

Combating Uncertainty in the Workflow of Systems Engineering Projects

*Barry Papke (L3 Communications) - barry.papke@L-3com.com
Rick Dove (Stevens Institute of Technology) - dove@parshift.com*

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Abstract. Throughout the Systems Engineering Lifecycle events require personnel, systems, equipment, facilities and information to converge on time and at the right place in order to achieve a program objective. Unpredictability in any predecessor event can mean unpredictability for the overall project. The Last Planner is a production and planning method initially deployed in 1992 in the building construction industry as part of an effort to reduce work flow variability and improve production efficiency in the construction industry. The two key elements of the Last Planner are (1) a change in project management from a task-oriented to a work-flow oriented model and (2) processes to improve reliability of the workflow within the team or group performing the work. This paper examines the systems engineering lifecycle as a production lifecycle and explores the application of key elements of the Last Planner as a tool for system engineers to address uncertainty and unpredictability in the execution of a project.