

Lawrence Livermore National Laboratory

Use of Modeling & Simulation in the CA Golden Guardian Exercise

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Sandia
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Laboratories



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The Training Exercise and Lessons Learned (TELL) program uses simulation and technology

- TELL is a DHS S&T sponsored program defining a framework to utilize simulations and technologies to drive training for large multi-jurisdictional responses
- The TELL prototype system is being used to experiment with this framework to drive training and exercises
- Anaheim PrepEx – The TELL system was used in an exercise that trained Incident Command Teams for the CA Golden Guardian exercise



The TELL system provided ground truth to trainees at the Anaheim Golden Guardian Preparation Exercise

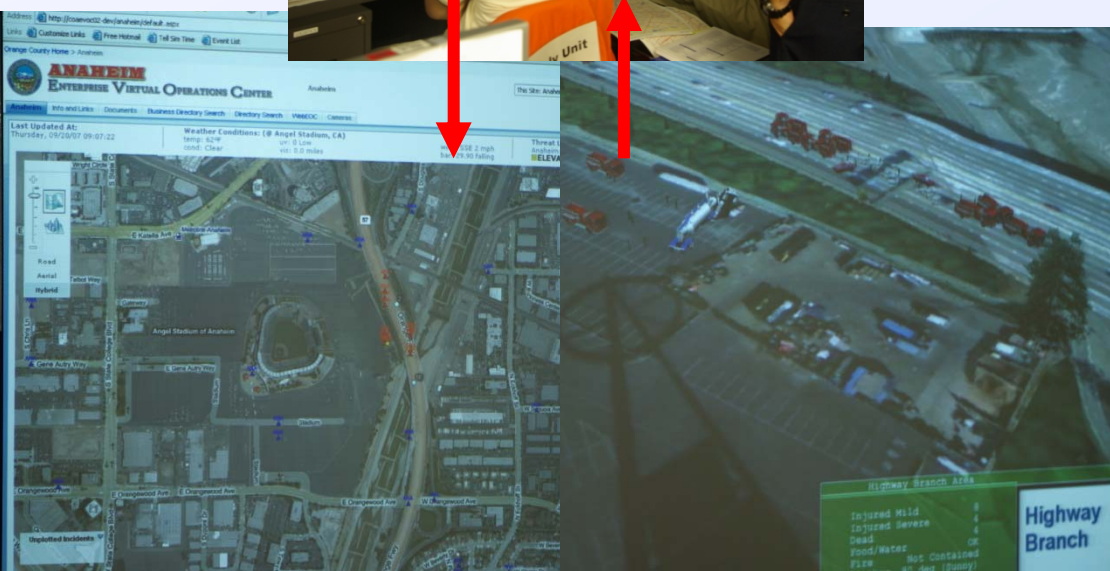
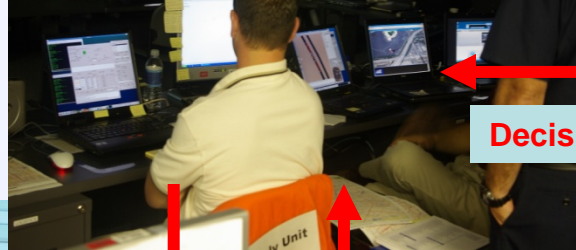
TELL System



Ground Truth Situation Awareness
Consequences



Decisions



The TELL system provides an immersive training experience

- Realistic
 - Ground truth
 - Operational tools

- Consequences to decisions
 - Simulations are physics based
 - Responder resources behave true-to-life
 - Chemical plumes disperse true-to-life
 - Decisions affect outcomes

- Metrics
 - All decisions and events are captured
 - Compare outcomes to all possible outcomes



Realistic activity in the Incident Command Post

- Operations Chief gets situation Brief from Highway 57 branch on-scene commander



- Perimeter established around Highway 57 branch



- Incident Command Team receives report of second explosion

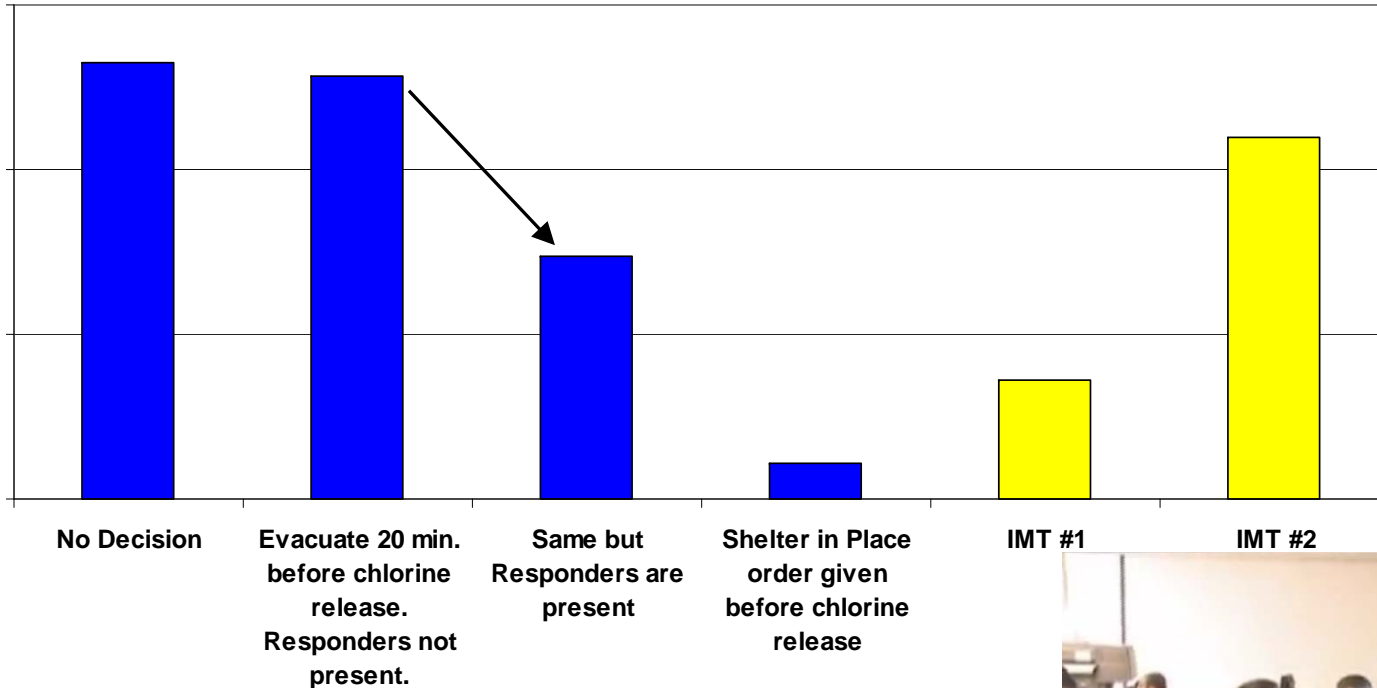


Consequences to explosion and chemical release video



Metrics ready immediately to provide a rich hotwash

OF CIVILIANS IN RESIDENTIAL AREA WITH CHLORINE HEALTH EFFECTS



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