Introduction

The Task Item Tracking and Nagging System is a work assignment tracking tool. It can also be used for Project and Time Management purposes. TITAN consists of several data storage and organization programs which assist in categorizing tasks, identifying responsibilities, allocating time, establishing priorities, and documenting request references and response files. It is designed to be run using SPF Dialog Manager and SAS.

Project Management

TITAN requires the user organization to define a common file of specific "project" and associated sub-project or "task" titles. A "project" is simply defined as any area of responsibility which constitutes a significant portion of the organization's role. Subdividing "projects" are "tasks," where a "task" is characterized as either a logical step within a project or a specific responsibility function. Work assignments or "items," are used to identify a specific action or set of actions. The three subordinated levels (projects, tasks, and items) provide a hierarchy that sufficiently defines and categorizes the work assignment. An example of TITAN project/task/item classification is shown below.

Project #30 - Nuclear Fuel Budget System
   Task #10 - Program Maintenance
   Item #YY.N - Burnam Pgm. Revision

The "projects" and "tasks" are predefined by the user group, and stored by TITAN in a table from which they can be retrieved by project and task number. This eliminates the need to specify project and task titles when entering a new item. TITAN assigns a unique item number to each item using the format YY.N where YY is the current year and N is a sequential number between 1 and 9999 beginning with 1 each year.

Time Management

TITAN requires information needed for time management such as assignment date, due date, priority, and estimated vs. actual hours for each assigned person.

Historic Record

In addition to the project and time management variables, TITAN also accepts and stores project action request and response documentation information. This provides a complete historical record for easy reference in the future.

TITAN System Design

Full screen data entry panels are used to input and update projects, tasks, and items. This technique is superior to other formats because of the ease in which data can be added, updated, and verified. An individual without a computer background may be assigned the responsibility of running the system.

TITAN uses IBM Command Language in a TSO environment to call SPF Dialog Manager services and SAS. The SAS PROC PREDT could have been used in place of SPF Dialog Manager, but it was not available on our system at the time TITAN was developed.

TITAN System Reports

All scheduled TITAN reports are produced by SAS background programs stored in SPF Dialog Skeleton files. This provides enhanced output flexibility through foreground code modification prior to execution. Special reports can also be easily generated by anyone having knowledge of Basic SAS.

Scheduled Reports include:

A. The User's Report - (3 sections):
   1. A Summary of Active Task Items (see figure 1),
   2. Detailed Update Sheets for each Active Task Item (see figure 2)
   3. A Summary of Completed Task Items (see figure 3)

B. The Supervisor's Report - (2 sections):
   1. A Summary of Active Task Items for all personnel supervised
   3. A Summary of Completed Task Items for all personnel supervised

C. The Director's Report - (2 sections):
   1. A summary of Active Task Items for all personnel within the organization - sorted in four different orders:
      a. by project, task, and priority
      b. by person, priority, and due date
      c. by priority, person, and due date
      d. by due date, priority, and person
   2. A Summary of Completed Task Items for all personnel within the organization - sorted in two different orders:
      a. by project and task
      b. by person
### FIGURE 1. Summary of Active Task Items.

<table>
<thead>
<tr>
<th>TASK NAME</th>
<th>DESCRIPTION</th>
<th>REQUESTED BY</th>
<th>DATE</th>
<th>ASIZ</th>
<th>EST</th>
<th>ACT</th>
<th>DATE</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>3004</td>
<td>ROUTINE REPORTS</td>
<td>C. SWENFREIDE, EV</td>
<td>12/23/92</td>
<td>PML</td>
<td>004</td>
<td>002</td>
<td>12/30/92</td>
<td>**</td>
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<tr>
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<td>FUEL EXPENDITURE</td>
<td>C. SWENFREIDE, EV</td>
<td>12/23/92</td>
<td>PML</td>
<td>004</td>
<td>002</td>
<td>12/30/92</td>
<td>**</td>
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<td>C. SWENFREIDE, EV</td>
<td>12/23/92</td>
<td>PML</td>
<td>004</td>
<td>002</td>
<td>12/30/92</td>
<td>**</td>
</tr>
</tbody>
</table>

### FUEL ECONOMIC ANALYSIS

<table>
<thead>
<tr>
<th>TASK NAME</th>
<th>DESCRIPTION</th>
<th>REQUESTED BY</th>
<th>DATE</th>
<th>ASIZ</th>
<th>EST</th>
<th>ACT</th>
<th>DATE</th>
<th>PRIORITY</th>
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<td>PML</td>
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<td>002</td>
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<td>12/23/92</td>
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<tr>
<td>1007</td>
<td>SPECIAL REQUESTS - WITHOUT PEND</td>
<td>C. SWENFREIDE, EV</td>
<td>12/23/92</td>
<td>PML</td>
<td>004</td>
<td>002</td>
<td>12/30/92</td>
<td>**</td>
</tr>
</tbody>
</table>
FIGURE 2. Detailed update sheet.

