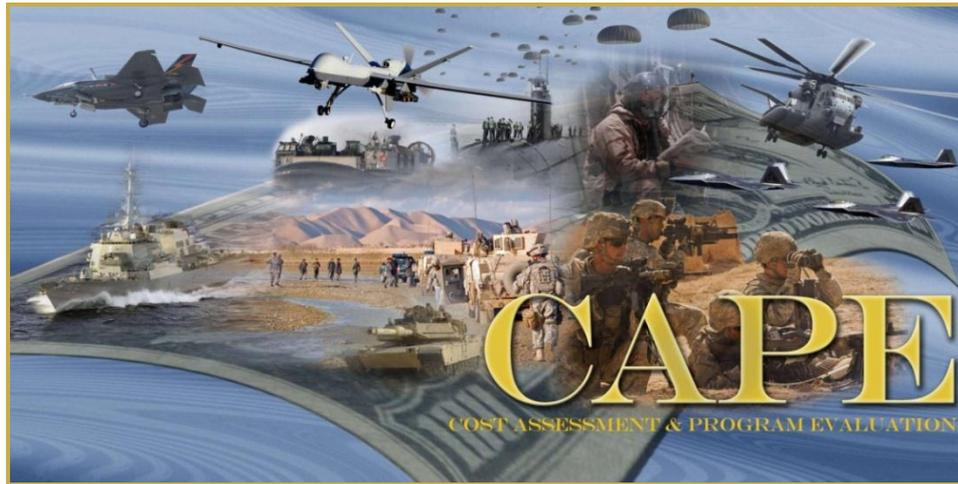


# CSDR Focus Group

December 4, 2013



Defense Cost and Resource Center



# Agenda

OSD CAPE

Agenda Item	Presenter	Minutes	Start	End
Opening Remarks & Introductions	Mike Augustus	10	8:30 AM	8:40 AM
CADE Total Access	Bess Dopkeen	40	8:40 AM	9:20 AM
Working Group Overview/Status	Working Group Leaders	30	9:20 AM	9:50 AM
CSDR Policy Overview	Rob Currie	15	9:50 AM	10:05 AM
1921-3 Contractor Business Data Report	Mike Biver & Carol Moore	30	10:05 AM	10:35 AM
---BREAK---		15	10:35 AM	10:50 AM
1921-4 Contractor Sustainment Report	Tom Henry & Angela Camp	30	10:50 AM	11:20 AM
Wild Card CSDR Submissions	Rob Currie	30	11:20 AM	11:50 AM
---LUNCH---		45	11:50 AM	12:35 PM
CWBS Dictionary	Emily Beltramo	30	12:35 PM	1:05 PM
Unit Reporting	James Parnham	30	1:05 PM	1:35 PM
XML Report Submission Requirement	John Claude Kassab	30	1:35 PM	2:05 PM
---BREAK---		15	2:05 PM	2:20 PM
CSDR Planning for IDIQ Contracts	Emily Beltramo	30	2:20 PM	2:50 PM
Program Planning Module (PPM) Overview	Charlotte McIntosh	20	2:50 PM	3:10 PM
Recommendations for cPet Enhancements	Tom Crowell	20	3:10 PM	3:30 PM
Summary and Review of Action Items	Tom Coonce/Ben Aronin	15	3:30 PM	3:45 PM



# Homework Assignments

OSD CAPE

1. How are you currently preparing CCDRs and SRDRs? Walk us through your process. (Industry)
2. Submit feedback on topics (All)

# Cost Assessment Data Enterprise (CADE) Project

## Vision for the CSDR Focus Group December 2013

**Bess Dopkeen**

**Last Updated: November 18, 2013**

**CAPE**  
COST ASSESSMENT & PROGRAM EVALUATION

# Agenda

- **Objectives**
- **History – Analysis Evolution**
- **Today’s Process**
- **Vision – Total Analyst Access**
- **Incs 0.5 (Nov ‘13), 1.0 (Feb ‘14) & Incs 2-5**
- **Current Collaboration**



# CADE Objectives/KPPs

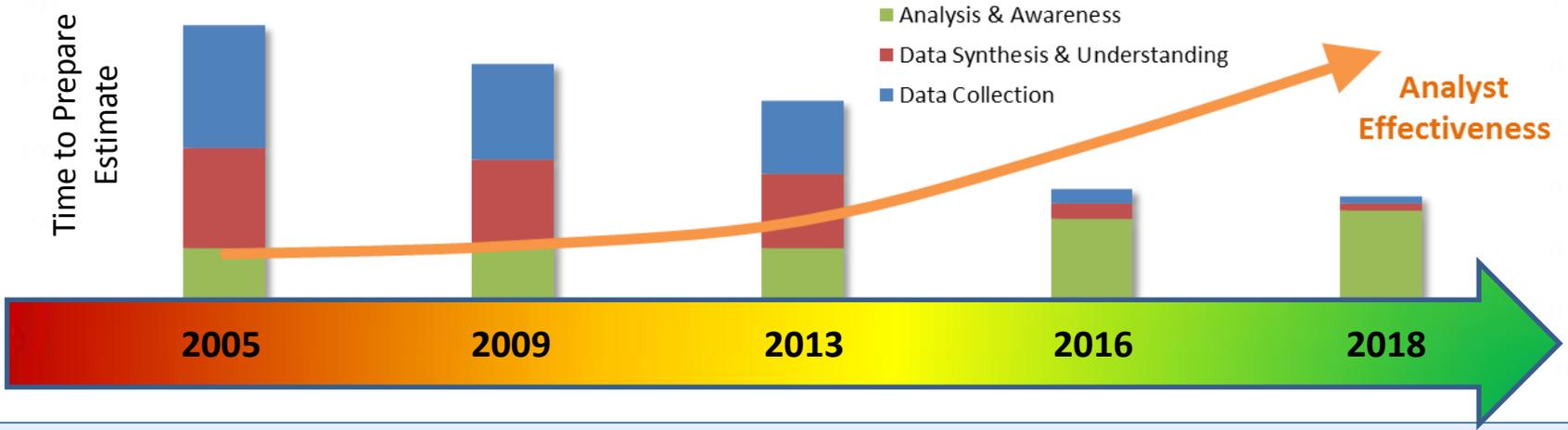
OSD CAPE

- **Improve analyst productivity**
  - Increased output and more comprehensive estimates per analyst annually
- **Ease of Data Access**
  - Near real-time access to data, more data, and less burden on the analyst to retrieve and process
- **Effectiveness**
  - Enable program insight
  - Begin to “tell the story”, holistic analysis
- **Data quality and Reporting Compliance Improvement**
  - for EVM and CSDRs
- **Source Data Transparency**

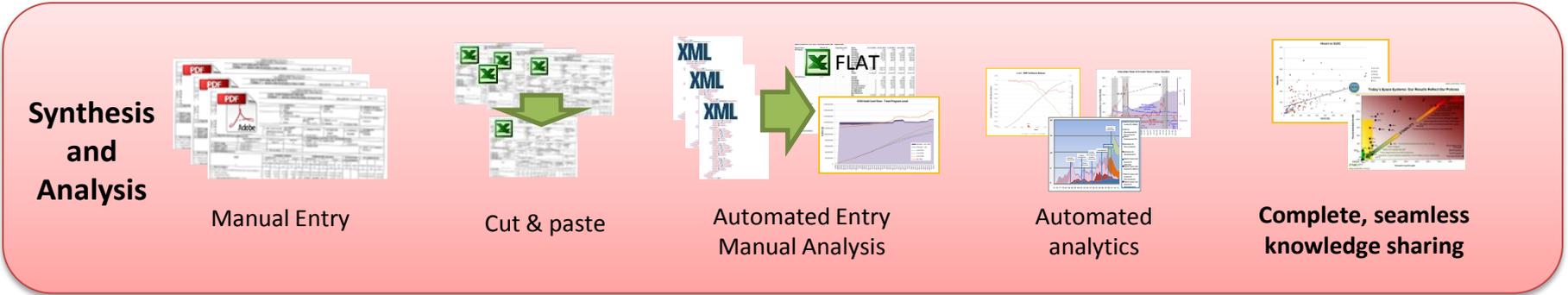


# Analysis Evolution

OSD CAPE



- Data Sources**
- Program Office
  - DACIMS
  - SARs
  - DAES
  - Contractors
  - Service O&S
  - Data Libraries
  - Colleagues Network
  - **EVM-CR**
  - DACIMS
  - **DAMIR**
  - Contractors
  - Service O&S
  - Data Libraries
  - **EVM Visual Display**
  - **DCARC Bulk Download**
  - DAMIR
  - Contractors
  - Service O&S
  - Data Libraries
  - **CADE Total Access**
  - Service O&S
  - Data Libraries
  - **CADE Total Access 2.0**

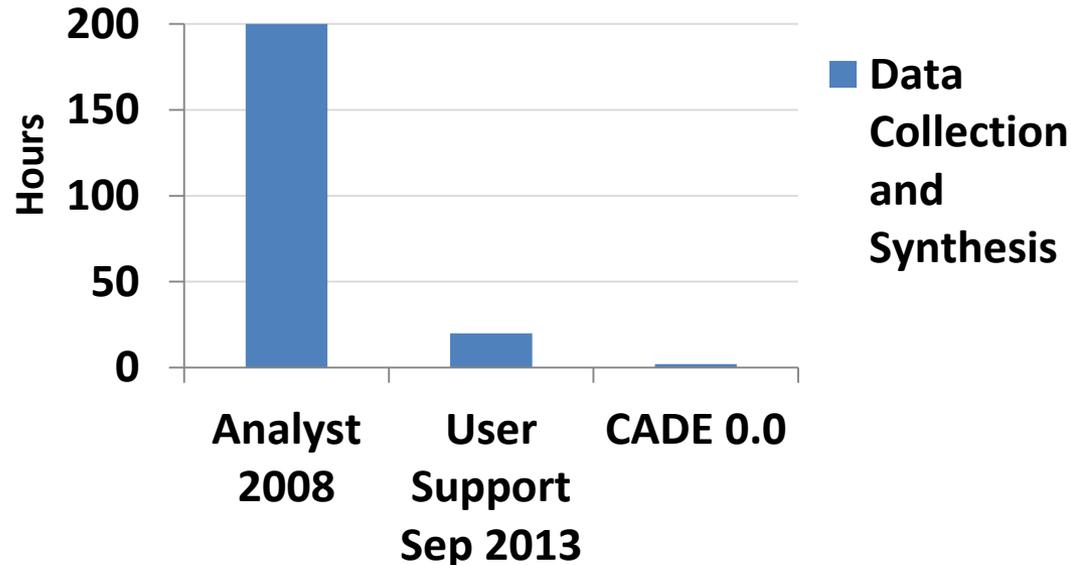




# Today's Process

OSD CAPE

Time for CPR Data Collection and Syntheses



## Analyst in 2008:

200 hours, typing in by hand selected data over time

## User Support Sep 2013:

20 hours to bulk download and format ~40 contracts

## CADE 0.0:

Retrieve data from 40 contracts over time within 2hrs



# Quick CDR Example...

OSD CAPE

[CSDR data is available in Excel files, and charts can be created ad hoc from those files]



# CADE Vision of the Future: Total Analyst Access

OSD CAPE

Seamless integration  
of authoritative data sources  
via smart search functionality

Knowledge Portal | DCARC CAPE | CADE Total Access

DCARC HOME PROGRAM SEARCH DASHBOARD TOOLS SOURCE DATA CONTACT US

USS Voyager | SEARCH | Advanced Search

CCDR | O&S

USS Voyager Concept  
USS Voyager Class Terminal  
USS Vincent  
USS Vantage

Press Enter to search.

Export Data | Zoom In

Set Thresholds

as of Date: 4/22/07

High Growth: 50%

Low Growth: 25%

Independent EAC

Reporting Level: 1

Element: Total

Performance Index: 3 Month

CPI Weight	SPI Weight
0.75	0.25

Forecast

Y-Axis: Dollars

X-Axis: Adj. % Complete

Forecast Metric: Independent EAC

Forecast Start: 22.9%

Forecast End: 77.1%

Linear  
 Log Linear

Override Contractor Planned End Date

On/Off Enter End Date:

Independent EAC Growth for Total

Planned End Date: 09/24/2010

Clear Milestones/Events

'lapse Widgets

USS Voyager

Program View in DAMIR

RDT&E: \$14,268M

Procurement: \$7,628M

Units: 2

Milestones

Program Milestones from DAMIR

Milestone	APB Obj.	APB Thres.	Current
Concept Dem...	Jul. 2012	Dec. 2012	Apr. 2013
MS II/B	Feb. 2014	May 2013	May 2013

View More

Key Program Events

Key Events list maintained by Community

- Mar. 2013 - LM closes LA ops
- Oct. 2012 - Dev. APB #3
- Sept. 2012 - New PM
- Jun. 2011 - First Flight

View More | Add New

CADE Community Knowledge

4 Analysts have been assigned to this program.

- BDopkeen shared a PowerPoint.
- KHazel posted a link.
- BDopkeen posted a note.
- Elofren shared an Excel Document.

View More | Add New

CCRL Search

7 references pertain to this program.

- "Voyager Technical Documentation"
- "Briefing to Under Secretary for"
- "CER for Voyager Development"...
- >LHusband: "Great CER w/ data visibility"...

View More

External Links

Opens website in new tab

- Defense Cost and Resource Center (DCARC)
- Data Warehouse
- DAMIR (AT&L)



# Visual Analysis Tools (VAT)

OSD CAPE

## Cost Analysis Concept Exploration

## Requirements Definition

## Useable Analyst Toolsets - Demonstration

### Tools

#### EVM

Tool	Data Type	Last Updated	Download Tool	Download User Guide	Data Formatter
Cost Performance Report (CPR)	EVM - Cost	Apr. 2013			
Integrated Master Schedule (IMS)	EVM - Schedule	Mar. 2013			

#### CSDR

Tool	Data Type	Last Updated	Download Tool	Download User Guide	Data Formatter
Software (SRDR)	CSDR - Software	Aug. 2013			

#### O&S

Tool	Data Type	Last Updated	Download Tool	Download User Guide	Data Formatter
Navy - Aircraft	O&S - Navy	Jul. 2013			
Navy - MSC	O&S - Navy	Jun. 2013			
Navy - Ships	O&S - Navy	Jun. 2013			
Navy - Ship Systems	O&S - Navy	Feb. 2013			
Air Force AFTOC	O&S - Air Force	Aug. 2013			

**Working to expand access to CADE to the Service Cost Centers soon – dealing with a server issue**



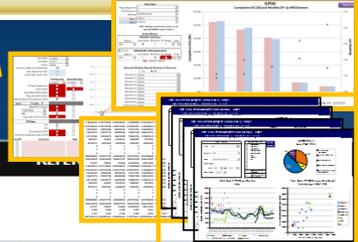
# CADE Increment 0

Knowledge Portal DCARC CAPE CPR, IMS, O&S, and SRDR VATs CADE Total Access

DCARC HOME SELECT PROGRAMS DASHBOARD RETRIEVE FILES TOOLS

VD Test User Log Out

Search for and add programs to list of favorite programs



Navigate to other programs via "My Programs" tool bar

Export data being viewed

Navigate to other data sources for the selected program

CPR Visual Analysis via Custom and Standard Views within Dashboard

Link to download Navy and Air Force O&S Visual Analysis Tools

**My Programs**

Program	EVM Contract Tasks	CCDR Contracts	DAMIR Program Schedule
data available	✓	✓	✓

Contract Task	# Periods	Last Available	Last Refreshed
1	15	3/31/2010	1/27/2012

Performance Over Time | Element Performance Comparison

Primary Y Axis Metric: Cumulative Scale: \$

Secondary Y Axis Metric: Off

Export Data | Zoom In | Standard Views

SV CV SPI CPI TCPI % Complete MR UB

Filter Data: Reporting Level: Summary Element: SubTotal (PMB) X-Axis: Month Add Event

Start: 1/31/2009 End: 3/31/2010 Set Decimals: 0

**EVM CPR Views**

Custom Views

Standard Views

EVM CPR Data

CCDR Contract Data

Program Milestones

Download O & S Tools

## Demonstration

# Increment 0.5 – New Functionality (November)

**Visual Display Administration**

Welcome to the CADE Total Access Administration home page, please select a task below.

Administrator Functions

- Manage Queue
- DAMIR Update
- Import Individual Cost Reports from CSOR SR
- Bulk Process 1921 Reports from CSOR SR
- Bulk Process 1921-1 Reports from CSOR SR
- Bulk Process 1921-2 Reports from CSOR SR
- View Errors
- Manage Tools
- Manage References

Administrative function for updating tools, resources, and external links

Quick program selector and favorites access

Army O&S VATs for multiple commodities (Aircraft, Combat, Wheeled Combat)

Improved navigation between View types

Milestone Widget: Add Milestones to Visual Displays

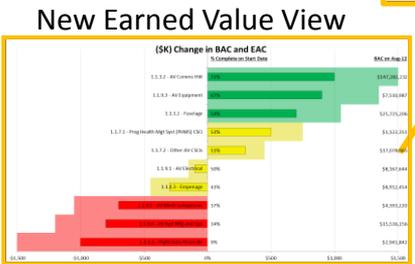
Program Events Widget: Define, Save & Add Program Events to Views

External Links Widget

Collapsible widget area

Improved View navigation through panel selector

Enhanced CADE Total Access Design



# Increment 1.0 – New Functionality (February)

Ability for analyst to comment on issues with validated DCARC data

**Provide CSDR Data Feedback** [X]

Send DCARC pertinent information related to CSDR data validity.

Contract Number  
Enter the Contract Number of the CSDR of interest.

Submission ID  
Enter Submission Number of relevant CSDR

Comment Description  
To change the event description, check the box and type new description.  
Max: 2,000 characters

Post

Army O&S VATs for multiple commodities (Tactical, Electronics)

General Program Information Widget (new data source)

Ability to export data into corresponding VAT format

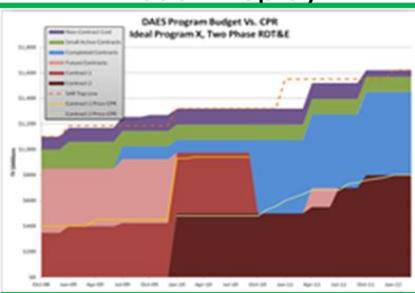
Knowledge Portal DCARC CAPE CADE Total Access

DCARC HOME ADMIN SEARCH PROGRAMS DASHBOARD REFERENCE FILES TOOLS REFERENCES CONTACT US VD Test User Log Out

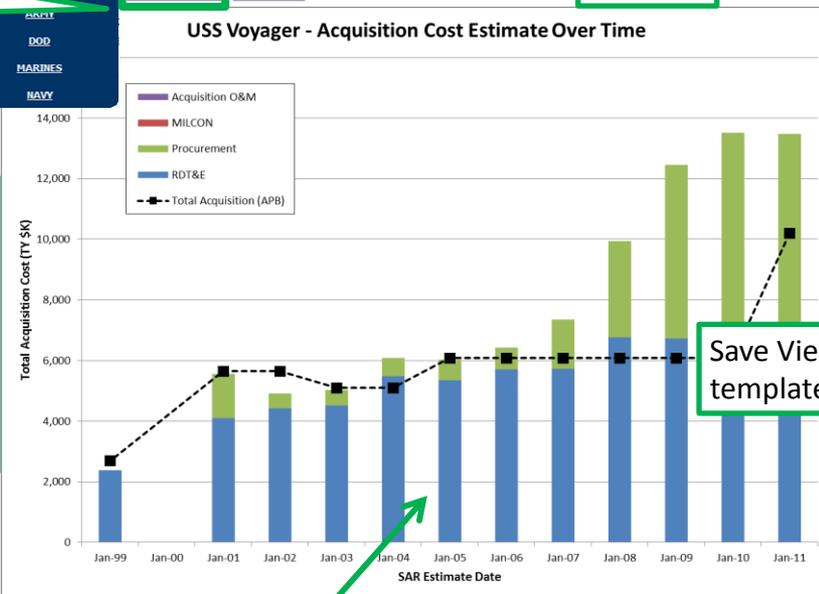
USS Voyager Program-Level EVM CSDR O&S

Export Data Zoom In SIB VAT

Partial Program-level Visual Display



1-2 high-level program views based on DAMIR data (new data source)



Save View templates

Plot how key event dates have evolved over time

**USS Voyager**

Program View in DAMIR

Cost: \$14,268M

Units: 1

Contract Tasks: Task 1 Intrepid

**Milestones**

Click date to add to View

Milestone	Baseline	Threshold	Current
Milestone A	Jan. 2004	Sept. 2004	Mar. 2004

- Key Program Events**
- Click date to add to View
- 3/27/2013 - LM closes LA ops.
  - 10/18/2012 - Dev APB #3
  - 9/3/2012 - New PM
  - 6/30/2011 - First Flight

**CADE Community Knowledge**

4 Analysts have been assigned to this program.

- BDopkeen shared a PowerPoint.
- KHazel posted a link.
- BDopkeen posted "O&S cost responsibility is handled under the Logistics Directorate..."

**CCRL Search**

7 references pertain to USS Voyager.

- "Voyager Technical Documentation"
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- "CER for Voyager Development"...
- >L Husband: "Great CER w/ data visibility..."

