

Master Document – Audit Program

Activity Code 17500		Progress Payment, Percentage of Completion
Version 5.3, dated August 2012		
B-1	Planning Considerations	
<p>1. This program is intended to provide a logical sequence to the audit effort and to reflect a mutual understanding between the auditor and the supervisor as to the scope required to meet auditing standards and DCAA objectives for the current assignment. The audit steps in the program are intended as general guidance and should be modified as considered necessary to fit the current audit. Portions of the audit which are covered in other assignments (e.g., billing systems, Earned Value Management System Criteria, Material Management and Accounting Systems) should be referenced at the appropriate place in this program.</p>		
<p>2. The basic authority for progress payments based upon a percentage or stage of completion is included in FAR 32.101 and 32.102(e)(1) and (2), which state that this type of progress payment may be used as a payment method under agency procedures. The current FAR provisions require that such agency procedures must ensure that:</p>		
<p>a. Payments are commensurate with work accomplished, which meets the quality standards established under the contract; and</p>		
<p>b. Progress payments may not exceed 80 percent of the eligible costs of work accomplished on undefinitized contract actions.</p>		
<p>3. DFARS 232.102(e)(2) limits such progress payments within DoD to contracts for construction, shipbuilding and ship conversion, alteration or repair. Generally speaking, the requirements of FAR/DFARS are implemented through department or agency directives or instructions. For example, the Navy implements these requirements through Secretary of the Navy (SECNAV) Instruction 7810.12C, Shipbuilding Progress Payments (current version is dated December 23, 2005). Typically, a special contract clause is negotiated based on that instruction which authorizes progress payments based on a percentage or stage of completion, subject to several restrictions and limitations specified in the contract clause. The clauses used for Navy contracts have usually included provisions which specifically address the criteria for (a) computation of payments, (b) establishing billing price, (c) allocating total contract price of each vessel, (d) invoices, (e) physical progress and weighting factors, (f) incurred costs, (g) retentions, and (h) certifications and audits. This contract clause is normally supplemented by Memorandums of Agreement (MOAs) relating to billing price revisions, the contractor's progressing system, and physical progress and weighting factors.</p>		
<p>4. Contract financing should be administered to aid the acquisition process; however, the contracting officer needs to avoid any undue risk of monetary loss to the Government through financing. Therefore, the contractor's use of the contract financing provided and the contractor's financial status need to be monitored. The risk of an overstated request for progress payment is highest when a contractor is experiencing cash flow or performance</p>		

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<p>problems. Consequently, the auditor should be alert for high risk situations such as poor financial conditions, low cash balances, losses on contract work, etc. During performance of risk assessments, auditors are reminded to contact the contracting officer to obtain the contractor's financial condition information for risk assessment purposes. The purpose of the audit is to evaluate the propriety of the progress payment request. Critical factors in making this determination include:</p>
<p>a. The contractor's compliance with the contract clause, memorandums of agreement, and progressing system as approved by the contracting officer.</p>
<p>b. The reasonableness of the contractor's estimates to complete. Understatement of the estimates at completion could result in overpayment and excessive financing costs.</p>
<p>c. The reliability of the contractor's accounting systems. To the extent that payments may be limited to a percentage of incurred costs and the physical completion percentage is computed based on labor hours and costs incurred, auditors must consider the reliability of the accounting systems that record and report such actual data when planning the scope of the review. Furthermore, costs related to undefinitized contract actions must be separately identified since FAR 32.102(e)(2) limits progress payments on these costs.</p>
<p>d. The proper liquidation of progress payments. Upon preliminary acceptance of a vessel, progress payments should be liquidated to the extent paid under the contract for that vessel.</p>
<p>e. The adequacy of the contractor's financial condition to continue contract performance (see B-1, Step 10). While the contracting officer is responsible for assessing the contractor's financial condition, auditors should immediately alert the contracting officer if they become aware of information that may indicate unfavorable or adverse financial conditions that could impede a contractor's ability to perform on Government contracts (e.g. audit leads, significant events, current economic conditions, etc.).</p>
<p>5. The scope of progress payment reviews will depend on how much reliance can be placed on the contractor's accounting system, internal controls, cost representations, and billing procedures. If the results of prior audits and the preliminary audit steps indicate low audit risk, a limited review of the progress payment should be made. This decision must reflect a mutual understanding between the auditor and supervisor as to the scope required to meet auditing standards and DCAA objectives for the current assignment. This program does not replace individual auditor judgment and may be supplemented to satisfy the needs of a particular assignment.</p>
<p>References</p>
<p>1. The Progress Payment clause in the contract</p>
<p>2. FAR 32.102(e) and DoD FAR Supplement 232.102</p>
<p>3. Price Revision Clause in the contract</p>
<p>4. CAM 14-300 "Assessing a Contractor's Financial Capability"</p>

