2020 Additive Manufacturing Workshop

AM Part Risk Categorization

AM TDP for Procurement in Sustainment

Lead:
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AM Part Risk Categorization

Objectives:

- Discuss methods of categorizing risk across the MILSVC's
- Gather methods of determining criticality and break down the components of criticality
- Discuss common themes across part selection processes
- Crowdsource key inputs that should be considered as part of the selection process

Steps to Achieve Objectives

- Share with the group what we have discussed in JAMA related to AM Part Risk Categorization.
- Leverage digital brainstorming capabilities to…
  - Capture participants' discussion on risk categorization and criticality as it relates to substituting traditional parts with AM parts.
  - Obtain feedback from the stakeholders on the key inputs that drive the selection of parts considered for additive manufacturing.

AM TDP for Procurement in Sustainment

Objectives:

- Use Technical Data Packages from items selected in Task #1 to identify common practices and gaps in assembling Tech Data Sets for AM
- Leverage work from ASTM/ISO for Joint ISO/TC 261-ASTM F 42 Group: Digital product definition and data management, Navy AM SWP and MIL-STD-31000
- Identify best of formats from MILSVC/DLA data sets to arrive at DOD recommended COAs

Steps to Achieve Objectives:

- Share with the group what we have discussed in JAMA about AM TDP for Procurement in Sustainment
- Capture the workshop participants' discussion on manufacturing and quality data requirements for procurement in sustainment; the vision of having TDPs that are all encompassing with design, manufacturing, and testing requirements. Goal is to ensure all requirements for acceptance of the AM item are clearly outlined in the TDP

AM Part Risk Categorization Team

Caroline Vail	Naval Surface Warfare Center
Richard Boxwell	Parson (MDA)
Christine Ajinjero	Deloitte Consulting
Adam Hicks	AFRL
Dave Wieland	Southwest Research Institute
Michael Nikodinovski	US Army - GVSC
Bishoy Said	CCDC AC
Zachary Collier	Collier Research Systems
Alexander Mark	Lockheed Martin Corporation
Caitlyn Slezak	Material and Process Engineer
Dan Braley	The Boeing Company
Matthew Clemente	US Army CCDC Armaments Center
Colette Fennessy	Collins Aerospace
Vijay Jagdale	Collins Aerospace
Jim Benedict	Raytheon - Missiles and Defense
Brandon Wegge	Boeing
Josh Moser	NAVAIR
William Pappas	NAVAIR
Tom Brouwer	Pratt Whitney
Anna Carlson	NAVAIR
John Wilczynski	NCDMM / America Makes
Gen Satoh	Raytheon Technologies
Kishore Tenneti	Lockheed Martin Sikorsky
Michael Arthur	Raytheon Technologies
Lisa C. Veitch	The Institute for Defense Analyses
Phillip Radliff	DLA Land and Maritime

Eric Upton	JHU/APL
Jacob Church	CCDC AvMC - Booz Allen Hamilton
Tony Delgado	DLA
Lt Col Elisa Peters	DLA
Edilia Correa	DLA
Andy Meighan	DLA
Eric Kirchner	D&G (supporting DLA R&D)
Mike Vehmeier	Lockheed Martin
Ryan L. Blake	Boeing Global Services
Rbert Bruce Cochran	USAF, HQ AFMC/A4/10-EN
Carl Dekker	Met-L-Flo, Inc.
Patrick Dwyer	Lochharbour Group
Jiaze He	University of Alabama
Ron Francis	NAVAIR
Jaikp Mallory	Delta
Slade Knightly	USAF
Tom Hargett	Tip Technologies
Michael Presley	JHU/APL
Jim Dobbs	Boeing
Kristen Eads	DLA
Xiaolei Shi	GE Research
Philip Allen	Naval Air Warfare Center Aircraft Division - Lakehurst (NAWCAD-LKE)
Thomas Barrett	Deloitte Consulting
Christian McCalley	Deloitte Consulting
Lisa Smith	Raytheon Technologies
Sean Dykes	LMI

AM TDP for Procurement in Sustainment Team

Ronald Edmunds	Defense Contract Management Agency
Maggie Gutierrez	Lockheed Martin
Eric Strong	AURA Technologies, LLC
Alex Blate, PhD	AURA Technologies, LLC
Anthony Parente	Deloitte Consulting
Edward Flinn	Rock Island Arsenal
Mark Maxwell	Aura Tech.
Jorge Betancourt	Defense Logistics Agency Aviation - DSCR
Paul Witherell	NIST
Wentao Fu	Boeing
Jeff Shubrooks	Raytheon Technologies
Peter Koudal	General Electric Research
Senthil Arul	DLA
Jillian Clark	LMI
Steve Manno	DLA Land and Maritime
Jeff Winham	U.S. Army CCDC Armaments Center
Andrew Smith	U.S. Army CCDC Armaments Center
Luke Helsel	U.S. Army CCDC Armaments Center
Alex Carlson	U.S. Army CCDC Chem Bio Center

