

**ANSI/EIA
Standard
748-A and
TRAKKER**



 **Dekker, Ltd.**



“ANSI/EIA Standard 748-A and TRAKKER”





Earned Value Management has become a very important consideration for all organizations working with and for the federal government due to substantially increased pressure by the federal government. Earned








Value Reporting is required by the Department of Defense ANSI/EIA Standard 748-A (ANSI Standard) for all government contractors, and the pressure to meet these requirements is continually increasing.









Since 1984, Dekker, Ltd. (Dekker) has been helping its clients to meet the 32 criteria that make up the ANSI Standard. Dekker has continually applied its expertise in the ANSI Standard to its premier software solution for Earned Value Management: Dekker TRAKKER® PPM (TRAKKER). TRAKKER is designed to not only support the 32 criteria outlined in the ANSI Standard, but to also position an organization to harness earned value information to better manage their own projects on a day-to-day basis.







The purpose of this document is to provide an understanding of each of the 32 criteria and the way in which TRAKKER will be utilized to comply with those criteria.







Item	Criteria	Yes	Response
1	Define the authorized work elements for the program. A work breakdown structure (WBS), tailored for effective internal management control, is commonly used in this process.		TRAKKER provides the ability to define a Work Breakdown Structure (WBS) in hierarchical and relational formats, and additionally supports almost any coding structure internal to an organization or agency. The WBS can be defined at any level of detail required by a project. (TRAKKER User Guide pp. 107-114).
2	Identify the program organizational structure including the major subcontractors responsible for accomplishing the authorized work, and define the organizational elements in which work will be planned and controlled.		The Organizational Breakdown Structure (OBS) Dictionary allows the user to describe a functional organization or an Integrated Product Team (IPT). It allows the definition of an organization to be as broad and as deep as required to describe the enterprise, performing organization, or IPT. (TRAKKER User Guide pp. 115-118).
3	Provide for the integration of the company's planning, scheduling, budgeting, work authorization and cost accumulation processes with each other, and as appropriate, the program work breakdown structure and the program organizational structure.		Inherent in the TRAKKER architecture is the integration of planning, scheduling, budgeting, resourcing, costing, financial data, and work authorization. The integration of these elements of project management are foundational to the application and eliminates any duplication of effort and removes the need to import or export data. The TRAKKER architecture ensures consistency of data and the integrity of the information available through the tool. (TRAKKER User Guide pp. 127-158, 329-340).
4	Identify the company organization or function responsible for controlling overhead (indirect costs).		The organization Breakdown Structure In TRAKKER provides for the complete definition of the organization including those elements responsible for controlling indirect costs. The capabilities of TRAKKER to integrate with the financial system ensure the integrity of this



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			information and its application to meet the ANSI Reporting Criteria. (TRAKKER User Guide pp. 99-106).
5	Provide for integration of the program work breakdown structure and the program organizational structure in a manner that permits cost and schedule performance measurement by elements of either or both structures as needed.		TRAKKER fully integrates both the WBS and OBS through the WBS/OBS Matrix view. This view provides for the definition of project Responsibility Assignment Matrix (RAM) to facilitate the tracking and reporting of schedule cost and performance data. The organization of information available through TRAKKER can be based upon the WBS, OBS, or the integration of these structures. This capability fully incorporates cost, schedule, and performance data (TRAKKER User Guide pp. 111-118).
Planning and Budgeting			
6	Schedule the authorized work in a manner which describes the sequence of work and identifies significant task interdependencies required to meet the requirements of the program.		TRAKKER provides a complete Critical Path Method (CPM) scheduling engine and allows the user to establish schedules and perform critical path analysis. Relationships can be established between activities and across projects. Once a critical path is established, color coding allows the user to quickly view the activities driving the schedule (TRAKKER User Guide pp. 121-141).
7	Identify physical products, milestones, technical performance goals, or other indicators that will be used to measure progress.		<p>Users can establish and identify product deliverables, milestones, technical performance goals, and additional indicators as a means of measuring progress. This is achieved through application features providing for the definition of deliverables associated to a task or WBS element, and establishing activity and program level milestones. TRAKKER has been developed to track program milestones, key events, major accomplishments, and the accomplishment criteria at any level of the project structure (TRAKKER User Guide pp. 117-118, 122, 329-340).</p> <p>In addition, TRAKKER applies both measurable milestones, and interim milestones earned value methods, to track the performance of an activity. A user can establish deliverables or goals for each task, to measure performance through either method. (TRAKKER User Guide pp. 123, 128, 154, 156, 212-213).</p>
8	Establish and maintain a time-phased budget baseline, at the control account level, against which program performance can be measured. Budget for far-term efforts may be held in higher level accounts until an appropriate time for allocation at the control account level. Initial budgets established for performance measurement will be based on either internal management goals or the external customer negotiated target cost including estimates for authorized but undefinitized work. On government contracts, if an over target baseline is used for performance measurement reporting purposes, prior notification must be provided to the customer		<p>TRAKKER provides for the budgeting within the work packages, or at the detailed task level within each work package. These costs can be rolled up to any level within the WBS or OBS for reporting purposes.</p> <p>TRAKKER also allows for rolling wave planning where users can identify planning packages and apply budgets and resource planning at summary levels of the project. These summary elements are maintained until the planning package can be further detailed. These elements will rollup with the detail planning to define the negotiated target cost for the project.</p> <p>TRAKKER fully supports the management of Over Target Baseline and the associated authorization process. (TRAKKER User Guide pp. 133-156, 329-340, Report Writer Guide pp. 234-248).</p>