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5. CAM 14-205 "Review of Progress Payments"

B-1	Preliminary Steps	
	W/P Reference	
<p>Version 5.3, dated August 2012</p>		
<p>1. Review the open MRD's for guidance which may impact the audit and adjust the scope and procedures appropriately. Open MRDs can be identified using the link provided on the DCAA Intranet home page for "MRDs, AGMs, & AMGMs"</p>		
<p>2. Obtain the request for audit, the contractor's progress payment request, and the supervisory auditor's risk assessment and preaudit instructions. Review and consider in establishing the scope of audit to ensure appropriate coverage of specific areas of concern.</p>		
<p>3. Review permanent files and/or current audit assignments to ensure that related findings from earlier audits are considered in the scope of follow-up reviews. (Note: Such information may not be separately maintained in a permanent file, but rather may be contained in individual current audit assignments.)</p>		
<p>4. Using the framework and the guidelines in WP B-2, obtain and document an understanding of the contractor's internal controls that are relevant to the audit. With the proper planning auditors should be able to obtain and document a major portion of this understanding during a walk-through of the contractor's assertion.</p>		
<p>5. Review the contract/contract brief and referenced Memorandums of Agreement (MOAs) for terms and conditions affecting progress payment requests and cost or performance reporting requirements.</p>		
<p>6. Review the contractor's progressing system description. Most contract payment clauses require the contractor to submit a description of its "progressing system" for review and approval by the contracting officer. The system should provide:</p>		
<p>a. Documentation supporting the physical percentage of completion computation for the specific contract.</p>		
<p>b. Traceability of allocable costs from the progress payment billings and physical completion computation to the cost accounting system.</p>		
<p>7. Obtain and review the contractor's most recent detailed (bottom-up) estimate at completion (EAC). Ensure that it is no older than the required revision frequency specified in the progress payment clause (normally quarterly).</p>		

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<p>8. Review any Contract Performance Reports (CPRs), Cost/Schedule Status Reports (C/SSRs) - (see CAM 11-304), or similar reports or charts prepared by the contractor, and identify any cost, technical, or schedule problems which could affect the EAC.</p>	
<p>9. Contact Government contract administration and program office officials to (1) identify any cost, technical, or schedule problems and (2) determine what these officials have done to evaluate the EAC. Assess the adequacy of any evaluations performed as follows (see CAM D-301):</p>	
<p>a. Review the latest copies of any technical evaluations, cost analyses, or other program management reports pertaining to evaluation of costs or schedule. This includes any progress/milestone charts or similar systems which assess contractor progress.</p>	
<p>b. Determine if the Government evaluations of the EAC considered any cost or schedule problems (identified in CPRs, progress/milestone charts, or similar data).</p>	
<p>c. When these evaluations present a range of EACs, inquire as to which is most likely.</p>	
<p>10. Request a Government technical evaluation of the progress payment request if appropriate (see CAM 14-205g(2)(d), D-100 and D-200).</p>	
<p>11. Contact the contracting officer to ascertain any known concerns (including risk related to the contractor’s financial condition) that will impact the audit and adjust the audit scope and procedures accordingly. If information regarding the contractor’s financial condition is not available from the contracting officer, the auditor should perform the procedures addressed in CAM 2-302.1h. If during the course of the audit the auditor becomes aware of unfavorable or adverse financial conditions, they should immediately communicate their concerns to the contracting officer, and appropriately adjust the scope of audit.</p>	
<p>12. Electronically transmit an acknowledgement/notification to the ACO/Buying Command notifying them of the commencement of the risk assessment and that the expected completion date will be provided in the formal acknowledgement/notification once the risk assessment is complete. (CAM 2-303). The acknowledgement/notification process should be within the timeframe and in accordance with the procedures in CAM 4-104.</p>	
<p>13. Determine if the progress payment request includes significant costs or estimates applicable to subcontractors or partners under teaming arrangements. If so, determine what actions the contractor has taken to ensure that progress payments to its subcontractors or partners</p>	