**External Links**

Opens website in new tab

- Defense Cost and Resource Center (D...
- Data Warehouse
- DAMIR (AT&L)
- See All



Functionality change requests and updates

Active Search of CCRL references

# Increment 1.0 – New Functionality (November/February) UNCLASSIFIED

Administrative function for updating tools, resources, and external links

**Visual Display Administration**

Welcome to the CADE Total Access Administration home page, please select a task below.

Administrator Functions

- Manage Queue
- DAMIR Update
- Import Individual Cost Reports from CSDR SR
- Bulk Process 1921 Reports from CSDR SR
- Bulk Process 1921-1 Reports from CSDR SR
- Bulk Process 1921-2 Reports from CSDR SR
- View Errors
- Manage Tools
- Manage References

**Provide CSDR Data Feedback** [X]

Send DCARC pertinent information related to CSDR data with this:

Contract Number  
Enter the Contract Number of the CSDR of interest.

Submission ID  
Enter Submission Number of relevant CSDR

Comment Description  
To change the event description, check the box and type new description. (Max: 2,000 characters)

Post

Ability for analyst to comment on issues with validated DCARC data

Army O&S VATs for multiple commodities (Aircraft, Combat, Wheeled Combat, Tactical, Electronics)

General Program Information Widget (new data source)

Milestone Widget: Add Milestones to Visual Displays

Program Events Widget: Define, Save & Add Program Events to Views

CADE Community Knowledge Widget

Upload historical analysis files

Post & share general program info & notes

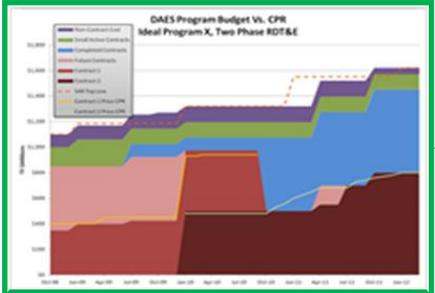
Active Search of CCRL references

Ability to export data into corresponding VAT format

Quick program selector and favorites access

USS Voyager	Program Level	CSDR	O&S	NAVY
1	✓	✓	✓	✓
2	✓	✓	✓	✓
3	✓	✓	✓	✓
4	✓	✓	✓	✓
5	✓	✓	✓	✓
6	✓	✓	✓	✓
7	✓	✓	✓	✓
8	✓	✓	✓	✓
9	✓	✓	✓	✓
10	✓	✓	✓	✓
11	✓	✓	✓	✓
12	✓	✓	✓	✓
13	✓	✓	✓	✓
14	✓	✓	✓	✓
15	✓	✓	✓	✓
16	✓	✓	✓	✓
17	✓	✓	✓	✓
18	✓	✓	✓	✓
19	✓	✓	✓	✓
20	✓	✓	✓	✓

Partial Program-level Visual Display



1-2 high-level program views based on DAMIR data (new data source)

**Knowledge Portal** DCARC CAPE

**CADE Total Access**

DCARC HOME ADMIN SEARCH PROGRAMS DASHBOARD RETRIEVE FILES TOOLS REFERENCES CONTACT US VD Test User Log Out

USS Voyager Program-Level

Export Data Zoom In SIB VAT

**USS Voyager - Acquisition Cost Estimate Over Time**

Total Acquisition Cost (TY \$K)

SAR Estimate Date

Acquisition O&M MILCON Procurement RDT&E Total Acquisition (APB)

Save View templates

**CADE Community Knowledge**

4 Analysts have been assigned to this program.

B Dopkeen shared a PowerPoint.

K Hazel posted a link.

B Dopkeen posted "O&S cost responsibility is handled under the Logistics Directorate..."

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**External Links**

Opens website in new tab

Defense Cost and Resource Center (DCARC)

Data Warehouse

DAMIR (AT&L)

See All

Enhanced CADE Total Access Design (Navigation between Views & View Types, Widget Area)



Functionality change requests and updates

External Links Widget

# Increment 2.0 Vision

UNCLASSIFIED

CPR, IMS, CCDR and SRDR VATs

Advanced search and auto-complete capability

Continually expanding set of widget capabilities

Enhanced Program-level View functionality and cross-submission CCDR Visual Display

Access authoritative documents by date.

CPR Visual Display

Program-level Visual Display

CCDR Visual Display

JCARD Resources & Other data back to 2007

O & S

V A T S

Post information pertaining to your program.

CERs

$$y = ax^b$$

UNCLASSIFIED

# Increment 3.0 Vision

UNCLASSIFIED

CPR, IMS, CCDR and SRDR VATs

Advanced search and auto-complete capability

Continually expanding set of widget capabilities

Milestone	APB Obj.	APB Thres.	Current
Concept Dem...	Jul. 2012	Dec. 2012	Apr. 2013
MS II/B	Feb. 2014	May 2013	May 2013

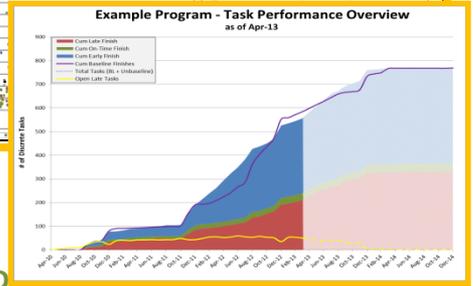
CPR Visual Display

Program-level Visual Display

CCDR Visual Display

Software Visual Display

IMS Visual Display



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Access authoritative documents by date.

$$y = ax^b$$

UNCLASSIFIED

# Increment 4.0 Vision

UNCLASSIFIED

CPR, IMS, CCDR and SRDR VATs

Advanced search and auto-complete capability

Auto-populate related programs for comparison

Continually expanding set of widget capabilities

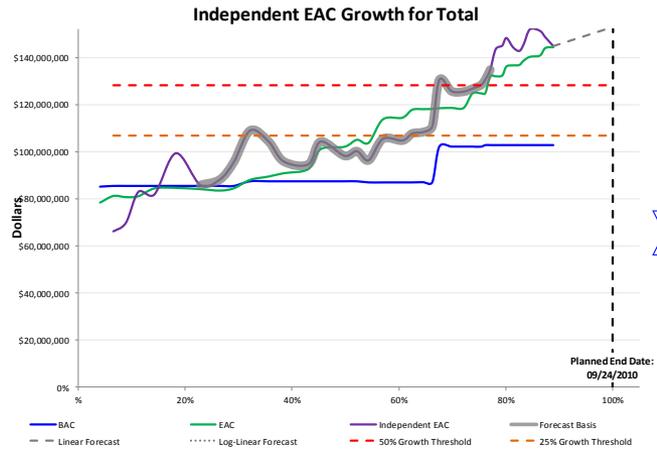
CPR Visual Display

Program-level Visual Display

CCDR Visual Display

Software Visual Display

IMS Visual Display



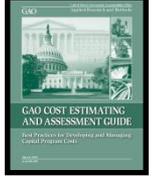
Portfolio Analysis

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Search for a program among official language and the law.

CERS



$$y = ax^b$$

UNCLASSIFIED



# Current Collaboration

OSD CAPE

## Cross-Agency Working Groups to Improve CSDRs:

1921, -1, -2: Duncan Thomas, NCCA

1921-3s: Mike Biver, CAPE

1921-4s: Tom Henry, CAPE

SRDRs: Ranae Woods, AFCAA

CCDR Tech Data Reporting: Facilitating  
Commodity Groups' Efforts: Greg Hogan,  
AFCAA

- Space: Greg Hogan, AFCAA
- Other Commodities: TBD – Volunteers?

## Office Collaboration:

NCCA

JCARD, CCRL & NAVAIR

MDA

Consolidated Cost Research  
Working Group

Army

JIAT/ACDB

DASA-CE Visit

AFCAA

AFCAA visit

Briefing Aviation CIPT

AT&L

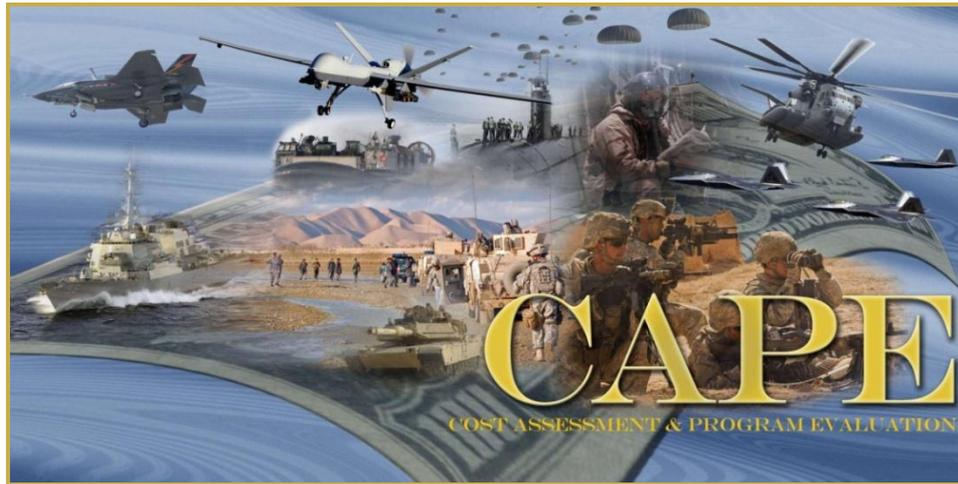
DAMIR, DAVE

### Service POCs:

**Army: Sean Vessey**   **Navy: John Fitch**   **Air Force: Tom Newberry**

# Working Group Overview/Status

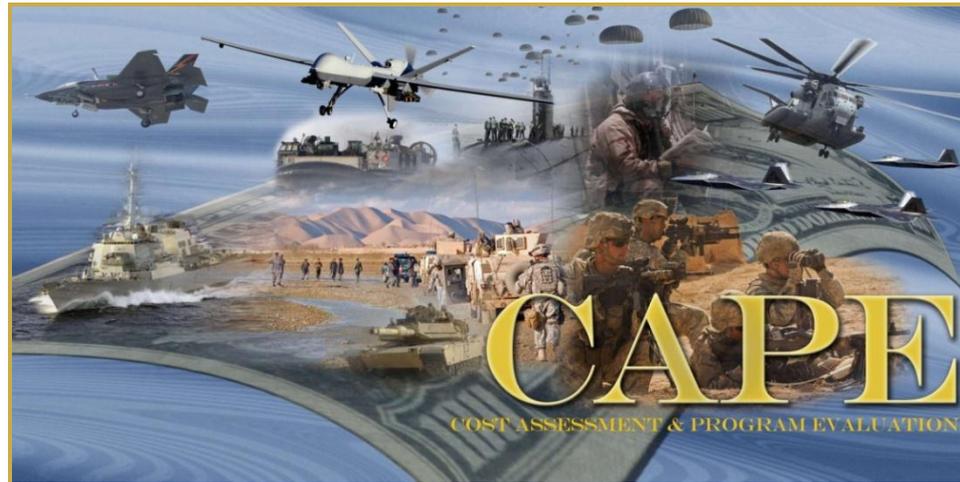
December 4, 2013



Placeholder for discussion by Working Group Leaders  
(No slides)

# CSDR Policy Overview

December 4, 2013



Rob Currie

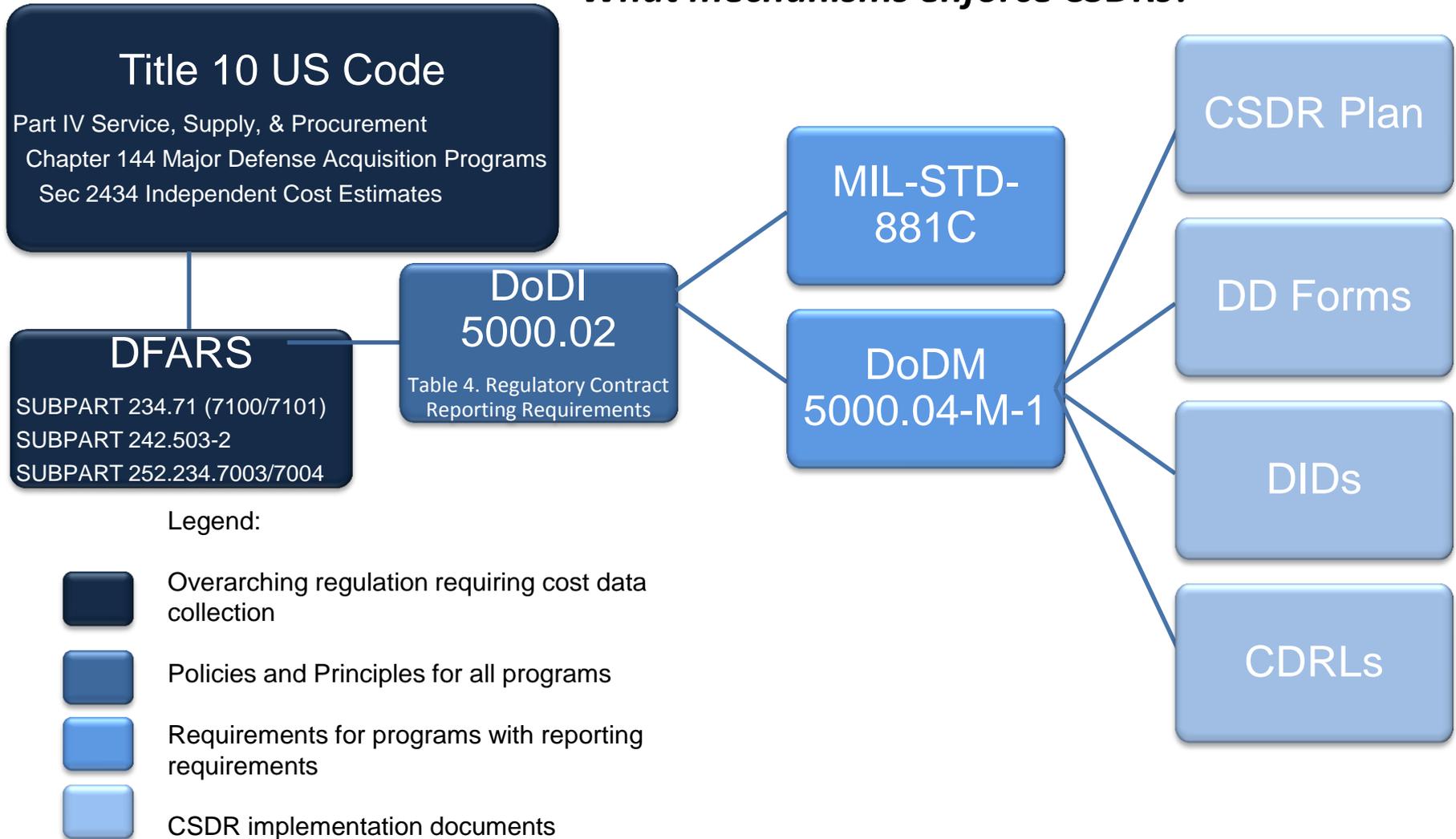
Defense Cost and Resource Center



# Legal Foundations for Reporting

OSD CAPE

## What mechanisms enforce CSDRs?





# Overarching Legal Foundations

OSD CAPE

- Title 10 US Code
  - Part IV, Chapter 144 Major Defense Acquisition Programs, Sec 2434-Independent Cost Estimates
- DFARS (Defense Federal Acquisition Regulation Supplement)
  - SUBPART 234.7100 Policy
    - Clause 234.7100 Policy
    - Clause 234.7101 Solicitation provision and contract clause
  - SUBPART 242.5 Post Award Orientation
    - Clause 242.503-2 Postaward conference procedure
  - SUBPART 252.234-7003 Notice of Cost and Software Data Reporting System
    - Contractors required to base CSDR reporting on *actual* cost collection against the CCDR DID descriptions and submit CCDRs with the pricing proposal
  - SUBPART 252.234-7004 Cost and Software Data Reporting System
    - Contractors required to submit CCDRs and SRDRs in a timely manner in accordance with the DIDs and to require CSDR reporting from all subcontractors at any tier with a subcontract that exceeds \$50 million



# Program Level Legal Requirements

OSD CAPE

- DoDI 5000.02 (Operation of the Defense Acquisition Management System)
  - Provides the policies and principles that govern the defense acquisition system for all programs
  - Establishes a management framework and identifies specific statutory and regulatory reports
- DoDM 5000.04-M-1 (CSDR Manual)
  - Serves as the primary requirements document for the development, implementation, and operation of the CSDR system for all ACAT I Programs with contracts that breach the CSDR reporting threshold
  - Prescribes procedures and instructions for DoD stakeholders in the CSDR process to ensure that data is accurate, consistent, and quickly made available
- MIL-STD-881C (Work Breakdown Structures for Defense Materiel Items)
  - Establishes mandatory procedures for all programs required to report by DoDI 5000.02
  - Contains standard Work Breakdown Structures (WBS) with definitions that allow for uniformity through a consistent and visible framework for defense materiel items and contracts



# Contract Level Forms and Requirements

OSD CAPE

- **CSDR Plan (DD Form 2794)**
  - Identifies data reporting structure, submission events, and required reports
- **DD Forms**
  - Ensures data is delivered in a standard format for all required CCDRs
- **Data Item Descriptions (DID)**
  - Provides preparation instructions and requirements of information that must be submitted for each report type
  - Currently there are eight active CSDR DIDs
- **Contract Data Requirements List (CDRLs) (DD Form 1423-1)**
  - Contracting mechanism that requires contractors to deliver CSDRs using the required DIDs and forms.



# Active Policy Initiatives

OSD CAPE

- DoDI 5000.02
  - Update nearing completion
  - CSDR language strengthened/clarified on
    - FMS reporting
    - Waiver requirements
    - IDIQ contract application
    - Reporting requirement for lower-level ACATs providing equipment to an ACAT I program
- DoDM 5000.04-M-1 CSDR Manual
  - Individual working groups on Policy, DID and Forms updates
  - Working groups in close consultation with CAPE's CADE Total Access Initiative
  - Updates to begin in 2014
- Operating and Support Cost Estimating Guide, OSD CAPE
  - Currently in draft form
  - Ties into the DD Form 1921-4 Contractor Sustainment Report



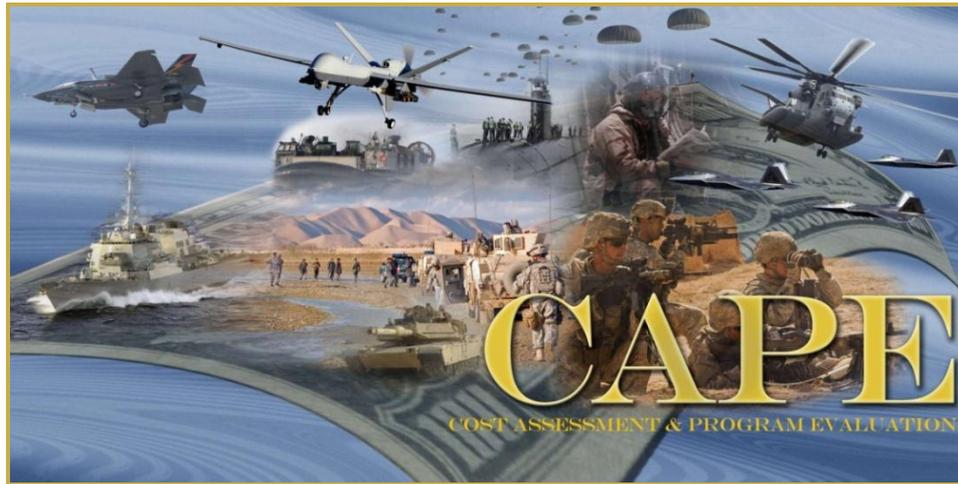
# Questions

OSD CAPE

- Open discussion/questions

# Contractor Business Data Report (1921-3)

December 4, 2013



Mike Biver and Carol Moore  
OSD CAPE



# 1921-3 Focus Group Plan

OSD CAPE

	Tasks
Nov - Dec	Develop 1921-3 requirements and options with Service Cost Centers
Jan - Feb	Review options with contractors (various commodities)
Mar	Propose preferred option to Cost Leadership Forum
Apr - May	Rework 1921-3 DID to reflect preferred option



# Reasons for the 1921-3 Focus Group

OSD CAPE

- Cost community collecting this type of data from other sources (i.e., contractor format)
- Contractors concerned that 1921-3 rates not aligned with FPRAs and may be used incorrectly
- Limited analytical utility for some cost components



# 1921-3 Objectives

OSD CAPE

- Collect business unit data that enables:
  - Modeling of the contractor's future costs
  - Explanation of contractor historical and projected rate trends and the impact on cost estimates
  - Analysis to reflect the impact on rates of projected business base changes
  - Analysis of a corporations business strategy and cost management
    - Overheads
    - Labor costs
    - Fringe costs
    - Workload allocation
    - Impact of consolidations



# Potential Revised Requirements

OSD CAPE

- Contractor rates, base and pool data in the contractor's rate structure, which aligns with:
  - Contractor and DCMA pricing rates
  - DCAA audited rates
  - Pricing models used by the contractor, DCMA, and the PCO for developing and negotiating proposals
  - Cost estimates based on labor hours, materials and rates in contractor format
- Contractor business strategies and supporting data
  - Brief narrative self-report on key long-range plans
  - Facility-level break-outs
  - Workforce information in addition to labor dollars/FTE
    - Demographics
    - Fringe cost drivers
    - Occupation-level breakouts in addition to direct/indirect labor
  - Some data likely from HR systems versus financial systems

These are preliminary draft CAPE ideas. They have not been coordinated with the service cost centers



# 1921-3 Reflecting Contractor's Structure

OSD CAPE

## CONTRACTOR BUSINESS DATA REPORT

Form Approved  
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate, Information Management Division, 1155 Defense Pentagon, Washington, DC 20301-1155 (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.**

1. CONTRACTOR NAME/ADDRESS (Include Zip Code)		2. FPR UNIT	3. IMPLEMENTING CONTRACT NUMBER	4. DATA PERIOD (X one) Prior Year Current Year Future Year	5. FISCAL YEAR (YYYY)	6. DATES IN FISCAL YEAR (YYYYMMDD) Start Date: End Date:
7. PREPARER'S NAME (Last, First, Middle Initial)		8. DEPARTMENT	9. TELEPHONE NO. (Include Area Code)	10. EMAIL ADDRESS		11. DATE PREPARED (YYYYMMDD)

### Overhead Accumulation, Distribution, and Application

DIRECT COST BY PROGRAM					DIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)										
					Engineering			Manufacturing Operations			Materials	Other			
Program Name a	A/F	Contract Number b	Equivalent Units c	Buyer d	Workers e	Dollars f	Hours g	Workers h	Dollars i	Hours j	Dollars k	Workers l	Dollars m	Hours n	
1.															
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															
11. Other DoD Effort															
12. Other Government Effort															
13. Commercial Effort															
14. Total Direct Cost and Hours Base						\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	0.0	
a. Total Direct Workers					0			0				0			

Columns reflect contractor's rates system

- Map columns into 1921's standardized Engr and Mfg Ops OHs

Rows adjusted to reflect contractor's rates systems

- Fringe can be Direct, Indirect, or both
- Indirect cost categories according to contractor's system?
- Map rows to reflect rates reflected in 1921's standardized OHs?

