

**Loves Labor Lost?
Accurately Tracking Costs for the DOD*
and other Government Agencies**

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If you do contract manufacturing work for the DOD, the telephone call you dread most is:

"Hi I'm Joe Smith from DCAA* and we need to do an audit." Now it is not that DCAA auditors are nasty people. On the contrary, in my experience, most of them are pleasant hardworking people. They just want you to prove that you performed the work that you charged Uncle Sam* for. In some cases, this is easy. You bid so many dollars per widget and you have a tracking system that recorded that you shipped the number of widgets that you billed the DOD for (don't you?). In many cases, however, you get paid on a cost-plus basis. And even on fixed price contracts, there is a clause that requires the DCAA to audit you to ensure that you didn't make excessive profits.

One place that many companies run into trouble is recording labor charges. DCAA requires you to track how much time each employee spent working on each job (both for DOD and other customers.) This is called direct labor. They also require you to track how much time your employees spent on indirect labor for activities such as meetings, training, sick time, vacations, and holidays. The indirect labor becomes part of the labor overhead rate calculation (an art form all itself). This overhead rate is then applied to the employee's hourly wage rate to come up with a loaded labor cost. The labor cost on Uncle Sam's job is then the labor hours spent on his job multiplied by the overhead rate. Add on the negotiated contract profit margin, such as 5%, and you have how much the DCAA thinks the US Government should be paying you.

DCAA auditors typically look for three things.

- Do you have a good record keeping system?
- How easy is it for records to be falsified or changed?
- Do the numbers look reasonable and, if not, can they be substantiated?

Simply having time clocks to record when people start work and finish work is totally inadequate. At a minimum, you need a written time card for each employee, that records how many direct labor hours each day each employee spent on each job and on indirect labor activities. The problem is that you, the DCAA auditors, and I know how easy it is to fake the hours charged on a time card. How do they know that Charlie Jones really worked the 8 hours for the DOD shown on his time card and didn't take an hour off to get new tires put on his truck. If you don't do manufacturing for the DOD, you can be pretty flexible with recording your employees' time. When you do work for Uncle Sam you have to be accurate.

One of the major problems with DCAA audits is that they usually take place long after the time the work is performed. In an ideal world, DCAA would continuously audit the operation while manufacturing is taking place to ensure that the Government is being fairly charged for the work performed. Large defense contractors typically do have a full or part-time DCAA auditor assigned to them. But most subcontractors and smaller prime contractors get audited once a year at best. The

DCAA, like many Government agencies, is understaffed for the demands placed on it. As a result, audits are often performed long after the work was performed and paid for.

The good news is that, by and large, Uncle Sam will trust you and will pay the bills you submit without question. Then later, usually much later, the DCAA audits your cost data. The bad news is that, if you cannot substantiate your costs, Uncle Sam wants his money back and has all sorts of nasty enforcement methods to get that money back, including putting you out of business.

The big problems come when the auditors start doing spot checks on your data. You have records that show that Joe and Nancy each spent 40 hours in a certain week making 8 brackets. That works out to 10 labor hours per bracket. This seems unreasonable to the auditor based on his experience. He asks for details about the bracket and estimates that it should take one or two hours per bracket at most. The auditor then asks for the time cards. He notes that Joe's was written in pencil and has been erased and rewritten (not allowed under DOD regulations). He finds that Nancy's was written in ink, but with the same pen each day (probably filled out at the end of the week when it should have been filled out daily), and was signed by Nancy's supervisor rather than Nancy (not a good sign). The exact 40 hours charged for the week by each employee is also very suspicious. Did Joe and Nancy not have any other activities that week? Or were they simply "buried" in the charges to the US Government. After consulting with his supervisor, the DCAA auditor disallows all but 8 hours of direct labor and you may have to refund Uncle Sam for the other 72 hours you charged him. You can appeal the auditor's ruling but, believe me, there are more pleasurable activities, such as having a root canal operation.

The big problem is that all this happened so long ago. If it happened last week, everyone would have remembered that the stainless steel that you got from your supplier was not hard enough to hold the fasteners and that you had to scrap the first batch and redo the order. Also, you had to do extra work to specially treat each fastener hole and that took a lot of extra time. Nancy and Joe actually worked over 40 hours for the week but only charged 40 hours because they felt so bad about the problems. Now both Joe and Nancy have left the company and you are stuck with the disallowed charges.

So what is the solution to all this? It is to have an accurate system that records labor charges as they actually occur. A barcode labor tracking system, such as BellHawk, uses barcode scanning to record when employees start and stop working on each step of each job. The employee scans a transaction barcode, a barcode on their employee badge, a job barcode on the traveler, and an operation barcode on the traveler for the job whenever they start or stop work on a job. These scans are time tagged and written into a database where they form a perpetual record of the work performed for subsequent DCAA audit.

The scan times and the job and operation with which they are associated cannot be edited. They can be over ridden by supervisors, with proper identification of the supervisor (typically requires a badge scan plus a password). This is to allow, for example, correction for a transaction in which an employee forgot to scan out for lunch break until he returned. But the original record is still there, as well as the correction, who corrected it, and the reason, all for DCAA audit.

The data is recorded in real-time (meets the contemporaneous standard), uses barcode scanning (to eliminate mistakes in writing and keyboarding data), and is difficult to forge or fake. More to the point, in our previous example, the system would have recorded the discarding of the first batch, the time on the fastener hole preparation task, and the overtime by Joe and Nancy, to complete the job on time. Barcode tracking systems such as BellHawk also track when multiple people are working on a job step at the same time and when a person is working on multiple jobs at the same time. In the latter case, the system accurately allocates the labor between the jobs, eliminating another source of possible contention with an auditor.