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<p>conform to the progress payment provisions of the contract. If the required analyses are not performed or are considered inadequate and these costs cannot be evaluated by other techniques (other current or historical data), an assist audit should be coordinated/requested (see CAM 14-205i.).</p>	
<p>14. Hold a planning meeting with the audit team (e.g., RAM, Manager, Supervisor, Auditors) to discuss the risk of fraud and other noncompliances with applicable laws and regulations that could have a material effect on the assertion. The discussion should include relevant prior audit experience (e.g., questioned cost, relevant reported estimating or accounting system deficiencies), relevant aspects of the contractor’s environment (e.g., the extent of incentives, pressures and opportunities to commit fraud and the propensity to rationalize misstatements), other known risk factors, and the audit team’s understanding of relevant internal controls (see W/P B-2). The team should also review and discuss the general and other relevant sections of the IG Handbook on Fraud Indicators for Contractors as well as the relevant fraud indicators in CAM Figure 4-7-3. See “Principal Sources of Fraud Indicators” below.</p> <p>Based on the team discussion and other risk assessment procedures the team should document on W/P B, Section 4 the risk factors/indicators identified and design audit procedures to meet the audit objectives and provide reasonable assurance of detecting fraud and other noncompliances with applicable laws and regulations that could have a material effect on the proposal (i.e., tailor (add/delete/modify) the audit steps). GAGAS 6.13(a)</p> <p>Communication among audit team members about the risk of material misstatement due to fraud should continue as needed throughout the audit.</p> <p>Principle Sources of Fraud Indicators:</p> <ul style="list-style-type: none"> • Handbook on Fraud Indicators for Contract Auditors, Sections I and III, (IGDH 7600.3, APO March 31, 1993) located at: http://www.dodig.mil/PUBS/igdh7600.doc. • CAM Figure 4-7-3. <p>(To access the fraud handbook, copy and paste the web address shown above into the address block in Internet Explorer.)</p>	
<p>15. Arrange and conduct an entrance conference with the contractor's designated representative.</p>	
<p>16. Issue a notification letter to the contractor regarding the audit in accordance with CAM 4-302.3.</p>	

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C-1	Estimate To Complete	
Version 5.3, dated August 2012		W/P Reference
Evaluate the reasonableness of the contractor's EACs used in calculating billing prices and weighting factors. The scope of review should depend on the auditor's knowledge of the contractor and the results of prior audits and risk assessment.		
1. When CPRs or C/SSRs are available, determine if the EAC appears reasonable when compared to projections using trend analysis techniques:		
NOTE: Do not duplicate analyses available from the Contract Administration Office (CAO) or Program Office.		
a. Compare the cumulative to date Budgeted Cost of Work Scheduled (BCWS), Budgeted Cost of Work Performed (BCWP), and Actual Cost of Work Performed (ACWP), on a monthly basis. Depending upon the stage of contract completion, this comparison may be best shown by use of a graph. Compare to identify unusual fluctuations (positive and negative) and trace to the cost account level to identify the underlying reasons.		
b. Project the EAC using Cost Performance Indices (CPI)s and Schedule Performance Indices (SPI)s as explained in Trend Analysis of EAC using Performance Indexes.		
c. Significant differences between the EACs projected using the CPI and SPI and the contractor's "bottom-up" EAC may indicate serious problems in the contractor's estimates and/or system and must be thoroughly investigated.		
d. Discuss significant differences with the contractor, the CAO, and the Program Office, and request an explanation for the difference.		
e. If not explained to the satisfaction of the auditor, request a technical evaluation on the items in question.		
2. Evaluate the reasonableness of the contractor's EAC using the guidance in CAM 9-300.		
a. Verify that the contractor has been consistent in its EAC preparation.		
b. Verify that the contractor has used appropriate rates and factors.		
c. Review the quantitative and qualitative aspects of the EAC for reasonableness utilizing Government technical assistance and assist audits if considered necessary (see CAM D-300).		

