



# Additive Manufacturing War Game

9-10 May 2016

## Acting Deputy Assistant Secretary of Defense for Maintenance Policy and Programs

Col. Dabney serves as the principal advisor to the Assistant Secretary of Defense for Logistics and Materiel Readiness and provides oversight of the Department's annual \$90 billion maintenance program. He also develops policies and procedures for maintenance support of major weapon systems and military equipment within the Department of Defense.

Colonel Dabney is an aircraft maintenance officer with experience on KC-135A/R, B-52G, E-3A, F-15, C-5A/B, C-17A and C-130E/H aircraft. He has held a variety of wing, depot, MAJCOM, program office and Air Staff positions including squadron and group command in Air Mobility Command and CENTCOM. Colonel Dabney also served as an Air Force Legislative Liaison and Director of Logistics for the KC-X/KC-46A Replacement Tanker Program. Previous to his current position, Colonel Dabney was the Military Deputy to the Deputy Assistant Secretary of Defense for Maintenance Policy and Programs.



**Colonel Dennis P. Dabney, USAF**

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### Sample Past Assignments

- Commander, 437th Maintenance Group, Joint Base Charleston, SC
- Director of Logistics/Sustainment IPT Lead, KC-46 Tanker Modernization Directorate, Wright Patterson AFB, OH
- Chief of Staff, KC-X Program Office, Wright Patterson AFB, OH
- Air Force Legislative Liaison and Chief, Readiness and Logistics, Programs and Legislation Division, Pentagon, Washington, DC
- Chief, Maintenance Information Systems and Chief, Maintenance Force Development Branch, Pentagon, Washington, DC
- Commander, 62d Maintenance Squadron, McChord AFB, WA
- Executive Officer, Directorate of Logistics, HQ Air Mobility Command, Scott AFB, IL

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### Education

- Bachelor of Science, U.S. Air Force Academy, CO (1989)
- Master of Science, Troy State University, AL (1995)
- Squadron Officer School, Maxwell Air Force Base, AL (1996)
- Air Command and Staff College, by Correspondence (2002)
- Air War College, by Correspondence (2006)
- Masters of Arts in National Security and Strategic Studies, Naval War College, Newport, RI (2010)
- Advanced Program in Logistics and Technology (LOGTECH), Logistics, Materials, and Supply Chain Management (2013)

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### Awards

Legion of Merit; Meritorious Service Medal with five oak leaf clusters; Air Force Commendation Medal with two oak leaf clusters; National Defense Service Medal; Global War On Terrorism Expeditionary Medal; Global War on Terrorism Service Medal; Military Outstanding Volunteer Service Medal; Nuclear Deterrence Operations Service Medal; AF Overseas Ribbon Long; Air Force Expeditionary Service Ribbon with Gold Border



## Agenda

- Facilitation and Control Team
- Overview
- Objectives
- War Game Format
- Schedule
- Things to Remember
- Rules of the Road
- Teams



**PLACEHOLDER Facilitation and Control Team Slide**

# Overview

## Burning Platform

- There is growing demand by both Government and Industry to take advantage of the benefits of additive manufacturing (AM) (i.e., 3D printing)
- Neither the Govt. nor Industry fully understand the requirements and implications for the other as it pertains to IP, terms and conditions, pricing, tech data, and risk, other business related concerns

## War Game Scope

This game explores the business aspect of the transaction, communication, and Government/Industry relationship as they work through considerations such as tech data, IP, quality control, risk, and pricing

## High-level Scenario

Government contacts Industry due to an urgently needed part for a UAV. The part is out of inventory in-theater and CONUS. Manufacturing and shipping from CONUS is not an option. There are AM machines in theater. It is determined that AM is the quickest way to produce the part and get the UAV FMC.

## Objectives

- Explore contract terms and conditions for a part that is 3D printed by the government using Industry IP
- Explore Industry business model gaps and challenges relating to AM adoption and IP
- Begin to understand what an AM conducive environment looks like from a business perspective from both the Government and Industry viewpoints

