

# Integrated Baseline Review (IBR)



Presented by:

Joel Little

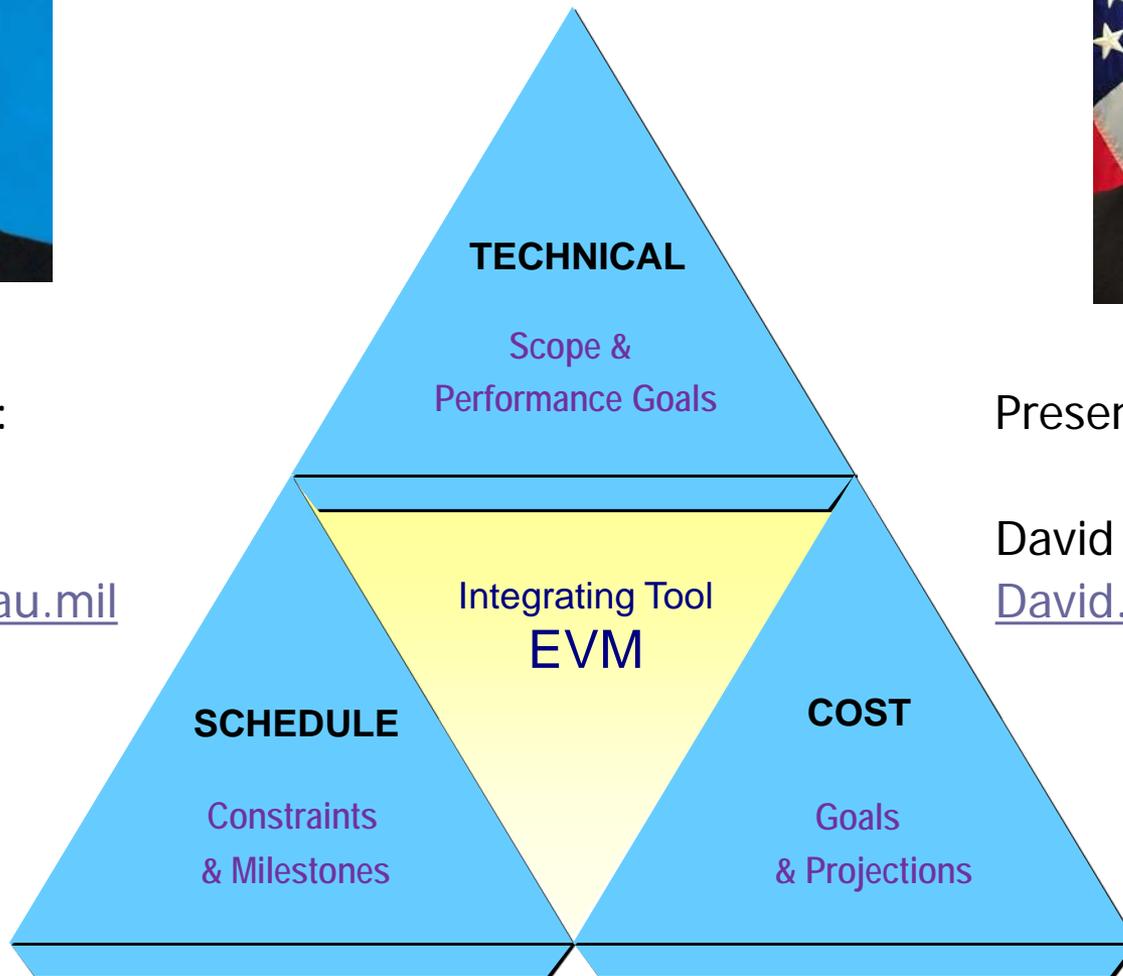
[Joel.Little@dau.mil](mailto:Joel.Little@dau.mil)



Presented by:

David Swinney

[David.Swinney@dau.mil](mailto:David.Swinney@dau.mil)



# Learning Objectives

- Understand when an IBR should be conducted
- Recognize techniques that enhance IBR outcomes
- Understand strategies/techniques to avoid relative to IBRs
- Identify IBR resources available

# Agenda

- IBR Requirement
- Technically Speaking
- IBR Rigor
- Build the Team
- Communicate
- Taking Credit
- Preparation/Execution
- Lessons Learned/Resources

Are we there yet?