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ADDITIONAL GUIDANCE:
Trend Analyses of EAC using Performance Indexes
The Earned Value Management Systems Criteria (EVMSC) require the contractor to plan work into detailed work packages. Based on the starting and stopping dates of each work package and on the budgets assigned, a budget is developed for each month of the contract. At the close of each reporting period, the contractor reports the dollar amount of work budgeted during each reporting period and the cumulative work budgeted to date (only cumulative values appear on the C/SSR). This is the budgeted cost of work scheduled (BCWS) to be completed.
In addition to the BCWS, the criteria require the contractor to provide a report of the budgeted dollar value of work completed during each reporting period and the cumulative total (only cumulative values appear on the C/SSR). This is the budgeted cost of work performed (BCWP). Regardless of the actual cost to perform the work, the BCWP includes only the budgeted cost for each element of work that the contractor has completed. The difference between the BCWP and BCWS is the dollar value of work the contractor is ahead of or behind schedule.
The criteria also require the contractor to accumulate the costs for effort performed on the contract during each reporting period and the cumulative total (only cumulative values appear on the C/SSR). This is the actual cost of work performed (ACWP). The difference between the BCWP and ACWP is the cost variance.
Performance Indexes
A Cost Performance Index (CPI) and a Schedule Performance Index (SPI) may be computed from the data available on Cost Performance Reports (CPRs) or C/SSRs.
The CPI is an efficiency ratio; output in terms of earned value, <u>divided by input</u> in terms of actual cost incurred.
BCWP
CPI = _____
ACWP

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As with efficiency ratios in physics or mechanics, 1.00 is "par." Anything above this indicates better progress for the money than expected. Anything below 1.00 indicates less progress for the money than expected.	
The CPI can be figured on both current and cumulative data. For example,	
	\$731,000
CPI _{cum}	= $\frac{\quad}{\quad}$ = .50
	\$1,457,000
Means we have gotten 50 cents' value for each dollar spent; or, expressed in another way, we're spending \$2 for each dollar's worth of progress.	
The CPI can be applied at any WBS level, or functional level, for which data is available.	
The cumulative CPI is a particularly important indicator of health. But the current CPI tends to grow in significance as the project approaches the completion date. The CPI is concise, and it quantifies the status of reported elements. It puts comparative cost variances in perspective and is highly useful in plotting trends and in forecasting. However, the CPI assumes an understanding of the factors involved, and it ignores whether items are of large or small dollar magnitude. For example, regarding dollar magnitudes, a large dollar item may show a CPI of .83.	
	\$20 million (BCWP)
	$\frac{\quad}{\quad}$ = .83
	\$24 million (ACWP)
But a relatively small item may also have a CPI of .83.	
	\$100,000 (BCWP)
	$\frac{\quad}{\quad}$ = .83
	\$120,000 (ACWP)
The point is, the same CPI could have resulted even though there is a large difference in dollar	