INDIRECT COST CATEGORY					INDIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)											
					Engineering			Manufacturing Operations			Materials	Other			G&A	
					Workers o	Dollars p	Hours q	Workers r	Dollars s	Hours t	Dollars u	Workers v	Dollars w	Hours x	Dollars y	Hours z
15. Indirect Labor																
16. Employee Benefits																
17. Payroll Taxes																
18. Employment																
19. Communication/Travel																
20. Production Related																
21. Facilities-Building/Land																
22. Facilities-Furniture/Equipment																
23. Administration																
24. Future Business																
25. Other Miscellaneous																
26. Credits																
27. Total Indirect Cost and Hours						\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	0.0		
28. Total G&A Cost and Hours															\$0.0	0.0
29. Indirect/Direct Cost Rate						0.00%			0.00%		0.00%		0.00%			
30. G&A Rate/(Direct + Indirect)															0.00%	



# Current 1921-3 (page 2)

OSD CAPE

**CONTRACTOR BUSINESS DATA REPORT - PAGE 2**

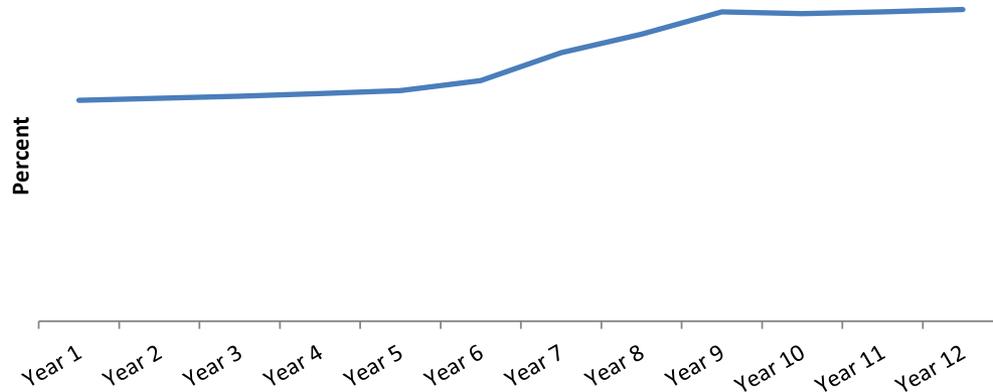
S E C T I O N  C	PRODUCTION CAPACITY		Current Year	Method of Calculating "FPR unit % of Full Production Capacity"																										
	FPR Unit % of Full Production Capacity																													
	Number of Shifts																													
S E C T I O N  D	Current Year (Report hours in thousands)																													
	1st Quarter				2nd Quarter				3rd Quarter				4th Quarter				Prior Year		Year:		Year:									
	Workers a		Hours b		Basic Rate\$ c		Effective Rate\$ d		Workers a		Hours b		Basic Rate\$ c		Effective Rate\$ d		Workers a		Hours b		Basic Rate\$ c		Effective Rate\$ d		Basic Rate\$ c		Basic Rate\$ c		Basic Rate\$ c	
	1. Engineering - Direct Labor																													
	2. Manufacturing Operations - Direct Labor																													
	a. Tooling - Direct Labor																													
	b. Quality Control - Direct Labor																													
c. Manufacturing - Direct Labor																														
S E C T I O N  E	Prior Year		Current Year																											
	Total FPR Unit Revenue (Sales) (thousands of dollars)																													
S E C T I O N  F	Organizational Changes (For Each Year Reported)										Accounting Changes (For Each Year Reported)																			
REMARKS																														



# Additional Fringe Breakouts

OSD CAPE

### Fringe Rate Over Time (Pool/Base)



#### Major fringe Categories:

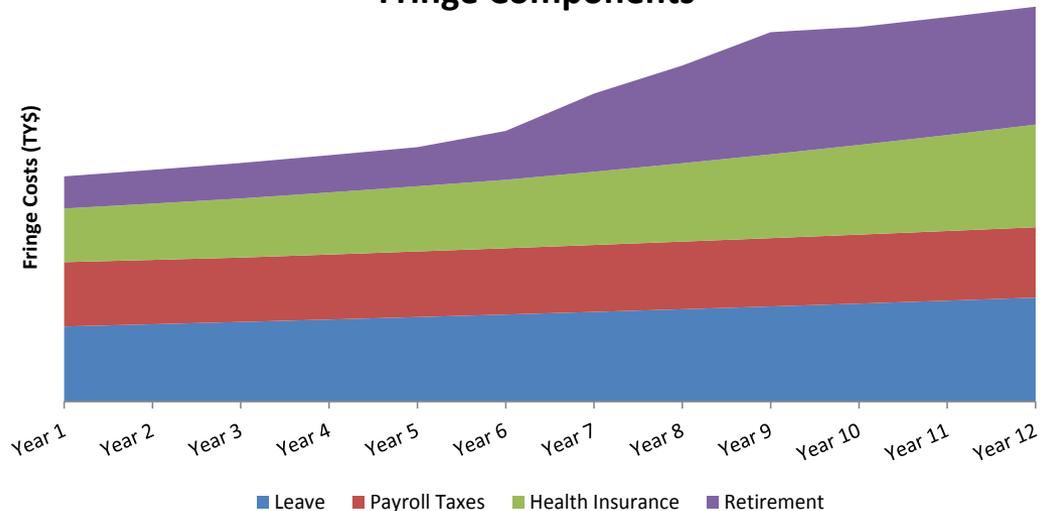
- Retirement
- Health Insurance
- Leave
- Payroll Taxes

Collect Fringe Base and Pool history and projections

Collect additional detail on Health Insurance and Retirement

- Defined benefit versus defined contribution
- Retired versus Active Medical
- Employee Contributions for health insurance

### Fringe Components





# Additional labor rate by occupation data

OSD CAPE

## Notional Example

OSD Occupation Category	Contractor Job Category
Engineers and Scientists	Computer Scientists
	Aerospace Engineers
	Materials Scientists
	Systems Engineers
General Managers	Supervisors
	Executives
Professional and Administrative Support Occupations	Contracting Specialists
	Recruiters
	Compensation and Benefits Specialists
	Lawyers
	Marketing
	Information Technology
Technicians	Drafters
	Engineering Technicians
Maintenance and Facilities Occupations	Electricians
	Pipefitters
	Facilities Managers



# Workforce Demographics: Example

## Notional Data for Illustration

OSD CAPE

### Metrics

- Age
- Years of Service with Company (YOS)
- Education

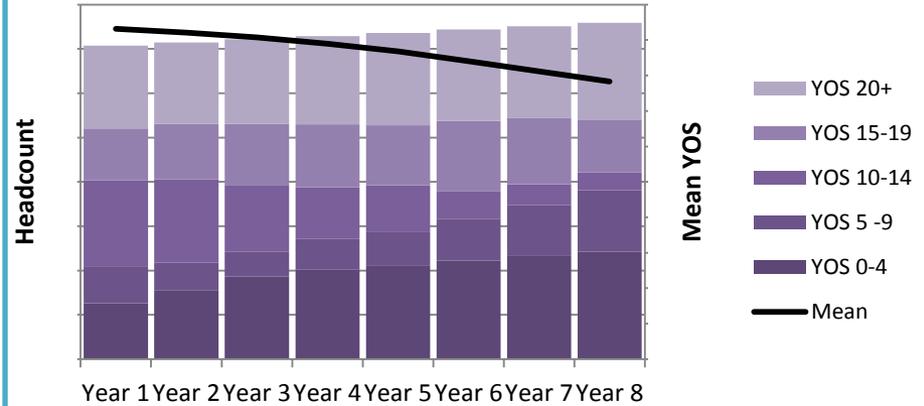
### Analytical Value

- Large changes suggest workforce churn that might signal performance and cost risks
- Indicate workforce knowledge and experience
- All else equal, correlated with salary and fringe costs

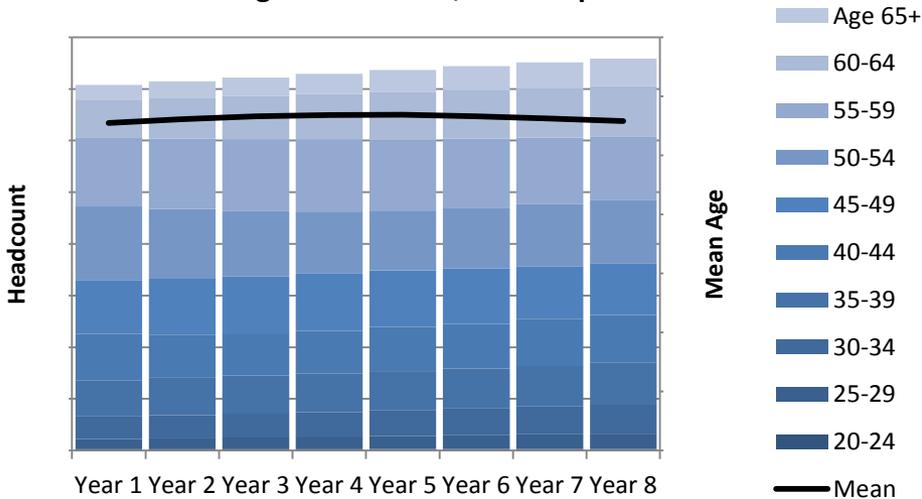
### Data Collected

- Five-year bins and/or averages

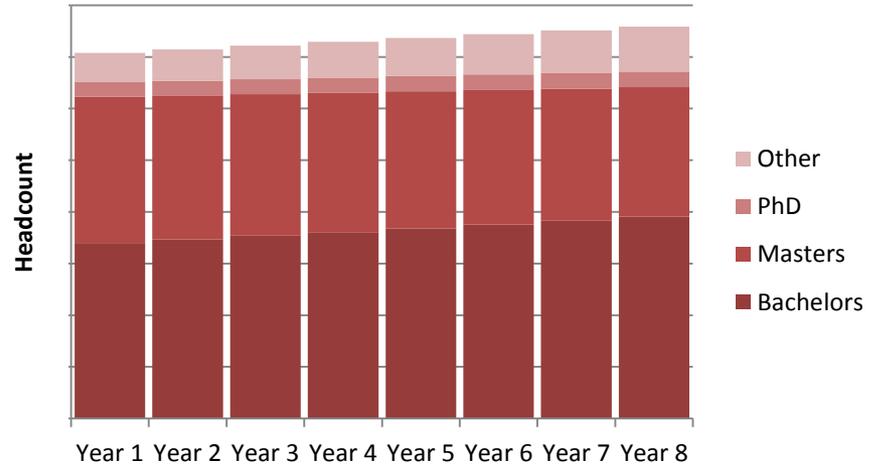
### Years of Service Distribution, All Occupations



### Age Distribution, All Occupations



### Degree Attainment, All Occupations





# Go Forward Plan

OSD CAPE

	Tasks
Nov - Dec	Develop 1921-3 requirements and options with Service Cost Centers
Jan - Feb	Review options with contractors (various commodities)
Mar	Propose preferred option to Cost Leadership Forum
Apr - May	Rework 1921-3 DID to reflect preferred option

# BACKUP



# CAPE

COST ASSESSMENT & PROGRAM EVALUATION



# Analyze Corporate Business Strategy

OSD CAPE

How is the corporation managing cost (efficiency)?

## Direct and Indirect Labor Rates

- 1921-3 tracks average DLR for standard categories of Engineering and Manufacturing
- Can get DLRs in corporate categories in FPRA - sometimes one engineering rate; sometimes hundreds
- Limited indirect labor category detail in 1921-3
- No information pertaining to age of workforce, etc...

## Fringe Rates

- Limited detail in 1921-3

## Overhead Control

- 1921-3 can track overhead base, pool, and rates and their major cost drivers
- May want additional details – capital equipment investment, etc...

## Switch workload to a less expensive business unit

- Internal business unit
  - 1921-3 forces them to combine all internal business units – no visibility
  - If collect corporate format – may see cost impact of transfer
- External Business Unit (IWA)
  - Shows up as materials...and labor/material in the IWA's 1921-3

## Impact of consolidations

- 1921-3 data would be a good basis to begin the analysis

## New Markets



# Background - DCMA

OSD CAPE

FPRs	Forward Pricing Rates
FPRP	Contractor's Forward Pricing Rate Proposal
FPRR	DCMA's Forward Pricing Rate Recommendation
FPRA	Negotiated Forward Pricing Rate Agreement between the contractor & DCMA

FPRP/R/A's contain direct labor rates and overhead rates – do not include a pricing model or wrap rates

DCMA Contract Business Analysis Repository (CBAR) is a website that will post FPRs and potentially “indirect expense history”

1921-3 was reinstated in 2009 when DCMA decided they could not provide the rates, bases and pools data



# Background – Pricing Models/Wrap Rates

OSD CAPE

## Pricing Models typically follow this structure (Wrap rates calculate cost per one hour):

(Simple labor example)

A Discrete Direct Hours (i.e. - engineering or touch manufacturing)

B Factored Direct Hours (can be numerous -i.e., quality assurance, material mangement, engineering supt to production, prog mgt, etc...)  
= discrete hours \* factors

C= A+B Total Direct Hours

D Total Direct Cost  
= Total direct hours \* direct labor rate

E Fringe Benefit Cost (Payroll taxes, leave, retirement, health insurance, etc...)  
= Total direct cost \* fringe rate

F = D+E Base for Overhead (Direct plus Fringe)

G Overhead Cost  
= Base for OH \* OH rate

H = F+G Base for G&A

I = G&A Cost  
= Base for G&A \* G&A rate

J = H+I Base for Cost of Money and Profit

ODC



# Current 1921-3 (page 1)

OSD CAPE

## CONTRACTOR BUSINESS DATA REPORT

Form Approved  
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate, Information Management Division, 1155 Defense Pentagon, Washington, DC 20301-1155 (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.**

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7. PREPARER'S NAME (Last, First, Middle Initial)	8. DEPARTMENT	9. TELEPHONE NO. (Include Area Code)	10. EMAIL ADDRESS	11. DATE PREPARED (YYYYMMDD)	

### Overhead Accumulation, Distribution, and Application

DIRECT COST BY PROGRAM					DIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)									
					Engineering			Manufacturing Operations			Materials	Other		
Program Name a	A/F	Contract Number b	Equivalent Units c	Buyer d	Workers e	Dollars f	Hours g	Workers h	Dollars i	Hours j	Dollars k	Workers l	Dollars m	Hours n
1.														
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11. Other DoD Effort														
12. Other Government Effort														
13. Commercial Effort														
14. Total Direct Cost and Hours Base						\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	0.0
a. Total Direct Workers					0			0				0		

INDIRECT COST CATEGORY					INDIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)											
					Engineering			Manufacturing Operations			Materials	Other			G&A	
					Workers o	Dollars p	Hours q	Workers r	Dollars s	Hours t	Dollars u	Workers v	Dollars w	Hours x	Dollars y	Hours z
15. Indirect Labor																
16. Employee Benefits																
17. Payroll Taxes																
18. Employment																
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23. Administration																
24. Future Business																
25. Other Miscellaneous																
26. Credits																
27. Total Indirect Cost and Hours						\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	0.0		
28. Total G&A Cost and Hours															\$0.0	0.0
29. Indirect/Direct Cost Rate						0.00%			0.00%		0.00%		0.00%			
30. G&A Rate/(Direct + Indirect)															0.00%	



# Current 1921-3 (page 2)

OSD CAPE

**CONTRACTOR BUSINESS DATA REPORT - PAGE 2**

S E C T I O N  C	PRODUCTION CAPACITY		Current Year	Method of Calculating "FPR unit % of Full Production Capacity"																	
	FPR Unit % of Full Production Capacity																				
	Number of Shifts																				
S E C T I O N  D	Current Year (Report hours in thousands)																				
	DIRECT LABOR RATES (FUNCTIONAL CATEGORIES)		1st Quarter				2nd Quarter				3rd Quarter				4th Quarter				Prior Year	Year:	Year:
			Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d	Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d	Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d	Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d	Basic Rate\$ c	Basic Rate\$ c	Basic Rate\$ c
	1. Engineering - Direct Labor																				
	2. Manufacturing Operations - Direct Labor																				
	a. Tooling - Direct Labor																				
	b. Quality Control - Direct Labor																				
c. Manufacturing - Direct Labor																					
S E C T I O N  E			Prior Year	Current Year																	
	Total FPR Unit Revenue (Sales) (thousands of dollars)																				
S E C T I O N  F	Organizational Changes (For Each Year Reported)								Accounting Changes (For Each Year Reported)												
REMARKS																					





# Current 1921-1

OSD CAPE

## FUNCTIONAL COST-HOUR REPORT

Form Approved  
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this

<b>1. MAJOR PROGRAM</b> a. NAME:		<b>2. PRIME MISSION PRODUCT</b>		<b>3. REPORTING ORGANIZATION TYPE</b>		<b>4. NAME/ADDRESS</b> (Include Zip Code)		<b>5. APPROVED PLAN NUMBER</b>	
<input type="checkbox"/> Pre-A <input type="checkbox"/> B <input type="checkbox"/> C-FRP <input type="checkbox"/> A <input type="checkbox"/> C-LRIP <input type="checkbox"/> O&S				<input type="checkbox"/> PRIME / ASSOCIATE CONTRACTOR <input type="checkbox"/> DIRECT-REPORTING SUBCONTRACTOR <input type="checkbox"/> GOVERNMENT		a. PERFORMING ORGANIZATION		b. DIVISION	
<b>6. CUSTOMER</b> (Direct-Reporting Subcontractor Use Only)				<b>7. TYPE ACTION</b>					
				a. CONTRACT NO.:		c. SOLICITATION NO.:		e. TASK ORDER/DELIVERY ORDER/LOT NO.:	
b. LATEST MODIFICATION:				d. NAME:					
<b>8. PERIOD OF PERFORMANCE</b>			<b>9. REPORT CYCLE</b>		<b>10. SUBMISSION NUMBER</b>		<b>11. RESUBMISSION NUMBER</b>		<b>12. REPORT AS OF</b> (YYYYMMDD)
a. START DATE (YYYYMMDD):			<input type="checkbox"/> INITIAL						
b. END DATE (YYYYMMDD):			<input type="checkbox"/> INTERIM						
			<input type="checkbox"/> FINAL						
<b>13. NAME</b> (Last, First, Middle Initial)		<b>14. DEPARTMENT</b>		<b>15. TELEPHONE NO.</b> (Include Area Code)		<b>16. EMAIL ADDRESS</b>		<b>17. DATE PREPARED</b> (YYYYMMDD)	
<b>18. WBS ELEMENT CODE</b>	<b>19. WBS REPORTING ELEMENT</b>			<b>20. NUMBER OF UNITS</b>			<b>21. APPROPRIATION</b>		
				a. TO DATE    b. AT COMPLETION			<input type="checkbox"/> RDT&E		
							<input type="checkbox"/> PROCUREMENT		
							<input type="checkbox"/> O&M		
<b>FUNCTIONAL DATA ELEMENTS</b>				<b>COSTS AND HOURS INCURRED TO DATE</b>			<b>COSTS AND HOURS INCURRED AT COMPLETION</b>		
				A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
<b>ENGINEERING</b>									
(1) DIRECT ENGINEERING LABOR HOURS									
(2) DIRECT ENGINEERING LABOR DOLLARS									
(3) ENGINEERING OVERHEAD DOLLARS									
(4) TOTAL ENGINEERING DOLLARS									
<b>MANUFACTURING OPERATIONS</b>									
(5) DIRECT TOOLING LABOR HOURS									
(6) DIRECT TOOLING LABOR DOLLARS									
(7) DIRECT TOOLING & EQUIPMENT DOLLARS									
(8) DIRECT QUALITY CONTROL LABOR HOURS									
(9) DIRECT QUALITY CONTROL LABOR DOLLARS									
(10) DIRECT MANUFACTURING LABOR HOURS									
(11) DIRECT MANUFACTURING LABOR DOLLARS									
(12) MANUFACTURING OPERATIONS OVERHEAD DOLLARS (Including Tooling and Quality Control)									
(13) TOTAL MANUFACTURING OPERATIONS DOLLARS (Sum of rows 6, 7, 9, 11, and 12)									
<b>MATERIALS</b>									
(14) RAW MATERIAL DOLLARS									
(15) PURCHASED PARTS DOLLARS									
(16) PURCHASED EQUIPMENT DOLLARS									
(17) MATERIAL HANDLING OVERHEAD DOLLARS									
(18) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS									
(19) TOTAL MATERIAL DOLLARS									
<b>OTHER COSTS</b>									
(20) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)									
<b>SUMMARY</b>									
(21) TOTAL COST (Direct and Overhead)									
<b>22. REMARKS</b>									



# CCDR versus Contractor System Estimating

OSD CAPE

## CCDR Costing

1921-1 For each WBS element

	Hrs	\$	OH\$
Engr			
Mfg			
Tool			
QC			
Mat'l's			

Build direct hours and material estimates from data for the 5 categories  
Then build wrap rates

Include EFDs

Result - 4 Labor rates and one material rate thru OH (incl ODC)

From 1921 - can obtain G&A and FCCOM

Result - A wrap rate for each of the 4 labor categories and materials

Issues:

- 1 - all the data in this format is not audited by DCAA (but it does have to add up in total)
- 2 - Need to understand accounting system - i.e., for G&A  
Value added - G&A not applied to materials  
Non-value Added - G&A applied to materials
- 3 - Timing issue  
1921-3 rates are by CY  
Hours and Material data by lot expended over many Cys - therefore the wrap rates above cover multiple Cys  
Need to work out outlay issue
- 4 - Need to catch all ODCs (there is an "other" category on the 1921-1)  
LM does Program Office at end of wrap rates  
Travel  
Material scrap/rework..