# IBR Requirement

## **252.234-7002 Earned Value Management System.**

As prescribed in [234.203\(2\)](#), use the following clause:

EARNED VALUE MANAGEMENT SYSTEM (DEVIATION 2015-O0017)(SEP 2015)

• • •

(f) The Government will schedule integrated baseline reviews as early as practicable, and the review process will be conducted not later than 180 calendar days after—

- (1) Contract award;
- (2) The exercise of significant contract options; and
- (3) The incorporation of major modifications.

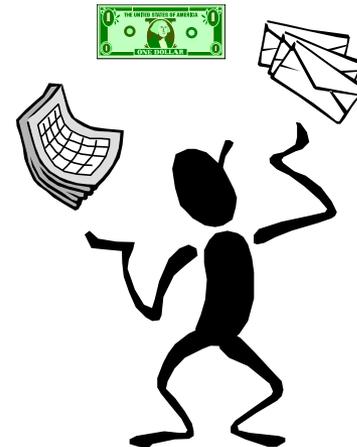
During such reviews, the Government and the Contractor will jointly assess the Contractor's baseline to be used for performance measurement to ensure complete coverage of the statement of work, logical scheduling of the work activities, adequate resourcing, and identification of inherent risks.

# Stay Focused

## The Primary Objective of the IBR:

*We jointly need to be able to answer this basic question...*

Can we execute this contract  
(technical work scope),  
given the available  
schedule and budget  
resources?



# Supporting Objectives

- Confirm compliance with the following business rules:
  - Technical scope of work is fully included and consistent with authorizing documents
  - Key schedule milestones are identified
  - Supporting schedules reflect a logical flow to accomplish the technical work scope
  - Resources (budgets, facilities, personnel, skills, etc.) are adequate and available for the assigned tasks
  - Tasks are planned logically & can be measured objectively
  - Managers have implemented required management processes
- Assess MR with respect to project risk
- Assess overall how PMB achieves the above objectives

# Technically Speaking



- How long will it take to develop a manufacturing approach?
- How long will it take to build a circuit board?
- How much will the components cost?
- How much testing will it need?
- Will it require rework?

# Technically Speaking

- Who can do this technical work?
- How long will it take?
- What components and materials are required?
- How much will the components and materials cost?

# 2009 DoD Report to Congress on the State of EVM

The following are significant deficiencies:

- ◆ Vague and confusing EVMS documentation
- ◆ Lack of clearly delineated roles and responsibilities
- ◆ Use of management reserve to alter internal and subcontract performance levels and overruns
- ◆ Work authorization and change control processes that do not extend to appropriate levels
- ◆ Cost and schedule integration problems that undermine the validity of data
- ◆ Use of inappropriate earned value techniques for assessing material, subcontracts, and rework
- ◆ Budget and data reconciliation issues
- ◆ Lack of IBR rigor and use of front-loaded baselines
- ◆ Baseline fluctuations and frequent replanning

# Build the Team

**PMs should develop a plan for conducting the review:**

- Define the objectives for the IBR
- Identify key responsibilities
- Identify documentation needs
- Plan & conduct IBR training
- Plan & schedule review dates
- Review work scope documents
- Identify required technical expertise
- Establish how IBR findings will be documented and resolved
- Establish risk evaluation criteria
- Identify procedures for risk identification, documentation, and incorporation into project risk management planning

**Who – What – When – Where - How**

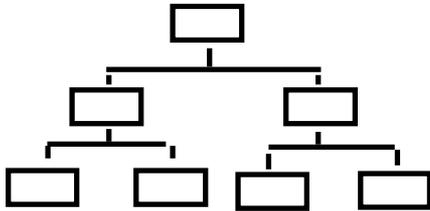
# Communicate

I am NOT a Warranted Contracting Officer. Any discussions of contractual requirements do not constitute contractual direction or authorization of any kind.

