THE KENNEDY CENTER

THE JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

Facility Management Plan
FY 1996

Prepared by

Technical Facility Management

CBD Announcement: On June 24, 1996, the Kennedy Center Contracting Department posted the SPAN FM sole source procurement in the CBD, Issue No. PSA-1622.

Phase I - Fourth Quarter - FIMS Installation

In the fourth quarter of FY96 the objectives of the Facility Department was to monitor the new operating SPAN FM system and adjust program objectives accordingly

The following reflects the out come of the CBD announcement on June 24, 1996, and the continuing delays and issues impacting the SPAN FM installation completion during the fourth quarter:

CBD Responses: TFM responded to the two (2) CBD inquiries concerning the SPAN FM software sole source purchase, on July 15 and 16, 1996.

SPAN FM Purchase: On August 9, 1996, the Kennedy Center Contracting Department issued a purchase order for the SPAN FM software. The Contracting Department did not provide any comments concerning the CBD inquiries or responses. ***Note: Innovative Tech notified TFM the same day of the purchase order. The Contracting Department never advised the Facility Department of the purchase.***

Installation Date: Innovative Tech advised TFM that the installation could be conducted on August 29,1996. TFM advised the Kennedy Center.

Work Order Database: On August 20, 1996, ITS requested a copy of the data files to review the data format for converting to the SPAN FM system. TFM prepared data files for file consistency and forward diskette copy to ITS on August 26, 1996.

SPAN FM Pre-installation Meeting: On August 27,1996, a meeting was held with the Facility Department and Harry Hunderman with WJE. The purpose of the meeting was to review the up coming SPAN FM installation and the changes requested by the Acting Director of Facilities.

SPAN FM Installation by ITS: On August 29, 1996, at approximately 10:30 am, John O'Neil with ITS arrived to begin the SPAN FM and Watcom installation. The installation was incomplete due to numerous Network system problems and workstation viruses. This September 3rd letter also address delay concerns with TFM's efforts to meet contractual obligations with the SPAN FM installation.

ITS Installation Issues: On August 30, 1996, John O'Neil with ITS advised TFM of specific installation instructions for the Kennedy Center MIS department for the Watcom workstation installations. Additionally, ITS provided a detailed list of installation requirements for the MIS department, in order for ITS to properly complete their installation of the SPAN FM system.

Minor Repair Data: WJE sent by FedEx a PC diskette with the Minor Repair data (Excel format) to TFM at the Kennedy Center on September 3, 1996. A copy was forwarded to ITS on the same day.

Bar Coding: On September 3, 1996, TFM provided ITS with the Bar Code Label specifications for the initial purchase of 5000 labels. TFM recommended the standard label size currently being used in the Facility Department.

Data Conversions: On September 4, 1996, between TFM and ITS concerning the needed additional data for the Work Order System. ITS needs tables to establish the Standards for the Work Order System data that TFM has created for the Kennedy Center. These tables are Shop Types, Response Times, Work Order Resolutions and Activity Codes. ITS also requires all of the CAD drawings (electronic format), so that the information stored in the drawings can be extracted and loaded into SPAN FM. This information includes room numbers, physical location, and square footage data.

MIS Follow-up Meeting: On September 4, 1996, TFM meet with the MIS department to review the outstanding issues with the SPAN FM installation:

Issue #1: - Creating a permanent map to the SPAN FM software on the server?
Status: - MIS agreed it was their responsibility. Work completed as of 9/06/96.

Issue #2: - Repair of Facility Department PC's?
Status: - As of 9/13/96 all PC's with viruses, network connections required and hard drive repairs are complete.

Issue #3: - Timing of having the trailers on the Network?
Status: - Wiring complete, date unknown. Final PC terminal connection unknown.

Issue #4: - Does MIS understand the Watcom installation instructions from ITS and is it the responsibility of the MIS Department?
Status: - MIS understands the installation instructions and excepts the responsibility of installing Watcom on the other workstations.

SPAN FM Training Schedule: On September 9, 1996, TFM advised the Kennedy Center facility Department of the proposed training schedule from ITS the week of September 23, 1996, but was postponed by the Acting Director of facilities. New training date pending.

ITS Conversion Proposal: On September 10, 1996, ITS notified TFM that there would additional expenses associated with the data conversion of existing Kennedy Center data, i.e., Work Orders, CAD Drawings and Minor Repair data. The Kennedy Center Facility Department was notified by TFM on September 10, 1996, of the cost proposal from ITS.

FIMS Status Meeting: On September 12, 1996, a meeting with Facility Department and Harry Hunderman with WJE was held at the Kennedy Center to review the current SPAN FM installation. The Facility Department decided that the current Task 4: Install and Setup Phase I of the FIMS, in Modification #71 could not be completed by September 30, 1996. The Acting Director of Facilities directed WJE and TFM to revise Modification to reflect the actual work to be completed and the additional work completed in other Task of this Modification, due to the delays caused by unanticipated problems with facility and project management activities.

FIMS Implementation Strategy

Phase II Implementation - FY97

This section outlines the requirements by the Kennedy Center Facility Department to achieve the following implementation strategy for completing the SPAN FM installation and utilizing a partially (selected modules) functional system during the fiscal year of 1997. Based on the facilities physical size, manpower support from the Kennedy Center, training and budget constraints this effort will take the entire 12 months of FY97 to complete Phase II.

Phase II - First Quarter - FIMS Installation

In the fourth quarter of FY96, Phase I of the FIMS installation was not completed, therefore the process must be initiated during the first quarter of the Phase II, FIMS Implementation Strategy plan. ***This effort will take 1 day to complete.***

SPAN FM Installation: The following steps must be taken to complete the SPAN FM installation:

Watcom Software: The MIS Department must complete the Watcom software installation on the remaining three (3) workstations. The SPAN FM purchase includes six (6) workstation licenses and three have been installed.

