

Repetitive Bidding of Duplicative Material Costs



Next Slide

Table of Contents

[Risk Assessment – Research and Planning](#)

[Risk Assessment – Initial Review of Subcontract Proposal](#)

[Preliminary Analytical Procedures](#)

[Entrance Conference](#)

[Audit Team Brainstorming for Fraud Risk Assessment](#)

[Results from Audit Procedures](#)

[Results from Audit Procedures-Discussion with Proposal Preparer](#)

[Expanded Audit Procedures and Results](#)

[Further Actions](#)

[General Comments and Lessons Learned](#)

[Fraud Indicators](#)

[Auditor Considerations with Qui Tam Actions](#)

Previous Slide

Next Slide

Risk Assessment- Research and Planning

The auditor was assigned to examine a \$70 million firm-fixed-price subcontract proposal (sole source award) to produce turbofan engines for TOPGUN, Inc., the manufacturer of an Air Force cargo jet. The auditor reviewed the audit request from the Air Force Procuring Contracting Officer (PCO) and then contacted the requester to see if there were any special concerns or sensitivities that should be considered in planning the audit. The PCO stated this was the fourth lot of turbofan engines manufactured for TOPGUN, Inc., basically the same as the previous production lots.

Risk Assessment- Research and Planning (Continued)

The PCO requested DCAA audit the subcontract proposal because the prime contractor was a sole source supplier and the subcontract costs were a substantial part of the prime contract costs. The subcontractor also denied the prime contractor access to its records. The auditor determined that the subcontractor proposal was adequate for audit. The auditor then reviewed the permanent file and documented the following materiality and sensitivity factors relevant to the audit.

- The subcontractor manufactures turbofan engines for various military cargo jets under multiple contracts and subcontracts.
- The subcontractor also provides various engine subassembly parts for commercial jets.

Risk Assessment- Research and Planning (Continued)

- In the previous year, the subcontractor had total sales of \$400 million. Sixty percent of those sales were Government-related and all were firm-fixed price.
- The subcontractor's Government contracts and subcontracts are subject to the Cost Accounting Standards (CAS) and the subcontractor has submitted a current CAS Disclosure Statement.¹ The Administrative Contracting Officer (ACO) recently determined that the Disclosure Statement was adequate and compliant with CAS. DCAA has not reported any CAS non-compliances.
- The proposal audits for Lots 2 and 3 of the turbofan engines reported some questioned costs for labor hours due to the subcontractor using incorrect improvement curve applications.

¹ A company or business unit of a company is required to submit a CAS Disclosure Statement when either: 1) a business unit is selected to receive a CAS-covered contract or subcontract of \$50 million or more, including option amounts; or 2) any company together with its segments received net CAS-covered awards totaling more than \$50 million in its most recent cost accounting period.

Risk Assessment- Research and Planning (Continued)

- In an audit performed several years ago, DCAA determined that the subcontractor's accounting system was adequate for accumulating and billing costs on Government contracts.
- An audit of the control environment was still in process even though it was begun concurrent with the accounting system audit.
- An estimating system audit performed 2 years ago reported the system was non-compliant with the following Defense Federal Acquisition Regulation Supplement (DFARS) estimating system criteria (DFARS 252.215-7002 (d)(4):
 - inadequate documentation of sources, methods, and rationale used in developing cost estimates; and
 - insufficient management oversight to detect and timely correct proposal preparation errors.

Risk Assessment- Initial Review of Subcontract Proposal



The auditor reviewed the proposal and documented the following information.

- The subcontractor's stated basis of estimate was the completed Lot 2 production contract for 25 engines produced over 12 months. The Lot 4 proposal was for the same number of engines as supplied under Lot 2 and also had a 12 month performance period. The negotiated price for the Lot 2 contract was \$53 million. The proposal stated that the Lot 3 production was ongoing with 10 of 25 engines completed and was not considered in developing the Lot 4 proposal.