Moral - Can be done but risky...  
Take wrap rates from program history

compare these wrap rates to -3 rates..tough because of outlays

## Contractor/DCMA/DCAA/PCO Costing

For each CLIN

Labor Cat 1	Hours
Labor Cat 2	Hours
Labor Cat 3	Hours
Labor Cat 4	Hours
Labor Cat 5	Hours

Pricing Model or Wrap Rate Model

EFDs	Fringe & OH's
------	---------------

Cost/Price

Mat'l Cat 1	Mat'l \$
Mat'l Cat 2	Mat'l \$
Mat'l Cat 3	Mat'l \$
Mat'l Cat 4	Mat'l \$
Mat'l Cat 5	Mat'l \$
Mat'l Cat 6	Mat'l \$

EFDs	Fringe & OH's
------	---------------

Cost/Price

1 - Can be many EFDs buried in the rates that DCMA negotiates....

**Note:**  
Contractor/DCMA/DCAA rates this format  
Proposals and negotiations this format



# Modeling Business Unit

OSD CAPE

## Inputs

Military Strategy/Planning/Budgets drive Workload

- Number of development programs
- Quantity of weapon systems procured



## Business Unit Model

Assess/predict:

- Fixed versus Variable cost (Direct versus Indirect) business base impacts
- Cost of Labor Trends
  - Union agreements, workforce demographics, wage growth
- Fringe Benefits
  - Trends for retirement, health insurance, etc..
- Business Expenses/Investments
  - Facility and Capital Equipment Strategy
  - IRAD and B&P Plans
  - Corporate Office G&A Allocations

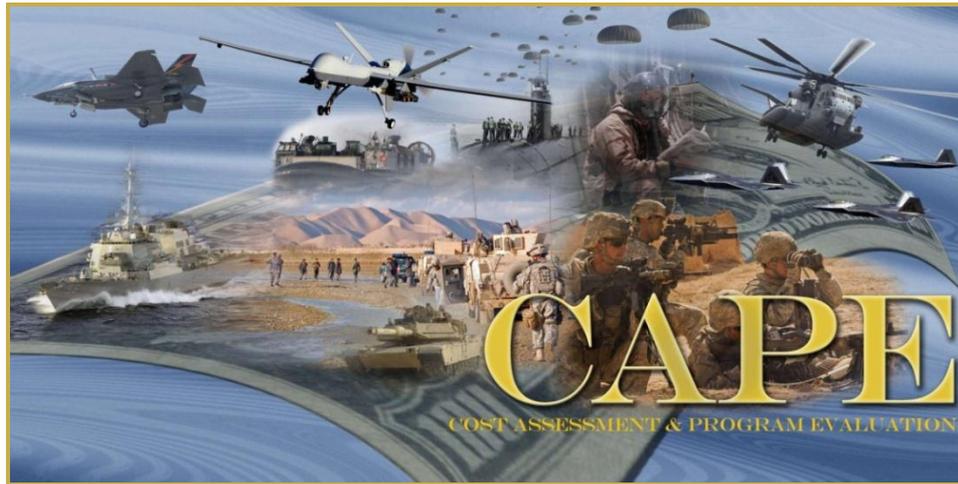


## Output

- Short and Long Term Cost Projections
- Assessment of Cost Control Strategies and DoD Affordability

# Contractor Sustainment Reporting

December 4, 2013



Angela E. Camp  
Defense Cost and Resource Center



# Purpose

OSD CAPE

- How will we use the data and why is it important to get
- Present proposed approach to collecting contractor sustainment cost data via the CSDR



# Why is the Data Important?

OSD CAPE

- O&S cost considerations should be analyzed and presented in order to play a key and actionable role in supporting program decisions
  - Data needs to become the basis for O&S Cost Estimates
  - CLS details not in the VAMOSC systems
- Examples of the Role of O&S Cost Estimates and Analyses
  - Affordability Assessments
  - Early Influence on System Design
  - Reliability and Maintainability Tracking
  - Tracking and Assessing O&S Cost Estimates Assess and Manage Trends for Legacy Systems
- Other Topics Addressed in the Role of O&S Cost Estimates and Analyses
  - Support to Trade-Off Studies
  - Support to Analysis of Alternatives
  - Business Case Analysis for Life-Cycle Sustainment Plan
  - Assessing Resources for Support
    - Manpower Estimates
    - Major O&M Elements



# Ground Rules and Assumptions

OSD CAPE

- Contractor Sustainment Cost Element Structure (CES) and definitions consistent with CAPE O&S Cost Estimating Guide
- Programs: ACAT I, former ACAT I, and programs supporting or supplying equipment to an ACAT I or former ACAT I
  - Contracts >\$50M, regardless of contract type
  - Reporting inclusive of all CLINs (i.e., total contract value reported)
- Contractor Sustainment Cost Reporting requirement will be added either with major contract modification (option exercised) or new contract
- No retroactive reporting



# Background: DD Form 1921-4

OSD CAPE

- DD Form 1921-4 was approved April 2012
- Corresponding data item description (DID), DI-FNCL-81831, was approved May 2012
- After eighteen months of implementing DD Form 1921-4, the following realizations have come to light:
  - No visibility into:
    - Labor hours and dollars
    - Overhead
    - Material dollars
    - Units
    - Profit/Loss or Fee
  - CSDR plans implementing DD Form 1921-4 require many clarifying explanatory footnotes, adding complexity to data preparation and validation
  - Adding lower-level elements requires modification of DD Form 1921-4



# Working Group

OSD CAPE

- A working group was established to discuss methods to obtain the cost data needed to support estimating needs
- Participating Organizations:
  - OSD CAPE
  - DCARC
  - AFCAA
  - NAVAIR 4.2
  - NCCA
  - PM Stryker Brigade Combat Team



# Proposed Implementation

OSD CAPE

- Collect sustainment costs using DD Form 1921
  - Use Sustainment CES from DD Form 1921-4 as basis for CSDR reporting structure
    - Add children to reporting structure where lower level detail is desired
    - Roll up reporting structure if lower-level detail is not applicable and/or not needed
    - Add summary elements (G&A, UB, MR, FCCM, and Profit/Loss or Fee)
- Collect functional data via a sustainment-specific 1921-1 (referred to as 1921-S here out)
  - Create 1921-S to capture functions that span across O&S activities
- Obtain contract-specific definitions of effort against reporting structure via CWBS dictionary
- Collect supporting data using methodology TBD
- Annual reporting by GFY, CY, contract year, or appropriation year



# Example: Contractor Sustainment CSDR Plan (1 of 3)

OSD CAPE

COST AND SOFTWARE DATA REPORTING PLAN						Form Approved OMB No. 0704-0188				
<p>The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.  <b>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</b></p>										
1. MAJOR PROGRAM a. NAME:		c. PRIME MISSION PRODUCT		2. WBS SYSTEM TYPE	3. SUBMISSION TYPE	4. CURRENT SUBMISSION DATE (YYYYMMDD)	5. LAST APPROVED PLAN DATE (YYYYMMDD)			
b. PHASE/MILESTONE <input type="checkbox"/> Pre-A <input type="checkbox"/> B <input type="checkbox"/> C-FRP <input type="checkbox"/> A <input type="checkbox"/> C-LRIP <input checked="" type="checkbox"/> O&S		Aircraft Sustainment		Sustainment Cost Element Structure	<input checked="" type="checkbox"/> INITIAL <input type="checkbox"/> CHANGE					
6a. POINT OF CONTACT (POC) NAME AND ADDRESS (Include ZIP Code)			6b. TELEPHONE NUMBER (Include Area Code)		6c. FAX NUMBER (Include Area Code)		6d. E-MAIL ADDRESS			
7. PLAN TYPE <input type="checkbox"/> PROGRAM <input checked="" type="checkbox"/> CONTRACT (PRIME) <input type="checkbox"/> CONTRACT (SUB)		8. PREPARING ORGANIZATION	9a. CONTRACTOR NAME/ADDRESS i. PERFORMING ORGANIZATION ii. DIVISION		9b. CONTRACT NUMBER	9c. APPROPRIATION <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT <input checked="" type="checkbox"/> O&M				
11. WBS ELEMENT CODE		12. WBS REPORTING ELEMENTS			13. REPORTS REQUIRED (X if applicable)					
a. PROGRAM/ CONTRACT/ SUBCONTRACT	b. CONTRACT/ SUBCONTRACT				a. CWBS DICTIONARY	b. DD 1921 (CDSR)	c. DD 1921-1 (FCHR)	d. DD 1921-2 (PCR)	e. DD 1921-S	f. SRDR FORMATS
									DD 1921-3 (CBDR): <input checked="" type="checkbox"/>	
	1.0	SUSTAINMENT EFFORT			X	X				
	1.1	UNIT-LEVEL MANPOWER (SYSTEM LEVEL COST ONLY)			X	X				
	1.1.1	OPERATIONS MANPOWER			X	X				
	1.1.2	UNIT-LEVEL MAINTENANCE MANPOWER			X	X				
	1.1.3	OTHER UNIT-LEVEL MANPOWER (Specify in Remarks)			X	X				
	1.2	UNIT OPERATIONS (SYSTEM LEVEL COST ONLY)			X	X				
	1.2.1	OPERATING MATERIAL			X	X				
	1.2.1.1	ENERGY (Fuel; Petroleum, Oil, and Lubricants (POL); Electricity)			X	X				
	1.2.1.2	TRAINING MUNITIONS/EXPENDABLE STORES			X	X				
	1.2.1.3	OTHER OPERATING MATERIAL (Specify in Remarks)			X	X				
	1.2.2	SUPPORT SERVICES (INCLUDING NON-MAINTENANCE FSRs)			X	X				
	1.2.3	TEMPORARY DUTY			X	X				
	1.3	MAINTENANCE			X	X				
	1.3.1	OVERHAUL OF END ITEMS			X	X				
	1.3.1.1	SCHEDULED OVERHAUL			X	X				
	1.3.1.1.1	VEHICLE/PLATFORM OVERHAUL			X	X				
	1.3.1.1.2	PROPULSION OVERHAUL			X	N/A				
	1.3.1.1.3	OTHER OVERHAUL			X	X				
	1.3.1.2	UNSCHEDULED OVERHAUL			X	X				
	1.3.1.2.1	VEHICLE/PLATFORM OVERHAUL			X	X				
	1.3.1.2.2	PROPULSION OVERHAUL			X	N/A				
	1.3.1.2.3	OTHER OVERHAUL			X	X				
	1.3.2	DEPOT LEVEL REPARABLES (DLR) / REPAIR OF REPARABLES (ROR)			X	X				
	1.3.2.1	DLR #1			X	X				
	1.3.2.2	DLR #2			X	X				
	1.3.2.3	Other DLR (Specify in Remarks)			X	X				
	1.3.3	CONSUMABLES AND REPAIR PARTS			X	X				
	1.3.4	OTHER MAINTENANCE SERVICES (INCLUDING P)			X	X				
	1.3.4.1	O-LEVEL MAINTENANCE SERVICES			X	X				
	1.3.4.2	I-LEVEL MAINTENANCE SERVICES			X	X				
	1.3.4.3	DEPOT LEVEL MAINTENANCE SERVICES			X	X				
	1.3.5	PACKING, HANDLING, SHIPPING AND TRANSPORT			X	X				
	1.4	SUSTAINING SUPPORT (SYSTEM LEVEL COST ONLY)			X	X				
	1.4.1	SYSTEM SPECIFIC TRAINING			X	X				
	1.4.1.1	OPERATOR TRAINING			X	X				
	1.4.1.2	MAINTENANCE TRAINING			X	X				
	1.4.1.3	OTHER TRAINING (Specify in Remarks)			X	X				

Sustainment Cost Element Structure

Elements with no effort marked as "N/A"

Add lower level elements where more detail is needed

Separate 1921-S reports required for specific elements to gain visibility into labor hours, overhead, material dollars, and direct-reporting subcontractors



# Example: Contractor Sustainment CSDR Plan (2 of 3)

OSD CAPE

Sustainment  
Cost  
Element  
Structure

11. WBS ELEMENT CODE		12. WBS REPORTING ELEMENTS	13. REPORTS REQUIRED (X if applicable)					
a. PROGRAM/ CONTRACT/ SUBCONTRACT	b. CONTRACT/ SUBCONTRACT		DD 1921-3 (CBDR): <input checked="" type="checkbox"/>					
			a. CWBS DICTIONARY	b. DD 1921 (CDSR)	c. DD 1921-1 (FCHR)	d. DD 1921-2 (PCR)	e. DD 1921-4 (CSR)	f. SRDR FORMATS
	1.4.2	SUPPORT EQUIPMENT REPLACEMENT	X	X				
	1.4.3	SUSTAINING/SYSTEMS ENGINEERING	X	X				
	1.4.3.1	RELIABILITY AND MAINTAINABILITY ENGINEERING	X	X				
	1.4.3.2	LOGISTICS ENGINEERING (LSA updates, logistics analysis)	X	X				
	1.4.3.3	SUPPLY ANALYSIS EFFORTS	X	X				
	1.4.3.4	SAFETY/HUMAN SYSTEMS INTEGRATION ENGINEERING	X	X				
	1.4.3.5	AFFORDABILITY ENGINEERING	X	X				
	1.4.3.6	OBSOLESCENCE ENGINEERING	X	X				
	1.4.3.7	AVAILABILITY MANAGEMENT	X	X				
	1.4.3.8	PRODUCT ENGINEERING SUPPORT	X	X				
	1.4.3.9	INFORMATION ASSURANCE	X	X				
	1.4.3.10	CONFIGURATION MANAGEMENT	X	X				
	1.4.3.11	SYSTEM PERFORMANCE ANALYSIS	X	X				
	1.4.3.12	SUPPLY	X	X				
	1.4.3.13	DATA ANALYSIS	X	X				
	1.4.3.14	PHYSICAL SECURITY	X	X				
	1.4.4	PROGRAM MANAGEMENT	X	X				
	1.4.4.1	CONTRACTOR LOGISTICS SUPPORT (CLS) MANAGEMENT	X	X				
	1.4.4.2	CLS SUPPLY MANAGEMENT	X	X				
	1.4.4.3	FINANCIAL/SCHEDULE PLANNING AND REPORTING	X	X				
	1.4.4.4	TRANSITION TO LEAD SERVICE	X	X				
	1.4.4.5	QUALITY ASSURANCE (Program Level)	X	X				
	1.4.4.6	ADMINISTRATIVE SECURITY	X	X				
	1.4.4.7	TRANSITION TO PERFORMANCE BASED LOGISTICS (PBL)	X	N/A				
	1.4.4.8	RISK MITIGATION	X	X				
	1.4.5	INFORMATION SYSTEMS	X	X				
	1.4.5.1	TECH REFRESH	X	X				
	1.4.5.2	LICENSE FEES	X	X				
	1.4.5.3	MAINTENANCE	X	X				
	1.4.6	DATA AND TECHNICAL PUBLICATIONS	X	X				
	1.4.7	SIMULATOR OPERATIONS	X	N/A				
	1.4.8	OTHER SUSTAINING SUPPORT (Specify in Remarks)	X	X				
	1.5	CONTINUING SYSTEM IMPROVEMENTS	X	X				
	1.5.1	HARDWARE MODIFICATIONS OR MODERNIZATION	X	N/A				
	1.5.2	SOFTWARE MAINTENANCE OR MODIFICATION	X	X				
	1.6	INSTALLATION AND PERSONNEL SUPPORT (System Level Only)	X	X				
		Subtotal Cost		X				
		Reporting Contractor G&A		X				
		Reporting Contractor Undistributed Budget		X				
		Reporting Contractor Management Reserve		X				
		Reporting Contractor FCCM		X				
		Total Cost		X				
		Reporting Contractor Profit/Loss or Fee		X				
		Total Price		X				

Lower level WBS elements rolled up when N/A:  
 1.4.7 Simulator Operations  
 1.4.7.1 Simulator Operations HW Support (N/A)  
 1.4.7.2 Simulator Operations Manpower (N/A)  
 1.4.7.3 Simulator Tech Refresh (N/A)

Lower level WBS elements rolled up when N/A:  
 1.5.1 Hardware Modifications or Modernization  
 1.5.1.1 Mod Kit Development (N/A)  
 1.5.1.2 Mod Kit Procurement (N/A)  
 1.5.1.3 Mod Kit Initial Spares (N/A)  
 1.5.1.4 Mod Kit Installation (N/A)



# Example: Contractor Sustainment CSDR Plan (3 of 3)

CSD CAPE

14. CSDR SUBMISSION DATES				
a. SUBMISSION	b. FORM(S)	c. EVENT	d. AS OF DATE (YYYYMMDD)	e. DUE DATE (YYYYMMDD)
1	CWBS Dictionary	CWBS Dictionary - Submitted with First Cost Report	20130930	20131130
2	1921, 1921-S	Interim Report #1	20130930	20131130
3	1921, 1921-S	Interim Report #2	20140930	20141130
4	1921, 1921-S	Interim Report #3	20150930	20151130
5	1921, 1921-S	Interim Report #4	20160930	20161130
6	1921, 1921-S	Final Cumulative Report when 95% of contract costs incurred	20170930	20171130

15. REMARKS
<p>1. Describe significant accounting changes from previous accounting period in the Remarks section of the reports, if applicable.</p> <p>2. DD Form 1921-3 Contractor Business Data Report:</p> <p>a. The Contractor Business Data Report is prepared by and for the business entity (e.g., business unit, segment, or site) responsible for submitting the Forward Pricing Rate Proposal (FPRP) representing the basis for Forward Pricing Rate Agreement (FPRA) negotiations with the government.</p> <p>b. Reports are submitted annually at the end of the contractor's fiscal year.</p> <p>c. Data for Future Years should be reflective of the number of years contained in the most current document, i.e., the FPRP or the FPRA. If the document applies to more than three future years, attach additional future year sheets as required. In the absence of these documents, estimates should be provided for three future years.</p>

DD FORM 2794 (PAGE 2), MAY 2011	PREVIOUS EDITION IS OBSOLETE
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# Example: Collecting Sustainment Costs with DD Form 1921 (2 of 2)

