

## Sustainment Cost Reporting

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“More than 60 percent of Navy and Marine Corps strike fighters are out of service, the Navy confirmed today.”<sup>1</sup>

“Today, the vast majority of Marine Corps aircraft can’t fly...Out of 276 F/A-18 Hornet strike fighters in the Marine Corps inventory, only about 30 percent are ready to fly...Similarly only 42 of 147 heavy-lift CH-53E Super Stallion helicopters are airworthy.”<sup>2</sup>

“Air Force grounded 31 squadrons of aircraft for more than three months, deferred depot maintenance, slashed facility upkeep by half and furloughed the vast majority of its civilian employees.”<sup>3</sup>

“The unrelenting budget impasse has also compelled us to degrade readiness to historically low levels,” the Army Chief of Staff continued. “Today, only 33 percent of our brigades are ready, when our sustained readiness rate should be closer to 70 percent.”<sup>4</sup>

These disconcerting news articles demonstrate the critical need for not only stable sustainment budgets, but for mechanisms to understand the actual costs of maintenance and repair of Department of Defense (DoD) equipment, especially those efforts performed by contractors. OSD CAPE (Cost Assessment and Program Evaluation) meets this need by collecting contractor and government sustainment actual costs via its data collection function, Defense Cost and Resource Center (DCARC). CAPE and DCARC have worked to consistently improve the availability and quality of sustainment data. This focus applies to Contractor Logistics Support (CLS), Performance Based Logistics (PBL), Interim Contractor Support (ICS) and transactions-based contracts.

### **Current Policy:**

Data collection is required by several laws and policies. Cost and Software Data Reports (CSDRs) are required by subpart 252.234-7003 and 242.234-7004 of the Defense Federal Acquisition Regulation Supplement.<sup>5</sup> Specifically

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<sup>1</sup> Sidney Fryberg, “62 % Of F-18 Hornets Unfit To Fly”, Breaking Defense.com, February 7, 2017

<sup>2</sup> Floor Statement by SASC Chairman Senator John McCain

<sup>3</sup> Jared Serbu, “Air Force Says Readiness Problems Will Last through 2023”, Federal News Radio, March 17, 2017

<sup>4</sup> Army Sgt 1st Class Tyrone C. Marshall Jr, “Army Chief: Readiness Degraded to Historically Low Levels”, Defense News, March 11, 2015

<sup>5</sup> Defense Federal Acquisition Regulation, 234.71 clauses 234.7003 and 234.7004

for sustainment contracts, DoDI 5000.02 “Operation of the Defense Acquisition System, Table 7 states that for Contractor Sustainment Report the requirement applies to “All major contracts and subcontracts, regardless of contract type, valued at more than \$50 million (then-year dollars).”<sup>6</sup> DoDI 5000.73 “Cost Analysis Guidance and Procedures” states “CSDR reporting requirements apply to acquisition programs in the sustainment phase”.<sup>7</sup>

CSDR policies are shaped by DoD Instructions, guidance from CAPE and the service cost centers, and Congress. The 2017 National Defense Appropriation Act (NDAA) featured a significant update to cost estimating and cost reporting policies. These changes included:

- Sustainment cost goal must be included in Milestone A review
- At each milestone, Milestone Decision Authority must send a report to Congress including an assessment of cost drivers for life cycle cost
- Requires that Program Manager and Contracting Officer ensure that cost data is collected for all programs over \$100M
- Recommendations for improving access to and analysis of O&S Costs
- Requires sustainment review five years after Initial Operating Capability (IOC) and throughout the life cycle of the program<sup>8</sup>

The guidance from the 2017 NDAA will require revisions to several of the current policies outlined above. Those updates are in process.

In 2012, there were six programs reporting contractor sustainment actual costs, using a variety of reporting structures. The Contractor Logistics Support cost in centralized Government VAMOSC-type databases was often a single line with no detail. In an attempt to standardize the sustainment reporting structure, and offer a breakout for the single CLS line, the 1921-4 Sustainment Reporting Form and Data Item Description (DID) were

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<sup>6</sup> Department of Defense Instruction 5000.02, “Operation of the Defense Acquisition System”, January 7, 2015, page 70.

