

— *Working Group Outbrief* —

Test Like You Fly Philosophy Applied to Ground Segment Testing

Session 10A

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Ground System Architectures Workshop



Session Goals

- 1) What aspects of the TLYF process apply to Ground Segment testing?
- 2) Commonality of Ground Segment development with Space Segment command & control test equipment development

Presenters/Panelists

- Julie White, Aerospace, Moderator
- Trudy Bergen, Aerospace, Co-Chair
- Ben Jai, JPL
- Robin O'Brien, JPL
- Walter Mitnick, APL
- Richard Todd, Octant Technology
- Alice Shaw, LM IS&GS
- Sam Majumdar, Aerospace
- Odette Khedr, NGMS

Key Points

- *TL YF applies to people and processes, not just hardware & software*
- *Test like you operate (communication, RF, etc.)*
- *Engineering models, simulators and test beds are key enablers to accomplishing TL YF*
 - *Need to do adequate validation of these tools*
 - *Essential for fault & contingency testing*
- *TL YF is a culture, not just a test approach*

Conclusions

- *Most TLYF principles apply to ground segment testing*
- *Using ground control hardware and especially software & databases for bench testing and space vehicle I&T is both feasible and economical*
- *Further questions emerged in the session –they will be pursued via the TLYF COP*