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9	Establish budgets for authorized work with identification of significant cost elements (labor, material, etc.) as needed for internal management and for control of subcontractors.		The budgets in TRAKKER can be defined at any level of the project structure required by the organization to manage the effort while meeting both internal and external reporting criteria. Resources used for budgeting can be defined at a level sufficient to meet the needs of the organization and are categorized as labor, material, equipment, subcontractor, and Other Direct Costs (ODC). Additionally, these resources can be organized by element of cost to meet both the internal management and ANSI/EIA Standard 748 requirements. (TRAKKER User Guide pp. 84-88).
10	To the extent it is practical to identify the authorized work in discrete work packages, establish budgets for this work in terms of dollars, hours, or other measurable units. Where the entire control account is not subdivided into work packages, identify the far term effort in larger planning packages for budget and scheduling purposes.		The cost schedule integration attributes of TRAKKER will allow a user to establish budget for work packages. Each resource (labor or non labor) can be applied in any unit of measure. Labor can be established in heads, quantity (hours), and direct or indirect costs in any currency. Non labor can be established in any unit of measure, including direct and indirect cost in any currency. (TRAKKER User Guide pp. 85-86).
11	Provide that the sum of all work package budgets plus planning package budgets within a control account equals the control account budget.		TRAKKER maintains data at the work package detailed level. The rollup of this information will assure that the sum of the elements will match the budget that is being reported for the control account. This information can be reported at any level within the hierarchy of the WBS or OBS. (TRAKKER User Guide pp. 133-156).
12	Identify and control level of effort activity by time-phased budgets established for this purpose. Only that effort which is unmeasurable or for which measurement is impractical may be classified as level of effort.		TRAKKER provides for the definition of Level of Effort of activities or work packages and the time phasing of budgets associated with the resources required to accomplish these tasks. This feature is accompanied by the tools required to identify these tasks to assure that they do not exceed reasonable thresholds for utilization for level of effort earned value methodologies within a project. (TRAKKER User Guide pp. 123,128, 213,219).
13	Establish overhead budgets for each significant organizational component of the company for expenses which will become indirect costs. Reflect in the program budgets, at the appropriate level, the amounts in overhead pools that are planned to be allocated to the program as indirect costs.		TRAKKER provides for the definition of Burden/Overhead Rates within the application. These rates support the budgeting process and enable the planning of the project at total cost. Users will have visibility of the allocation of these indirect costs for budget at the resource level. These costs can be rolled up to any level within the WBS or OBS structures. (TRAKKER User Guide pp. 99-106).
14	Identify management reserves and undistributed budget.		Management Reserve (MR) and Undistributed budget (UB) can be established and tracked as it is consumed throughout the lifecycle of a project. TRAKKER requires the user to define the reason for consuming MR or UB and to identify where these funds were applied within the project. TRAKKER provides automated logs to ensure visibility into where these funds are applied within a project. (TRAKKER User Guide pp. 235-237).
15	Provide that the program target cost goal is reconciled with the sum of all internal program budgets and management reserves.		The automation within TRAKKER ensures that the detailed planning of all internal program budgets and management reserve will summarize to the target cost. This is further simplified by specific reporting that breaks out cost to provide the detailed definition of the program target cost. (TRAKKER Report Writer Guide pp. 234-248).

