

# VV&A and LVC DE: Explicit and implicit assumptions

Dr. Marion L. Williams  
Institute for Defense Analyses  
[mwilliam@ida.org](mailto:mwilliam@ida.org)

# VV&A

- MORS SIMVAL Workshop 1990
  - Developed VV&A concept and definitions
  - Coordinated with Services, PA&E, AT&L, DOT&E, JCS, others
  - Adopted as DoD policy
  - Focus was on M&S re-use
- Foundational assumptions
  - M&S validation data bases will be available for new model users
  - New model applications will add to validation efforts
  - Comparison of models and test results will improve model fidelity
  - Model “validity” (across applications) will improve with time

# LVC T&E Roadmap

- Sponsored by DOT&E
  - Live, virtual, constructive Distributed T&E environment
    - Policy
    - Infrastructure
    - Methods and Processes
  - Supporting Joint Mission Testing
  - Approved by DEPSECDEF 2004
- Foundational assumptions
  - LVC DE will be used by industry, DT&E, OT&E across acquisition
  - Blue models will be developed, maintained and available from industry
  - Red models will be available from S&TI centers
  - “Multi-dimensional” V&V will be accomplished
  - Multiple test/model correlation efforts
  - Re-use repository of models and data bases

# Observations

- There has been considerable progress, but many assumptions are still assumptions
  - V&V data bases
  - Blue and Red model availability
  - Pre-test prediction and post-test correlation efforts
  - Etc.
- There is still work to do on LVC and VV&A