

## 7<sup>th</sup> Annual INCOSE Great Lakes Regional Conference

# *Leadership Through Systems Engineering*

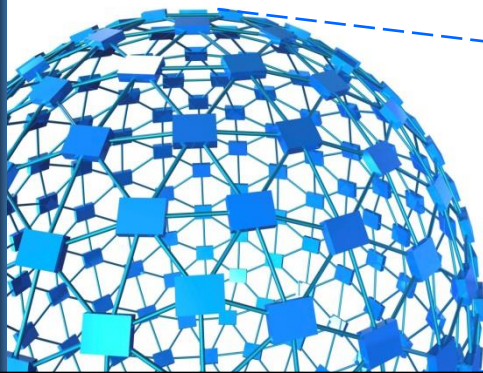
*Aerospace | Commercial | Defense | Health Care | Manufacturing | Academia*

### **Thomas Mellies, Timothy Eveleigh, Tom Holzer, *Tailoring Systems Engineering for the Development of Complex Systems***

Abstract: The past ten years have seen considerable growth in the number of increasingly complex systems being developed across many industries. The development of these systems typically involves the discipline of systems engineering. The effective use of systems engineering in developing complex systems requires an understanding of how to tailor systems engineering processes and activities. Daunting real-world cost, schedule, and technology challenges make tailoring an increasingly important reality for systems engineers. An increased understanding of tailoring may help ensure that complex system development programs don't share the outcome that has burdened some high-visibility acquisition programs: notorious budget overruns, gross schedule delays, and poor system performance. The anticipated continued exponential increase in the development of complex systems, coupled with programmatic realities that foster the intentional tailoring of systems engineering processes and activities, provides a timely and relevant question of significant interest to the systems engineering community: What amount and type of systems engineering process and activity tailoring is best suited when developing complex systems? The presentation will describe the research approach that is currently being taken by the speaker to answer this timely question, with the speaker seeking validation from his conference peers that his approach and methodology will yield findings of value to the systems engineering community. The presentation will contribute to the systems engineering body of knowledge by defining tailoring in the context of systems engineering lifecycle processes. More importantly, it will summarize the many conclusions, lessons-learned, observations, and recommendations related to systems engineering tailoring that have appeared in scientific, technical, and engineering literature.

Author:

Abstract



**GLRC 2013: *Leadership Through Systems Engineering***

