

# **USER'S MANUAL**

for

National Special Security Events (NSSE)/  
Special Event Assessment Rating Events (SEAR)

Job Aid



for use with  
Microsoft Project 2003

If you have any questions about the NSSE/SEAR Job Aid or this user's manual, please contact:

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## 1.0 Introduction

The National Special Security Events (NSSE) / Special Event Assessment Rating (SEAR) MS Project Job Aid is a planning tool designed to help Port planning officers to develop and execute a 12-18 month plan to assemble and deliver United States Coast Guard (USCG) and other maritime security forces to the designated AOR in support of the security operations lead by the U.S. Secret Service (USSS) or FBI in a NSSE or a SEAR. This guidance assumes the USCG will organize itself using the Incident Command System (ICS) structure to support the lead agency.

## 2.0 Job Aid Overview

ABS Consulting created this job aid for the USCG with the users in mind. The MS Project file (NSSE-SEAR Planning Template.mpp) is a template from which the user can create a project plan based upon the specific nature of the event. The job aid applies to any event designated as an NSSE or SEAR (formerly Special Events, Homeland Security (SEHS)). Previous examples include the 2004 G8 Summit in Savannah, GA (NSSE); Super Bowl XL (2006) in Detroit, MI (SEHS); and the 2004 Democratic National Convention in Boston, MA (NSSE).

### 2.1 *National Special Security Events (NSSE)*

An NSSE is a designated event that, due to its political, economic, social, or religious significance, may be the target of domestic / international criminal activity (terrorism) as a result of national significance and high visibility, requiring the lead of Secret Service.

### 2.2 *Special Event Assessment Rating (SEAR) Events*

A SEAR is a similar event not of the same magnitude or significance as an NSSE, but involving the lead interagency effort of DHS, USSS, and the FBI. The SEAR Methodology is a risk-based evaluation process serving as a starting point for the interagency Special Events Working Group (SEWG) by providing an initial numerical risk score for all events submitted. There are 40 other agencies/directorates involved (see Appendix A).

Other factors, besides national significance, differentiating an NSSE from a SEHS include the expected number of VIPs and overall anticipated event size. A list of SEAR categories follows.

1. SEAR-I: Events of such magnitude and significant national and/or international importance that may require the full support of the United States Government (USG). The scale and scope of these events requires significant coordination among federal, state, and local authorities and warrants pre-deployment of federal assets as well as consultation, technical advice, and support to specific functional areas in which the state and local agencies may lack expertise or key resources.

2. SEAR-II: Significant events with national and/or international importance that may require direct national federal support and situational awareness. The magnitude and significance of these events requires close coordination between federal, state, and local authorities and may warrant limited pre-deployment of USG assets as well as consultation, technical advice, and support to specific functional areas in which the state and local agencies may lack expertise or key resources.
3. SEAR-III: Significant events with national and/or international importance that may require only limited direct federal support to augment local capabilities. Generally, state and local authorities adequately support these events; however, the significance of these events requires national situational awareness and, depending on the jurisdiction, may require limited direct support from specific federal agencies. In order to ensure national situational awareness, an Integrated Federal Support Plan (IFSP) may be developed.
4. SEAR-IV: Events with limited national importance that generally require state and local resources. Unusual circumstances may sometimes necessitate the employment of specific federal resources to address unique needs of a particular event. Existing federal assistance programs are available to state and local jurisdictions hosting the event for training, exercise, and/or tailored program support.
5. SEAR-V: Events that may be nationally recognized but generally have local or state importance. These events normally require only state or local resources but may have the need to leverage locally based federal assets. Federal departments and agencies will receive notice of these events for situational awareness, but in most cases minimal, if any, federal assets or resources will be expended to assist with management of these events.

### **2.3 ICS Environment**

The job aid is intended for use in the Incident Command System (ICS) structure, with the USCG supporting the lead agency. The ICS structure brings industrial and governmental interests together for discussion and collaboration. The cooperative effort ensures that information is shared, that all interests are fairly represented, and that all pertinent event issues are addressed.

### **2.4 Scope and Limitations of the Job Aid**

The NSSE/SEAR Planning Tool provides a detailed list of activities and tasks that covers most event planning situations. However, there are some steps in the template that are not necessary for all events. Similarly, there are certain additional steps that might be necessary for a specific event. These steps are expected to be extraordinary in nature, which is why they are not captured in the Job Aid template.

The job aid is designed to help Port planning officers to develop and execute a 12-18 month plan to assemble and deliver USCG and other maritime security forces to the designated AOR in support of the security operations lead by the USSS or FBI in an NSSE or SEAR.

The job aid focuses on planning events leading to day one of the NSSE or SEAR event – called “E” Day. The time scale of this job aid covers the period “E minus 18 months” through “E minus 1 day”.

The job aid identifies 118 planning actions across 6 main planning functions:

- Command, Control, and Communications (C<sup>3</sup>);
- Operations (O);
- Logistics (L);
- Personnel (P);
- Safety (S); and
- Inter-Agency Coordination and Public Affairs (X).

Each of the 118 actions is placed in time over an 18 month period divided into 6 phases. Each action related to a complete action sequence called an action string.

Each of the 118 actions is coded to identify its place in the system according to its corresponding system variables, including:

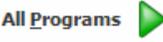
- Phase Number;
- Function Type;
- Action String; and
- String Sequence Number (SSN).

For example, the code for the first action in Command, Control, and Communications is: 1-C<sup>3</sup>-ICS-1, indicating:

- Phase 1;
- Function Type C<sup>3</sup>;
- the ICS Action String; and
- Step 1.

See Appendix C for more details.

### **3.0 NSSE/SEAR Job Aid Software Requirements**

Before using the NSSE/SEAR Job Aid, you will need a 2003 Microsoft Office Project license. The job aid is a file template that operates within the 2003 Microsoft Project application. Open your Microsoft Project application by moving your cursor to the  button on the Quick Launch toolbar and clicking the left button on your mouse. When the pop-up menu opens, move your cursor over the phrase  . Either left click on this phrase or allow the

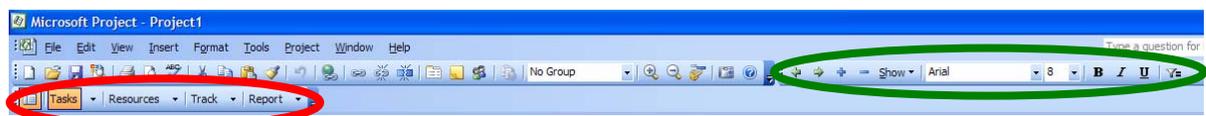
cursor to dwell over this text; note that when “All Programs” is selected, the text color changes to white and a blue box surrounds the words. In the side menu that opens, move your cursor over the folder “Microsoft Office” and either left click or allow the cursor to dwell here. Another side menu appears. Move your cursor over the phrase “Microsoft Office Project” to highlight your selection as shown in Figure 1 below. Left click with your mouse to open Microsoft Project.

Figure 1: Accessing Microsoft Project



Move your cursor into the application window and left click anywhere to activate the program. You will know if the application is active by the color of the title bar – if it is blue, it is active; if it is gray, it is inactive. Just below the Title Bar at the top of the window, there is a Command Toolbar as shown in Figure 2. The Command Toolbar contains the labels “File, Edit, View, Insert, Format, Tools, Project, Collaborate, Window, and Help”. Note also in Figure 2 that the application is active (since the Title Bar that reads “Microsoft Project – Project 1” is blue).

Figure 2: MS Project Title Bar and Common Toolbars



Below the Command Toolbar are other standard icons that allow one to easily open or save a file, for example. Next to the Standard Toolbar is the Formatting Toolbar; this toolbar begins with two green arrows pointing in either direction and is enclosed within the green circle above. Below the Standard Toolbar is the Project Guide Toolbar that is specific to MS Project. This toolbar, which contains drop-down menus for “Tasks”, “Resources”, “Track”, and “Report” functions, is circled in red above.

NOTE: Your MS Project application may include additional toolbars not included in Figure 2, or may lack some shown above. It depends on which toolbars are selected. To view the toolbars that are selected and shown in your application, move your cursor to “View” on the Command Toolbar and left click with your mouse. Find the word “Toolbars” by either scrolling down the list if you see it, or by expanding the drop-down menu using the double-down



arrow . Move your cursor over the name “Toolbars” and a side menu emerges. A toolbar name that has a checkmark enclosed within an orange box next to it is currently displayed in the MS Project application. To add a toolbar, simply move your cursor over the name and left click with your mouse. Since the selections are toggle items, you can similarly remove a toolbar from view by moving your cursor over the name and left clicking with your mouse.

#### 4.0 NSSE/SEAR Job Aid Software Requirements

The formatting convention used in this user’s manual consists of the following:

<**BOLD**> surrounded by inequalities refers to keyboard keys (e.g., <**ENTER**>).

***Bold Italics*** refer to names and labels used in the Job Aid. For example, one of the column headers on the template is ***Phase***.

*Italics* indicate data entry values, output information, output messages, or drop-down menu selections in the Job Aid. For example, one might enter the value of *ICS* in the ***String*** column header.

