**Manufacturing Readiness Assessment**

**2. MRA PROCESS**



**2.1. Identify the Need for a MRA**

The objective of this lesson is for each student to comprehend the process for identifying the need for a MRA.

**2.1.1. Steps Associated with Identifying the Need for a MRA**

**Step 1:**

A Manufacturing Readiness Assessment may be initiated at any stage of the acquisition program, most often by the PM, who identifies the need for an assessment.

**Step 2:**

Determine the site where the evaluation will take place.

When choosing the facility for the on-site evaluation, consider the following:

* Is the highest percentage of manufacturing cost incurred there?
* Is the final assembly and test conducted there?
* Are the most sensitive manufacturing tasks accomplished there?
* Are the least technologically mature materials, components, or subsystems produced there?
* Are there known significant problems or risks such as low yields, high costs, or immature manufacturing processes?

Facilities matching one or more of the criteria should be considered for the evaluation site.

**2.1.2. Triggers for a PMO MRA**

***An approaching milestone review***

While MRA policy does not require formal MRAs to be tied to milestone reviews, Manufacturing Readiness Level (MRL) language is used in DoD acquisition as a requirement to milestone reviews. (Department of Defense Instruction (DoDI) 5000.02)

**An Aeronautical Armament Center (AAC) mandate**

The AAC requires MRAs prior to Milestone B, Milestone C, and prior to a Full Rate Production (FRP) decision on *Integrated Program Assessments*.

As of 11/09, the Aeronautical Systems Center (ASC) has a policy letter in work that will require MRAs prior to milestone reviews.  
***A Program Executive Officer (PEO), Office of the Secretary of Defense (OSD), or similar party request***

In addition to the PM, the PEO, OSD, or a similar party may request a MRA for reasons they deem necessary.  
***A result of good business sense***

This may be done to find out where the program stands, if it’s progressing at the right pace, producing on-schedule, etc.  
***A result of Department of Defense (DoD) criteria***

The DoD criteria includes the following questions as guidelines:

* Cost
* Is this item a driver that can significantly impact cost?
* Design
* Is the design novel, complex, or directly related to key performance parameters (KPP)?
* Manufacturing Process
* Is a product being produced that requires a new manufacturing capability, technology, or process?
* Will the technology require the use of advanced manufacturing technology, processes, and systems?
* Has the technology been characterized in a manufacturing environment?
* Has the manufacturing technology been demonstrated on a similar system?
* Quality
* Does the item have known yield or quality issues?
* Schedule
* Is the product or process on the critical path or behind schedule?
* Does this product or process on the critical path have long lead item issues?
* Facilities
* Is a new or different manufacturing facility required for capability and capacity?
* Will the manufacturing technology require a scale-up effort?
* Supplies / Materials
* Is there a history of supplier problems?
* Industrial Base
* Are there critical industrial base shortfalls?
* Is this a critical item manufactured by a single or foreign source?