# Game Format

## Government Teams

## Industry Teams

**Move 1**  
**Defining the Requirement  
and Providing Information**

DRAFT SOLICITATION  
SECTIONS BASED ON  
SCENARIO

RESPOND TO INITIAL  
GOVERNMENT  
COMMUNICATIONS AND  
SET PROPOSAL STRATEGY

**Move 2**  
**Refining the Requirement**

EVALUATE SOLICITATION  
EFFECTIVENESS BASED  
ON INDUSTRY  
COMMUNICATIONS,  
UPDATE/FINALIZE  
SOLICITATION

RESPOND TO DRAFT  
SOLICITATION  
REQUIREMENTS AND  
DRAFT RESPONSE

**Move 3**  
**Incorporate Considerations  
and Finalize Proposal**

REVIEW DRAFT  
PROPOSAL / DEVELOP  
KEY QUESTIONS AND  
REBUTTAL

REVIEW FINAL  
SOLICITATION, DEVELOP  
FINAL RESPONSE,  
PRICING, AND  
NEGOTIATION TACTICS

**Move 4**  
**Proposal  
Presentation and  
Evaluation**

RECEIVE INDUSTRY  
PRESENTATIONS/  
ENGAGE IN  
REBUTTAL, Q&A, and  
NEGOTIATION

PRESENT FINAL  
RESPONSE/NEGOTIATE

# Day 1 Schedule Overview

Timing	Move	Government Team	Industry Teams
12:00 – 1:30	CHECK-IN, LUNCH, KEYNOTE ADDRESS, AND GAME INTRODUCTION		
1:30 – 3:15	Move 1 Defining the Requirement and Providing Information	DRAFT SOLICITATION SECTIONS BASED ON SCENARIO	RESPOND TO INITIAL GOVERNMENT COMMUNICATIONS AND SET PROPOSAL STRATEGY
3:15 – 3:30	BREAK		
3:30 – 5:30	Move 2 Refining the Requirement	EVALUATE SOLICITATION EFFECTIVENESS BASED ON INDUSTRY COMMUNICATIONS, UPDATE/FINALIZE SOLICITATION	RESPOND TO DRAFT SOLICITATION REQUIREMENTS AND DRAFT RESPONSE
5:30 – 6:00	DEBRIEF ON MOVE 1 & 2 ACTIVITIES (Remain in breakouts: Govt. and Industry debriefs)		
6:00 – 7:00	NETWORKING RECEPTION		



## Day 2 Schedule Overview

Timing	Move	Government Team	Industry Teams
8:00 – 8:15		CHECK-IN	
8:15 – 10:15	Move 3 Incorporate Considerations and Finalize Proposal	REVIEW DRAFT PROPOSAL / DEVELOP KEY QUESTIONS AND REBUTTAL	REVIEW FINAL SOLICITATION, DEVELOP FINAL RESPONSE, PRICING, AND NEGOTIATION TACTICS
10:15 – 10:30		BREAK	
10:30 – 12:00	Move 4 Proposal Presentation and Evaluation	RECEIVE INDUSTRY PRESENTATIONS/ ENGAGE IN REBUTTAL, Q&A, and NEGOTIATION	PRESENT FINAL RESPONSE/NEGOTIATE
12:00 – 1:00		<b>DEBRIEF ON MOVE 3 AND 4 ACTIVITIES AND CLOSING</b> <ul style="list-style-type: none"> <li>• <i>Discuss the Simulation, identify lessons learned</i></li> <li>• <i>Capture additional topics/questions that still need to be addressed surrounding AM business transactions</i></li> </ul>	

## Things to Remember

- The exercise is being conducted in compressed time
- This is not about solicitation/contracting best practices; this is about the AM government requirements and considerations surrounding tech data, IP, QC, risk, and other business items.
- While there may be other solutions to the scenario in the simulation, THE solution for the purposes of this wargame is AM
- Use your team facilitators and control team as a resource to help drive discussion
- Control team will be documenting the discussion real time
- When developing or responding to a solicitation:
  - Describe your thought process and any assumptions out loud with your team
  - Consider risks
  - Determine and document any additional assumptions you need to make for the purposes of the wargame
  - How will it be done? Are there certain limitations to consider?
  - Does the action require approvals / quality reviews?
- Simulation materials will be collected at the end of the exercise

## Rules of the Road

- Accept scenario events at face value
- This is a non-attribution and non-reprisal environment; voice opinions and highlight opportunities for improvement
- Stay engaged with the exercise – no mobile devices please; access laptops only if needed for the game
- Maintain exercise integrity – limit sidebar conversations
- Observers should not participate in simulation discussion unless otherwise instructed
- Do not open materials in the player packets unless instructed

## Wargame Assumptions

- Additive Manufacturing is the solution that will be used for this scenario
- The timeline is notional for the purposes of facilitating the conversation
- Sole source is allowed in this case according to FAR
- Industry already has the file in STL format to be additively manufactured
- The government has the technology to additively manufacture the parts
- The parts will not be produced in the US and shipped. They will be produced in-theater



## Questions/Comments