Underline is used for figure, chart, or table names in this document, as well as some list headings. For example, we might refer to Figure 1: About Microsoft Project, or to the heading in which we define a type 1 SEAR event as SEAR-I.



The green diamond with a white “T” indicates a tutorial step. For example, a step showing how to modify your project file will have this icon next to it.



The red octagon with a white “E” indicates information pertaining to an error message follows. For example, to demonstrate how an error might occur, we may instruct the user what to type and the subsequent error that would follow.



The yellow inverted triangle with a black “C” indicates a note of caution. The ensuing explanation might be a tip, a potential source of error, or some discrepancy between what you see and what you read. The user should realize fewer errors when adhering to the practices as described.

#### 5.0 Job Aid File Retrieval

The planning template may be accessed from a compact disc (CD) or via the Homeport web portal. If accessing via CD, then do the following. Insert the CD containing the planning template into the appropriate drive on your computer. Then select the “My Computer” icon



on your desktop. If the icon is not there, click the  button on the Quick Launch toolbar. When the drop-down menu opens, move your cursor over the “My Computer” icon



and left click to open the window. Double click with the left mouse button on the drive

name containing the CD to show the contents of the disc. Then double click on the filename “NSSE-SEAR Planning Template.mpp” to open the file.

If you are downloading the planning template from the intranet, do the following. Double click

on the “Network Places” icon . Move your cursor over the folder entitled “folder name”, and double click with the left mouse button. On this updated window, locate the filename “NSSE-SEAR Planning Template.mpp”, position your cursor over the name with your mouse, and single click with the right mouse button. A pop-up menu appears, from which you should select “Send To” by moving your cursor over the word. A side menu appears. Move your cursor so that the phrase “My Documents” is highlighted, and click with the left mouse button. The file is now saved in the “My Documents” folder. Open this folder and double click on the filename “NSSE-SEAR Planning Template.mpp” to open.

Before we explore the capabilities of the planning template, let’s first save the file to an appropriate name. Note that “NSSE-SEAR Planning Template.mpp” is a template from which we can create a planning file for each security event. We want to ensure that the user will always have this master template at his/her disposal; thus, we have set it up as read-only. We also recommend that the user select a descriptive file name for easy identification and association with a particular event. We propose the following naming convention:

event\_location\_date\_revision.xls

For example, if Super Bowl XLII is planned for Miami on February 3, 2008, then we might name our file “superbowlXLII\_miami\_2008\_02\_03rev1.mpp”.

## **6.0 Job Aid Technical Description**

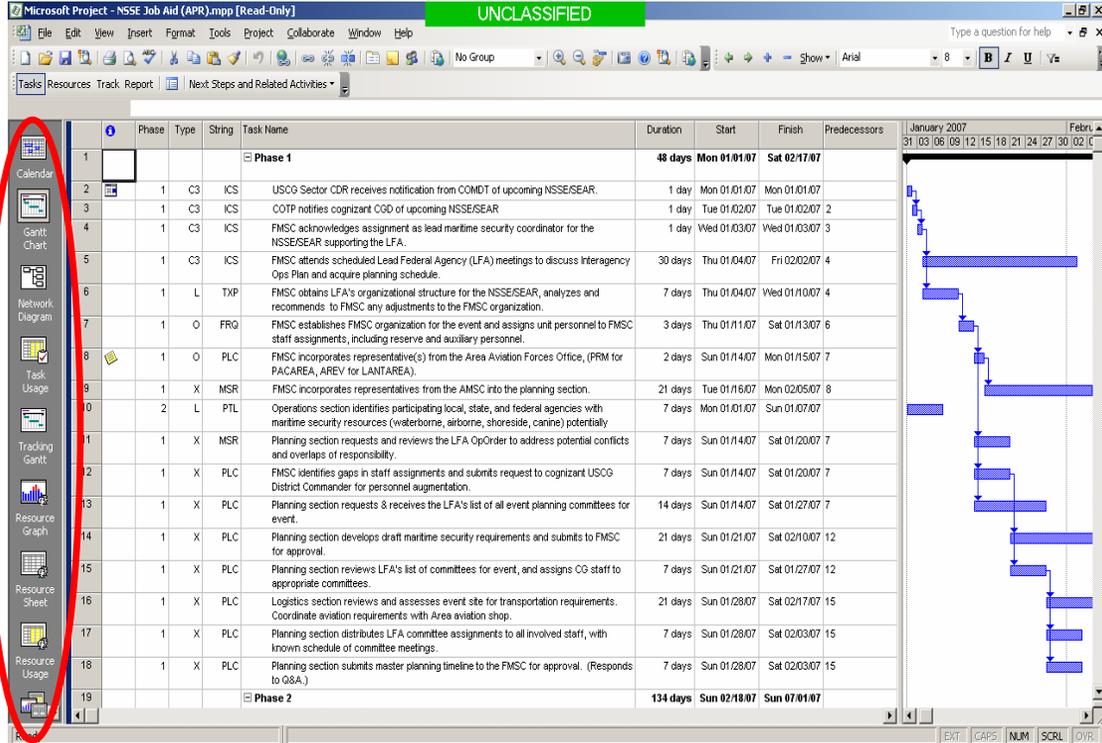
The MS Project file (NSSE-SEAR Planning Template.mpp) is a template from which the user can create a project plan based upon the specific nature of the event. The job aid applies to any event designated as an NSSE or SEAR (formerly Special Events, Homeland Security (SEHS)). It is meant as a detailed guide to facilitate the planning process. If we open the template file, we can look at the layout of the planning tool.

As before, find the location of the template file. If it is on a CD or website, then refer to the instructions in section 5.0. If it is in some other location, then open the file accordingly.

When you open the file, you will be asked if you want to open it as a read-only file. Select the “Yes” button by moving your cursor over the button and left clicking the mouse button. By opening the file as read-only, you will prevent inadvertent overwriting or modification of the template file.

The template file opens and we see something similar to the information shown in Figure 4. At the top is the Title Bar showing the MS Project filename. Below that, we have the Command Toolbar and the three other toolbars discussed in section 3.0 (see Figure 2).

Figure 4: NSSE-SEAR Planning Template



In Figure 4, we also see the look of the tool. The View Bar, shown as the encircled window on the left, includes several different view options including Calendar, Gantt Chart, and Network Diagram. If the View Bar is not shown on your screen, simply move your cursor and left-click the word “View” on the Command Toolbar; when the drop-down menu appears and expands, check the “View Bar” line by left-clicking with your mouse. The drop-down menu closes and the View Bar appears as shown in Figure 4. If any other windows appear to the immediate left or immediate right of the View Bar, simply click the small “x” in the upper right hand corner of each window to be closed. When finished, your screen should look like Figure 4.

The option we have selected on the View Bar is “Gantt Chart” because we want to see a visual representation of task duration and dependencies among tasks. The actual Gantt chart appears on the far right. (Note that we are only viewing a portion of the Gantt chart. We will discuss later how to view the entire chart.) The final section, found between the View Bar and Gantt chart, is the task list.

In the following sections, we are going to discuss the task list and the Gantt chart.

## 6.1 Task List

The planning template task list is a table of actions or events that must be completed in order to complete the project. Each row in the table corresponds to a specific task, which is numerically identified by the row number. As we review the information for a given task, we see there are several pieces of information stored. These pieces of information include the **Phase**; **Type**; **String**; **Task Name**; **Duration**; **Start**; **Finish**; and **Predecessors**. A description for each follows.

**Phase:** The phase corresponds to the primary task under which the subtask falls. There are six phases associated with this project planning template, thus, appropriate values in this column are the numbers {1,2,3,4,5,6}.

**Type:** The type refers to the category or group under which the task falls. It is a planning function. The six types are:

- Command, Control, and Communications (C<sup>3</sup>);
- Operations (O);
- Logistics (L);
- Personnel (P);
- Safety (S); and
- Inter-Agency Coordination and Public Affairs (X).

**String:** The string refers to a particular project associated with the development of the overall operation. The values for strings are:

- (ATS) Automated Tracking System;
- (CMP) Communications Plan;
- (CON) COTP Controls;
- (CPX) Command Post & Communications Equipment;
- (CRD) Credentialing;
- (DEM) Demobilization Plan;
- (FLS) Field Logistics Station Support;
- (FRQ) Force Requirements;
- (ICS) Incident Command System;
- (MOP) Maritime Security Operations Plan;
- (MSR) Maritime Security Requirements ;
- (PAF) Public Affairs;
- (PEQ) Personnel Equipment;
- (PLC) Planning Coordination;
- (PTL) Personnel Travel & Lodging;
- (REP) Reporting Procedures;
- (ROE) Rules of Engagement;
- (SSP) Site Safety Plan;
- (TQL) Training Qualifications;
- (TXP) Transportation Plan; and

- (WQS) Watch, Quarter & Station Bill;

**Task Name:** The task name provides a label for and/or a description of the task.



\*\*\* **NOTE** \*\*\*

For the next three fields, **Duration**, **Start**, and **Finish**, we supply values for two fields and MS Project computes the third.