Tony Delgado	DLA
Lt Col Elisa Peters	DLA
Edilia Correa	DLA
Andy Meighan	DLA
Eric Kirchner	D&G (supporting DLA R&D)
Thomas Barrett	Deloitte Consulting
Christian McCalley	Deloitte Consulting
Ian Wing	Deloitte Consulting
Craig Hughes	Johns Hopkins University / APL
Bill Macy	Macy Consulting, Inc.
Maj Melissa DePriest	USMC
Teresa Clement	Clement
Janet	Link3D
Julia Tan	VRC Metal Systems, LLC
Eric Upton	JHU /APL
Nicholas Stolten	U.S. Army CCDC Armaments Center
Latasha Beckman	OUSD R&E
Mark Napolitano	U.S. Army Futures Command
Capt Matt Audette	Marine Corps Systems Command

AM Part Risk Categorization Agenda – Day 1

Time	Agenda item	Objective	Tools	Owner
0800-1000	Plenary	Introduction and overview	Adobe Connect	Edilia Correa (DLA)
1000-1030	JAMA Task 1 overview Intro to risk categorization and criticality	Orient the audience for the discussion topics	Adobe Connect	Tony Delgado (DLA)
1030-1200	Deep dive on categorization and criticality	- Discuss criticality and what it means - Discuss AM effects on criticality	Adobe Connect Survey tool	Edilia Correa (DLA)
1200-1300	Lunch			
1300-1430	Input discussion (includes intro to level set, 20min per theme)	Identify missing inputs for each theme and sort need to have from nice to haves	Adobe Connect Survey tool	Tony Delgado (DLA)
1430-1445	Break			
1445-1530	Input discussion (includes intro to level set, 20min per theme)	Identify missing inputs for each theme and sort need to have from nice to haves	Adobe Connect Survey tool	Tony Delgado (DLA)
1530-1630	DoD AM guidebook discussion	- Solicit feedback on DoD guidebook	Adobe Connect	Lt Col Peters (DLA)
1700-1800	Virtual Happy Hour	https://lmco.zoomgov.com/j/1616547775?pwd=akYxaVlYb0JLci9LQ3NUUlhlUFN0QT09		

AM TDP for Procurement in Sustainment Agenda – Day 2

Time	Agenda item	Objective	Tools	Owner
0800-0945	Plenary	Working Group Day 1 Reviews	Adobe Connect	Edilia Correa (DLA)
0945-1015	TDP Standards for Sustainment & Discussion	Brief / Discussion	Adobe Connect	Paul Witherell (NIST)
1015-1045	MIL-STANDARD 31000 Update & Objectives	Brief / Discussion	Adobe Connect	Tom Schneider (ASA(ALT)
1045-1115	MILDEPs Standard Work Packages (SWPs)	Brief / Discussion	Adobe Connect	John Schmelzle (NAVAIR)
1115-1145	2D/3D Model Conversions	Brief / Discussion	Adobe Connect	Ian Wing (Deloitte)
1145-1230	Lunch			
1230-1300	M1A1 Impeller – AM Metal 3DAM Model	Brief / Discussion	Adobe Connect	Eric Upton (JHU/APL)
1300-1330	3Di Viewable CPI Effort	Brief / Discussion	Adobe Connect	Jill Clark (LMI)
1330-1400	3D TDP PDF	Brief / Discussion	Adobe Connect	Senthil Arul (DLA)
1400-1430	Future of Technical Data sharing for Sustainment	Brief / Discussion	Adobe Connect	Catrina Murphy (DLA)
1430-1445	Break			
1445-1600	AM Unique AMMO WG Key Category and Topics Brainstorming	Obtain feedback for AM Guidebook	Adobe Connect	Lt Col Peters (DLA)

AM Part Risk Categorization
AM TDP for Procurement in Sustainment Agenda
Day 3

Time	Agenda item	Objective	Tools	Owner
0800-1100	Working Group Time	Prepare Out Brief	Adobe Connect	Edilia Correa (DLA)
1100	Outbrief Due			
1100-1300	Lunch			
1300-1600	Plenary	Welcome Work Group Out Briefs Closing Remarks	Adobe Connect	Greg Kilchenstein / Work Group Leads

AM Part Risk Categorization

Meeting / Call-In Information

- https://ncms.adobeconnect.com/jteg
- Call: 888-537-7715
- Conf ID: 16161715#

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