Model-Based Enterprise

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Logistics Solutions for the Warfighter

Production Plants Barstow (PPB) and Albany (PPA)

MODEL BASED DEFINITION
- Both depots currently have the ability to generate 3D digital data and drawings and are utilizing SolidWorks software
- Innovation Labs have 3D printers and modeling/measurement equipment

VERIFICATION/VALIDATION OF MODEL
- Both depots currently have the ability to verify and validate 3D models

MODEL-BASED INSPECTION
- Depots currently utilizing FARO portable CMMs (coordinate measuring machines) for dimensional metrology requirements

MODEL-BASED WORK INSTRUCTIONS
- Depots are currently in the investigation phase of utilizing MBE for the development of process instructions, simulation and animation

Challenges of Implementing MBE Technologies

- Vast majority of current USMC legacy workload data has not been converted to 3D by the PMs

- Much of our internal infrastructure is still 2D focused

- Infrastructure cost to implement MBE systems across our enterprise is prohibitively expensive. Due to economy-of-scale issues, it is challenging to get viable ROIs

- There is no current requirement from the PMs that specifically require robust 3D capabilities. The depots do fabricate parts and components but the vast majority of these parts are legacy and already are in the system as 2D

- The scale of our manufacturing/fabrication initiatives is minimal

- Minimal resource/artisan experience

Future Plans

- Anticipate future workloads to utilize more 3D data

- Integrate full IT across the enterprise

- Expand resource/artisan training

Questions?