**Duration:** The estimated amount of time to complete the task. It is the difference between the **Finish** time and **Start** time estimates, but in the context of a work schedule. For example, if a task is scheduled to last 8 hours and 8 hours is a typical workday, then the task will last 1 day. Similarly, if a workday is 16 hours, then that same task takes 0.5 days to complete.

**Start:** The date a task is expected to begin.

**Finish:** The date a task is expected to end.

**Predecessors:** Those tasks that must be completed before the current task can be started. Acceptable values are numbers less than the current task number.

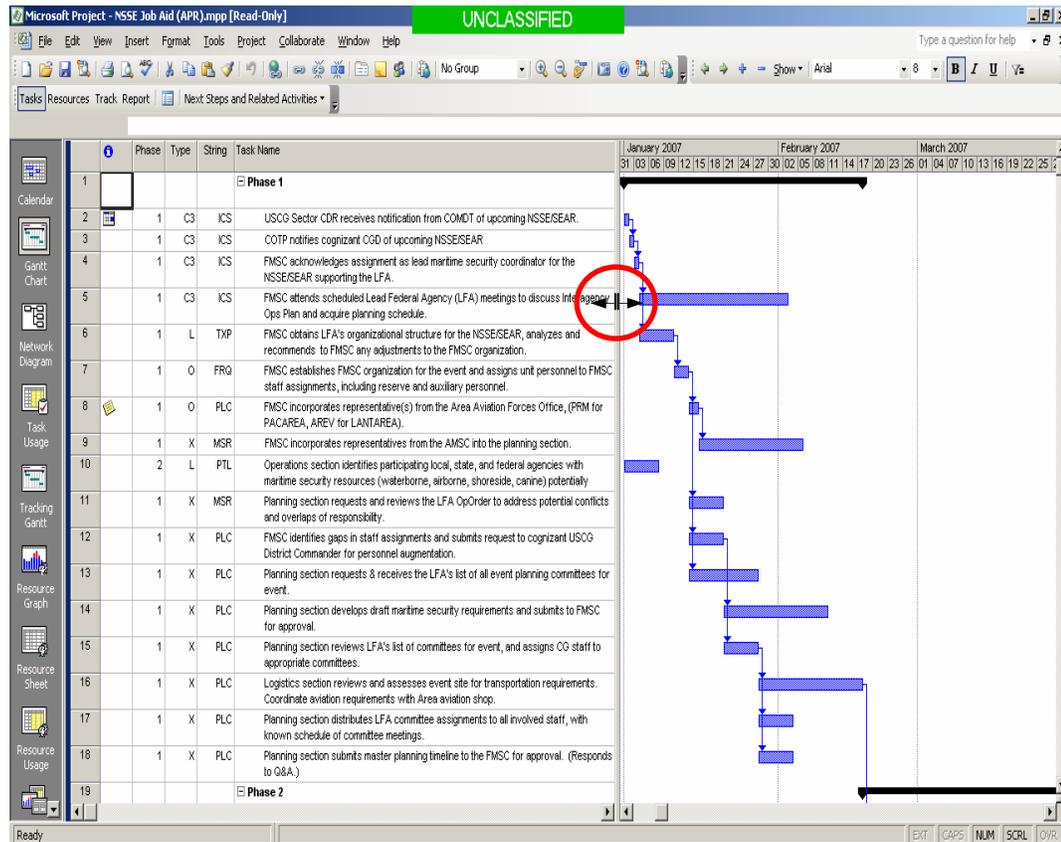
The NSSE-SEAR Planning Template.mpp file contains 118 planning actions (or subtasks), grouped into 6 phases (or primary tasks). They appear as individual list items in the Task List, but also as bars representing time duration on the Gantt chart.

## 6.2 Gantt Chart

The Gantt chart is a visual project management tool that represents tasks in relative size by their duration on a calendar timeline. In addition, the Gantt chart illustrates dependency issues among tasks using lines with arrowheads. Let's take a look at the Gantt chart in the NSSE-SEAR Planning Template.mpp.

Since the Gantt chart is only partially visible, let's increase its presence in our worksheet. To do that, move your cursor to the vertical bar that separates the Task List from the Gantt chart. When your cursor changes its appearance from an arrow to a pair of parallel vertical lines surrounded by pulling arrows (circled in red below), left click with your mouse and drag the separation bar to the left. This reduces the task list window and increases the Gantt chart window. Figure 5 shows an expanded Gantt chart that covers the **Duration**, **Start**, **Finish**, and **Predecessors** columns.

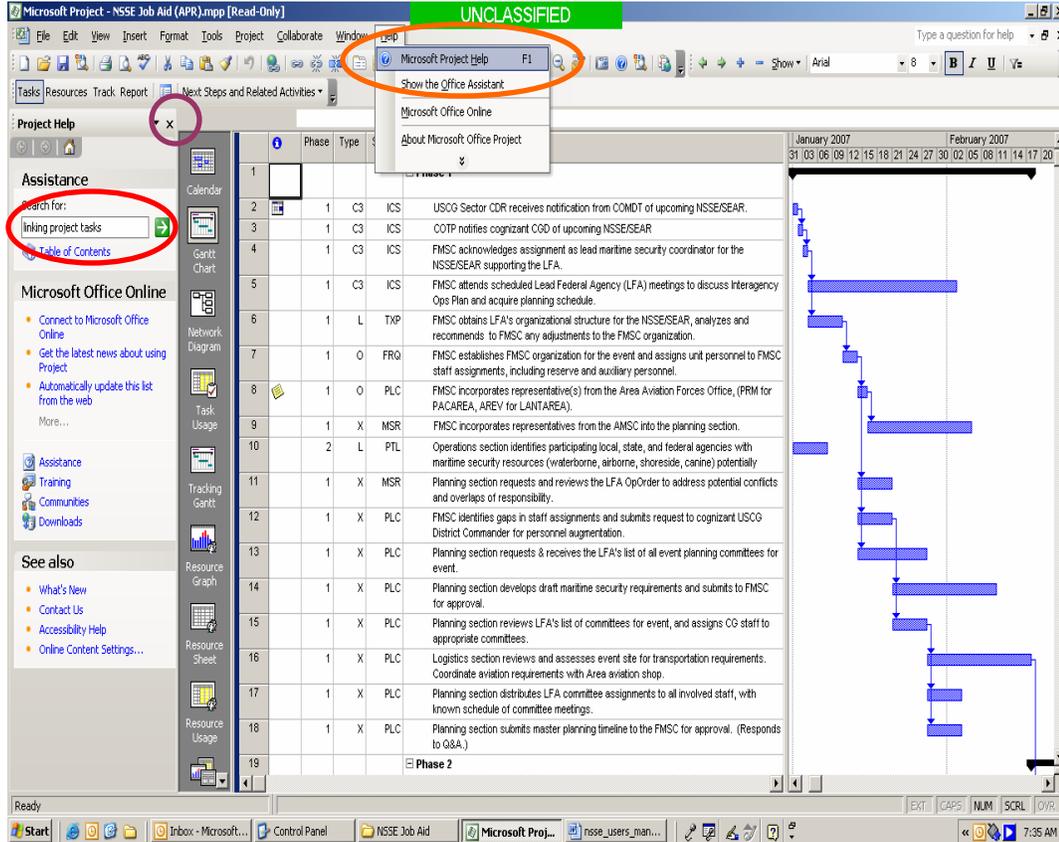
Figure 5: Expanded Gantt Chart



In Figure 5, we can see that the subtasks are represented by blue rectangles, while the primary tasks (in our case, the phases of the plan) are shown as black bars. The blue arrowed lines indicate precedence. If the blue arrow begins on the right side (or finish side) of a task and points to the left side (or start side) of another task, then it indicates that the second task cannot begin until the first is completed. This is the Finish-to-Start dependency and is one of four such dependencies in MS Project.

Since the NSSE-SEAR Planning Template.mpp uses Finish-to-Start dependencies exclusively, we will not discuss the other types of dependencies here. If you are interested, you may research this topic via the Microsoft Project Help feature. From the Command Toolbar, left click the word “Help” with your mouse and select “Microsoft Project Help” from the drop-down menu by left clicking again with the mouse. (Note that you can also press the <F1> function key on your keyboard to open the help window.) In the “Search for:” field, type *linking project tasks* as shown in Figure 6. When the search results appear, click on the hyperlink “Linking Project tasks” to view the help file; it should be the first on the list.

Figure 6: MS Project Help Documentation



When finished with the help lookup, simply left click the “X” in the Help Window (shown in purple in Figure 6). The window closes, and the Task List and Gantt Chart shift to the left. We are now ready to create an example project file.

## 7.0 Project Plan

In this section, we create a project plan using the NSSE-SEAR Planning Template.mpp. Let’s suppose that several foreign dignitaries, along with many national VIPs, plan to attend the 2009 Giants in Entertainment Awards (GEA) ceremony at a venue on beachfront property in the coastal town of Oceanville. The ceremony is scheduled for the night of March 8, 2009. We are tasked to create a project plan for this National Special Security Event (NSSE).