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impact between the two examples. Thus, the auditor must consider both the absolute costs differences and the performance indices.
The SPI formula is work performed divided by work scheduled. The SPI may be useful as an overall progress indicator.
BCWP
SPI = $\frac{\quad}{\quad}$
BCWS
Here again 1.00 is "par," with indices above this meaning more work was performed than scheduled, and indices below 1.00 indicating the opposite. SPIs can be computed on cumulative and current CPR data.
The SPI isn't nearly as reliable or as valuable an indicator as the CPI, because it reflects an average of WBS items' schedule status and ignores whether items may be on the critical path. Items small in dollar value but having a key impact on schedules may be "laundered" during the summarization process. The SPI may be useful as a supplement to time-based schedule status information, since early in a program it often precedes indicators of cost problems.
The SPI supplements, but does not replace, a contractor's regular scheduling technique whether his technique is bar charting, network scheduling, line of balance, or the like.
<u>EAC Projection Methods</u>
EACs may be projected using trend analysis techniques. One of the best and most recent studies on EAC projection methods was developed for the Naval Weapons Engineering Support Activity. This study showed that CPI based methods produced superior results than regression based methods. The reason is that with CPIs, the known data increases with time and the Budgeted Cost of Work Remaining (BCWR) declines.
While no single method is considered best in forecasting an EAC, it was found that certain methods perform better than others depending on whether a contract is in its early, middle, or late stage of completion.
According to the Report, the following CPI-based methods perform best during the indicated periods of contract performance:
<u>Early or Middle Stage of Completion</u>

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					BAC
EAC	=				
					CPI _C
					BCWR
EAC	=	ACWP _C	+		
					CPI _C X SPI _C
					BCWR
EAC	=	ACWP _C	+		
					CPI ₃
<u>Late Stage of Completion</u>					
					BCWR
EAC	=	ACWP _C	+		
					CPI ₃
					BCWR
EAC	=	ACWP _C	+		
					CPI ₁₂
					BCWR
EAC	=	ACWP _C	+		
					CPI ₆
In these formulas:					
•	ACWP	=	Actual Cost of Work Performed.		

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<ul style="list-style-type: none"> • BCWP = Budgeted Cost of Work Performed.
<ul style="list-style-type: none"> • BAC = Budget at Completion.
<ul style="list-style-type: none"> • BCWR = Budgeted Cost of Work Remaining (equal to BAC minus BCWP).
<ul style="list-style-type: none"> • Subscript c signifies cumulative.
<ul style="list-style-type: none"> • Subscript numbers (3, 6, 12) refer to months. For example, CPI₆ represents the average of the current period CPIs for the last 6 months.
<ul style="list-style-type: none"> • CPI represents a CPI based on a sum of BCWPs divided by a sum of ACWPs. For example, CPI₃ represents the sum of the current period BCWPs for the last three months divided by the sum of the current period ACWPs for the last three months.

D-1	Incurred Costs	
Version 5.3, dated August 2012		W/P Reference
<p>Incurred Costs. Contract payment clauses used by the Navy generally limit payment to a specified percentage of allowable costs incurred as of the date the progress payment/invoice is submitted. On each invoice, the contractor must certify the allowable costs incurred. Such certification shall provide for cost category reporting in accordance with the contractor's normal accounting system and be broken down into direct material, direct labor, and indirect costs. In evaluating this incurred cost limitation, the auditor should:</p>		
1. Verify that costs incurred are based on currently posted job cost subsidiary ledgers or similar authorization controls.		
2. If retirement fund contributions are paid less frequently than quarterly, verify that pension accruals are excluded from incurred costs until such costs are paid.		
3. Ensure that progress payment requests on costs related to undefinitized contract actions are separately identified and are limited to 80% of eligible costs as determined by the contract terms (see FAR 32.102(e)(2)). In addition, for DoD contracts, the auditor should be		