1.4	SUSTAINING SUPPORT (SYSTEM LEVEL COST ONLY)								
1.4.1	SYSTEM SPECIFIC TRAINING								
1.4.1.1	OPERATOR TRAINING								
1.4.1.2	MAINTENANCE TRAINING								
1.4.1.3	OTHER TRAINING (Specify in Remarks)								
1.4.2	SUPPORT EQUIPMENT REPLACEMENT								
1.4.3	SUSTAINING/SYSTEMS ENGINEERING								
1.4.3.1	RELIABILITY AND MAINTAINABILITY ENGINEERING								
1.4.3.2	LOGISTICS ENGINEERING (LSA updates, logistics analysis)								
1.4.3.3	SUPPLY ANALYSIS EFFORTS								
1.4.3.4	SAFETY/HUMAN SYSTEMS INTEGRATION ENGINEERING								
1.4.3.5	AFFORDABILITY ENGINEERING								
1.4.3.6	OBSOLESCENCE ENGINEERING								
1.4.3.7	AVAILABILITY MANAGEMENT								
1.4.3.8	PRODUCT ENGINEERING SUPPORT								
1.4.3.9	INFORMATION ASSURANCE								
1.4.3.10	CONFIGURATION MANAGEMENT								
1.4.3.11	SYSTEM PERFORMANCE ANALYSIS								
1.4.3.12	SUPPLY								
1.4.3.13	DATA ANALYSIS								
1.4.3.14	PHYSICAL SECURITY								
1.4.4	PROGRAM MANAGEMENT								
1.4.4.1	CONTRACTOR LOGISTICS SUPPORT (CLS) MANAGEMENT								
1.4.4.2	CLS SUPPLY MANAGEMENT								
1.4.4.3	FINANCIAL/SCHEDULE PLANNING AND REPORTING								
1.4.4.4	TRANSITION TO LEAD SERVICE								
1.4.4.5	QUALITY ASSURANCE (Program Level)								
1.4.4.6	ADMINISTRATIVE SECURITY								
1.4.4.7	TRANSITION TO PERFORMANCE BASED LOGISTICS (PBL)								
1.4.4.8	RISK MITIGATION								
1.4.5	INFORMATION SYSTEMS								
1.4.5.1	TECH REFRESH								
1.4.5.2	LICENSE FEES								
1.4.5.3	MAINTENANCE								
1.4.6	DATA AND TECHNICAL PUBLICATIONS								
1.4.7	SIMULATOR OPERATIONS								
1.4.8	OTHER SUSTAINING SUPPORT (Specify in Remarks)								
1.5	CONTINUING SYSTEM IMPROVEMENTS								
1.5.1	HARDWARE MODIFICATIONS OR MODERNIZATION								
1.5.2	SOFTWARE MAINTENANCE OR MODIFICATION								
1.6	INSTALLATION AND PERSONNEL SUPPORT (System Level Only)								
	Subtotal Cost								
	Reporting Contractor G&A								
	Reporting Contractor Undistributed Budget								
	Reporting Contractor Management Reserve								
	Reporting Contractor FCCM								
	Total Cost								
	Reporting Contractor Profit/Loss or Fee								
	Total Price								

Sustainment CES from CSDR Plan reported on DD Form 1921

Summary elements

22. REMARKS



# Example: Collecting Sustainment Costs with DD Form 1921-S

SECURITY CLASSIFICATION Unclassified

### SUSTAINMENT FUNCTIONAL COST-HOUR REPORT

DRAFT

The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. PROGRAM a. MDAP: b. PHASE:		2. PRIME MISSION PRODUCT		3. CONTRACTOR TYPE (X One) <input type="checkbox"/> PRIME / ASSOCIATE <input type="checkbox"/> DIRECT-REPORTING SUBCONTRACTOR		4. NAME/ADDRESS (Include Zip Code)	
5. APPROVED PLAN NUMBER		6. CUSTOMER (Direct-Reporting Subcontractor Use Only)				7. TYPE ACTION a. CONTRACT NO.: b. LATEST MODIFICATION:	
8. PERIOD OF PERFORMANCE a. START DATE (YYYYMMDD): b. END DATE (YYYYMMDD):		9. REPORT CYCLE <input type="checkbox"/> INITIAL <input type="checkbox"/> INTERIM <input type="checkbox"/> FINAL		10. SUBMISSION NUMBER		11. RESUBMISSION NUMBER	
13. NAME (Last, First, Middle Initial)		14. DEPARTMENT		15. TELEPHONE NO. (Include Area Code)		17. DATE PREPARED (YYYYMMDD)	
18. WBS ELEMENT CODE		19. WBS REPORTING ELEMENT		20. NUMBER OF UNITS a. TO DATE: b. AT COMPLETION:		PROCUREMENT O&M	

1921-S applies to individual WBS elements

SUSTAINMENT FUNCTIONAL DATA ELEMENTS	COSTS AND HOURS INCURRED TO DATE			COSTS AND HOURS INCURRED AT COMPLETION		
	A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
<b>ENGINEERING</b>						
(1) DIRECT ENGINEERING LABOR HOURS						
(2) DIRECT ENGINEERING LABOR DOLLARS						
(3) ENGINEERING OVERHEAD DOLLARS						
(4) TOTAL ENGINEERING DOLLARS						
<b>PROGRAM MANAGEMENT</b>						
(5) DIRECT PROGRAM MANAGEMENT LABOR HOURS						
(6) DIRECT PROGRAM MANAGEMENT LABOR DOLLARS						
(7) PROGRAM MANAGEMENT OVERHEAD DOLLARS						
(8) TOTAL PROGRAM MANAGEMENT DOLLARS						
<b>MAINTENANCE OPERATIONS</b>						
(9) DIRECT MAINTENANCE LABOR HOURS						
(10) DIRECT MAINTENANCE LABOR DOLLARS						
(11) DIRECT MAINTENANCE LABOR OVERHEAD DOLLARS						
(12) INDIRECT MAINTENANCE LABOR HOURS						
(13) INDIRECT MAINTENANCE LABOR DOLLARS						
(14) INDIRECT MAINTENANCE LABOR OVERHEAD DOLLARS						
(15) TOTAL MAINTENANCE OPERATIONS DOLLARS						
<b>MATERIALS</b>						
(16) RAW MATERIAL DOLLARS						
(17) PURCHASED PARTS DOLLARS						
(18) PURCHASED EQUIPMENT DOLLARS						
(19) MATERIAL HANDLING/OVERHEAD DOLLARS						
(20) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS						
(21) TOTAL MATERIAL DOLLARS						
<b>OTHER COSTS</b>						
(22) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)						
<b>SUMMARY</b>						
(23) TOTAL COST (Direct and Overhead)						

Proposed functional breakout for sustainment efforts

22. REMARKS



# Cost Reporting Discussion

OSD CAPE

- Does the proposed functional breakout for sustainment effort capture all elements of cost across all sustainment cost elements?
- Does your firm collect cost in a way such that costs can be reported out this way?
- Does the government need estimates at completion (EAC) for sustainment efforts?
- Does industry generate EACs for sustainment efforts?
- What challenges do you foresee?



# Supporting Data

OSD CAPE

- Sustainment cost data must be accompanied by other metrics in order to maximize usefulness. E.g.,
  - Number of flying hours or operational hours represented by data
  - Number of systems/AC supported
    - For aircraft specify PAA, TAI, Engines
    - For space specify payloads, number of satellites and number of satellites per constellation
  - For any depot events identify number of inductions, separate types of systems (e.g., airframe vs. engine)
  - For any repair or consumables events include
    - Repair Qty OR list of parts removed at LRU level, part NIIN, spare cost, repair cost
  - For weapons identify number of weapons tests
- The working group is currently brainstorming mechanisms to collect this data in a standard format and will coordinate with the Technical Data Working Group



# Supporting Data Discussion

OSD CAPE

- What other supporting data/metrics are necessary for cost estimating purposes?
- What is the best format for collecting this information?
- What challenges do you foresee?



# Summary: Recommendation

OSD CAPE

- Recommendation:
  - Collect costs against sustainment CES using DD Forms 1921
  - Establish sustainment CES in policy
  - Establish 1921-S to collect functional breakout
  - Establish mechanism for collecting supporting data



# Proposed Way Forward

OSD CAPE

Update to Sustainment Reporting Policy  
Schedule (v1) as of 11/20/2013

\*\*\*DRAFT\*\*\*  
All dates up for discussion/subject to change

	2013		2014												2015																
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan				
Collect Data Requirements from Government Working Group Oct 30, 2013 - Dec 3, 2013	■																														
Solicit Industry & Government Feedback Dec 4, 2013 - Jan 10, 2014		■																													
Review Feedback Jan 10, 2014 - Feb 7, 2014			■																												
Finalize Changes with Government Working Group Feb 7, 2014 - Feb 21, 2014				■																											
Update DIDs and DD Forms* Feb 21, 2014 - Dec 31, 2014					■																										
Implement requirement on new contracts Jan 1, 2015 - Onwards																	■														
Receive data Jan 1, 2016 - Onwards																															

**Milestones:**

- 1 - Kickoff meeting (Oct 30, 2013)
- 2 - Initial Gov't recommendations presented at CSDR Focus Group (Dec 4, 2013)
- 3 - Final Gov't recommendations finalized, briefed out, and approved for policy update (Feb 21, 2014)
- 4 - DIDs and DD Forms approved (Dec 2015)
- 5 - First CSDR plan approved with requirement (Jan 2015)
- 6 - First cost report received (Jan 2016)

\*Historically, the process to update DIDs and DD Forms has taken 8 - 12 months  
 Formal Coordination: 30 - 60 days  
 Staffing through Washington Headquarters Services (WHS): 6 - 10 months

Send feedback to Angela Camp ([Angela.E.Camp.ctr@mail.mil](mailto:Angela.E.Camp.ctr@mail.mil))  
 NLT COB January 10, 2014

# BACKUP



# CAPE

COST ASSESSMENT & PROGRAM EVALUATION



# Why Sustainment Reporting?

OSD CAPE

- The 2008 update of DoDI 5000.02 mandates that reports of sustainment contractors' costs be collected within the CSDR system
  - ALL ACAT I contracts (including sustainment) over \$50M
  - On ACAT I programs, the sustainment contracts ... shall provide tailored cost reporting that can facilitate future cost estimating and price analysis. (pg. 57)
- WSARA 2009 – reiterates mandated O&S reporting for MDAPs
  - Section 304 of the Act:
    - Identify the original O&S cost estimates for selected MDAPs
    - Assess the actual O&S costs, the rate of growth and the cost drivers
  - Cannot be done without visibility into Contractor Sustainment
- Requirement for annual CAPE report to Congress on O&S costs
- Language in 2012 Defense Appropriation Bill
- AT&L Memo Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending
  - Affordability target (both average unit acquisition cost and average annual O&S cost per system) to be treated like a Key Performance Parameter
  - Updated target (both acquisition cost and O&S cost) is incorporated into ADM and APB for baseline establishment and monitoring

# Advantages of Proposed Implementation

OSD CAPE

- Gain necessary visibility into
  - Number of units
  - Profit/Loss or Fee
  - Labor hour and dollar data by functional category (engineering, manufacturing, tooling, quality control)
  - Overhead (engineering, manufacturing operations, material handling)
  - Material dollars and price of direct reporting subcontractors
- Tailor reporting level
  - Add lower level elements without having to modify DD Form
  - Roll-up elements where no effort is anticipated
- Realize efficiencies
  - Utilizes mature forms, DIDs, and planning and validation processes
  - Eliminates need for contractors and cost analysts to learn an additional DID and form
  - Streamlines policy updates and IT development and maintenance



# Proposed WBS Numbering

OSD CAPE

- Current 1921-4 index does not follow 1.0 total rollup protocol like MIL-STD-881C
- In order to work with existing validation tools, a total rollup WBS must be established
- Possible solutions provided on following slide

# Proposed WBS Numbering (continued)

OSD CAPE

## Option 1: WBS 0.0 Rollup

0.0	SUSTAINMENT EFFORT
1.0	UNIT-LEVEL MANPOWER (SYSTEM LEVEL COST ONLY)
2.0	UNIT OPERATIONS (SYSTEM LEVEL COST ONLY)
3.0	MAINTENANCE
4.0	SUSTAINING SUPPORT (SYSTEM LEVEL COST ONLY)
5.0	CONTINUING SYSTEM IMPROVEMENTS
6.0	INSTALLATION AND PERSONNEL SUPPORT (SYSTEM LEVEL COST ONLY)

## Option 2: WBS 1.0 Rollup

1.0	SUSTAINMENT EFFORT
1.1	UNIT-LEVEL MANPOWER (SYSTEM LEVEL COST ONLY)
1.2	UNIT OPERATIONS (SYSTEM LEVEL COST ONLY)
1.3	MAINTENANCE
1.4	SUSTAINING SUPPORT (SYSTEM LEVEL COST ONLY)
1.5	CONTINUING SYSTEM IMPROVEMENTS
1.6	INSTALLATION AND PERSONNEL SUPPORT (SYSTEM LEVEL COST ONLY)

## Option 3: WBS 2.0 Rollup

2.0	SUSTAINMENT EFFORT
2.1	UNIT-LEVEL MANPOWER (SYSTEM LEVEL COST ONLY)
2.2	UNIT OPERATIONS (SYSTEM LEVEL COST ONLY)
2.3	MAINTENANCE
2.4	SUSTAINING SUPPORT (SYSTEM LEVEL COST ONLY)
2.5	CONTINUING SYSTEM IMPROVEMENTS
2.6	INSTALLATION AND PERSONNEL SUPPORT (SYSTEM LEVEL COST ONLY)



# DD Form 1921-4

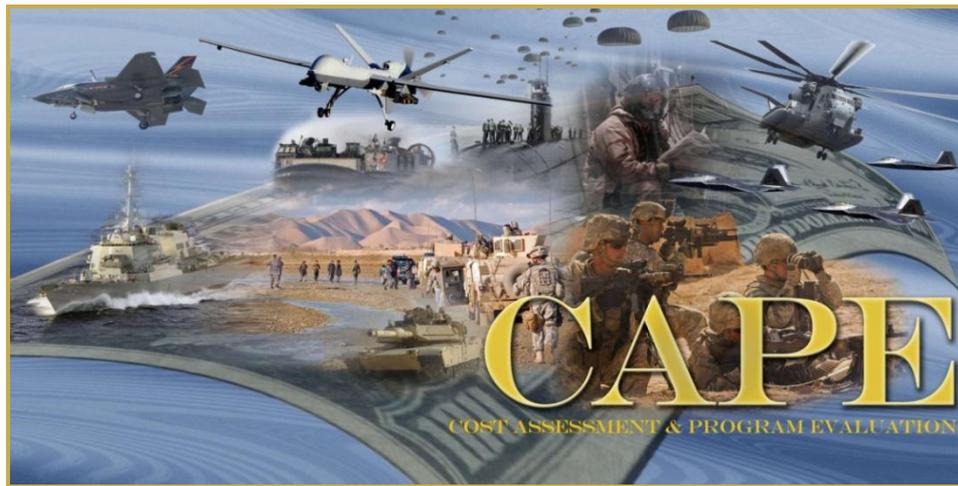
OSD CAPE

SECURITY CLASSIFICATION <u>Unclassified</u>		<b>CONTRACTOR SUSTAINMENT REPORT</b>					Form Approved OMB No. 0704-0188			
<p>The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate, Information Management Division, 4800 Mark Center Drive, Alexandria, VA 22350-3100 (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</b></p>										
<b>1. MAJOR PROGRAM</b> a. NAME:		<b>2. PRIME MISSION PRODUCT</b>		<b>3. REPORTING ORGANIZATION TYPE</b>		<b>4. NAME/ADDRESS</b> (Include Zip Code)		<b>5. APPROVED PLAN NUMBER</b>		
b. PHASE/MILESTONE <input type="checkbox"/> Pre-A <input type="checkbox"/> B <input type="checkbox"/> C-FRP <input type="checkbox"/> A <input type="checkbox"/> C-LRIP				<input type="checkbox"/> PRIME / ASSOCIATE CONTRACTOR <input type="checkbox"/> DIRECT-REPORTING SUBCONTRACTOR <input type="checkbox"/> GOVERNMENT		a. PERFORMING ORGANIZATION    b. DIVISION				
<b>6. CUSTOMER</b> (Direct-Reporting Subcontractor Use Only)				<b>7. TYPE ACTION</b>						
				a. CONTRACT NO.:    c. SOLICITATION NO.: b. LATEST MODIFICATION    d. NAME:		e. TASK ORDER/DELIVERY ORDER/LOT NO.:				
<b>8. PERIOD OF PERFORMANCE</b>		<b>9. REPORT CYCLE</b>		<b>10. SUBMISSION NUMBER</b>		<b>11. RESUBMISSION NUMBER</b>		<b>12. REPORT AS OF</b> (YYYYMMDD)		
a. START DATE (YYYYMMDD): b. END DATE (YYYYMMDD):		<input type="checkbox"/> INITIAL <input type="checkbox"/> INTERIM <input type="checkbox"/> FINAL								
<b>13. NAME</b> (Last, First, Middle Initial)		<b>14. DEPARTMENT</b>		<b>15. TELEPHONE NO.</b> (Include Area Code)		<b>16. EMAIL ADDRESS</b>		<b>17. DATE PREPARED</b> (YYYYMMDD)		
<b>18. WBS ELEMENT CODE</b>		<b>19. WBS REPORTING ELEMENT</b>		<b>20. QUANTITY OR TECHNICAL METRIC</b>		<b>21. APPROPRIATION</b>				
				<input type="checkbox"/> QUANTITY <input type="checkbox"/> TECHNICAL METRIC (Specify in Remarks) a. TO DATE    b. AT COMPLETION		<input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT <input type="checkbox"/> O&M				
<b>SUSTAINMENT COST ELEMENTS</b>				<b>COST INCURRED TO DATE</b> (thousands of U.S. Dollars)			<b>COST INCURRED AT COMPLETION</b> (thousands of U.S. Dollars)			<b>G. ELEMENT QUANTITY OR TECHNICAL METRIC</b>
				A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL	
(1) <b>1.0 UNIT-LEVEL MANPOWER (SYSTEM LEVEL COST ONLY)</b>										
(2) 1.1 OPERATIONS MANPOWER										
(3) 1.2 UNIT-LEVEL MAINTENANCE MANPOWER										
(4) 1.3 OTHER UNIT-LEVEL MANPOWER (Specify in Remarks)										
(5) <b>2.0 UNIT OPERATIONS (SYSTEM LEVEL COST ONLY)</b>										
(6) 2.1 OPERATING MATERIAL										
(7) 2.1.1 ENERGY (Fuel; Petroleum, Oil, and Lubricants (POL); Electricity)										
(8) 2.1.2 TRAINING MUNITIONS/EXPENDABLE STORES										
(9) 2.1.3 OTHER OPERATING MATERIAL (Specify in Remarks)										
(10) 2.2 SUPPORT SERVICES (INCLUDING NON-MAINTENANCE FSRs)										
(11) 2.3 TEMPORARY DUTY										
(12) <b>3.0 MAINTENANCE</b>										
(13) 3.1 OVERHAUL OF END ITEMS										
(14) 3.1.1 SCHEDULED OVERHAUL										
(15) 3.1.1.1 VEHICLE/PLATFORM OVERHAUL										
(16) 3.1.1.2 PROPULSION OVERHAUL										
(17) 3.1.1.3 OTHER OVERHAUL										
(18) 3.1.2 UNSCHEDULED OVERHAUL										
(19) 3.1.2.1 VEHICLE/PLATFORM OVERHAUL										
(20) 3.1.2.2 PROPULSION OVERHAUL										
(21) 3.1.2.3 OTHER OVERHAUL										
(22) 3.2 DEPOT LEVEL REPARABLES (DLR) / REPAIR OF REPARABLES (ROR)										
(23) 3.3 CONSUMABLES AND REPAIR PARTS										
(24) 3.4 OTHER MAINTENANCE SERVICES (INCLUDING FSRs) (Specify in Remarks)										
(25) 3.4.1 O-LEVEL MAINTENANCE SERVICES										
(26) 3.4.2 I-LEVEL MAINTENANCE SERVICES										
(27) 3.4.3 DEPOT LEVEL MAINTENANCE SERVICES										
(28) 3.5 PACKING, HANDLING, SHIPPING, AND TRANSPORTATION (PHS&T)										



# Wild Card CSDR Reporting

December 4, 2013



Rob Currie

Defense Cost and Resource Center



# Background

OSD CAPE

- The Government's requirement for required reports and due dates are established prior to contract award on every CAPE-approved CSDR Contract Plan.
- Common reporting frequencies used include:
  - Development Contracts
    - Report major technical event (e.g., CDR, PDR, First Flight)
    - Annual Reports over contract period of performance
  - Production Contracts
    - Interim Report
    - Final Report (Upon Completion of Deliveries)
  - Operations and Support Contracts
    - Annual Reports
- Unscheduled assessments of KPP affordability targets or unit cost forecasts require the latest "actuals" from industry.



# What is Wild Card CSDR Reporting

OSD CAPE

- A Wild Card CSDR submission is a CSDR submission event placed onto a CSDR Plan that provides a means for OSD CAPE to obtain CSDR data on demand.
- Wild Card reports are designed to address the unpredictability of demand for a CAPE independent cost assessment on a program.
- Wild Card reports are not intended to replace traditional annual or event-driven submission events.
- Wild Card reports can be applied to contracts in any phase, however, the focus will be development and high-risk, high-technical-interest contracts.



# Implementation

OSD CAPE

- One to two Wild Card CSDR Submissions will be added to DD Form 2794 Block 14 (CSDR Submission Dates) on CSDR Contract and Subcontract Plans for development and high-risk, high-technical-interest contracts.
- If CAPE needs data and the previously accepted CSDRs are deemed “not current enough,” CAPE will exercise a Wild Card Report.
- Note: There may be instances where Wild Card reports are included in Submission Events but never exercised.