Risk Assessment- Initial Review of Subcontract Proposal (Continued)

- The prime contractor required the subcontractor to certify that the cost or pricing data submitted in support of the Lot 4 subcontract proposal was current, accurate and complete as of the date of subcontract price agreement.
- Direct materials, labor, and indirect costs were the most significant cost elements. The basis for the proposal cost elements are presented in the following table:

Proposal Cost Element	Basis for Proposed Cost
Direct Materials - Unit Cost/Quantity	Priced bill of material using mostly purchase history and current quotes
Labor Hours	Lot 2 history with learning curve improvements
Labor Rates	Forward pricing rate agreement (FPRA) negotiated 13 months prior
Engineering Overhead	FPRA
Material Handling Overhead	FPRA
Material Cost Estimating Factor	FPRA
General and Administrative (G&A)	FPRA

Previous Slide

Next Slide

Preliminary Analytical Procedures

Since the basis of the proposal was the Lot 2 production actuals, the auditor requested the subcontractor representative to provide the Lot 2 actual cost incurred by cost element from the job cost ledger. The auditor also requested a listing of the actual rates and factors used on the Lot 2 contract. The auditor then compared the Lot 2 actual costs to the proposed Lot 4 cost by cost element and noted the following results:

- proposed direct labor costs were about 5 percent lower;
- proposed direct material costs were 32 percent higher;
- proposed other direct costs were about the same; and
- proposed indirect costs were 6 percent higher.

Preliminary Analytical Procedures (Continued)

The auditor compared the proposed rates and factors with the Lot 2 actual rates and factors provided by the subcontractor and found the proposed rates based on the current FPRA were a little higher than the Lot 2 actuals.

The auditor also reviewed the subcontractor's CAS Disclosure Statement to gain an understanding of the types of cost elements that made up the indirect cost pools and the material cost estimating factor. The subcontractor's disclosed practice was to use the cost estimating factor to bid material supply items that do not become a part of the end product and for other low value material items.

The subcontractor accumulated the costs of these material items in an account designated as abnormal supplies. The account description in the Disclosure Statement listed examples that included lubricants, welding tools, shop supplies, tooling supplies, nuts, bolts, fasteners, and drilling tools.

Entrance Conference

The auditor and supervisor met with the subcontractor's audit liaison and the proposal manager to gain an understanding of the basis of each cost element of the proposal, the related supporting documentation, and the relevant policies, procedures, and processes (walk-through of the proposal). During the meeting, the auditor asked the following series of questions.

Auditor Question: "Is the company planning to make any cost accounting practice changes that could impact this proposal?"

Subcontractor (audit liaison) Response: "No."

Auditor Question: "Is the company planning to make any organizational changes that could impact this proposal?"

Subcontractor (audit liaison) Response: "No."

Entrance Conference (Continued)

Auditor Question: "What is the status of the outstanding estimating system deficiencies?"

Subcontractor (proposal manager) Response: "We are working on them. I joined the company about 4 months ago and so I am just getting up to speed on how estimating works here. DCAA cited us for not having adequate policies and procedures for performing management reviews of proposals so I am working on drafting some. It's not like we weren't doing the reviews; we just didn't have the written policies and procedures DCAA was expecting us to have."

Entrance Conference (Continued)

Auditor Question: "So please explain how management conducts reviews of proposals."

Subcontractor (proposal manager) Response: "Well, I am still learning the ins and outs of our estimating processes, but each proposal has a proposal lead who reviews the proposal preparer's work. Then I review the proposal if the proposal lead deems it necessary. Also, I know all the proposals that are in-process at any given time and often just decide to randomly review a proposal. I reviewed the proposal you are auditing."

Entrance Conference (Continued)

Auditor Question: "What criteria is used in these reviews, for example is there a review checklist?"

Subcontractor (proposal manager) Response: "No, I do not use a specific review checklist. We just review the proposal to make sure that it was prepared in accordance with our regular estimating practices and that proposed amounts are based on the most current, accurate and complete cost or pricing data, when required."

Entrance Conference (Continued)

Auditor Question: "What changes are there between the Lot 4 proposal and the previous two lots?"

Subcontractor (proposal manager) Response: "There are none. As we explained in the walk-through, we based Lot 4 on Lot 2, and Lot 3 was generally based on Lot 2. TOPGUN, Inc. is purchasing the same quantity as before, and the design of the turbofan engine is the same."

Entrance Conference (Continued)

Auditor Question: "Please explain why the direct material cost is higher in this proposal than in Lot 2?"