If the Chief Purpose of the IBR is to  
Assess the Baseline, shouldn't we  
Understand how it is Developed

# PMB Development Steps

## Step 1. Define the Work Scope



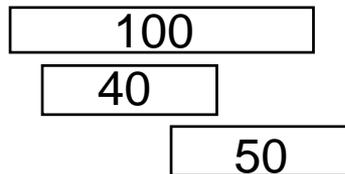
- Identify the scope of work
- Plan the work at the control account / work package level

## Step 2. Schedule the Work



- Arrange the work packages in order
- Schedule work packages

## Step 3. Allocate Budgets to Schedule



- Classify the work and select an EV technique
- Budget the work packages
- Spread the budget over time
- Calculate cumulative BCWS

# Taking Credit: PMB Development

## – *Earned Value Methods* --

- **Purpose:**  
Match Timing Of Actual Costs with Work Completion
- Should Be a Quantitative and Discrete Way to Measure the Work
- Should Tie in With Success Criteria or Technical Measure
  - e.g., Successful Completion of a Specific Test, Reliability Growth Curve
- Work Categories and Earned Value Methods
  - Discrete
  - Apportioned
  - Level of Effort

# Earned Value Methods

- Discrete or Measurable
  - specific, tangible end product or result
  - preferred category of work because it's objective
- Apportioned effort
  - dependent on other discrete tasks (e.g., QA)
  - measured as a factor, e.g., 10% of discrete task
- Level of Effort (LOE)
  - Ensure LOE tasks are truly LOE
  - has no specific product
  - measured by the passage of time, so...
  - No Schedule Variances are ever reported

# Earned Value Techniques

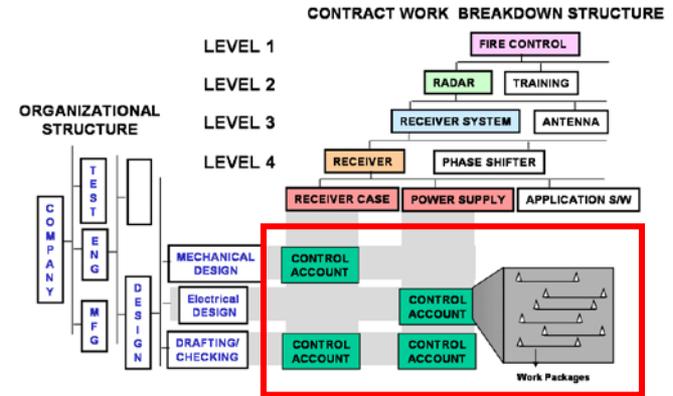
- Correlates the BCWS and BCWP EV Variables
- Selected Earned Value Techniques
  - Discrete Measures
    - Percent Complete
      - 0 / 100
      - 50 / 50 (or 20/80 etc.)
    - Weighted Milestones
    - Weighted Milestones with Percent Complete
    - Units Completed
    - Equivalent Units
  - Apportioned Effort
  - Level of Effort (LOE)

# Earned Value Techniques

<u>METHOD</u>	<u>LENGTH</u>	<u>BCWP CALCULATION</u>
0 / 100 %	1 Mth	
50 / 50 %	2-3 Mths	
% Complete	Varies	
Variant Milestone	3 or More Mths	
Level of Effort	Varies	
Apportioned Effort	Varies	

# The Control Account

- All Performance Measurement is Captured at the Control Account Level
  - BCWS is established
  - BCWP is determined
  - ACWP is collected
  - Variances are assessed
  - Estimates are revised
  - Workaround plans are devised



- In IPT organization structures, the control account may be tied to an IMP Significant Accomplishment or Accomplishment Criteria.
- EVMSIG Definition –

CONTROL ACCOUNT	The control account is the intersection of one WBS element and one OBS element representing a discrete portion of program scope assigned to an individual manager. The control account is the minimum level where technical, schedule, and cost responsibility exists.
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# IBR Preparation – Documentation

- CWBS
- CWBS Dictionary
- Contractor's Organizational Breakdown Structure
- Responsibility Assignment Matrix
- Work Authorization Documents
- Integrated Master Schedule
- Risk Management Plan and Register
- Control Account Plans
- Current IPMR & CFSR
- Detailed Control Account Schedules
- Schedule Risk Assessment (SRA)
- EVM System Description
- Subcontractor Data
- Basic Contract
- P000 Mods
- EVMS Surveillance Reports
- DCMA/DCAA findings (CAR)

# IBR Notification to Contractor



<Company Name>  
<Company Address>

Ref: (a) Contract <Contract Number>

Dear <Company Contracting Officer>:

The < PMA Name> Integrated Product Team (IPT) plans to conduct an Integrated Baseline Review (IBR) on the <Program Name> in <Company City and State> <Review Dates>.