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	Accounting Considerations		
16	Record direct costs in a manner consistent with the budgets in a formal system controlled by the general books of account		TRAKKER integrates with over 70 different commercial financial systems, agency specific applications, and "home grown" organizational financial systems including Oracle Financials, SAP, Deltek, Lawson, and Microsoft Dynamic (Great Plains). This integration eliminates the need to manually reenter the data within TRAKKER. This ensures data provided on the Cost Performance Reports matches the data stored in the financial book of record. This data is directly aligned to the budget and the elements of the schedule to which they were applied. (TRAKKER User Guide pp. 351-370).
17	When a work breakdown structure is used, summarize direct costs from control accounts into the work breakdown structure without allocation of a single control account to two or more work breakdown structure elements.		Within TRAKKER, direct cost integrated from the financial system are aligned to the level at which the budgets are applied within the project structure. Since this information is maintained at the lowest level of detail allocations are not required. This information can be rolled up through the WBS structure to meet the internal and external reporting requirements of the organization and the project. (TRAKKER User Guide pp. 351-370).
18	Summarize direct costs from the control accounts into the contractor's organizational elements without allocation of a single control account to two or more organizational elements.		Within TRAKKER, direct cost integrated from the financial system are aligned to the level at which the budgets are applied within the project structure. Since this information is maintained at the lowest level of detail allocations are not required. This information can be rolled up through the OBS structure to meet the internal and external reporting requirements of the organization and the project. (TRAKKER User Guide pp. 351-370).
19	Record all indirect costs which will be allocated to the contract.		Financial system integration within TRAKKER includes indirect costs. This capability ensures that the indirect costs allocated to the project in the financial system are aligned to the appropriate activities and resources within the project. (TRAKKER User Guide pp. 351-370).
20	Identify unit costs, equivalent units costs, or lot costs when needed.		The TRAKKER integration to the financial system includes quantity values in the appropriate unit of measure. The ability to acquire quantity data from the financial system enables TRAKKER to identify the unit cost for both labor and non labor elements of the project (TRAKKER User Guide pp. 84-88, 351-370).
21	For EVMS, the material accounting system will provide for:		TRAKKER provides a full featured automated integration capability that supports over 70 different commercial financial systems, agency specific applications, and "home grown" organizational financial systems including Oracle Financials, SAP, Deltek, Lawson, and Microsoft Dynamic (Great Plains).
21.1	Accurate cost accumulation and assignment of costs to control accounts in a manner consistent with the budgets using recognized, acceptable, costing techniques.		The financial integration within TRAKKER follows Generally Accepted Accounting Principles (GAAP). This integration is accomplished at the detail level of the data and ensures the consistency and complete integrity of the information. (TRAKKER User Guide pp. 351-370).
21.2	Cost performance measurement at the point in time most suitable for the category of material involved, but no earlier than the time of progress payments or		The approach TRAKKER provides for the measurement of earned value for material follows the GAAP practices for recognizing material costs

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	actual receipt of material.		within the financial system. This approach to managing earned value for material ensures that earned value occurs in a manner consistent with the recognition of actual expense for the material and its utilization on specific tasks within the project. (TRAKKER User Guide pp. 351-370).
21.3	Full accountability of all material purchased for the program including the residual inventory		The integration of the financial system and TRAKKER will ensure that the data reported via TRAKKER matches the financial book of record and meet the requirements for material and inventory management as defined by GAAP. (TRAKKER User Guide pp. 351-370).
Analysis and Management Reports			
22	At least on a monthly basis, generate the following information at the control account and other levels as necessary for management control using actual cost data from, or reconcilable with, the accounting system:		TRAKKER reporting provides the reporting intervals necessary to meet the needs of each stakeholder within the project on a weekly or monthly basis. This information will include technical, schedule, resource, cost, and performance data. The actual hours, quantities, direct costs, and indirect costs will be integrated from the financial system to ensure consistency with the financial book of record. (TRAKKER Report Writer Guide pp.66-67, 87).
22.1	Comparison of the amount of planned budget and the amount of budget earned for work accomplished. This comparison provides the schedule variance.		The TRAKKER reporting capabilities includes numerous reports that provide for current period, cumulative to date, and a time phased comparison of planned budget, earned value, and actual costs. The schedule variance, cost variance, and at completion variances are staple elements of these reports. The TRAKKER application also contains numerous on-line views that provide visibility into the planned budget, earned value, actual costs, and resulting variances. This information is available at the detailed and all summary levels within a project. (TRAKKER Report Writer pp. 234-248)
22.2	Comparison of the amount of the budget earned the actual (applied where appropriate) direct costs for the same		See Item 22.1.
23	Identify, at least monthly, the significant differences between both planned and actual schedule performance and planned and actual cost performance, and provide the reasons for the variances in the detail needed by program management.		TRAKKER calculates the schedule variance, cost variance, variance at complete, and indices including ETi, SPi, CPi, and TCPi at any level of detail within the project. Integral to this feature is a robust capability for identifying variances that are outside the thresholds established for the project. TRAKKER provides for the definition of the problem statement, corrective action, cost impact, and schedule impact. This reporting capability also includes an automated workflow distribution and electronic authorization for each variance analysis. (Report Writer Guide pp. 234-248, iPursuit User Guide 89, 91).
24	Identify budgeted and applied (or actual) indirect costs at the level and frequency needed by management for effective control, along with the reasons for any significant variances.		The TRAKKER integration with the financial system will ensure that the indirect costs are available to the reporting and analysis of data on weekly or monthly intervals. With the earned value data, TRAKKER calculates schedule variance, cost variance, variance at complete, and the resulting indices including ETi, SPi, CPi, and TCPi at any level of detail within the project. These variances are tracked in quantity, direct costs, and

