Program Management Case Study

Defense Vehicle Program Management

- A large scale vehicle development created many needs for decisively executed projects
- A wide range of skills were needed
- Two of the project aspects we led will be covered here

Requirements		
Electrical Test		
Mechanical SW	Concept	
Simulate	Design	
Manufacturing		Validation

Defense Vehicle Project Situation

- One year into a 3 year development, a significant material change was required to meet weight requirement.
 - After 6 months of "transition," the new project was initiated. Same schedule. Same requirements. Baseline design information was not useful.
- A significant hardware component was not adequate for the automated reliability requirements.
 - A second source was to be evaluated for improved comprehensive performance. This was the highest technical risk on the billion dollar program.

Defense Vehicle Potential Project Impact

- The vehicle structure is the framework for future integration testing. Plus, the vehicle was beyond the weight allowed for transport requirements.
 - The weight constraint is required, but the schedule is critical for this highly visible project.
- Either the existing supplier needed to greatly increase performance or the new supplier had to slip into the project with no surprises.
 - Testing could not be performed side by side, so an air tight test protocol was needed to clearly and quickly make a decision after testing was complete.

Defense Vehicle Project Solutions

- Communication, visibility, defer yet address non-essential activities
 - Design guidelines and system thinking
- Test protocol development, integration assessment, risk assessment
 - 24 hour testing and international component vendor

Defense Vehicle Project Results

- Product provided on original schedule. No negative impact on integration schedule.
 - Design team over-came typical development obstacles, yet maintained "composure" with only essential tasks resourced. Other less urgent activities were performed after product prototype delivery.
- Competitive threat raised the level of technical achievement in a short period of time for the original vendor. Integration unknowns would potentially have a significant impact on the overall project.
 - Because each design met the success criteria in the test protocol, the existing vendor was maintained. The project risk was reduced to an acceptable level.

Perry's Solutions, Inc.

- Consulting and Training services from DOE and SPC to project planning and management
 - Solving NPD design, execution and re-plan situations
- Phone: 651-230-3861
- **Email:** Perry@PerrysSolutions.com
- Website: www.PerrysSolutions.com