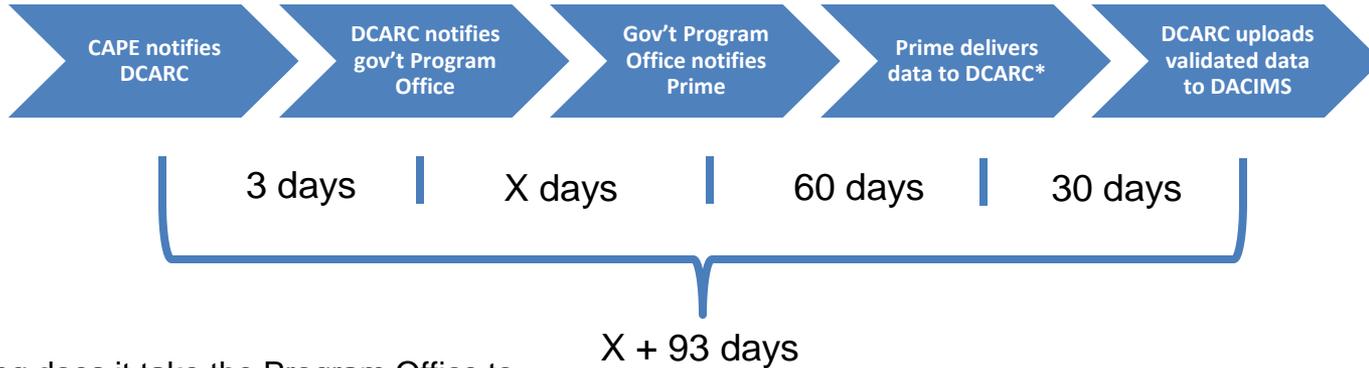




# Timeline

OSD CAPE

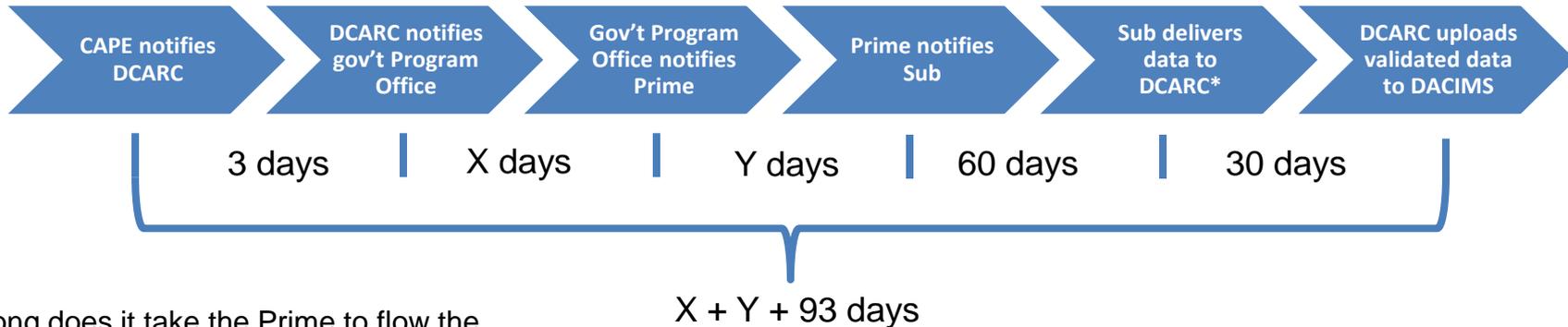
## Prime Contractor Wild Card Report



\*Pre-validated data available to cost community to use at own discretion

X - How long does it take the Program Office to flow the requirement to the Prime Contractor?

## Sub Contractor Wild Card Report



Y - How long does it take the Prime to flow the requirement to the Sub?



# Status

OSD CAPE

- Several pilot programs are implementing Wild Card reporting today.
- Full implementation to commence on all new contracts.



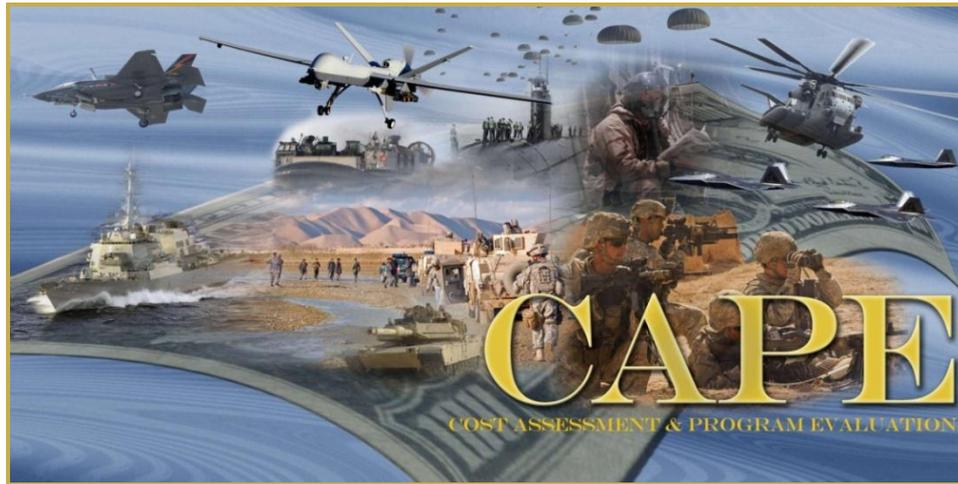
# Questions for Discussion

OSD CAPE

- Timing
  - Is 60 days sufficient time for industry to prepare a Wild Card report?
  - What requirements of the submission could be streamlined/eliminated to speed up report delivery?
- Implementation
  - How should DCARC communicate the decision to exercise a Wild Card report to the Program Office and Prime Contractor (e.g., official memo from DCARC Director? Date change in Submit-Review website, etc.)?
- Prime/Sub relationships
  - What impact will Wild Card reporting have on prime contractors who have subcontractors?
  - What impact will Wild Card reporting have on direct-reporting subcontractors?
- Price
  - How will the Wild Card Reports be priced by industry and billed to the MDAP Program Office?
  - If a Wild Card Report is not exercised, would the government be able to recoup the costs from industry?

# Contract Work Breakdown Structure Dictionary

December 4, 2013



Emily M. Beltramo

Defense Cost and Resource Center



# Contract Work Breakdown Structure Dictionary

OSD CAPE

- Current Contract Work Breakdown Structure (CWBS) Dictionary DID requirements
- Anticipated changes to the next CWBS Dictionary DID
- Discussion



# 2011 CWBS Dictionary DID

OSD CAPE

- Currently, the CWBS Dictionary provides definitions unique to the firm's effort that describe technical, cost, and work content for each contract WBS element on the CSDR plan
  - Technical definitions include what the item is, what it does within the system, and how the item is physically defined for all hardware WBS elements
  - Cost content definitions include explanations of recurring versus nonrecurring efforts, functional cost element inclusion, and purchased versus made in-house decisions. The description of the cost content must also include characterizations by functional category (i.e., engineering, tooling, quality control, and manufacturing) as appropriate
  - Work content definitions include descriptions of the process and activities used to design, produce or sustain the item, and whether work is being done by the contractor or a supplier/subcontractor
- The CWBS Dictionary must be resubmitted with the next affected reports if changes occur



# Changes for Next CWBS Dictionary DID: Technical Definitions

OSD CAPE

- 1) Remove requirement to provide technical definitions
  - Other DIDs serve to collect technical data at a greater level of detail
  - Focusing solely on cost and work definitions will improve the quality and level of detail of these definitions
  - Reporting entities will be expected to provide more details about their cost and work definitions
    - Often, dictionaries will provide generic definitions for all hardware WBS elements (e.g., “includes the material and labor the manufacture the [insert WBS element name]”)
    - Cursory definitions that do not clearly state the functional and nonrecurring/recurring cost types, processes, and contractor/supplier breakout will not be accepted



# Example of Acceptable Cost/Work Definition

OSD CAPE

- An acceptable cost/work definition is . . .

**ENGINEERING:** Tasks include nonrecurring and recurring environmental control subsystem analysis, engineering design, and preparation and maintenance of procurement specifications. Also included is liaison with the customer, preparation of layouts, design drawings, advance material requests and other related data required for component and system design of the environmental control subsystem; release of these drawings and data; functional system integration, including preparation and approval of test procedures, test data analysis, and management/coordination of subcontractor design, development, test and fabrication programs.

**MANUFACTURING:** Tasks include fabrication and processing of detail parts and subassemblies, subassembly checkout, and manufacturing support.

**MANUFACTURING ENGINEERING:** Tasks include nonrecurring planning, design and fabrication of all tooling and special test equipment required to fabricate detail parts, subassemblies, equipment mounting and masters for coordination of subcontractor/vendor tooling. Also included is numeric design support and preparation of numeric control machining data.

**QUALITY ASSURANCE:** Tasks include Quality Control and Inspection effort associated with fabrication of tooling, parts fabrication and subassembly. Includes vendor surveillance and allocated receiving inspection of parts and material.

**MATERIAL:** Tasks include the procurement, management and disbursement of high value items, including the cooling lines, provided by XYZ Subcontractor (City, State), production material; supplier efforts for design, development and fabrication of tooling and qualification tests.

# Changes for Next CWBS Dictionary DID: Cost/Work Definitions

OSD CAPE

- 2) Require reporting entity to list name, location, dollar value, and items purchased from suppliers/subcontractors that breach a dollar threshold TBD
  - Tightening up requirement would provide more insight to cost analysts
  - *How difficult would it be to provide breakout of suppliers and items purchased?*
  - *What should the threshold be for breaking out suppliers?*
- *Are there any additional requirements that should be included for cost or work definitions?*



## Possible Change for Next CWBS Dictionary DID: Submission Frequency

OSD CAPE

- 3) Require submission of CWBS Dictionary with every Contractor Cost Data Report (CCDR) submission
  - The current requirement to update and submit the dictionary if changes occur is difficult to enforce
  - Requiring resubmission irrespective of changes will necessitate the dictionary to be a living document
  - The dictionary will be validated against each CCDR submission to ensure consistency (e.g., the dictionary has definitions for all WBS elements with costs)



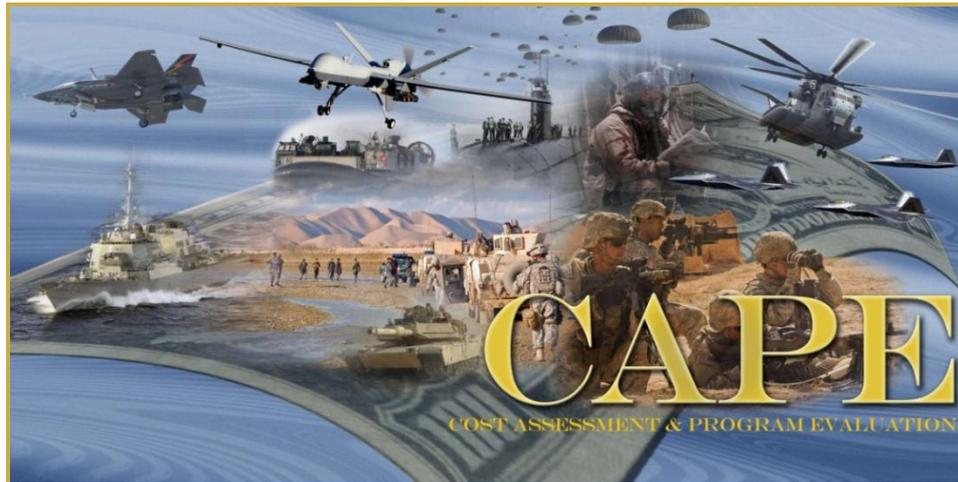
# Summary

OSD CAPE

- The next CWBS Dictionary DID will:
  - Update definition requirements
    - No technical descriptions
    - Greater focus on cost and work descriptions
  - Possibly change required submission frequency to ensure necessary updates are made

# Unit Reporting

December 4, 2013



James Parnham  
Defense Cost and Resource Center



# Background/Issues

OSD CAPE

1. Parent-level units vs. child-level units
2. Shipsets vs. Actual units
3. Number of units to date
4. Delivered vs. internal use units on development contracts



# Background/Issues

OSD CAPE

1. Parent-level units vs. child-level units
  - The DIDs require units to be reported for all hardware elements
  - This results in reporting dissimilar units together at a parent level WBS
    - Summing units at a parent level WBS element when units are not being integrated may cause a polluted unit count



# Position

OSD CAPE

- Require units to be reported at the lowest applicable WBS element level
- Require integrated units to be reported at parent level WBS elements, only where applicable
- An explanation of integrated or non-integrated units will be required in the Remarks section of the report



# Unit Example - Integration

OSD CAPE

<b>EXAMPLE 1</b>		Total Units Reported
1.1.1	(PPP) Modules	30
1.1.1.1	(SP) Module	60
1.1.1.2	(SPIO) Module	90
1.1.1.3	(IP) Module	30
1.1.1.4	(GPP) Module	30
1.1.1.5	(GPIO) Module	120
1.1.1.6	(DS) Module	60
1.1.1.7	(FCS) Module	60
1.1.1.8	(PPP) Fwd Back Planes	30
1.1.1.9	Module Integration, Assembly, Test, and Checkout	30

Remarks - 30 Total modules Integrated at 1.1.1 (PPP) Modules

2 (SP) Module per (PPP) Module

3 (SPIO) Module per (PPP) Module

1 (IP) Module per (PPP) Module

1 (GPP) Module per (PPP) Module

4 (GPIO) Module per (PPP) Module

2 (DS) Module per (PPP) Module

2 (FCS) Module per (PPP) Module

1 (PPP) Fwd Back Planes per (PPP) Module



# Unit Example – No Integration

OSD CAPE

<b>EXAMPLE 2</b>		Total Units Reported
1.1.1	(PPP) Modules	See Remarks
1.1.1.1	(SP) Module	65
1.1.1.2	(SPIO) Module	92
1.1.1.3	(IP) Module	28
1.1.1.4	(GPP) Module	26
1.1.1.5	(GPIO) Module	117
1.1.1.6	(DS) Module	62
1.1.1.7	(FCS) Module	68
1.1.1.8	(PPP) Fwd Back Planes	31
1.1.1.9	Module Integration, Assembly, Test, and Checkout	0

Remarks - Units not integrated at parent level; delivered as individual units at child level



# Background/Issues

OSD CAPE

## 2. Shipset vs. Actual units

- The DIDs do not specify whether to report units in shipsets or actual units
- Hardware items identified on a CSDR Plan are often made up of several subsystem hardware items not identified on the CSDR WBS
- Knowing what subsystems comprise these hardware items is beneficial to an analyst



# Position

OSD CAPE

- Default will be to require reporting by actual hardware units
- Explanation of actual units will be provided in Remarks section
- Permit reporting by shipset so long as explanation of what comprises a shipset is provided in the Remarks section



# Unit Reporting- Hardware Units

OSD CAPE

EXAMPLE 3		Total Units Reported
1.2	F-15 Cockpit	18
1.2.1	Display Radio Antennas	72
1.2.2	Communication Systems Control Group	126
1.2.3	GPS SATCOM/Antenna	0
1.2.4	Embedded GPS	36
1.2.5	Flight Computer	18
1.2.6	Mission Computer	18
1.2.7	Multi-Function Display	36
1.2.8	Pointing Device	36
1.2.9	Control Monitor Panel	18
1.2.10	Data Concentrator Unit	36
1.2.11	Data Transfer System	54
1.2.12	Notch Filter	36
1.2.13	Control Display Unit	180
1.2.14	Emergency Panel	18
1.2.15	Armament Control Indicator	18
1.2.16	F-15 Common Cockpit Software	0
1.2.17	F-15 COCKPIT Integration, Assembly, Test and Checkout	18

1.2.1 - Each shipset includes Qty 2 UHF/VHF Antennas + Qty 2 Logic Control Units (LCU) ( $4 * 18 = 72$ )

1.2.2 - Each Shipset consists of 1 Audio Management Computer (AMC), 1 Operator Control Panel (OCP), 3 Communication System Control (CSC), 1 Interconnect Box and 1 Relay Assembly ( $7 * 18 = 126$ )

1.2.4 - Qty 2 EGI's per shipset ( $2 * 18 = 36$ )

1.2.7 - Qty 2 Multi-Function Displays per shipset ( $2 * 18 = 36$ )

1.2.8 - Qty 2 Pointing Devices per shipset ( $2 * 18 = 36$ )

1.2.10 - Qty 2 Data Concentrator Units per shipset ( $2 * 18 = 36$ )

1.2.11 - Each Shipset includes Qty 1 Data Transfer System (DTS) and 2 PCMCIA Cards ( $3 * 18 = 54$ )

1.2.12 - Qty 2 Notch Filters per shipset ( $2 * 18 = 36$ )

1.2.13 - Each Shipset includes 2 Control Display Units (CDU), 2 Cables and 6 Blank Panels ( $10 * 18 = 180$ )



# Unit Reporting - Shipsets

OSD CAPE

EXAMPLE 4		Total Units Reported
1.2	F-15 Cockpit	18
1.2.1	Display Radio Antennas	18
1.2.2	Communication Systems Control Group	18
1.2.3	GPS SATCOM/Antenna	18
1.2.4	Embedded GPS	18
1.2.5	Flight Computer	18
1.2.6	Mission Computer	18
1.2.7	Multi-Function Display	18
1.2.8	Pointing Device	18
1.2.9	Control Monitor Panel	18
1.2.10	Data Concentrator Unit	18
1.2.11	Data Transfer System	18
1.2.12	Notch Filter	18
1.2.13	Control Display Unit	18
1.2.14	Emergency Panel	18
1.2.15	Armament Control Indicator	18
1.2.16	F-15 Common Cockpit Software	0
1.2.17	F-15 COCKPIT Integration, Assembly, Test and Checkout	18

1.2.1 - Each shipset includes Qty 2 UHF/VHF Antennas + Qty 2 Logic Control Units (LCU) ( $4 * 18 = 72$ )

1.2.2 - Each Shipset consists of 1 Audio Management Computer (AMC), 1 Operator Control Panel (OCP), 3 Communication System Control (CSC), 1 Interconnect Box and 1 Relay Assembly ( $7 * 18 = 126$ )

1.2.4 - Qty 2 EGI's per shipset ( $2 * 18 = 36$ )

1.2.7 - Qty 2 Multi-Function Displays per shipset ( $2 * 18 = 36$ )

1.2.8 - Qty 2 Pointing Devices per shipset ( $2 * 18 = 36$ )

1.2.10 - Qty 2 Data Concentrator Units per shipset ( $2 * 18 = 36$ )

1.2.11 - Each Shipset includes Qty 1 Data Transfer System (DTS) and 2 PCMCIA Cards ( $3 * 18 = 54$ )

1.2.12 - Qty 2 Notch Filters per shipset ( $2 * 18 = 36$ )

1.2.13 - Each Shipset includes 2 Control Display Units (CDU), 2 Cables and 6 Blank Panels ( $10 * 18 = 180$ )



# Background/Issues

OSD CAPE

## 3. Number of units to date

- The DIDs suggest an EVMS-based approach to calculate number of units to date
  - Isolation of recurring labor and material costs to calculate number of units to date
- The contractor may use an alternative method if it is analytically based and consistently applied over time
- This means units to date are being reported as an algebraic number while holding no real significance



# Position

OSD CAPE

- Remove the requirement in the DID to report number of units to date
- Only require units at completion



# Background/Issues

OSD CAPE

4. Delivered vs. units for internal use on development contracts
  - The DIDs require two values to be reported: quantity delivered to the government (X) and quantity produced for internal use (Y)
  - Units are reported as X / Y
  - Units are not always an “apples to apples” comparison (e.g., units produced for internal use may not be identical units delivered to the government)
  - DID does not require comment to explain Unit X / Y reporting



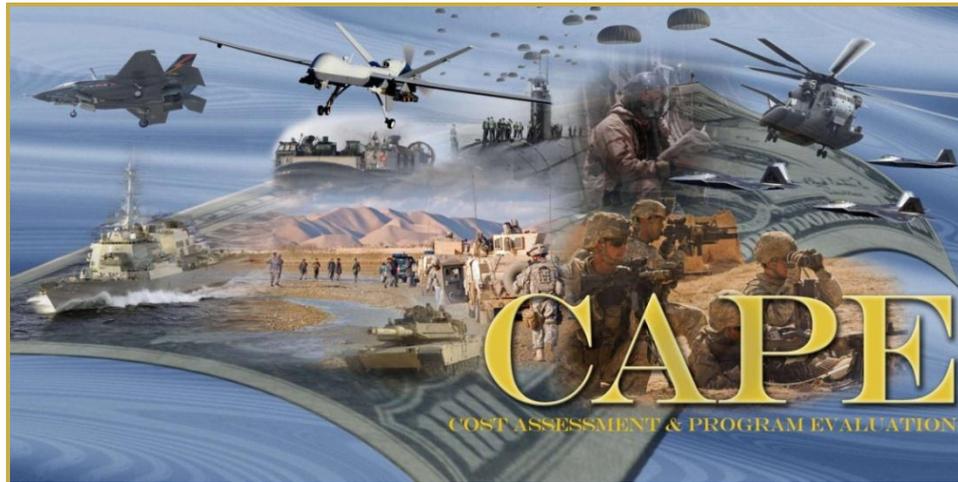
# Position

OSD CAPE

- Remove requirement to report delivered vs. internal units
  - Report total quantity, representative of the sum of both delivered and internal units
  - Provide explanation in the remarks section explaining delivered vs. internal units
  - CSDR plan revisions may be required to ensure no unit reporting pollution occurs

# Submitting CSDRs in XML

December 4, 2013



John Claude Kassab  
Defense Cost and Resource Center



# Agenda

OSD CAPE

- Current State of CSDR Formats
- Items Under Consideration
  - One or Multiple XML Files
  - XML Conversion Tools
- Technology Enhancements from XML
  - Built-in Parent-Child Relationships
  - Better Defined Remark Fields
  - Advanced Data Calculations for Submitters or Validators