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<p>aware that no more than 50% of the not-to-exceed price shall be expended by the Government until the contractor submits a qualifying proposal to definitize the action. Refer to DFARS 217.7503(b)(4). After 12/31/91, these limitations are covered by DFARS 217.7404-4 (1991 edition).</p>	
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E-1	Other Areas - Percentage Of Completion	
	Version 5.3, dated August 2012	W/P Reference
	1. Review the contractor's progress payment request to:	
	a. Determine whether the progress payment, retention, holdback, etc., rates are in agreement with the payment clause.	
	b. Check the accuracy of the contractor's progress payment request calculations.	
	c. Verify that billed costs do not exceed the target or ceiling cost stated in the contract.	
	d. Verify that the payment requested by the contractor based on the percentage of physical progress does not exceed the amount billable based on the incurred cost limitations specified in the contract clause.	
	2. Verify that the billed escalation amounts for materials and other types of costs included in the progress payment request are in accordance with the contract provisions.	
	3. Verify that progress payments are being properly liquidated. Upon delivery or preliminary acceptance of each vessel, progress payments should be liquidated to the extent paid under the contract.	
	4. Be alert for changes in financial condition that may impact future contract deliveries. If the contractor is in a loss situation on the contract, inform the administrative contracting officer.	
	5. Test the contractor's billing system internal controls for reconciling amounts received on billings for this contract. If the test finds that the contractor has received overpayments, further test the contractor's controls for notifying the contracting officer and the paying office.	
	6. Add any additional audit steps considered necessary under the circumstances.	

F-1	Percentage Of Physical Progress
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Version 5.3, dated August 2012	W/P Reference
<p>Percentage of Physical Progress. The contract payment clause provides for the computation of progress payments and retention amounts based on specific criteria for physical progress. In determining the reasonableness of that physical progress percentage, review the following:</p>	
<p>1. Billing Price - The contract billing price should equal the total revised contract price or the sum of the projected final cost and projected profit. Most contract clauses require that any proposed contractor revision to the billing price must be separately set forth in a supplemental agreement to the contract, and include the computations upon which the revision to the billing price is based.</p>	
<p>2. Allocated Total Contract Price of Each Vessel - Determine if the computed price is based on appropriate factors. In no event should the allocated total contract price of all vessels exceed the total contract price. The allocated amount is determined by multiplying the total contract price by a percent fraction (representing the quotient from dividing the original unit target price of the vessel by the original total target price).</p>	
<p>3. Weighting Factors - These factors are used to measure physical completion by categories of labor and material cost. These factors are revised quarterly or when factual data indicates they are no longer representative of the actual labor and material distribution. Revisions must be supported by detailed de-escalated EACs for direct labor, direct material, and indirect costs with additional data concerning the cause of the changes.</p>	
<p>a. Determine if a MOA exists between the Government and the contractor for the weighting factors used to prepare the progress payment.</p>	
<p>b. Verify that the contractor used the weighting factors contained in the most current valid agreement.</p>	
<p>c. Review the basis of the agreed to weighting factors and determine if they are reflective of actual labor and material distribution. If the MOA appears to contravene the requirements of either the contract clause or the applicable service instruction, the auditor should pursue the issues in accordance with CAM 5-307(d).</p>	
<p>d. Reconcile the supporting documentation for the cost element weights to the contractor's latest CPR, C/SSR, or other similar internally generated management reports.</p>	

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A-1	Concluding Steps	
	Version 5.3, dated August 2012	W/P Reference
	1. Discuss audit findings with supervisor and hold an exit conference (follow the guidance in CAM 4-304.4).	
	2. Complete indexing and cross-reference working papers.	
	3. Draft Report (CAM 14-206 and 10-1200).	
	a. When an assist audit and/or a technical evaluation is necessary, and is not obtained, the Scope of Audit paragraph should be properly annotated for the qualification. The qualification should also be made an integral part of the Summary of Audit Results paragraph. Both of these paragraphs should make references to the Circumstances Affecting the Audit paragraph, where the details regarding the qualifications for the nonreceipt of the reports should be shown.	
	b. If the contractor's accounting system is considered inadequate for the administration of progress payments, describe the findings and fully explain why the conditions need to be corrected by the contractor. The report should include specific recommendations to the ACO as to whether the progress payment(s), in whole or in part, should be paid to the contractor under the circumstances.	
	4. Significant procedural or control deficiencies, or CAS/FAR noncompliances should be cited in this report and also reported separately using the procedures in CAM 10-400 or 10-800. If significant billing system deficiencies are noted, issue a flash report and revise the ICAPS risk assessment.	
	5. If the auditor has encountered information that constitutes evidence or raises suspicion that fraud or other illegal acts have occurred, refer such suspicion by completing a DCAA Form 2000 (see CAM 4-702.4 and 5).	