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			indirect costs. TRAKKER provides for the definition of the problem statement, corrective action, cost impact, and schedule impact. This reporting capability also includes an automated workflow distribution and electronic authorization for each variance analysis. (iPursuit Users Guide 89,91)
25	Summarize the data elements and associated variances through the program organization and/or work breakdown structure to support management needs and any customer reporting specified in the contract.		The budget, actual, and earned value data are maintained at the detail level. This allows for the calculations of variances at any level of the WBS or OBS. The variance analysis associated with each of these elements remains available for analysis and problem resolution. This capability supports the management of the project and the stakeholder reporting requirement of the contract. (TRAKKER Report Writer 89-92).
26	Implement managerial actions taken as the result of earned value information.		TRAKKER provides for the integration of work flow for each variance and the tracking of action items, issues, and risk. This capability automates the process and simplifies the tracking and management the work flow and problem resolution.
27	Develop revised estimates of cost at completion based on performance to date, commitment values for material, and estimates of future conditions. Compare this information with the performance measurement baseline to identify variances at completion important to company management and any applicable customer reporting requirements including statements of funding requirements.		TRAKKER provides a complete automation for the Estimate At Completion (EAC). These estimates can be based on performance to date or the detailed Estimate To Complete. These estimates can be measured against the Performance Measurement Baseline to identify variances and project risk. This information can be reported at any level of the WBS or OBS and is integrated with the funding data maintained for the project. (TRAKKER User Guide pp. 209-212, iPursuit User Guide pp. 132).
Revisions and Data Maintenance			
28	Incorporate authorized changes in a timely manner, recording the effects of such changes in budgets and schedules. In the directed effort prior to negotiation of a change, base such revisions on the amount estimated and budgeted to the program organizations.		TRAKKER provides a complete change management capability that allows for the definition of any proposed change to schedule and budget of the project. Once authorized, these changes can be formally incorporated into the plan as a budget change with a complete log of the scope, reasons for change, and the identification of each discrete element affected by the update. This automation provides a complete logging of these details and the ability to review and report on this information throughout the lifecycle of the project. (TRAKKER User Guide pp. 226-238).
29	Reconcile current budgets to prior budgets in terms of changes to the authorized work and internal replanning in the detail needed by management for effective control.		The change control features in TRAKKER provide automated transaction level tracking of each change to the budget and schedule. This information is logged within the system. For each change the user is prompted to provide a reason for the change and to define the source (MR, UB, etc) for the funding of the change. These logs are available for review and reporting throughout the lifecycle of the project. This capability eliminates the manual reconciliation of the current budget to prior budget plans. (TRAKKER User Guide pp. 226-238).
30	Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs, earned value, or budgets. Adjustments should be made only for		TRAKKER does not allow for changes to historical or reported periods of the project. However, TRAKKER allows for current period adjustments to account for retroactive changes to historical

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	correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data.		periods. These transactions only occur in the current period and are traceable back to the system of record. For earned value, TRAKKER will allow the user to make retroactive or correcting adjustments in the current period, but will not allow cumulative earned value to be less than 0% or more than 100%. (TRAKKER User Guide pp. 226-235).
31	Prevent revisions to the program budget except for authorized changes.		TRAKKER provides extensive change management and security capabilities. These features ensure the integrity of the budget and limits budget updates to the only those changes that have been authorized. TRAKKER will log all changes to the budget and ensure the complete documentation of the scope and reason of the change. (TRAKKER User Guide pp. 59-73, 226-238).
32	Document changes to the performance measurement baseline.		The automation associated with the change management features within the application ensures the complete documentation of any change to the budget. This can be reviewed and reported throughout the lifecycle of the project. (TRAKKER User Guide pp. 226-235).

Since its inception, Dekker has continually been involved with the ANSI Standard, while many of their clients have been successful in utilizing TRAKKER to support their EVMS Certification. Dekker clients have also gained valuable access to performance metrics that helped to better guide them to successful performance management.

TRAKKER's signature attributes are the integration of cost and schedule data within the system, and the system's integration directly with an organization's financial configuration.

These two principal attributes provide a streamlined approach to associating actual costs to a project, while making it easy for project costs and schedules to be maintained together. Without these attributes for an EVM System, an organization would spend the majority of its time manually collecting cost information in spreadsheets and reconciling that information. TRAKKER eliminates these laborious aspects of maintaining an Earned Value Management System while also supporting the 32 criteria of the ANSI Standard.

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