# Current CSDR Submission Formats

OSD CAPE

- The 1921 series of forms are submitted via MS Excel primarily
  - One Excel file submitted for each type of CCDR (1921, -1, -2, -3)
- Contractor Reporting Structure Dictionaries and Indexes are submitted via MS Word or MS Excel
- MS Excel is error prone
  - Bad links
  - Improperly formatted
  - Inconsistencies between data repeated within and between files
  - Fields that can be calculated/ inherited are instead explicitly reported
    - Total = Recurring + Nonrecurring
    - Total Price = Total Cost + Fee
    - ETC
  - Data loss when converted to XML



# How Many XML Files

OSD CAPE

- Multiple Files, one for each CSDR type, submitted
  - 1921
  - 1921-1
  - 1921-2
  - 1921-3
  - Contractor Reporting Structure Dictionary
- OR**
- One stand alone file per submission
  - 1921, 1921-1, and 1921-2
  - 1921-3
  - Contractor Reporting Structure Dictionary



# CSDR XML Conversion Capability

OSD CAPE

- DCARC currently provides CSDR Planning and Execution Tool (cPET) desktop and web
  - cPET has the capability to generate XML schema compatible files for the CSDR submissions
- Currently, reporting entities are not required to use the conversion tool
- **Do CSDR data providers need additional functionality for XML Conversion? If so, what?**



# Other Potential Considerations

OSD CAPE

- Built in parent-child relationships
- All (potentially) required remarks/ required elements will have specific tags in the schema
- Advanced Data Calculations for Submitters or Validators

# Backup





# One XML File Pros

OSD CAPE

- Avoid inconsistencies
  - Metadata inputted once for all files
  - Less to fill out (avoid errors)
    - Number of units are shared between the 1921 and 1921-1
    - Total nonrecurring and recurring costs are the same from 1921 to 1921-1
    - Certain costs and hours are shared between the 1921-1 and 1921-2
    - Etc.
- Validate the whole submission easier



# Other Potential Considerations

OSD CAPE

- All (potentially) required remarks/ required elements will have specific tags in the schema
  - Breakout of Other Costs
  - Specification of Direct-Reporting Subcontractors
  - Target Cost, Target Fee, Share Ratio
  - Etc.
- Fields that can be calculated/ inherited will not be required to be reported directly (avoid errors!)
  - $Total = Recurring + Nonrecurring$
  - $Total Price = Total Cost + Fee$
  - Etc.
- Built in parent-child relationships
  - Will not need a CSDR plan to validate (at least the math)
  - Children elements can be more easily added



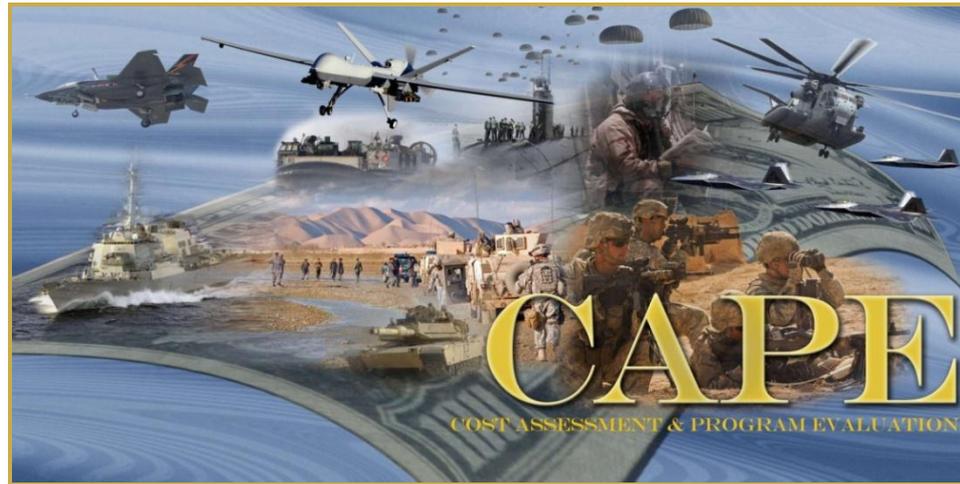
# CSDR XML Conversion Capability

OSD CAPE

- Future Additions
  - XML to MS Excel conversion **WITHIN** DACIMS and Submit-Review (Reviewers and users will still be able to view MS Excel files among other options)
  - No data loss due to conversion
    - MS Excel to XML loses remarks and any improperly formatted cells
    - XML to MS Excel has no data loss

# CSDR Planning for Indefinite Delivery/Indefinite Quantity (IDIQ) Contracts

December 4, 2013



Emily M. Beltramo

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# IDIQ Contracts

OSD CAPE

- Challenges with implementing CSDRs on IDIQ contracts
- CSDR implementation alternatives for IDIQ contracts
- Discussion



# Challenges with Implementing CSDRs on IDIQ Contracts

OSD CAPE

- Collecting CSDRs on IDIQ contracts has been a systemic issue
  - Program Offices treat task/delivery orders (TO/DOs) as individual contracts. Therefore, Program Offices only alert DCARC to those DOs that breach the reporting threshold
  - The precise items or services to be delivered are unknown
- The deficit of CSDRs on IDIQ contracts have created a lack of cost data in critical areas



# CSDRs for Future IDIQ Contracts

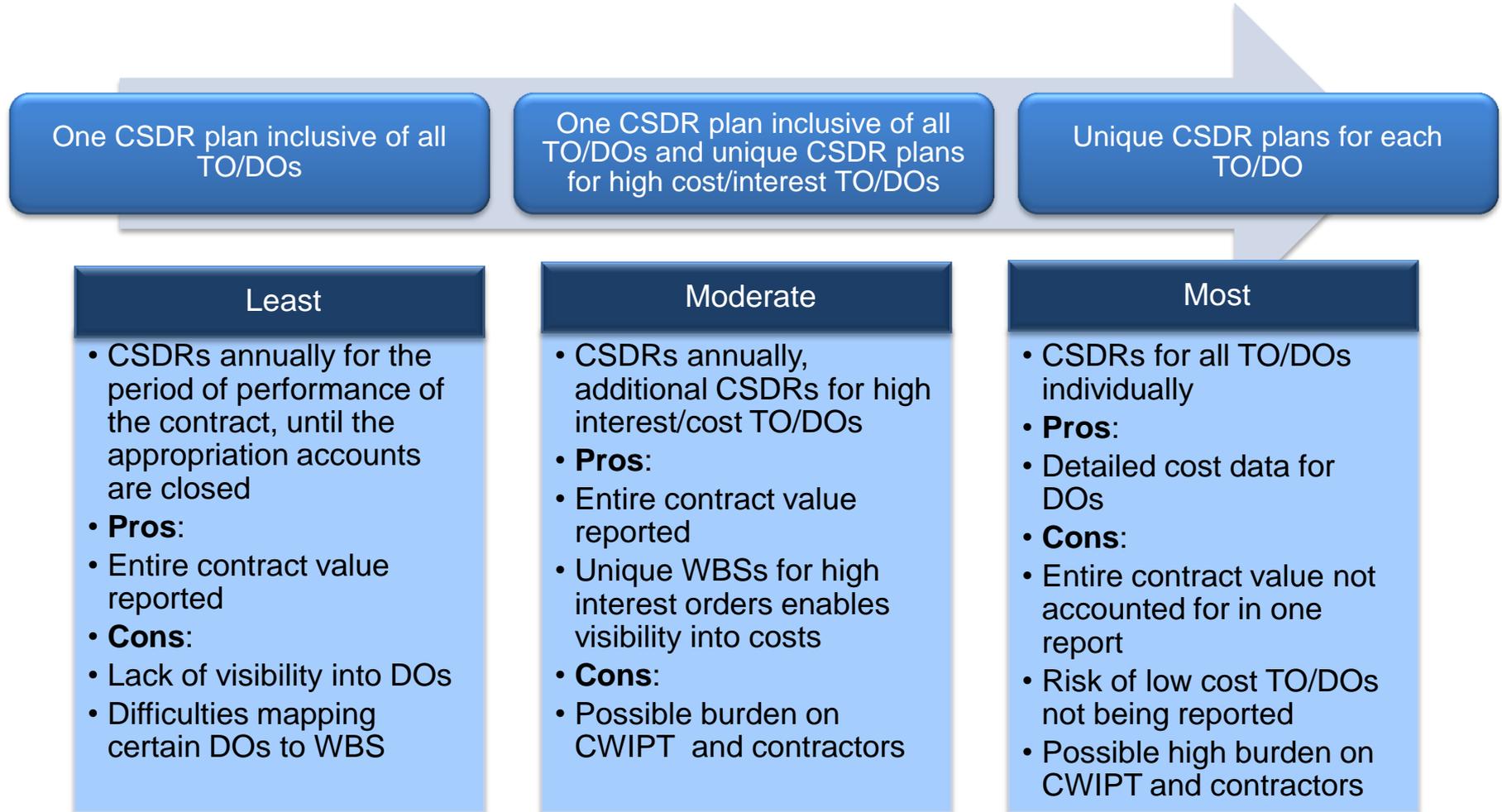
OSD CAPE

- CSDRs must capture total IDIQ contract value
- CSDR Plans will contain annual submission events for the period of performance of the contract, until the appropriation accounts are closed
- Separate CSDR plans will be created for task orders/delivery orders that are high cost/interest
  - If the TO/DO will maintain the same WBS as the CSDR capturing total value, the existing CSDR plan can be revised to add a submission event



# IDIQ Implementations and CSDR Burden for Industry & Government

OSD CAPE



All parties in the CWIPT must actively participate to impose the necessary CSDR requirements for IDIQ contracts



# Discussion

OSD CAPE

- What attributes should CSDR data on IDIQ contracts contain in order to serve the needs to the cost community?
- Is it beneficial to collect costs by TO/DO?
- Is data still usable if costs for all TO/DOs are reported against one WBS?

# BACKUP



# CAPE

COST ASSESSMENT & PROGRAM EVALUATION



# Example CSDR for Future IDIQ Contracts

OSD CAPE

- Work Breakdown Structure
  - The WBS will be planned in advance, based on the SOW/RFP
  - Unexpected TOs/DOs will require revisions to the CSDR plan
- Submission Events
  - Submission events will be set up to collect costs for all DOs annually, by appropriation type for the period of performance of the contract
  - If an appropriation type is not used, CSDRs will not need to be submitted

b. CONTRACT/ SUBCONTRACT	12. WBS REPORTING ELEMENTS
1.0	Missile X
1.1	Air Vehicle
1.1.1	Airframe
1.1.1.1	Airframe Integration, Assembly, Test and Checkout - Baseline (BL) Unique
1.1.1.2	Airframe Integration, Assembly, Test and Checkout - Extended Range (ER) Unique
1.1.1.3	Primary Structure - Body
1.1.1.3.1	Body components - Common
1.1.1.3.2	Body components - BL Unique
1.1.1.3.3	Body components - ER Unique
1.1.1.4	Secondary Structure - Aft Cover
1.1.1.4.1	Aft Cover - Common
1.1.1.4.2	Aft Cover - BL Unique
1.1.1.4.3	Aft Cover - ER Unique
1.1.1.5	Aero Structures
1.1.1.5.1	Inlet
1.1.1.5.1.1	Inlet - Common
1.1.1.5.1.2	Inlet - BL Unique
1.1.1.5.1.3	Inlet - ER Unique
1.1.1.5.2	Wings
1.1.1.5.3	Tail

14. CSDR SUBMISSION DATES				
a. SUBMISSION	b. FORM(S)	c. EVENT	d. AS OF DATE (YYYYMMDD)	e. DUE DATE (YYYYMMDD)
1	CWBS Dictionary	Initial CWBS Submission - IDIQ 5	20140930	20141130
2	1921, 1921-1	2014 Annual Report - RDT&E Appropriation	20140930	20141130
3	1921, 1921-1	2014 Annual Report - Procurement Appropriation	20140930	20141130
4	1921, 1921-1	2014 Annual Report - O&M Appropriation	20140930	20141130
5	1921, 1921-1	2015 Annual Report - RDT&E Appropriation	20150930	20151130
6	1921, 1921-1	2015 Annual Report - Procurement Appropriation	20150930	20151130
7	1921, 1921-1	2015 Annual Report - O&M Appropriation	20150930	20151130
8	1921, 1921-1	2016 Annual Report - RDT&E Appropriation	20160930	20161130
9	1921, 1921-1	2016 Annual Report - Procurement Appropriation	20160930	20161130
10	1921, 1921-1	2016 Annual Report - O&M Appropriation	20160930	20161130
11	1921, 1921-1	2017 Annual Report - RDT&E Appropriation	20170930	20171130
12	1921, 1921-1	2017 Annual Report - Procurement Appropriation	20170930	20171130
13	1921, 1921-1	2017 Annual Report - O&M Appropriation	20170930	20171130
14	1921, 1921-1	Final Report: 2018 Annual Report - RDT&E Appropriation	20180930	20181130
15	1921, 1921-1	Final Report: 2018 Annual Report - Procurement Appropriation	20180930	20181130
16	1921, 1921-1	Final Report: 2018 Annual Report - O&M Appropriation	20180930	20181130



# Options for High Interest Delivery Orders

OSD CAPE

- Particular delivery orders that contain high interest items may be reported to a lower level WBS using the following methods:
  - Creation of a new CSDR plan specific to the delivery order
  - Revision of the existing CSDR plan to add lower-level WBS elements and submission event for the specific DO
- The costs of the high interest delivery order must still be included in the annual CCDR



# IDIQ Implementations

OSD CAPE

## IDIQ Implementation

- CSDR required to capture the entire contract value, inclusive of all TO/DOs
- **Pros:** Entire contract value reported
- **Cons:** Lack of visibility into DOs  
Difficulties mapping certain DOs to WBS

- CSDRs required for particular DOs that are high cost or high interest
- **Pros:** Detailed cost data for DOs
- **Cons:** Entire contract value not reported  
Possible burden on CWIPT and contractors

- CSDR required to capture the entire contract value, inclusive of all DOs
- Additional CSDRs required to capture high interest DOs
- **Pros:** Entire contract value reported  
Detailed cost data for DOs
- **Cons:** Possible burden on CWIPT and contractors

## CSDR Plan

- One MIL-STD-881C WBS, broken out to provide additional detail based on expected DOs, for reporting of entire contract value

- Separate MIL-STD-881C WBS for each high interest DO

- Basic MIL-STD-881C WBS for all expected DOs
- Separate MIL-STD-881C WBSs for each high interest DO

## CSDR Submissions

- Annual submission events by appropriation type (RDT&E, Procurement, O&M) for period of performance of contract, to include all DOs

- Submission events are discrete and capture one delivery order

- Annual submission events capture entire contract costs
- Additional submission events capture costs of high interest/cost DOs

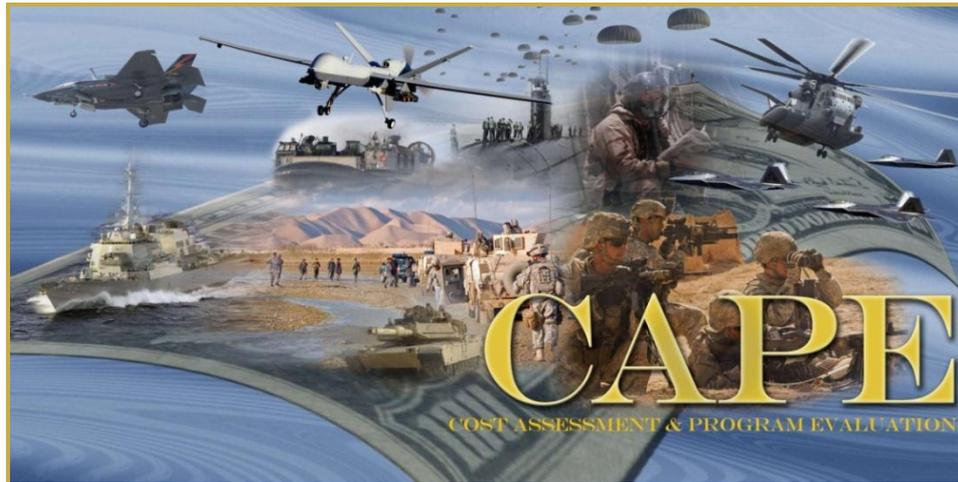
Annual CSDRs inclusive of all DOs

CSDRs for particular DOs

CSDRs annually and for particular DOs that breach threshold or are high interest

# Program Planning Module

December 4, 2013



Charlotte McIntosh  
Defense Cost and Resource Center



# History of Plan Development

OSD CAPE

- Plan development occurred within the eRooms:
  - Lack of standard file structure in “Working Files”
  - Lack of substantive programmatic and plan package information
  - Detailed access control features
  - Version control problems (files edited outside of eRooms)
  - Lengthy internal business process
  - Communication between DCARC and Program Office usually took place through email

# eRooms Interface

OSD CAPE

- Any user with access to the program can create a folder and upload documents

- Difficulty controlling folder structure, program and plan package information, and reviewer comments

**2010 MY2 MY8 Plans**  
a folder created by Michael Augustus on 22 Nov 06

Name
20100217_MH-605_PLAN_MY2.xls
20100302_MH-605_MY8_PROD_Plan.xls
LMCO H605 MY-2 DCARC RDT 4-5-2010_(f).xls
SAC Sierra MYVIII RDT.xls

access notification custom fields  
select all copy copy link mark read mark unread

**Comments**

**DCARC Comments** (Dan Knighton, DCARC (Contractor), 25 Mar 10 2:04pm)  
In both plans, section 15 needs some attention. Please refer to the 2794 instructions, pa We will also need a contract RDT created for each of these plans. When you do the RDT time.

If the LM plan has no subs, please show that in the RDT. Finally, the prior LM cockpit p

**Response to Comments** (Katrina Frink, USN NAVAIR 4.2 (Civ), 26 Mar 10 12:43pm)  
1) Both plans have been revised to include Section 15 notes including 1921-3 language.  
2) SAC MYVIII RDT is uploaded. I have contacted Lockheed for submission of MYII RDT.  
3) The Common Cockpit Follow-on Contract has different delivery schedules for both Ro

**What is the status of the MYII RDT?** (Dan Knighton, DCARC (Contractor), 16 Apr 10  
MYII RDT (Katrina Frink, USN NAVAIR 4.2 (Civ), 19 Apr 10 9:06am)  
The RDT has been uploaded for your review.



# Program Planning Objectives

OSD CAPE





# Program Planning Module

OSD CAPE

- Customized “home” screen based on user roles and program assignments:

## Programs

[Hide My Programs](#) [Search](#)

### Programs

Please select your program to begin. If your program does not appear, please search to find your program.

ACAT Category:  CSDR Compliance Group:  Earliest Target Date:  Service:  DCARC Analyst:  Action Required:

1 2 3

Name	ACAT Category	CSDR Compliance Group	Action Required	Earliest Target Date	Service	DCARC Analyst
<a href="#">AGM-88E AARGM - AGM-88E Advanced Anti-Radiation Guided Missile (AARGM) Program</a>	IC	B (not rated)	No	May 2, 2014	NAVY	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Kristen Wingrove, Robert Bailey
<a href="#">B-2 DMS : Defensive Management System</a>	ID	NA ●	No	September 30, 2013	AIR FORCE	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Sandra Enser
<a href="#">UCLASS (Unmanned Carrier-Launched Airborne Surveillance and Strike)</a>		NA (not rated)	No	August 30, 2013	DOD	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Sandra Enser
<a href="#">AMPV - Armored Multi-Purpose Vehicle</a>		NA (not rated)	No	July 31, 2013	ARMY	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Robert Currie
<a href="#">JAGM – Joint Air-to-Ground Missile</a>		NA (not rated)	No	October 12, 2012	ARMY	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey
<a href="#">V-22 - OSPREY Joint Advanced Vertical Lift Aircraft</a>	ID	C ●	Yes	June 2, 2008	NAVY	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Sandra Enser
<a href="#">AAG - Advanced Arresting Gear Program</a>	II	A ●	No		NAVY	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Sandra Enser
<a href="#">B-2 EHF SATCOM AND COMPUTER INCREMENT I – B-2 Advanced Extremely High Frequency SatCom Capability</a>	IC	B (not rated)	No		AIR FORCE	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Robert Currie
<a href="#">B-2 EHF SATCOM AND COMPUTER INCREMENT II – B-2 Advanced Extremely High Frequency SatCom Capability</a>	ID	NA (not rated)	No		AIR FORCE	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Robert Currie
<a href="#">B-2 RMP - B-2 Radar Modernization Program</a>	IC	C (not rated)	No		AIR FORCE	Angela Camp, Cathy Ferguson, Charlotte McIntosh, Robert Bailey, Robert Currie

1 2 3



# Organization

OSD CAPE

- All programs have the same view and file structure
- DCARC and Program Office users have customized insight into their “actions”
- All plan packages/tasks require the same information
- Plans are linked directly to the CSDR Submit-Review
- Organization of all required documents

# Plan Packages/Tasks

OSD CAPE

## Test



<b>Program Name</b>	Program Name
<b>ACAT Category</b>	ACAT Category
<b>CSDR Compliance Group</b>	CSDR Compliance Group
<b>Action Required</b>	N/A
<b>Earliest Target Date</b>	N/A
<b>Service</b>	Service
<b>Assigned DCARC Analyst</b>	Assigned DCARC Analyst
<a href="#">Edit</a>	

<b>Program Collaborator</b>	<b>Organization</b>	<b>Role</b>
Angela Camp	DCARC	DCARC Reviewer
Cathy Ferguson	DCARC	DCARC Reviewer
Robert Bailey	Contract Support for DCARC, employed by Technomics	DCARC Reviewer
Shevonne Stanley	NAVAIR	Program Collaborator

Add CSDR Plan Package

In Process

In Finalization

Approved Documentation

Archived Working Files

Plan Packages:

**Action Required:**
 Any
  Yes
  No

	Identifying Task	New/Revision	Action Required	Reporting Entity	Contract Number	Target Approval Date
<b>PROD</b>						
DCARC Production Plans	Collaboration	In Vote	Director Review	CAPE Review	Approved	
<a href="#">A-13-C</a>	Program Plan	New	No	DCARC	TBD	11/2/2013
<a href="#">A-13-C-1</a>	Prime Contract Plan	New	No	DCARC Inc.	TBD	11/2/2013

- **Plan Package** = A collection of program, contract, or subcontract plans that require DCARC and CAPE approval
- **Plan Task** = A single program, contract, or subcontract CSDR plan, as well as the accompanying required documentation



# Information

OSD CAPE

- Programmatic information at the top level
- Insight into plan package and individual plan details
- Compliance reports and late submissions
- Generation of plan-based metrics



# Adding/Requesting Plan Tasks

OSD CAPE

- Program Offices can request a plan task, and DCARC Analysts have final approval

## Add CSDR Plan Task

Input the following information to add a CSDR plan task.