So first, we create a project file from the template. We open the NSSE-SEAR Planning Template.mpp file from its appropriate location (as discussed in section 5.0) and save the file as:

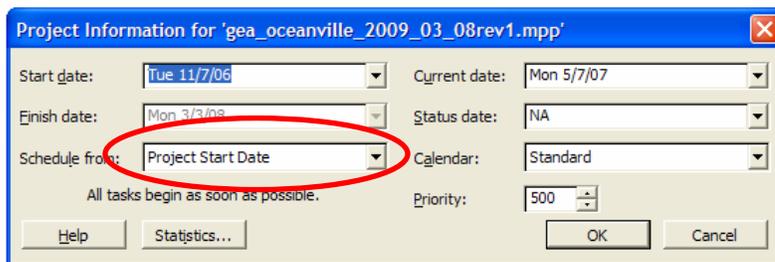
gea\_oceanville\_2009\_03\_08rev1.mpp.

The project plan will follow the typical 18-month, 6-phase timeline as contained in our file. We need to go through each of the tasks to determine its need in the context of our project. There are essentially three different options:

1. A task does not pertain to our project – in this case, we can simply delete it;
2. A task is appropriate, but not exactly as described – in this case, we need to modify it so that it fits our project; and
3. A task is missing an important predecessor step – in this event, we need to add another task to the project.

Let's begin to tailor our project plan for `gea_oceanville_2009_03_08.mpp`. The first thing we want to do is update our project file based upon the anticipated completion date, which is the night before the event (i.e., March 7, 2009). Thus, we click "Project" from the Command Toolbar, and select "Project Information..." from the drop-down menu. The Project Information Window opens as shown in Figure 7.

Figure 7: Project Information Window



To choose a project finish date, we must first left click on the drop-down menu icon to the right of the "Schedule from:" field (circled in Figure 7). When we click this down arrow, we find two options – *Project Start Date* and *Project Finish Date*. We choose the latter by moving our mouse over the phrase *Project Finish Date* and left clicking with the mouse. When selected, our new value is updated in the "Schedule from:" field, the "Start date:" is grayed, and the "Finish date:" field becomes editable. We move the mouse to the "Finish date:" input field, delete the existing contents, type `3-7-09`, and press <ENTER>. The information is updated in the Task List and Gantt Chart. The Project Information Window also closes.

With the project information now updated and appropriately defined, we move on to the individual tasks.

**Task 1:** The first task is the primary (or summary) task, *Phase 1*. It consists of 15 subordinate, or secondary tasks, numbered 2 through 16. *Phase 1* is represented on the Gantt Chart by a black bar with a fulcrum at either end. The points on each fulcrum indicate the earliest start date and latest finish date of the subordinate tasks of *Phase 1*. These limits define the extent of *Phase 1*.



We decide that Task 1 is necessary and is appropriate as is. Thus, we do nothing to this particular task.

**Task 2:** The second task is the first subordinate task. As we read across the row, we see that this task is a proposed Phase 1 task; is a Command, Control, and Communications (C<sup>3</sup>) type; and is assigned an ICS string. Furthermore, it has a task name indicated, lasts one day, begins on January 5, 2008 and finishes on January 5, 2008.

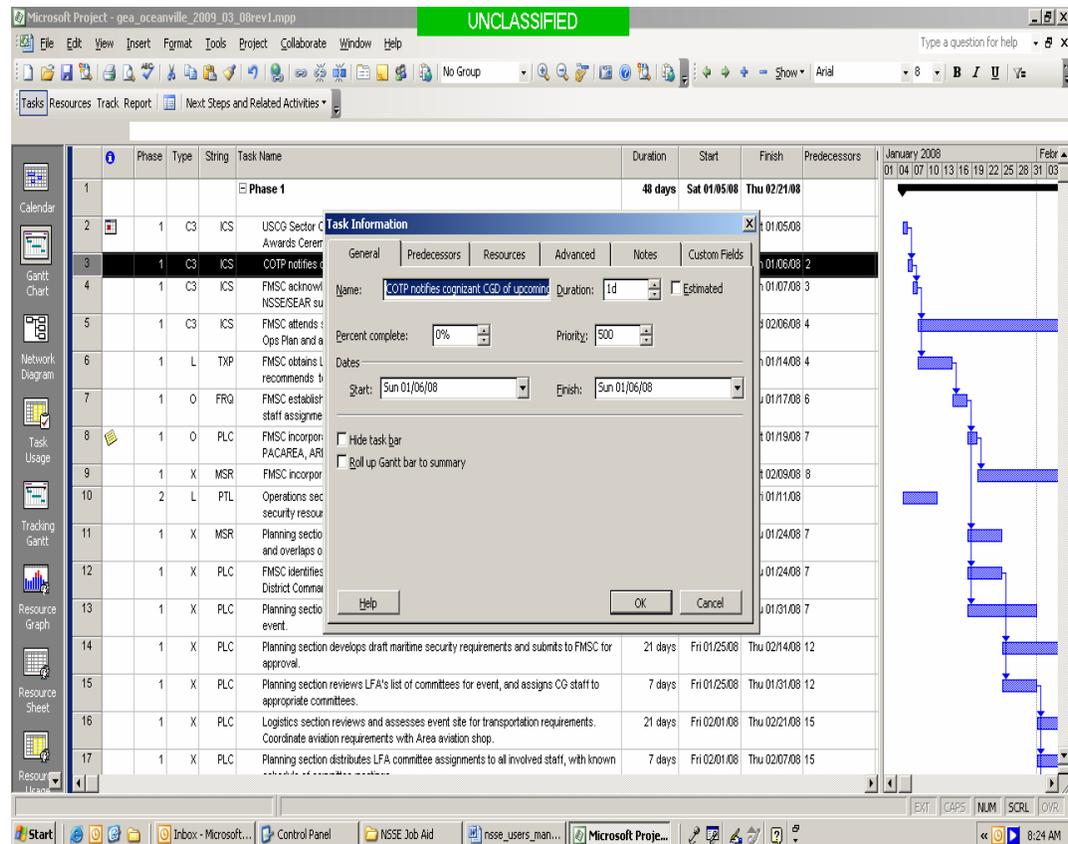


We decide that Task 2 is necessary, but can be refined for our project. Under task name, we change the value to *USCG Sector CDR receives notification from COMDT of upcoming Giants of Entertainment Awards (GEA) ceremony in Oceanville on March 8, 2009.*



Since our text has run onto a second line, we can no longer read the entire task name. Thus, we increase the row height for Task 2 by moving our cursor to the line that separates the “2” block from the “3” block, then left clicking and dragging the line downward until we see both lines of text for the task name. (Note that in order to select the cell divider, the cursor must change from the white arrow to what looks like a black directional compass missing its east and west arrowheads.)

Figure 8: Task Information Window



**Task 3:** The third task is deemed necessary with a minor change to the Task Name. This time, we are going to modify the Task Name by moving our mouse over the

number 3 and left clicking to highlight the row. Then we are going to right click with the mouse to open the Task Information Window. This appears in Figure 8.

On the first tab, entitled “General”, we move our cursor into the “Name:” field and edit the line so that it now reads *COTP notifies cognizant CGD of upcoming GEA in 2009*. If we click  , then the line item corresponding to Task 3 will display the new information under the **Task Name** column.

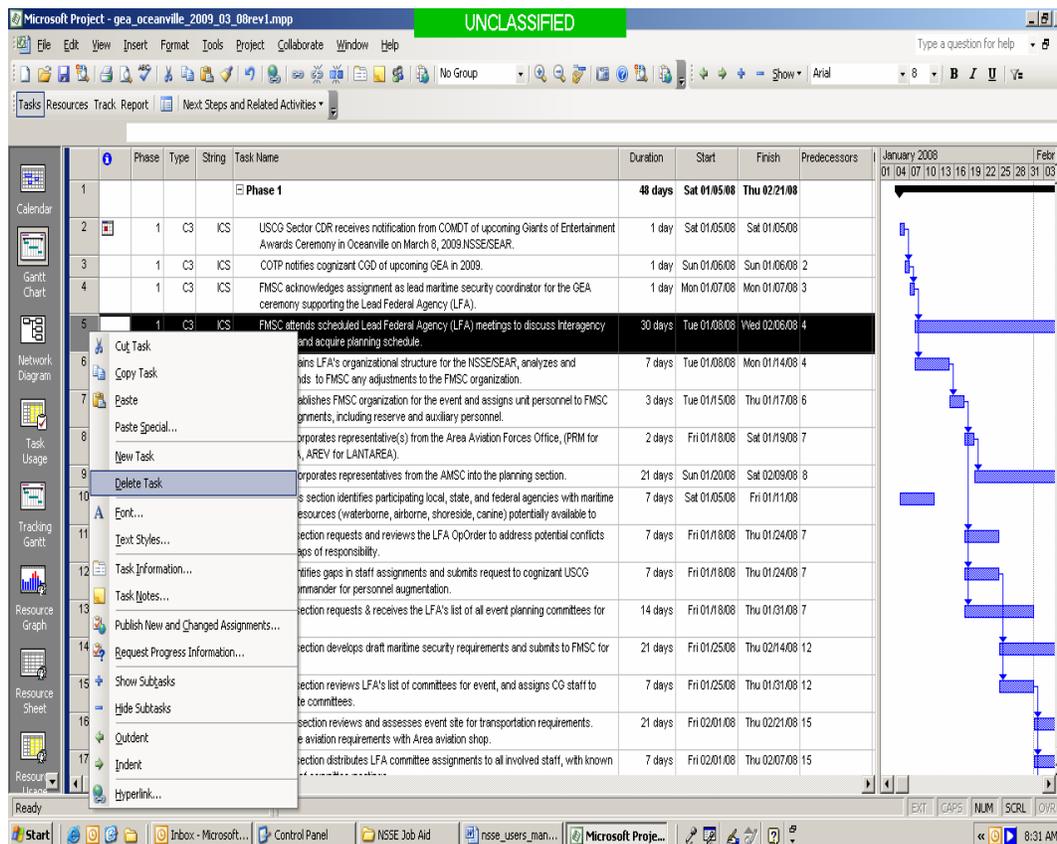
As Figure 8 also reveals, we can also change the **Duration**, **Start** (date), and **Finish** (date) for a task on this General tab.