<sup>7</sup> Department of Defense Instruction 5000.73, “Cost Analysis Guidance and Procedures”, June 9, 2015, page

<sup>8</sup> National Defense Authorization Act (NDAA) for Fiscal Year 2017

<https://www.congress.gov/congressional-report/114th-congress/house-report/840/1>

developed. The sustainment reporting structure was derived from the draft of OSD “Operating and Support Cost Estimating Guide”<sup>9</sup>. The reporting structure aligns with the OSD structure, but has additional child elements under Sustaining Support and Program Management.

In 2014, the 1921-4, which was a fixed form that was difficult to tailor, was discontinued. The 1921-4 form was replaced by a 1921 using the CAPE sustainment cost reporting structure. This reporting structure was further refined based on feedback from users.

The Functional Cost-Hour Report 1921-1, the hours and dollars report that accompanies a 1921 using work breakdown structures from MIL-STD 881C<sup>10</sup>, includes categories that are very manufacturing-centric, such as Engineering, Manufacturing Operations, and Materials, but was not suitable for sustainment reporting. A new form, the 1921-5, Sustainment Functional Cost-Hour Report, is now paired with the sustainment 1921. The 1921-5 includes detail for Engineering, Program Management, Maintenance Operations and Materials.

Another shortfall that CAPE has worked to correct is in regard to Indefinite Delivery/Indefinite Quantity (IDIQ) contracts. In the past, DoD Programs sometimes interpreted each delivery order or task order on an IDIQ contract as a separate contract, reporting only on delivery orders over \$50M. This resulted in significant under-reporting, with CSDR reports capturing much less than the entire contract value. The policy for reporting on IDIQ contracts was clarified to require reporting on all delivery orders in a recent CAPE implementation memo.<sup>11</sup>

The same implementation memo also introduced the new Software Resource Data Report (SRDR) for sustainment contracts. The Software maintenance DR will be required for any contract whose software maintenance exceeds \$1M per year.<sup>12</sup> Having software maintenance actual cost history will help programs estimate the cost of future software maintenance efforts.

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<sup>9</sup> CAPE Operating and Support Cost Estimating Guide, February 2, 2014

<sup>10</sup> MIL-STD 881C, “Work Breakdown Structures (WBS) for Defense Materiel Items”, October 3, 2011

<sup>11</sup> Dr. Jamie Morin, Director OSD CAPE, “Cost Analysis Improvement Memo”, January 9, 2017

<sup>12</sup> Technical Data Focus Group, “Software Resource Data Reporting” Presentation page 11, May 20, 2016

## New Initiatives

Cost data is more useful if it is accompanied by technical and quantity data. For example, a cost report states that \$100M was spent to maintain an aircraft type, which is important information. If there is additional data stating that the \$100M was spent on radar maintenance on 100 aircraft, the cost analyst can develop a cost estimating relationship that can be used to estimate future radar maintenance costs for that aircraft type.

To collect this data, CAPE and the services developed the 1921-T Technical Data Report. It can be used for acquisition and sustainment, with specific technical terms requested in each instance. For sustainment the 1921-T also defines the units associated with quantities, such as person-years, platform counts, Depot Level Repairables (DLR) quantities. It also defines the technical characteristics associated with contracts, such as target and actual Mean Time Between Failure (MTBF), number of DLRs performed, or number of consumables used.

CAPE and AFCAA also implemented a new form called 1921-M/R Maintenance and Repair Report specifically for sustainment contracts. The report lists the maintenance events that occurred, information related to each maintenance event such as the specific system being repaired, location where the repair activity occurred, reason for failure, day failure was identified and day repair activity was completed. The maintenance events are paired with a Repair Parts report, which identifies the parts that were consumed during each maintenance event.

In order to ensure that the correct technical and M/R data is collected, the CSDR plans analyst works with the Program Office to put Xs in the 1921-T and 1921-M/R columns for the desired cost elements in the CSDR plan.

CAPE has also worked to expand the number of sustainment contracts reporting CSDR data. The sustainment database has grown from six programs in 2012 to 54 programs with CSDR reporting on contract or with plans in process. This increase was accomplished by improved Request for Proposal (RFP) and contract award research, CSDR training to Government and contractor groups, and outreach to contracting activities such as Naval Supply Systems Command and Defense Logistics Agency.

Actual cost data is essential for program decision making, making the collection of CSDR data on sustainment contracts worthwhile effort. Posting the data to the Cost Analysis Data Environment (CADE) means that the data is stored in a secure environment which is easily accessed by Government employees for profit analysis, negotiations support, Analysis of Alternatives (AoAs), and business case analysis.