Subcontractor (proposal manager) Response: "For some material parts, the purchase history was no longer valid and we had to obtain new current quotes for those material parts. As I explained, the priced bill of material indicates whether we used a current quote or the purchase history to support the proposed unit price."

Entrance Conference (Continued)

Auditor Question: "Where does the company consider the greatest risk of fraud in the proposal preparation process to be?"

Subcontractor (proposal manager) Response: "We don't really consider that proposals are particularly vulnerable to fraud since they are more related to future costs."

Auditor Question: "Does management have any knowledge of fraud or suspected fraud affecting this proposal or the contracts for previous production lots?"

Subcontractor (audit liaison) Response: "No, absolutely not!"

Entrance Conference (Continued)

Auditor Question: "Is the company aware of any allegations of fraud or suspected fraud made by employees, former employees, regulators, or others related to this proposal or the contracts for the previous production lots?"

Subcontractor (audit liaison) Response: "No."

Audit Team Brainstorming for Fraud Risk Assessment

The auditor discussed with the supervisor the results of the risk assessment or preliminary audit procedures performed and the potential fraud risks or misstatements associated with the proposal audit. Both agreed that the outstanding estimating system deficiencies increased the risk of potential fraud in this proposal. With respect to the material cost element, they brainstormed about why the proposed material costs for Lot 4 would be that much higher than the costs incurred for Lot 2.



Audit Team Brainstorming for Fraud Risk Assessment (Continued)

They concluded that proposed material costs could be overstated due to error or fraud if the subcontractor:

- proposed unit prices based on higher current quotes when lower prices from purchase history on previous lots might still be valid. This situation would contradict the subcontractor's statements made during the entrance conference;
- proposed material part(s) not necessary to production;
- proposed material quantities in excess of material requirements; and/or
- proposed direct material parts normally bid indirect as part of the material estimating factor or the material handling overhead pool.

Audit Team Brainstorming for Fraud Risk Assessment (Continued)

To address these risks, the team decided to perform the following audit procedures:

- Compare the proposed materials on the Lot 4 priced bill of material to the engineering bill of material² for the Lot 4 production. Identify any proposed material parts not listed as required parts on the Lot 4 engineering bill of material.
- Discuss with the subcontractor proposal preparer the basis for any identified differences between the proposed material parts listed on the Lot 4 priced bill of material as compared to those on the Lot 4 engineering bill of material.

² Some companies may produce multiple types of bills of material. An engineering bill of material will list all the parts required to produce the end products and usually can be matched to detailed engineering drawings. In addition, to address detailed material requirements, manufacturing personnel may develop a manufacturing bill of material to aid in the manufacturing process.

Audit Team Brainstorming for Fraud Risk Assessment (Continued)

For the remaining proposed material parts on the priced Lot 4 bill of material, perform a statistical sample using a sample size sufficient to address a high risk of misstatements (high expected error rate) which the auditor is unwilling to accept (low tolerable misstatement). Test the selected material parts to verify:

- that the proposed unit prices tie to or agree with the purchase history for the part, including purchase order and invoice source documents;
- whether the purchase history is valid for material parts supported by current quotes;
- that current quotes are supported by adequate competition and price analysis;
- that proposed unit prices based on current quotes also included reasonably anticipated discounts when there is no valid purchase history; and
- that the part is properly classified as direct material consistent with established and disclosed cost accounting practices.

Results from Audit Procedures

The auditor performed the planned testing and documented the results.

- The auditor identified 12 material parts totaling \$4 million that were not listed on the Lot 4 engineering bill of material. The auditor noted that some part names and descriptions seemed very similar to the description of some indirect supply items normally bid as part of the material cost estimating factor.
- The auditor did not identify any additional discrepancies in the unit prices or quantities for any material part in the statistical sample testing.

Results from Audit Procedures- Discussion with Proposal Preparer

The auditor met with the proposal preparer and proposal manager to discuss the proposed material parts that were not on Lot 4 engineering bill of material.

Auditor Question: "Please explain why these 12 material parts are not listed on the Lot 4 engineering bill of material."