**Task 4:** The fourth task is deemed necessary with a minor change to the Task Name. You may choose your particular method to update the information. When you are finished, the Task Name should read *FMSC acknowledges assignment as lead maritime security coordinator for the GEA ceremony supporting the Lead Federal Agency (LFA)*.

**Task 5:** The fifth task is deemed unnecessary and can thus be deleted. No formal meetings are required as described.

Figure 9: Delete Task





We delete this task by moving our cursor to the block labeled 5 and right clicking our mouse button. This highlights the task 5 row and opens the menu shown in Figure 9. We scroll down the menu to select “Delete Task”. The task is removed and the Task List and Gantt Chart update accordingly.

\*\*\* **CAUTION** \*\*\*



Be careful when deleting tasks. MS Project does not give you any warning regarding the ramifications of a deletion. Fortunately, most deletions can be undone by selecting “Edit” from the Command Toolbar and “Undo” from the drop-down menu.

We continue to work our way through the subordinate tasks in Phase 1, making minor modifications to the **Task Name** information. When we reach Task 17, we believe that we are missing an intermediate step between Task 16 and Task 17. Thus, we are going to add a new Task 17 which follows.



**Task 17:** We believe that there should be a feedback loop before the master plan is disseminated in Task 17 so we add a task by right-clicking on the number 17. This highlights the task line item and opens a menu. We scroll down the list to select “New Task”. The menu closes and a blank task line is inserted as Task 17. All subsequent tasks are shifted down one row.



We can fill in the cells directly. First, we enter a value of 1 for **Phase**, followed by X for **Type**, and PLC for **String**. Then we type *Committee staff responds with schedule modifications and updated list is redistributed to all involved staff.* under **Task Name**. For duration, we type 14 days. We leave the **Start** and **Finish** columns as is and input 16 in the Predecessors column. Since 14 is not a predecessor to any other subsequent tasks, we need not update the **Predecessor** information for other cells. If Task 16 were a predecessor to a later step, then we would have gone to that task and changed the predecessor from 16 to 17 so that the subsequent step would have the updated information that we created in Task 17.

\*\*\* **CAUTION** \*\*\*



When adding a new task, be sure to review your **Predecessor** information in subsequent steps to ensure that the proper dependencies are defined.

At this point, you are equipped to modify the project plan as needed by adding, modifying, or deleting tasks.

## 8.0 Project Output

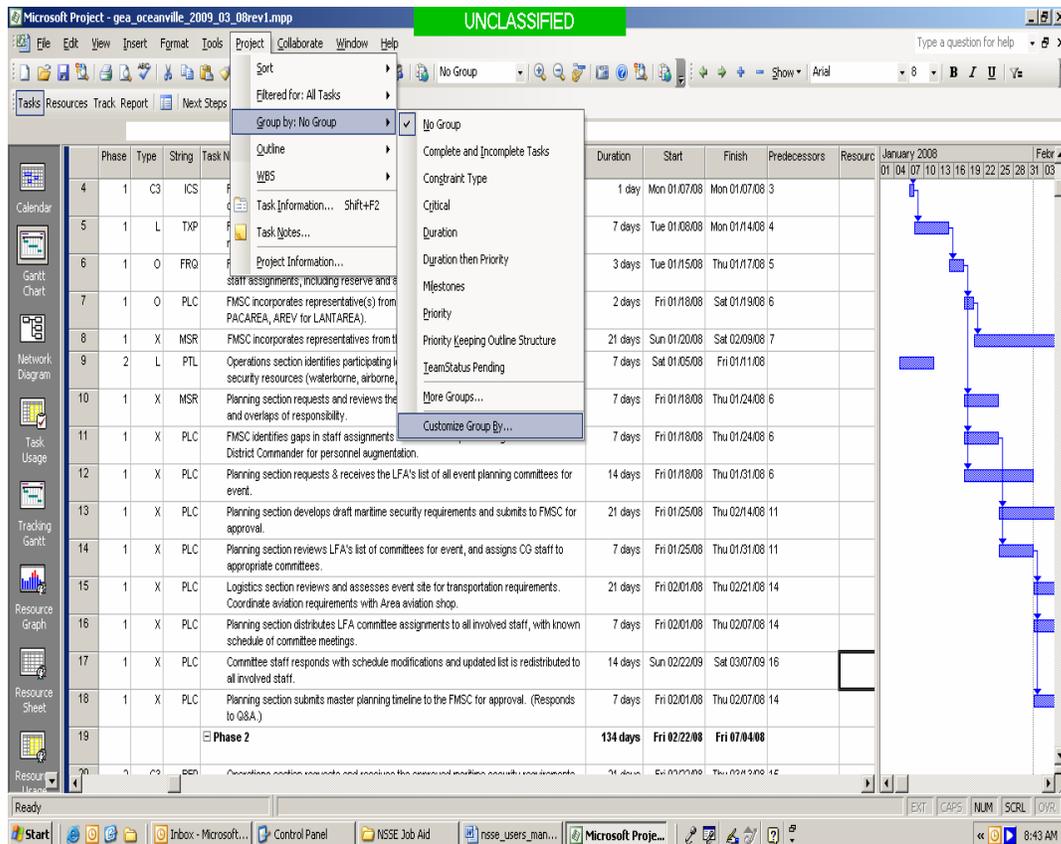
Once your project plan is created, you will want to sort and print this information for distribution, as well as to track task completion information. Each of these topics is discussed below.

### 8.1 Sorting

The distribution will likely require a sorting feature so that you can inform specific groups of their tasks associated with this project. They may only be interested in the task, start date, and duration. Notices of progress would likely keep them apprised of their impending involvement so that only the aforementioned information would be of importance.

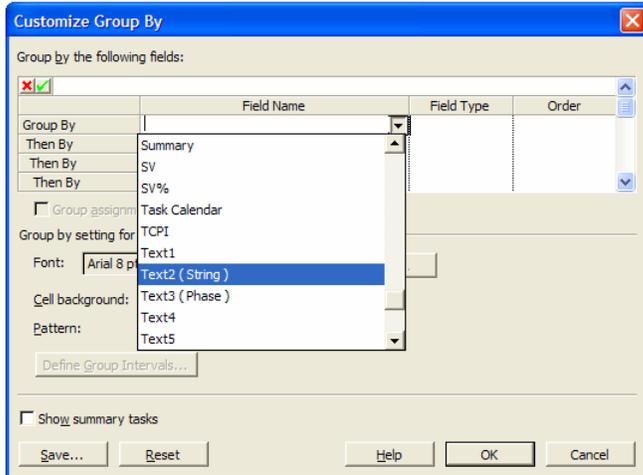
To review items by category, we will use the group feature. If we want to group by String, then we select “Project” from the Command Toolbar. A drop-down menu appears and we select “Group by:”. A side menu appears and we select “Customize group by ...” as shown in Figure 10.

Figure 10: Accessing Groups



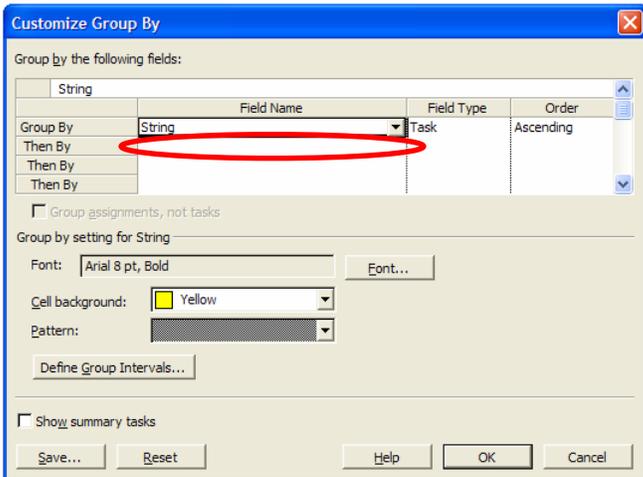
In the cell formed at the intersection of row “Group By” and column “Field Name”, left click on the down arrow to activate the drop-down menu. Scroll until you find “Text2 (String)” as shown in Figure 11. Left click to make your selection.