FIGURE 3. Summary of Completed Task Items.
To invoke TITAN:

A. LOGON to TSO.

B. At 'Ready' type 'TITAN'.

C. Enter whatever TITAN option is desired. See figure 4.

1 - ADD OR UPDATE AN ITEM is used to add a new item or update an existing item.

2 - DISPLAY AN ABBREVIATED ITEM LIST is used to display a list of all current items. The list is in order starting with the most recent item added.

3 - DISPLAY THE PRINT PANEL is used to display a panel of print options.

4 - DISPLAY THE PROJECT/TASK PANEL is used to display a panel of options available for maintaining the project/task subsystem of TITAN.

5 - DISPLAY THE ROUTINE ITEM PANEL is used to display a list of options available for maintaining the routine item subsystem of TITAN.

6 - MOVE ITEMS FROM THE CORRECT ITEM TABLE TO AN OLD ITEM TABLE is used to move items that are a selected age from the current item table to an old item table.

X - EXIT THE TITAN SYSTEM is used to return to the ready state in TSO.

ADD OR UPDATE AN ITEM (option 1)

Type in '1' on the TITAN option list (see figure 4) to receive the TITAN selection screen (see figure 5). To enter a new TITAN item and display the new TITAN item screen (see figure 6), leave the ITEM NO field blank. To modify an existing item, type the desired TITAN item number.

DISPLAY AN ABBREVIATED ITEM LIST (option 2)

Type in '2' on the TITAN option list (see figure 4) to receive an abbreviated list of all current items starting with the most recently added (see figure 8).

DISPLAY THE PRINT PANEL (option 3)

Type in '3' on the TITAN option list (see figure 4) to receive the 'TITAN' print options panel (see figure 9). Enter the desired print option.

DISPLAY THE PROJECT/TASK PANEL (option 4)

Type in '4' on the TITAN option list (see figure 4) and receive the 'TITAN' project/task option list (see figure 10). Enter whatever project/task option desired.
DISPLAY THE ROUTINE ITEM PANEL (option 5)

Type in '5' on the TITAN option list (see figure 4) and receive the 'TITAN' routine item option list (see figure 11). Enter whatever routine item option is desired.

MOVE ITEMS FROM CURRENT ITEM TABLE TO OLD ITEM TABLE (option 6)

Type in '6' on the TITAN option list (see figure 4) to move all current items satisfying the selected age requirement from the current item table to the old item table.

Experiences with TITAN

A. Positive:

1. TITAN is a useful tool in controlling the flow of tasks.
2. TITAN provides each user a written and clear definition of item assignment, priority, and date due.
3. Through the supervisor report, TITAN provides supervisors a quick reference as to the status of items.
4. TITAN provides a meaningful documentation summary from the time of input to completion.
5. TITAN provides assistance in planning human resources and man-hour requirements.
6. The TITAN files are useful in preparing progress reports for management, time costs for accounting, and evaluation forms for annual employee appraisals.
7. The TITAN files are useful in preparing special reports that summarize activities by projects for use in identifying trends in work assignments, so that human resources can be trained and allocated to expanding areas.

B. Negative:

1. Initially the effort required to establish TITAN exceeded the benefit; however, this problem was resolved as the group became familiar with the input/output procedures.
2. Since the Project/Task approach was new to the group, establishing it created some resistance initially.

Acknowledgments

Although assuming final responsibility for the material contained in this paper, I gratefully acknowledge the following: Foster M. McGee, Director of Fuel Economic Analysis, and S. P. Keck, Supervisor of Fuel Economic Analysis, for their suggestions, assistance, and support during the development of TITAN; Kent Bauman, Nuclear Fuel Procurement, for his assistance in the development of the SAS programming; and Gayle W. Sylvester and Lisa C. Champ for their administrative support.

A special thank you is extended to my wife, Sharon, for her encouragement while preparing this paper for presentation at SUGI83.

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