The purpose of the IBR is to achieve a mutual understanding of the Performance Measurement Baseline and its relationship to the underlying Earned Value Management (EVM) systems and processes. The objectives are to gain insight into cost and schedule risk areas associated with the remaining effort, as well as develop confidence in the program's operating plans. This will be accomplished by evaluating the performance measurement baseline to ensure it captures the entire remaining technical scope of work, is consistent with contract schedule requirements, and has adequate resources assigned.

Enclosed is a list of administrative and documentation requirements that need to be submitted electronically for government review prior to <Date Documentation Required>. Forward all electronic submissions to <POC email address>. Please note the IBR team requires non-escort badges, a working area with tables, access to a fax machine, printers, and telephones.

IBR team training is scheduled for <Training Dates>. <Company Name> personnel are invited. The location of the training, tentative agenda and the list of proposed team members will be provided under SEPCOR.

<Government IPT Lead's Name> will be the IBR Team Leader for this review. Questions concerning the IBR may be directed to <Government IPT Lead's Name> <Government IPT Lead's Phone Number>, or <EVMS Analyst's Name> <EVMS Analyst's Phone Number>.

If you have any questions pertaining to this notification, contact <Contracts Specialist's Name>, at <contracts Specialist's Phone Number>.

Sincerely,

<PCO'S Name>  
Procuring Contracting Officer

Encl: Review Requirements

Copy to: PEO <>  
DCMA HQ  
DCMAC-C  
DCAA Resident Office

# Now what?

# Execute!

- In-Brief
- Control Account Manager (CAM) –  
Discussions
- Daily Wrap-ups
- Document Findings/Action Items
- Out-Brief
- Track Action Items

# Joint (Gov't / Ktr) In-Briefing

- Welcome remarks (contractor/government)
- Review IBR Goals
- WBS coverage
- Team members and roles
- Discussion pointers
- How to document discussions and action items
- Agenda
  - Daily team meetings
  - Side meetings
- Overview of contractor's earned value processes
- ~~• Overview of master program schedule and risks~~
- Ongoing surveillance issues (DCMA) (optional)

# CAM Discussions

- Walk through the baseline documentation:
  - Work Authorizations
  - Schedules and Budgets
  - Material Cost Estimates
  - Subcontracted Efforts
- Explain your control account's work effort
  - Scope
  - EV Method selected
- Show how you planned the work
  - Time-phasing
  - Identify key relationships in schedule
- Summarize resources (e.g., labor mix, LOE, material)
- Open-ended discussion v. Yes/No questions
- Discuss and agree on all known risks

“Show Me” v. “Tell Me”

# Typical CAM Discussion Questions

- **Show** me your latest work authorization document
- **Show** me the schedule you are working to and how it supports the master schedule
- **Show** me how your resources are planned in the schedule
- Explain how much of your budget is LOE and why
- **Show** me what you consider to be your critical activities
- **Show** me an example of horizontal schedule traceability within your tasks
- **Show** me an example of vertical schedule traceability in support of the Component Master Schedule
- **Show** me how your subcontract effort is planned
- **Show** me how the work is classified? What EVM Method did you use?
- **Show** me how your material and travel effort is planned

# Baseline Discussion “Do’s”

- Start on time
- Both sides limit attendance
  - CAM can be defensive or nervous
  - Be sensitive and spend a little time to set the tone
  - Introduce all meeting attendees
- Follow a logical flow
- Summarize at the beginning what you want to look at
- Phrase all questions as simply as possible
- If unsure that you understand CAM’s answers
  - Repeat it back in your own words
- Probe deeper into any areas that seem ill-defined
  - If still unsure about definition, bring to IPT lead attention

# Baseline Discussion “Do’s”

- Designated GCAM may need to get the meeting back on track
- Government should be prepared
  - Familiar with the system
  - Plan for the discussion
- CAM should be prepared
  - Documentation available
    - Monthly spread of resources and planning documents
  - Understand document content
  - Show support for answers
  - Communicate!
- Both sides honor ground rules