Figure 11: Customize Groups



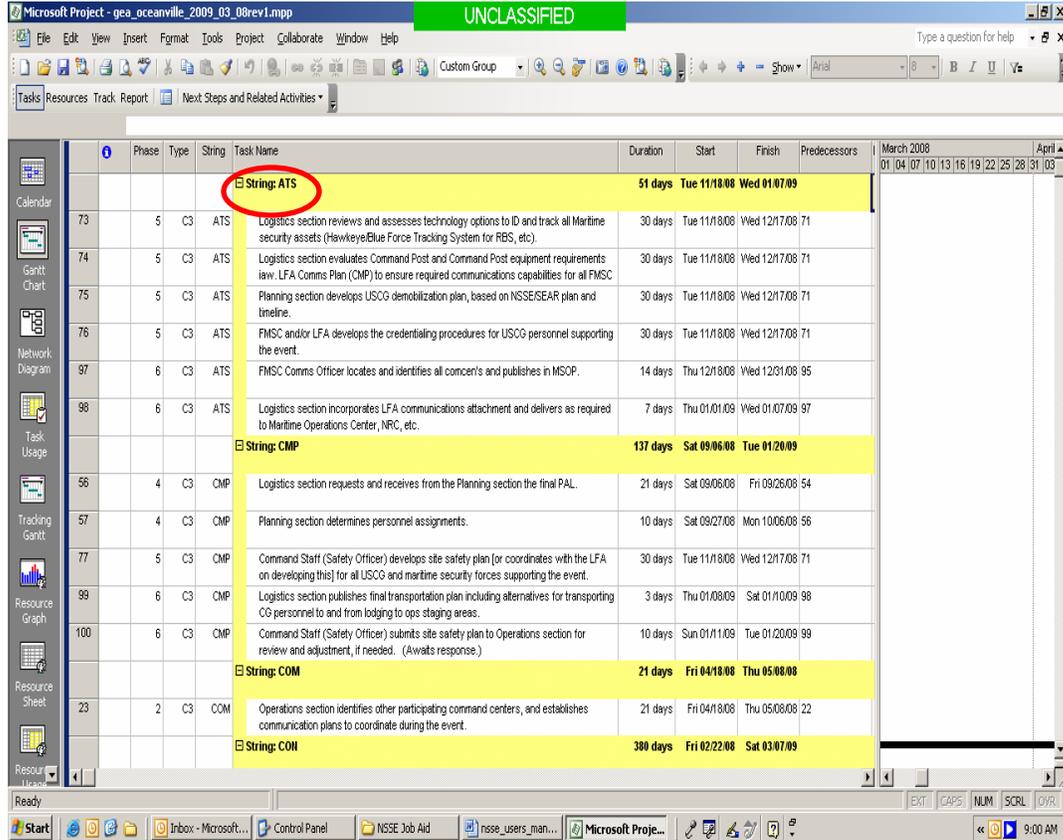
We see that our cell now displays the word String, which is our column header. Moving across the row, we see that the Field Type is Task since it pertains to a task. The order is Ascending, meaning it will be alphabetized beginning with the letter “a”. This is shown in Figure 12.

Figure 12: Custom Group Selected



If we wanted to create subgroups or groups within groups, we would select them in the cell below the one we just completed (i.e., the cell at the intersection of “Field Name” and “Then By” – see red circle in Figure 12). For example, we might want a subgroup to be “Phase”. For now, we are going to group by the String only. Thus, we click “OK” to make our selection. MS Project groups all those tasks with the same String together and displays them as shown in Figure 13.

Figure 13: Sorted Project File



Note that the first tasks are those with the *String* value *ATS*. This is because our Order value as shown in Figure 12 was Ascending. The first six lines contain tasks with the *ATS* string; four are scheduled for Phase 5 work, while the remaining two are scheduled for Phase 6. Note that you can collapse the tasks under a particular string label by left clicking on the minus sign to the left of the label; this is circled in red on Figure 13. When collapsed, a plus sign will appear. If you want to view the list again, left click on the plus sign to expand it.

You are now able to display the output in the form that you want.

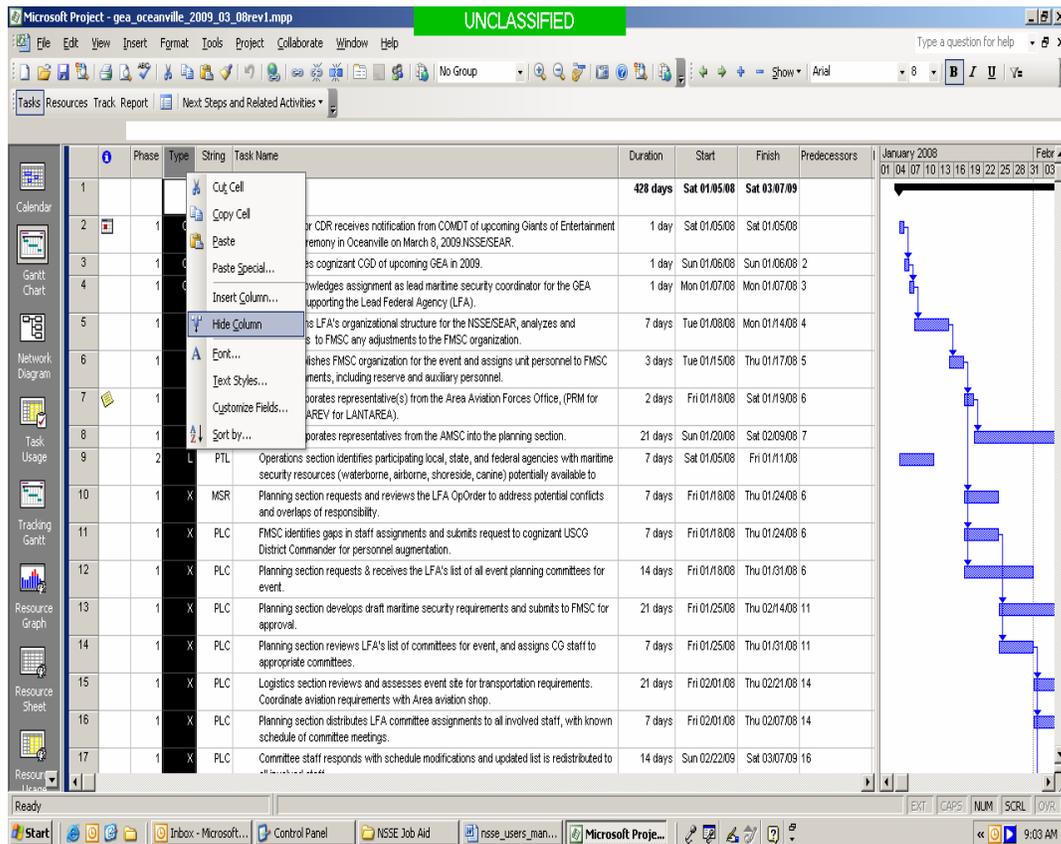
## 8.2 Printing

The printing of Microsoft Project file becomes one of personal preference. It is a balancing act, filled with the trade-offs of what one wants to show, how much detail to show, and the readability of the printed sheet(s). For example, one could print the entire file and specify that the printer fit it all to one page; however, in this case, one would need a magnifying glass to potentially read this document. On the other extreme, one could print everything without specifying a limit on the pages; in this case however, one might end up with 30 pages of tasks and Gantt chart material that is cumbersome to work with. Thus, we reiterate that the printed output requires the right blend of information, detail, and readability.

To show the right detail on the printout, we have many tools at our disposal. We discuss five of them here. The first technique entails sorting our information as we just showed in section 8.1. Sorting allows us to group information that is pertinent to a specific audience, allowing them to see only material that is important to them.

A second method involves hiding and inserting columns. For example, if we do not need to see the “Type” field in the printout, then we can hide it by right clicking the “Type” column label and selecting “Hide Column” from the drop-down menu as shown in Figure 14. If you selected the wrong column, you can either “Undo” your last action or reinsert the column.