<b>CSDR Plan Package:</b>	DCARC Production Plans	<b>Plan Task Description:</b>	
<b>Identifying Task:</b>	Prime Contract Plan		
<b>Plan Type:</b>	<input type="radio"/> Program Plan <input checked="" type="radio"/> Prime <input type="radio"/> Sub		
<b>Reporting Entity Type:</b>	<input checked="" type="radio"/> Industry <input type="radio"/> Government		
<b>Reporting Entity Name:</b>	DCARC Inc.		
<b>New/Revision:</b>	<input checked="" type="radio"/> New <input type="radio"/> Revision <input type="radio"/> Unknown		
<b>Special Cases:</b>	<input checked="" type="radio"/> None <input type="radio"/> MAIS <input type="radio"/> Sustainment		
<b>CSDR Plan Number:</b>	A-13-C-C1		
<b>EVM Reporting:</b>	<input type="radio"/> Unknown <input checked="" type="radio"/> Yes <input type="radio"/> No		
<b>Contract Type:</b>	CPAF		
<b>Contract Number:</b>	TBD		
<b>Estimated Total Contract Value:</b>	<input type="radio"/> X<20M <input type="radio"/> 20M < X < 50M <input checked="" type="radio"/> X>50M		
<b>Estimated SW Dev Effort:</b>	<input type="radio"/> X<20M <input checked="" type="radio"/> X>20M		
<b>Draft RFP Release Date:</b>	1/1/2014		
<b>Final RFP Release Date:</b>	3/1/2014		
<b>Contract Award Date:</b>	5/1/2014		
<b>Target Approval Date:</b>	11/2/2013		
<b>Contracting Officer Name:</b>	John Smith		
<b>Contracting Officer Email:</b>	John.Smith@mail.mil		
<b>Contracting Officer Phone:</b>	555-555-5555		
		<b>Required Documents:</b>	
		<b>Submission Component Type</b>	<b>Required\Not Required</b>
		CSDR Plan	<input checked="" type="radio"/> Required <input type="radio"/> Not Required
		RDT	<input checked="" type="radio"/> Required <input type="radio"/> Not Required
		Acquisition Schedule Document	<input checked="" type="radio"/> Required <input type="radio"/> Not Required
		RFP/SOW Language	<input checked="" type="radio"/> Required <input type="radio"/> Not Required
		CDRL - CMRS Dictionary & Mapping	



# Compliance Reports

OSD CAPE

- Similar to eRoom checklists
- Generated with CSDR reporting metrics from the CSDR Submit-Review website
- Display of all associated submission events
- Alerts for overdue submissions

Prime Contract Number	Contractor Name	Approved Plan Number	Submission Number	Resubmission Number	Submission Event Name	As Of Date	SR ID #	Due Date	Received Date	Status	Memo Date
EMD											
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	1	0	<a href="#">Interim Report</a>			3/1/2004			
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	1	1	<a href="#">Interim Report</a>			11/21/2005			
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	2	0	<a href="#">Interim Report</a>			3/2/2005			
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	2	1	<a href="#">Interim Report</a>			11/21/2005			
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	3	0	<a href="#">Interim Report</a>			3/2/2006			
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	3	1	<a href="#">Interim Report</a>			6/9/2006			
<a href="#">N00019-93-C-0006</a>	Bell-Boeing V-22 Program Office	N-05-E-C1(R)	4	0	<a href="#">Interim Report</a>			3/1/2008			



# Access Control

OSD CAPE

- All users must be approved by the DCARC Director
- Access restricted to DCARC Analysts, Program Office Reviewers, and members of the government cost community
- Packages requested by Program Office and approved by DCARC Analysts
- Display of all associated collaborators
- Document versions controlled by DCARC Analysts
- Documents stored within secure DCARC Knowledge Portal

<u>Program Collaborator</u>	<u>Organization</u>	<u>Role</u>
 Angela Camp	DCARC	DCARC Reviewer
 Cathy Ferguson	DCARC	DCARC Reviewer
 Robert Bailey	Contract Support for DCARC, employed by Technomics	DCARC Reviewer
 Shevonne Stanley	NAVAIR	Program Collaborator



# Standardization

OSD CAPE

- All plan packages follow the same business process:



- Clearly labeled document requirements
- Increased transparency and visibility into the DCARC business and decision making process



# Approval Process

OSD CAPE

Collaboration

In Vote

Director Review

CAPE Review

Approved

- **Collaboration:** Plan development phase where CSDR IPT members have action to submit or review CSDR Plans and supporting documentation
- **In Vote:** Members of the CSDR IPT vote to approve or disapprove the plan package
- **Director Review:** The DCARC Director will review and approve or disapprove the plan package
- **CAPE Review:** The Deputy Director, Cost Assessment (DDCA) will review and approve or disapprove the plan package
- **Approved:** The DDCA has signed and approved the plan



# Collaboration

OSD CAPE

- Automatic and custom alert emails
- Comments sorted by document type
- CWIPT voting capability:

Collaborators			
	John Kassab		<a href="#">Full Comment</a>
	Charlotte McIntosh	Did not vote	
	Robert Bailey	Did not vote	
	Sandra Enser	Did not vote	
	Shevonne Stanley		



# Summary

OSD CAPE

- The new Program Planning Module brings the following benefits to the DCARC's plan development and approval process:
  - Organized file structure and compliance reporting
  - Information at the user's finger tips related to programs, plan packages, and plan tasks
  - Controlled access and editing features
  - Standardized business process
  - Collaborative setting between DCARC, Program Office, and members of the cost community
  - Transition to a completely electronic, paperless process

# RECOMMENDED CPET ENHANCEMENTS

Tom Crowell  
Lockheed Martin Aeronautics Company  
CSDR Focus Group 12/4/13

CPET IS A *FANTASTIC* TOOL

*AND...*

IT CAN BE MADE EVEN BETTER!

# SECTIONS

1. “TELL THE STORY, THE WHOLE STORY, AND NOTHING BUT THE STORY”
2. “GEE IT WOULD BE NICE TO HAVE...”
3. IDIOT-PROOFING or “SAVE US FROM OURSELVES”

## **“TELL THE STORY” SUMMARY**

- *IDENTIFY ALL ITEMS THAT NEED TO BE ADDRESSED WITH PRECISION*
- *DO NOT FLAG ITEMS THAT DO NOT NEED TO BE ADDRESSED*
- *DETERMINE THE ABOVE WITH REASONABLE, SPECIFIC STANDARDS*

**ONLY ONE OCCURRENCE OF DD 1921-1 OTHER COSTS > XX% OF TOTAL COSTS IDENTIFIED PER CWBS**

**Validation Results for 1921-1 from 4. NAME/ADDRESS (include ZIP Code) for 1. PROGRAM**

**Location**

WBS Element Code: 1.0  
WBS Element Name:

**Description**

Other Costs Not Shown Elsewhere are greater than or equal to 15% of total cost. Remarks required.

**Details**

Column: **To Date Total**  
Other Costs Not Shown Elsewhere: \$k 11,531.6  
Total Cost: \$k 45,648.0  
Other costs as percent of total: 25%

WBS Element Code: 1.1  
WBS Element Name:

Other Costs Not Shown Elsewhere are greater than or equal to 15% of total cost. Remarks required.

Column: **To Date Total**  
Other Costs Not Shown Elsewhere: \$k 115.8  
Total Cost: \$k 777.8  
Other costs as percent of total: 15%

18. WBS ELEMENT CODE	19. WBS REPORTING ELEMENT	20. NUMBER OF UNITS			21. APPROPRIATION		
		a. TO DATE:	N/A	b. AT COMPLETION:	N/A	RDT&E	PROCUREMENT
FUNCTIONAL DATA ELEMENTS		COSTS AND HOURS INCURRED TO DATE			COSTS AND HOURS INCURRED AT COMPLETION		
		A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
<b>OTHER COSTS</b>							
(20) OTHER COSTS NOT SHOWN ELSEWHERE ( <i>Specify in Remarks</i> )		\$11,531.6	\$0.0	\$11,531.6	\$12,042.3	\$0.0	\$12,042.3
<b>SUMMARY</b>							
(21) TOTAL COST ( <i>Direct and Overhead</i> )		\$45,648.0	\$0.0	\$45,648.0	\$47,225.9	\$0.0	\$47,225.9
				25%			25%

- IDENTIFY ALL INSTANCES WHERE OTHER COSTS > XX%

## DD 1921-1 OTHER COSTS > XX% OF TOTAL COSTS FLAGGED AT LESS THAN XX%

### Location

WBS Element Code: 2.5.6  
WBS Element Name:

### Description

Other Costs Not Shown Elsewhere are greater than or equal to 15% of total cost. Remarks required.

### Details

Column: To Date Total  
Other Costs Not Shown Elsewhere: \$k 115.8  
Total Cost: \$k 777.8  
Other costs as percent of total: **15%**

18. WBS ELEMENT CODE	19. WBS REPORTING ELEMENT	20. NUMBER OF UNITS			21. APPROPRIATION		
					<input type="checkbox"/>	RDT&E	<input type="checkbox"/>
2.5.6		a. TO DATE: N/A	b. AT COMPLETION: N/A				
FUNCTIONAL DATA ELEMENTS		COSTS AND HOURS INCURRED TO DATE			COSTS AND HOURS INCURRED AT COMPLETION		
		A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
<b>OTHER COSTS</b>							
(20) OTHER COSTS NOT SHOWN ELSEWHERE <i>(Specify in Remarks)</i>		\$115.8	\$0.0	\$115.8	\$115.8	\$0.0	\$115.8
<b>SUMMARY</b>							
(21) TOTAL COST <i>(Direct and Overhead)</i>		\$777.8	\$0.0	\$777.8	\$777.8	\$0.0	\$777.8
				<b>14.89%</b>			

- APPLY THE XX% PRECISELY

## TO DATE > AT COMPLETION REQUIREMENTS NOT CLEAR

### Location

WBS Element Code: 4.5.6  
WBS Element Name:

### Description

To Date figure is greater than At Completion figure.

### Details

Data Element: **Total Materials Dollars**  
Columns: Total  
To Date Cost: \$k 702,141.2  
At Completion Cost: \$k 252,121.9

### Error Magnitude

450,019.3

18. WBS ELEMENT CODE	19. WBS REPORTING ELEMENT	20. NUMBER OF UNITS			21. APPROPRIATION					
		a. TO DATE:	N/A	b. AT COMPLETION:	N/A	RDT&E	PROCUREMENT			
FUNCTIONAL DATA ELEMENTS		COSTS AND HOURS INCURRED TO DATE			COSTS AND HOURS INCURRED AT COMPLETION					
		A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL	N	R	T
<b>ENGINEERING</b>										
(1) DIRECT ENGINEERING LABOR HOURS		200.0	250.0	450.0	250.0	200.0	450.0	50.0	(50.0)	0.0
(2) DIRECT ENGINEERING LABOR DOLLARS		\$9,000.0	\$11,250.0	\$20,250.0	\$11,250.0	\$9,000.0	\$20,250.0	2,250.0	(2,250.0)	0.0
(3) ENGINEERING OVERHEAD DOLLARS		\$17,550.0	\$21,937.5	\$39,487.5	\$21,938.0	\$17,550.0	\$39,488.0	4,388.0	(4,387.5)	0.5
(4) TOTAL ENGINEERING DOLLARS		\$26,550.0	\$33,187.5	\$59,737.5	\$33,188.0	\$26,550.0	\$59,738.0	6,638.0	(6,637.5)	0.5
<b>MATERIALS</b>										
(14) RAW MATERIAL DOLLARS		\$350,000.0	\$350,000.0	\$700,000.0	\$125,000.0	\$125,000.0	\$250,000.0	(225,000.0)	(225,000.0)	(450,000.0)
(15) PURCHASED PARTS DOLLARS		\$1,878.4	\$0.0	\$1,878.4	\$1,860.2	\$0.0	\$1,860.2	(18.2)	0.0	(18.2)
(16) PURCHASED EQUIPMENT DOLLARS		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0	0.0	0.0
(17) MATERIAL HANDLING/OVERHEAD DOLLARS		\$262.7	\$0.0	\$262.7	\$261.7	\$0.0	\$261.7	(1.1)	0.0	(1.1)
(18) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0	0.0	0.0
(19) TOTAL MATERIAL DOLLARS		\$352,141.2	\$350,000.0	\$702,141.2	\$127,121.9	\$125,000.0	\$252,121.9	(225,019.3)	(225,000.0)	(450,019.3)
<b>OTHER COSTS</b>										
(20) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)		\$3,330.3	\$0.0	\$3,330.3	\$3,331.4	\$0.0	\$3,331.4	1.1	0.0	1.1
<b>SUMMARY</b>										
(21) TOTAL COST (Direct and Overhead)		\$382,021.5	\$383,187.5	\$765,209.0	\$163,641.3	\$151,550.0	\$315,191.3	(218,380.2)	(231,637.5)	(450,017.7)

- IDENTIFY ALL AREAS THAT MUST BE ADDRESSED
  - DD 1921 & 1921-1
  - ALL AREAS WITHIN EACH CWBS ELEMENT
    - BY NONRECURRING OR RECURRING WHEN REQUIRED
    - BY INDIVIDUAL DD 1921-1 ROW WHEN REQUIRED

## ITEMS FLAGGED ARE SOMETIMES IMMATERIAL

### Location

WBS Element Code: 1.2.5.3  
WBS Element Name:

### Description

To Date figure is greater than At Completion figure.

### Details

Data Element: Manufacturing Operations Overhead Dollars  
Columns: Non-Recurring  
To Date Cost: \$k 778.7  
At Completion Cost: \$k 777.1

### Error Magnitude

**1.6**

### Location

WBS Element Code: 4.5.8  
WBS Element Name:

### Description

Data reported for Direct Labor Dollars but not for Direct Labor Hours.

### Details

Category: Quality Control  
Column: To Date Non-Recurring  
Direct Labor Hours : **0.0**  
Direct Labor Dollars: **0.2**

- *SET SPECIFIC, REASONABLE STANDARDS FOR ALL ITEMS*

**“GEE IT WOULD BE NICE TO HAVE...”**

# REPORTS DON'T ALWAYS FORMAT PROPERLY

FUNCTIONAL DATA ELEMENTS	COSTS AND HOURS INCURRED TO DATE <small>(thousands of U.S. Dollars or thousands of hours)</small>			COSTS AND HOURS INCURRED AT COMPLETION <small>(thousands of U.S. Dollars or thousands of hours)</small>		
	A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
<b>MANUFACTURING OPERATIONS</b>						
(5) DIRECT TOOLING LABOR HOURS	0	0.1	0.1	0	0.1	0.1
(6) DIRECT TOOLING LABOR DOLLARS	\$0.2	\$7.3	\$7.5	\$0.2	\$7.3	\$7.5
(7) DIRECT TOOLING & EQUIPMENT DOLLARS	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
(8) DIRECT QUALITY CONTROL LABOR HOURS	0	0.7	0.7	0	0.7	0.7
(9) DIRECT QUALITY CONTROL LABOR DOLLARS	\$0.8	\$51.7	\$52.5	\$0.8	\$51.7	\$52.5
(10) DIRECT MANUFACTURING LABOR HOURS	0	<b>2</b>	<b>2</b>	0	<b>2</b>	<b>2</b>
(11) DIRECT MANUFACTURING LABOR DOLLARS	\$2.0	\$141.2	\$143.2	\$2.0	\$141.2	\$143.2
(12) MANUFACTURING OPERATIONS OVERHEAD DOLLARS <i>(Including Tooling and Quality Control)</i>	\$2.2	\$149.8	\$152.0	\$2.1	\$149.0	\$151.1
(13) TOTAL MANUFACTURING OPERATIONS DOLLARS <i>(Sum of rows 6, 7, 9, 11, and 12)</i>	\$5.2	\$350.0	\$355.2	\$5.1	\$349.2	\$354.3

- SET REPORTS TO MAINTAIN THE DESIRED FORMATS

# REPORTS HIDE REMARKS

## 22. REMARKS

The quick brown fox jumped over the lazy dog.

Four score and seven years ago our fathers brought forth upon this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived, and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives, that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we cannot dedicate—we cannot consecrate—we cannot hallow—this ground. The brave men, living and dead, who struggled here, have consecrated it far above our poor power to add or detract. The world will little note, nor long remember, what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here, have, thus far, so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they here gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation, under God, shall

DD FORM 1921, 20070416

PREVIOUS EDITION IS OBSOLETE.

SECURITY CLASSIFICATION

**Unclassified**

*- SET REPORTS TO DISPLAY ALL REMARKS*

# **IDIOT-PROOFING or “SAVE US FROM OURSELVES”**

# ERROR MESSAGES NOT ALWAYS GENERATED WHEN 1921 WBS LEVEL 1.0 COSTS NOT EQUAL TO SUBTOTAL COST

	1921/1921-1	WBS Reporting	WBS		
Data Type	Input	Level	Code	NR \$ TD	Rec \$ TD
Data Version	2007		0000	45,648.0	0.0
Security					
Classification	Unclassified		####	8,602.1	0.0
Subtotal TD	58,316.9		####	0.0	0.0
Subtotal AC	47,225.9		####	5,835.2	0.0
G&A TD	8,476.2		####	5,835.2	0.0
G&A AC	8,791.4		####	0.0	0.0

WBS ELEMENT CODE A	WBS REPORTING ELEMENTS B	COSTS INCURRED TO DATE		
		NONRECURRING	RECURRING	TOTAL
		D	E	F
0000		\$45,648.0	\$0.0	\$45,648.0
####		\$8,602.1	\$0.0	\$8,602.1
####		\$5,835.2	\$0.0	\$5,835.2
	Subtotal Cost			\$58,316.9

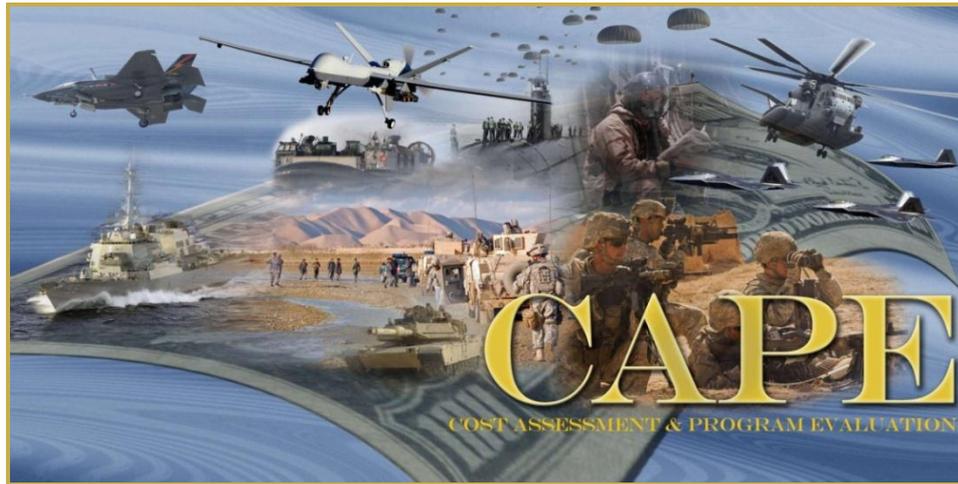
- IMPROVE CPET CHECK OF 1.0 COSTS VERSUS SUBTOTAL COST

## SUMMARY OF MOST CRITICAL RECOMMENDATIONS

- *IDENTIFY ALL ITEMS THAT NEED TO BE ADDRESSED WITH PRECISION*
- *DO NOT FLAG ITEMS THAT DO NOT NEED TO BE ADDRESSED*
- *DETERMINE THE ABOVE WITH REASONABLE, SPECIFIC STANDARDS*

# Member-Generated Topics / Summary and Review of Action Items

December 4, 2013



Placeholder for open discussion and wrap-up  
(No slides)