Subcontractor Response: "I really can't explain that without reviewing these parts in more detail. There are so many parts on our proposal priced bill of material; I can't recall the specifics of any given part. However, the material parts on the priced bill of material should match the material parts on the engineering bill of material. Just give me the part numbers and I will be happy to look into your question."

Results from Audit Procedures- Discussion with Proposal Preparer

Auditor Question: "Okay, but look at these two parts, fabricated tools and bracket tools. The part names and descriptions seem to be very similar to the material supply items normally bid as part of the material cost estimating factor and accumulated in the abnormal supplies account."

Subcontractor Response: "I will look at into that question too, but right now I need to leave for another meeting. It would be helpful if you could just put your specific questions in an email request and I will get to them as soon as I can."

Auditor Follow-up: "I will do that, but I need your responses as soon as possible. I can't accept any proposed material parts that are not required for production."

Results from Audit Procedures- Discussion with Proposal Preparer

Later that afternoon, the proposal preparer requested a meeting with the auditor outside the office. During the meeting, the proposal preparer explained that they inherited this proposal and others from their colleague who unexpectedly left the company a month ago. Also, the proposal manager came onboard just 4 months ago and things had been crazy. In reviewing this proposal for which they were now responsible, the proposal preparer noticed some anomalies in the way the priced bill of material was prepared.

Results from Audit Procedures- Discussion with Proposal Preparer

In particular, some part numbers the auditor asked about were not bid using the subcontractor's normal process. The proposal preparer found invoices indicating these were material supply items that were normally accumulated in the abnormal supplies account and bid using the material cost estimating factor. The proposal preparer further explained that direct material part numbers for these items were created in the computer system two to three months ago and that the purchase history for the supply items was duplicated under the newly created part numbers. The proposal preparer found several other material parts that were likewise bid as separate direct material line items but would be included as part of the material cost estimating factor.

Results from Audit Procedures- Discussion with Proposal Preparer

The proposal preparer raised the issue with the proposal lead and the new proposal manager but was told that they were mistaken and not to change the priced bill of material. The proposal preparer stated that they became concerned since they were now responsible for the proposal and discussed their options with an attorney. The attorney suggested filing a qui tam suit³ but the proposal preparer stated they had not yet decided to take that action. The auditor ended the meeting by thanking the proposal preparer for the information. For more information, see [“Auditor Considerations Regarding Qui Tam Actions”](#) located after the Fraud Indicators section in this scenario.

³ Qui tam actions are civil actions that are brought under the authority of the False Claims Act (31 U.S. Code § 3729-3731). In a qui tam suit, the plaintiff brings the action on behalf of the Government. A qui tam suit is filed under seal. The defendant contractor is not provided with a copy of the filing nor is it to be told the contents of the filing while the action is under seal. The Government is furnished a copy of the filing and has 60 days in which to decide whether it will join in the suit. The qui tam plaintiff can receive an award up to 30 percent of proceeds of the action or settlement of the claim. The qui tam plaintiff is often referred to as the relator.

Expanded Audit Procedures and Results

The auditor discussed the substance of the meeting with the supervisor and audit office manager. All agreed that a Form 2000 fraud referral should be issued. The supervisor emphasized the importance of protecting the fraud referral information from inadvertent disclosure, particularly in light of a potential qui tam filing. The auditor then raised the question of whether this was an isolated incident on this proposal or a systemic practice of duplicative bidding of material supply items.

Expanded Audit Procedures and Results (Continued)

The auditor suggested reviewing a sample of proposals for similar items submitted over the last year to see if the subcontractor proposed questionable indirect material supply parts as direct material parts in the priced bill of material. The supervisor stated that although this would be a valid audit step for determining if the issue was systemic, it was not necessary to the audit objectives for this proposal audit. Performing procedures outside the scope of evaluating the proposal could be viewed as gathering information for the sole purpose of supporting a potential investigation. The audit step should be done under a separate audit assignment as part of issuing a business system deficiency report and/or a CAS non-compliance report.

Further Actions

The auditor, supervisor and audit office manager agreed to take the following actions. They would:

- Contact the DCAA investigative support auditor to arrange a meeting with the local criminal investigator to discuss the audit, the meeting with the proposal preparer, and the forthcoming fraud referral. Per DCAA guidance, the investigative support auditor should participate in the meeting with the investigator.
- Ask the investigator what information, if any, could be discussed with the PCO, other auditors and the prime contractor.