Figure 14: Hiding Columns



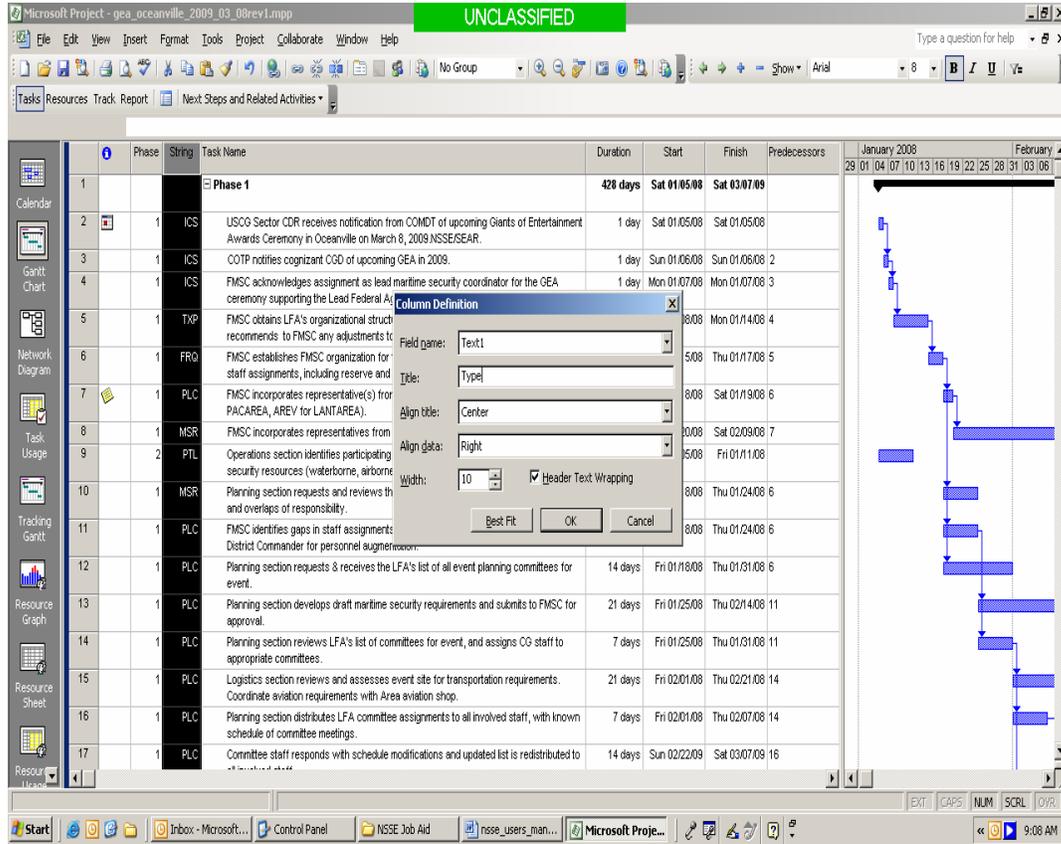
\*\*\* **CAUTION** \*\*\*



When inserting or reinserting a column, be sure to highlight the column label where you want the inserted column to be. Thus, if you want to reinsert the “Type” column in our example, right-click the “String” column’s header and select “Insert Column ...” from the drop-down menu. In the “Column Definition” window, select the drop-down arrow to the right of the Field Name entry field and scroll to find the option “Text1”. In the Title field, type the word “Type” and select “OK”. The window closes and the “Type”

column appears between the “Phase” and “String” column again with all of the stored values for each task. This is shown in Figure 15.

Figure 15: Inserting Columns



Our third option is to change the column width. To do this, we move our cursor to the right side of the column that we wish to change, selecting the line separating the column headers. The cursor will change to vertical line with arrows directed outward. When this symbol appears, left-click and hold the mouse button while dragging the symbol to the left. This will make the column width smaller. If you want a larger column width, move your mouse to the right while depressing and holding the left mouse button.

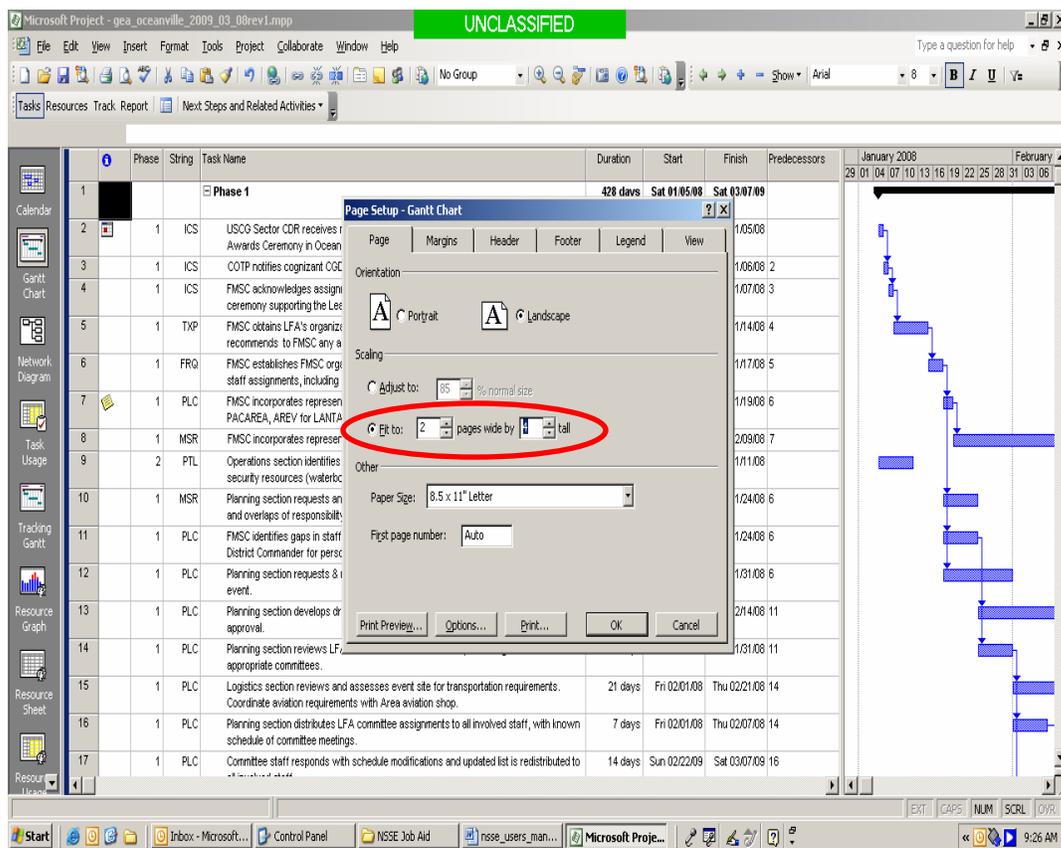
The fourth method involves moving the Gantt chart to the left, thereby hiding the right-most columns. We did this in section 6.2 above. Please refer to that section if you would like to employ this method.

A fifth option is to scale the information and/or set limits on the number of output pages. By setting a limit on the output pages, Microsoft Project automatically scales the project information so that it will fit to the desired number of pages. The other option is to employ the “Zoom” feature found under the “View” drop-down menu from the Command Toolbar. Once you’ve selected the zoom time frame, you can use the slider at the bottom of the Gantt chart

window to select the desired time frame of interest. You may also select a scaling factor on the “Page Setup” window as described below.

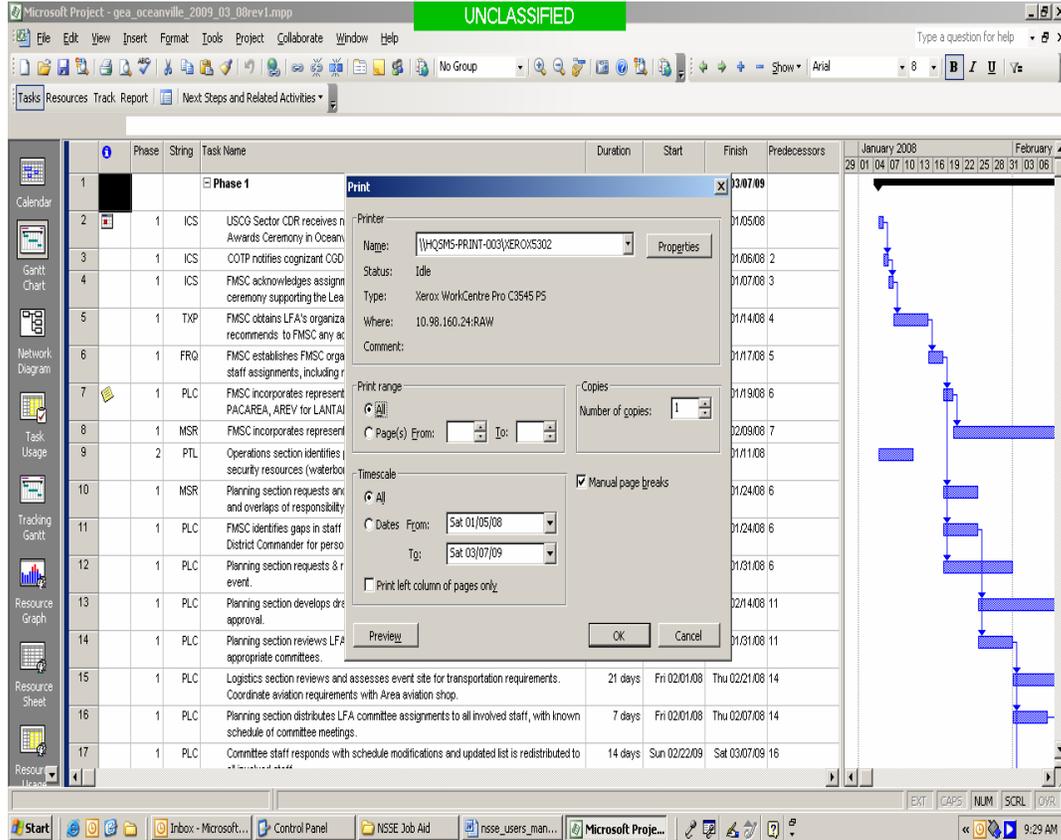
Once you have decided what you want the output to look like, you can make the appropriate changes as described above and in the “Page Setup” options found under the “File” drop-down menu of the Command Toolbar. On the “Page Setup” window, you will see a Scaling section in which the Gantt Chart can be scaled by inputting the scale factor in the “Adjust to” field. Instead of this, you may choose to select the maximum number of pages for your output report by selecting the “Fit to” field and choosing appropriate numbers to the right. If for example, you select “Fit to” and choose “2” pages wide by “4” tall as shown in Figure 16, then your output report should be at most, eight pages. If MS Project can fit everything at the current scale onto one page, then your report should only be one page, instead of the eight that you indicated.

