to bridge the gap between controlled laboratory investigations of team performance and more complicated but realistic research from the field. Reported work is part of a broad, multidisciplinary research program linking insights from both extremes in a middle ground of controlled experimentation with medium fidelity, team-in-the-loop synthetic tasks. Our work, focussed on the domain of AWACS command and control, has taken a multi-level, multi-method approach to task development and performance assessment. In this report, we will discuss recent data and insights from a high-fidelity DMT exercise— RoadRunner '98—and our ongoing efforts to apply these insights and results to the development of a series of experiments using medium-fidelity simulation to capture the same core constructs. Paper contains preliminary data from RoadRunner 98, a description of our measurement approach and discussion of our current research using the medium-fidelity DDD-AWACS simulator.