Further Actions (Continued)

- Complete the proposal audit effort and issue an adverse opinion on the proposal unless the criminal investigator requests in writing for DCAA to stop the audit.
- If the criminal investigator concurs, meet with the PCO and auditors cognizant of prime contractor TOPGUN, Inc. to discuss the results of the subcontract proposal audit and how best to address the audit results with the prime contractor.
- Establish business deficiency report assignment to determine whether duplicative bidding of material supply costs is a systemic practice.

Further Actions (Continued)

- Establish CAS 402, Consistency in Allocating Costs Incurred for the Same Purpose, non-compliance assignment in conjunction with the business deficiency report assignment.
- Discuss the results of the audit (excluding information related to the subcontractor employee and potential qui tam) with the auditor currently performing the control environment internal control audit.

General Comments and Lessons Learned

Bidding costs as both direct and indirect is one way a contractor can overstate the proposed contract price and earn a potential windfall profit. It can also be difficult to detect in a proposal audit, particularly if the contractor has a complex indirect rate structure and/or uses many cost estimating factors. The auditor must know and thoroughly understand the contractor's disclosed estimating and accounting practices. Using that knowledge, the auditor can identify any estimating or accounting changes and be alert for possible duplication of costs.

Fraud Indicators

- Repetitive noncompliance with the contractor's disclosed bidding/estimating practices.
- Repetitive, significant noncompliances with CAS and/or the contractor's CAS Disclosure Statement.
- Inconsistencies between the proposal bill of material and the engineering and/or manufacturing bill of material.
- Proposed material requirements that cannot be verified to engineering drawings or other production documents.
- Nomenclature similarities between proposed direct material items and items normally bid indirect as part of an overhead rate or as part of a material cost estimating factor.
- Vague terms used to bid materials based solely on management's judgments or rough estimates.

Auditor Considerations with Qui Tam Actions

Qui Tams are civil complaints filed by private persons for alleged violations of the False Claims Act (31 U.S. Code § 3729-3731). The plaintiff or relator files the complaint and a written disclosure of all known relevant information with the court under seal. The matter is initially sealed for 60 days while the Government conducts an investigation and determines whether to intervene in the action, thereby taking primary responsibility for prosecuting the action. Typically a qui tam investigation involves a DoJ Trial Attorney and/or Assistant United States Attorney (AUSA); one or more investigators; and often a forensic auditor.

Auditor Considerations with Qui Tam Actions (Continued)

The most important consideration for auditors when dealing with a qui tam situation is to carefully protect and strictly control all information related to the alleged false claim. In particular, while the matter is under seal, the auditor should not discuss or provide any information (facts, statements, documents, working papers, audit reports, etc.) related to the qui tam without the consent of the responsible DoJ Trial Attorney and/or AUSA. This includes the contractor, contracting officials, other auditors, and even senior audit management, if necessary.

Auditor Considerations with Qui Tam Actions (Continued)

Premature or inadvertent disclosure to unauthorized persons could compromise the Government investigation and/or hamper efforts to obtain evidence. The DoJ Trial Attorney or AUSA have sole authority and responsibility for the release of any information related to the qui tam. In situations where a contractor employee has contacted an auditor about an alleged fraud but has not yet filed a qui tam complaint, the auditor should still protect the information and identify the individual from the contractor and limit dissemination. In these cases, the auditor should contact a DoD criminal investigator as soon as possible. DCAA auditors should coordinate this contact with the DCAA investigative support auditor.

Auditor Considerations with Qui Tam Actions (Continued)

In addition, attorneys for qui tam relators often instruct their clients not to discuss the matter or provide information to anyone since it might negate their case. When the qui tam is based on information that has been disclosed to the public through any of several means including government hearings, audits, reports, or investigations, or through the news media, the relator may not be able to pursue the action due to statutory limitations. The relator should be the original source for the qui tam information. So during an audit, the auditor could inadvertently query a relator about something related to a qui tam filing and the relator may try to dodge the question, delay answering or even refuse to respond to the auditor's inquiry. These types of responses indicate increased audit risk in the area being queried, and auditors should not limit their questioning or probing into the sensitive area.