# Baseline Discussion “Do’s”

- Ask for copies of relevant documents to back-up concerns
- Take time to:
  - Read information given to you
  - Write legible, complete notes
- Document discussion and review with CAM
- Arrive at a joint conclusion with CAM
  - “Yes, we can manage within this baseline”

# Baseline Discussions “Don’ts”

- DON'T:
  - Ask Yes/No questions
  - Tie yourself to a list of questions
  - Allow discussion to stray from the objective
  - Lose control of the discussion
  - Accept formal presentation in place of live Control Account data
  - Ignore the documentation
  - Word questions negatively
  - Make derogatory comments
  - Make constructive, out of scope direction
  - Allow CAM to let others describe his control account
  - Allow Discussion to Become Emotional

# Typical Problems

- Discussion is not in the CAM's workplace
- Information/documentation not available
- Interruptions (phones, people, beepers)
- "Strap-hangers" outnumber participants
- CAM is not prepared/familiar with documentation
- "Assistant" answers all the questions
- "Tells you" versus "Shows you"
- "I am an engineer ... not a bean counter"

# Lessons Learned

- Government Team is Typically not Adequately Prepared (e.g. not familiar with Contractor's documentation)
- IBR Planning not conducted Jointly
- Understand IBR preparation requirements and timing (Government & Contractor)
- Government shooting for early IBR (90-120 days, vice 180 days)
- IBR IS NOT AN EVM REVIEW! It is an INTEGRATED TECHNICAL Review (with other functional support)
- Identify and Train the Team Early
- Conduct Joint (Contractor and Government) IBR Training
  - Have contractor teach/explain their documentation/procedures to the Government

# Lessons Learned

- Leadership absence or disengagement sends a clear message that the IBR is not a Government priority
- Clearly Define Expectations
- DO NOT PROCEED unless both sides are prepared (i.e. PMB has been developed and the Government has had time to study the supplier's plans and documentation)
- Open communications PRIOR to the event will lessen the formal IBR burden
- Group "Briefings" with a room full of attendees may not produce the desired results
- Make sure the contractor has performed a Schedule Risk Assessment (SRA)
  - And key players know how to interpret the results

# Lessons Learned

- IBR Establishes the Tone for a Long-term Relationship between the Government and the Contractor
- ID People (and Constraints) and Schedule Sessions Early
- Approach in an Integrated Manner
- Focus on Specifics (Nth Level of Detail)
- Plan for CAM discussion spillover sessions

# Lessons Learned

- Know what Success is, prior to conducting CAM Discussion (Conclude when success is achieved)
  - ID, Review and Satisfy Objectives and Exit Criteria
- IBR is not a “Gotcha” Session. More of an Understanding/ Learning Event
- GCAMs need to understand they cannot change the terms of the Contract

# Other Recommendations

- Establish meaningful thresholds for each of your Risk criteria
- Conduct High Level Daily Wrap Ups
  - Identify Programmatic Issues
  - Give Others the “Heads Up” on Findings
  - Get Clarification During the Review
- Document All Findings
- Develop Action Plan to Resolve Findings

# EVM Analysis Resources

- DAU - Defense Acquisition University
  - Gold Card - Summary of EVM Techniques
  - Tailored Training and Recommendations
  - Acquisition Community Connection: <https://acc.dau.mil/>
  - Continuous Learning Modules (CLMs) – short online courses
- DCMA - Defense Contract Management Agency
  - Onsite Contractor Surveillance & Expertise
  - Control Account Manager (CAM) Interviews/Discussions
  - Verification of Policy Compliance
- Planning & Scheduling Excellence Guide
- PM's Guide to IBRs
- Services' IBR Guides/Toolkits
- EVMS Interpretation Guide

# Summary

- IBRs are Primarily a Technical Review
- IBRs are Vital to Program Success
- Planning & Preparation is Key
- Build a Strong Relationship with Your Supplier
- Understand & Manage the Risks inherent to the Plan
  - Cost
  - Schedule
  - Technical
  - Resource
  - Management Processes

Questions???