



*"The Relentless Pursuit of Excellence"*

# A Contractors View On TDP Management

**NDIA**

Munitions  
Executive  
Summit

March 2017





# The Aerospace and Defense Industry Standard(s)

**AS 9100 (Subordinately ISO 9001) this is our collective STD**

- **AS9100** is largely the standardized quality management system for the aerospace and defense industry.
- AS9100 fully incorporates the entirety of the current version of [ISO 9000](#), while adding requirements relating to quality, risk management, and safety.

## **What is the required related to management of design**

- 2009 Revision C specifically addresses the need for design verification, validation, and reliability determination.
- 2016 Revision D specifically addresses the need for clarity as it relates to configuration management, to include the elements of obsolescence and diminishing resources.

***TDP management and objectives are defined here***



# Tenants specific to TDP(s), and design against the STD

## PSEC verses supplied TDP

- Whomever owns the owns the design owns configuration management.
- Whomever owns the design owns product performance, to include design driven reliability, and necessary performance envelopes associated with design limit trade study.
- Configuration owns obsolescence that would impede ones ability to meet quality constraints, timely delivery or product performance.

***This is the STDs definition of responsibility***



# TDP references and controls, by example, where the STD(s) are not met

- Interface controls by example: a Titanium part tolerance that doesn't take into consideration exterior coatings. **ICD**
- Reliability constraints required single source supply, surface area of Class 5 RDX/HMX, Ammunition Primers. **Old Specs, COTS use**
- Drawings or specifications which do not make reference to the necessary process controls, the key constraint, or measurable element(s) that provide for reliability, consistency and performance. **Missing Key controls**
- Continued use of archaic STDs, processes and methods. **Obsolescence**
- Trade study not completed and where complaint parts in the amalgam do not meet performance requirements. **Design validity**
- Drawings and or specifications that do not identify the features that ensure reliability or technical compliance. **Design Reliability**
- Drawings and or Specifications which do not provide for known and necessary departure from stated constraints. **Lack of Technical Definition**

***TDP management must be met in order to deliver promised result***



# Means to Referee TDP changes and ownership of IP

- PSPEC
- VECP
- ECP
- Contractor Process or their subcontractors constraints that address elements in slide 4
- RFD/RFV, contract paper

***IP ownership and responsibilities are defined by TDP. however there needs to be clear contractual IP ownership when coming to improvement, and methodologies***



# Objectives

- Reductions in REAs
- Schedule compliance
- Affordability
- Reliability Increases
- Variability Reduction
- Soldier appreciation

***Objectives met provide for Soldier confidence  
whether in training or in combat***



# Solutions

- Clear TDP ownership lines, to include changes
- Regular competent review of TDPs
- Through reviews when maturing from development to production, or interagency transfer
- When necessary provide a means of responsible referee.

***Ownership accountability meets expectations***