Figure 16: Page Setup for Printing



You can also change your margins, include a header and/or footer, add a legend, or apply other print options by selecting the other tabs in the Page Setup window. These exercises are left to the user if interested in making the output look more polished. To print, simply select “File” from the Command Toolbar and “Print...” from the drop-down menu. The Print window opens as shown in Figure 17.

Figure 17: Print Window



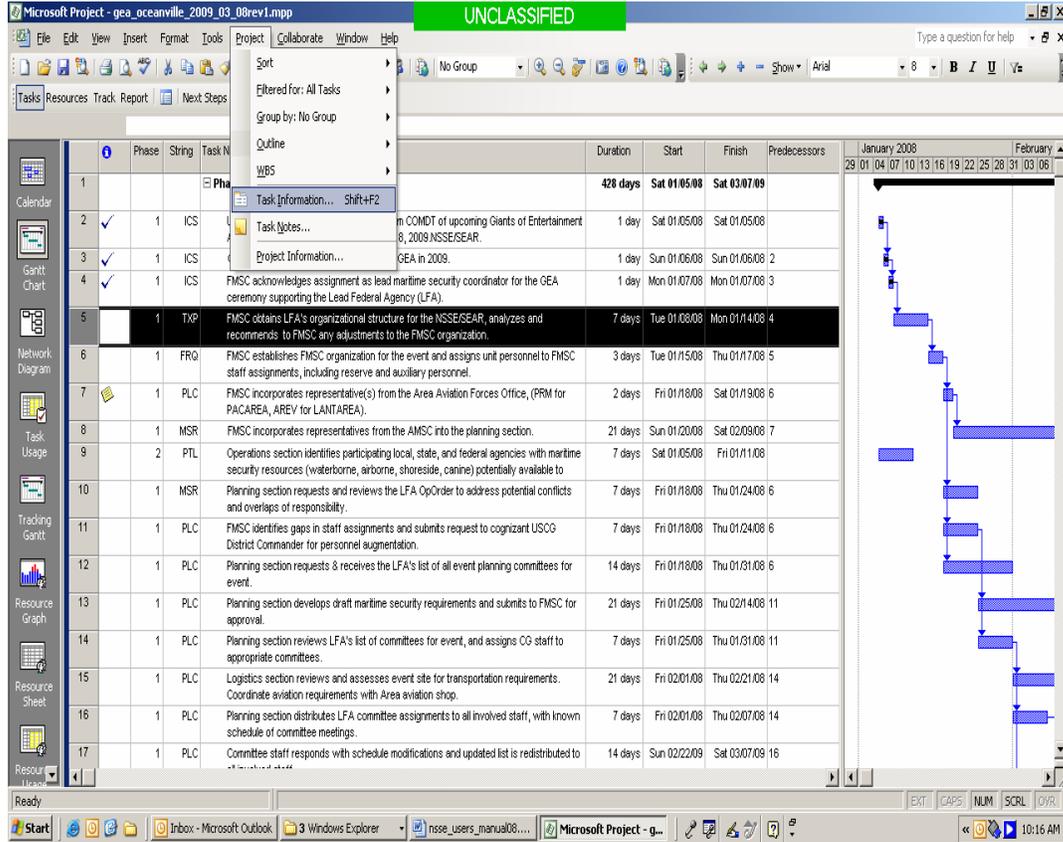
If everything is set up properly, then you can select the “All” option button in the Print Range section or you can choose certain pages. Also, you can choose the start and ending dates for the time scale in the section below that. This might be a suitable option deep into the project when you are no longer interested in viewing completed tasks from months earlier. When you have made the selections that you want, then simply click “OK” to print. Review the print out to ensure that you have captured all of the information that you intended. If the print out does not contain all of the information, then use the techniques described in this section to properly set up your page for printing.

### 8.3 Tracking

As the project progresses, one will likely want to track the progress of individual tasks and hence, the entire project. To report tracking information, we simply highlight the task for which we are inputting completion data. Then we select “Project” from the Command Toolbar and “Task Information ...” from the drop-down menu. Figure 18 shows the case in which we want to input completion information for the task in row 5.

On the “General” tab, find the “Percent complete:” field and input the percentage (0 – 100) complete. Select “OK”. The “Task Information” window closes and the Gantt chart now includes a solid bar through the center of the task. Note that the length of the solid bar

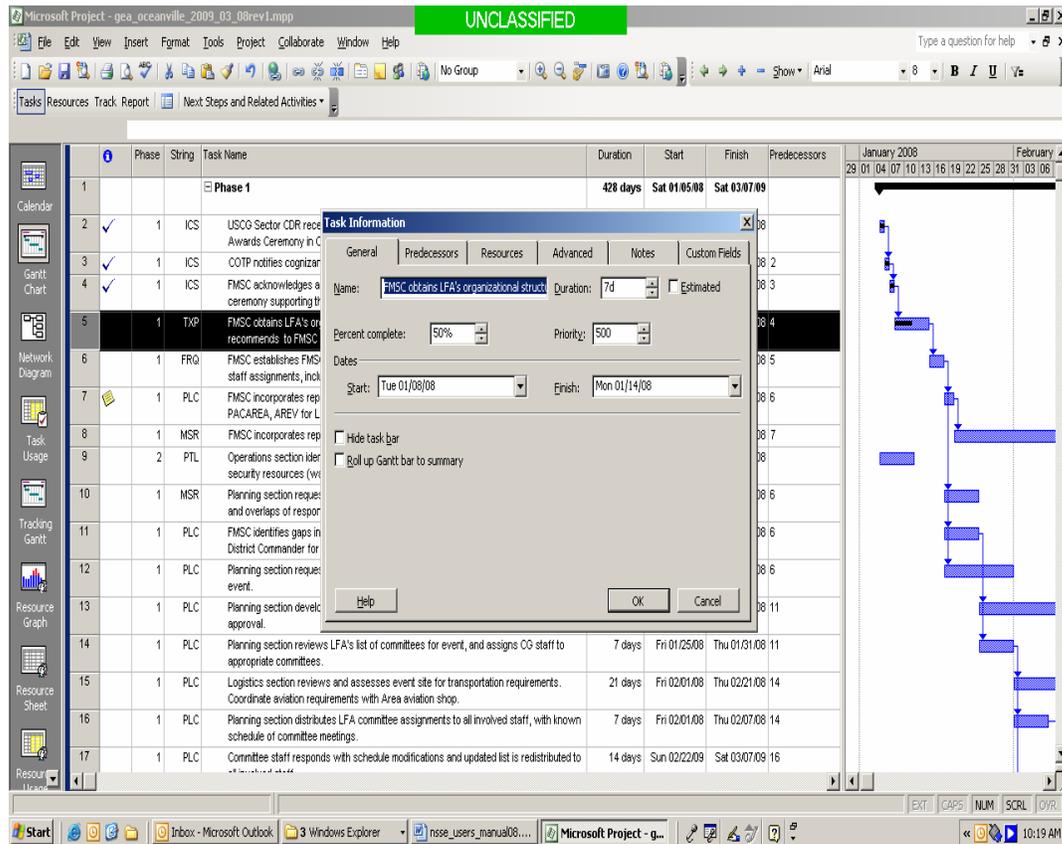
Figure 18: Project Tracking



indicates the proportion of work completed on that task. For example, if we input 50 as the percentage of work completed for task 5, then the bar in the Gantt chart would show task 5 as being half finished as shown in Figure 19. When the task is complete, the solid bar is as long as the task bar in the Gantt chart; in addition, a check mark appears in the left-most column (labeled as a white “i” inside of a blue circle) of the Task window. See tasks 2 through 4 in Figure 18; these tasks were completed prior to the beginning of task 5.

By tracking individual tasks, users of the template can view the progress of individual tasks and the entire project.

Figure 19: Task Completion



## 9.0 Conclusion

You now have enough information regarding the use and capabilities of MS Project and the NSSE-SEAR Planning Template.mpp to successfully plan and manage the development of an NSSE/SEAR. It is highly recommended that the user become familiar with all that has been discussed in the manual prior to applying the template in practical application. Further guidance on the capabilities of MS Project not discussed within this manual can be found in any MS Project manual.