It is usually not a good idea to use separate time clocks to record when people start and finish work. The problem is that some companies have experienced as much as a 30 percent discrepancy between the time clock data and the time recorded by a labor tracking system. This can be very difficult to explain to the DCAA (or any other auditor). Were the employees drinking coffee and

reading newspapers (usually unallowed costs) between when they clocked-in and actually started work? The best way is to have employees clock-in and clock-out using the same factory-floor computers that they use to record their labor data. In such systems, employees usually get paid from when they start their first job at the beginning of the shift to when they finish working on the last job of their shift. This avoids any questionable discrepancies.

So what about indirect labor hours? These fall into two categories: in-plant and outside-plant. The in-plant indirect labor hours are for such activities as meetings, breaks, accidents, and equipment maintenance. These are typically recorded using barcode scanning against a list of barcodes, one for each indirect charge category. Again, we have an accurate contemporaneous record of the labor hours spent by each employee on these activities. All direct and indirect scanned labor hours are typically reviewed and approved by an employee's supervisor and then rolled-up on a daily basis into an electronic time card. This is the equivalent of the weekly paper time card but all the direct and indirect charges by hourly non-exempt employees are directly traceable to time-tagged scans made on the factory-floor.

Outside-plant labor time such as holidays, vacations, sick leave, and jury duty are entered directly into the electronic time cards. These may be entered by the employee or by a person authorized to enter the hours for these activities on behalf of the employee. We can ensure identification of the person entering the time-card records by having that person scan their badge and enter a password.

Between the shop-floor scans and the time card entry we have a total labor record for each non-exempt hourly paid employee. These records can then be automatically integrated into job cost data and into the overhead rate calculations in such a way that should satisfy even the most picky DCAA auditor.

What about exempt employees such as managers, supervisors, administrators, and engineers? Typically these people directly enter their direct and indirect labor time directly into the electronic time cards. It's not that DCAA does not want to accurately record the time spent by these people. It's just that DCAA recognizes that people like engineers have some of their best ideas at 3 o'clock in the morning, when they are at home, or when they are flying somewhere on an airplane far from a barcode scanner. So the DCAA has to trust these exempt salaried people to accurately record how they spent their time.

Hourly exempt people may be required to scan in and out of tasks or they may not. Many administrators are so multi-tasked that their labor hours are simply recorded as indirect overhead and then spread over all contracts. In this case, it makes sense for them to simply record their time using an electronic time sheet rather than scanning in and out. Besides, these are usually highly trusted employees, often the ones designated to fill out electronic time-sheet entries for absent employees.

One major benefit of the type of electronic labor tracking system described here is that the labor hours recorded on the electronic time sheets can be automatically exported to a payroll system. This then gives accurate traceability from monies paid to employees back to the labor hours worked. The export mechanism, in a system such as BellHawk, computes when labor hours worked are subject to time-and-a-half and double-time overtime payments. It computes these according to local, state, federal, union and plant specific rules and allocates these to jobs where appropriate. In this way DCAA auditors can verify overtime charges made to DOD jobs to expedite completion.

Another major benefit of the automated payroll export, with traceability to underlying labor data, is that it leaves a trace for other auditors, such as those from state agencies who need to ensure that you are fairly paying your employees for the hours they worked.

While we have focussed, so far, primarily on auditing labor records it should be remembered that it is also important to be able to justify other cost elements when you are audited. It is important to have good traceability of materials that are used on each Government job. You will need to track the price you paid a vendor for the lot of materials you used on the Government job. You will need to record how much of that lot was used on the job, and how much was scrapped on that job. This is so that the

material costs can be accurately apportioned to the job. This tracking is accomplished in a system such as BellHawk through the use of barcodes to track each container of materials received and the consumption of the material it contains on multiple jobs. Such tracking systems record the production of WIP by jobs and the consumption of this WIP on other jobs. They also use barcode scanning to record the production of finished goods and their shipment to the DOD. In this way we are able to track the accumulation of material cost from received materials to finished goods.

Another cost factor is the cost of machines. While some manufacturers simply treat the depreciation cost of their machines as part of the general overhead, it may be beneficial to break out the cost of each machine and to charge for the hours used on each job. Because the cost of the machine may be different when the machine is running or not (due, for example, to the cost of electricity) we need to accurately track setup, run, down (broken), and tear down times. These times are recorded, in a tracking system like BellHawk, using barcode scanning to record machine time by job and operation performed. In many ways this is like tracking employees' labor but we are tracking machine time instead.

You may have already recognized that, in accurately accounting for the cost of performing jobs for the DOD, we are using a method called Activity Based Costing (ABC). In this we account for all labor, materials, and machine time used for each operation of each job. Tracking systems such as BellHawk provide a real-time roll-up of actual versus estimated for each job. This is so that the costs can be compared as you are making the products for the Government.

With the resurgence of defense spending in the wake of September 11th, more and more manufacturers are starting to handle defense contracts. The good news is that this is providing a much-needed economic boost to America's manufacturers. The bad news is that it brings with it a whole new set of requirements for tracking labor, material, and equipment costs. Many manufacturers' cost tracking systems are woefully inadequate for the DOD and may lead to a nasty wakeup call from DCAA.

For more information please call 1-800-747-1377, see our website at www.BellHawk.com, or send Email to sales@BellHawk.com.

* For those who (like me) have problems with acronyms: DOD stands for Department of Defense and DCAA stands for Defense Contracts Audit Agency. Uncle Sam = US Government.

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