Mapping Connections: Once the Watcom software is installed, MIS must test each workstation to ensure proper mapping to the FM Network server.

Phase II - First Quarter - Data Conversion

In the fourth quarter of FY96, Phase I of the FIMS Data Conversion was not completed, therefore the process must be initiated during the first quarter of the Phase II, FIMS Implementation Strategy plan. ***This effort will take 30 to 45 days to complete.***

Data Conversions: The Work Order, Minor Repair, CAD Drawings, and O&M Financial data files will need to be converted into an Excel file extension ***(except Work Order - Access file extension)*** by Innovative Tech and then TFM or others will then have to sort the data files into an appropriate format for populating the data into the SPAN FM and then Innovative will then have to make the final conversion. ***(Refer to section Support for Data Conversion Cost).*** The Facility Department has the option establishing new data with use of the SPAN FM system without the old data files. This option would eliminate using the old Work Order System while populating the new system and then manually inputting any additional work orders once the SPAN FM system is complete. The CAD drawing data and employee data will have to be populated into the Property/Organization before the Maintenance Manager module can be utilized.

Phase II - First Quarter - Property/Organization Data

In the fourth quarter of FY96, Phase I of the FIMS Property/Organization data inputting was not completed, therefore the process must be initiated during the first quarter of the Phase II, FIMS Implementation Strategy plan. ***This effort will take 30 to 45 days to complete.***

Property Data: The physical property data includes but not limited too; building address, shipping address, project code number, ownership name, etc.

Organization Data: This section has two categories that define the User and the Support:

Users: This section requires information on the occupants in the facility that require support or services from the facility supporting departments, i.e., Housekeeping, HVAC, Maintenance, Security, MIS, etc. The information for the Users will include, Name, Telephone number, Office/Location, Department, etc.

Support: This section requires information on the facility support department personnel, i.e., Department, Title (Mechanic, Cleaner, Labor) wage grade and other employee information.

Phase II - First Quarter - Inventory Data

In the fourth quarter of FY96, Phase I of the FIMS Inventory (Dbase III Diskettes) data were not available, therefore the process must be initiated during the first quarter of the Phase II, FIMS Implementation Strategy plan. ***This effort will take 30 days to complete.***

Dbase Data: The diskettes that the Kennedy Center thought were available did not exist, therefore the hard copy of the current Facility Department records will either have to be scanned into a usable document (Word or Excel) or have the data hand typed in (Word). Once this is completed ITS can convert the data into SPAN FM. ***(Refer to section Support for cost estimate).***

Phase II - First Quarter - Bar Coding

The following will provide an overview of the Bar Code system and process with implementing the collection of inventory data. ***This program will require 2 days of training.***

Introduction to Bar Code Symbols: Bar codes or bar code symbols are patterns of printed bars and intervening spaces that are used to encode messages in a machine-readable form. By altering the arrangement, width, and number of bars, multiple patterns or codes can be represented.

Bar coding is defined as the process of attaching a unique scaleable bar code to an inventory item and then relating the number or code that the bar code represents to data items in the Asset Management application. These data items include asset tag numbers, asset definitions, location and condition codes.

Bar codes at the Kennedy Center will be scanned, interpreted, and stored by a MARS hand held scanner.

The asset Management applications' coding system is based upon tagged assets; these are items that are considered valuable enough to be tracked individually by location. By attaching a unique bar code symbol to an asset, information about the item will be able to be collected by the hand held scanner. By using bar codes, you avoid entering asset information manually and reduces operator errors.

Using the MARS MEQ Scanner: The information will need to be performed by the MIS Department:

Command Lines: Once the system has been configured using these parameters the MARS scanner will be ready for use. The MIS Department must place the following three files in the Windows/System directory:
Note: This effort will take the MIS Department 1 day to complete.

MSCOMM.VBX
CMDIALOG.VBX
VBRUN300.DLL

and the following lines also need to be included the SPAN.INI file:

- [Reject]
- inuse=f
- [scanner]
- type=MARS

Preparing and Configuring the Scanner: The Asset Management program must be downloaded into the scanner refer to the SPAN-FM User's manual on directions.

Scanner Basics: The following provides a basic overview of how the Bar Code Scanner works:

Step 1: If the scanner is powered up and left inactive for 90 seconds, it will automatically power down.

Step 2: You may scan a bar code whenever a scan prompt, such as Scan Location, appears on the scanner screen. Below the prompt, the cursor will rapidly scroll from left to right. To scan, press the trigger and aim the scanner beam at the selected bar code. The scanner beam must be between two and thirteen inches away and intersects all elements of the bar code. When successfully read, the scanner will beep and its green light will flash.

Step 3: If you do not want to scan bar coded information, or if bar codes are not available, information can be entered manually.

Phase II - First Quarter - Inventory Strategy

The following reflects the manufacturer's standard guidelines with establishing and implementing an automated inventory program using the Mars MEQ Scanner. ***This effort will take approximately 90 days to complete and will require consulting support from ITS.***

Step 1 - Inventory Process: .Two books must be prepared and printed before the actual inventory can take place. The following must be decided:

Issue 1: Decision on what to tag?

Issue 2: What do we want to accomplish by tagging the item?

Issue 3: Make a decision on where to physically place the tags on the items?

Step 2 - Catalog Books Have to be Prepared:

Locations: The *Rooms/Sub-locations* section of Property Portfolio must be completed before the inventory can take place.

Items Catalog: Items will have to be defined within the *Standards* section of Asset Management. All assets to not have to be identified before hand -- it will be an on going process of building the Items Catalog.

Condition Codes: Defined within the Standards section of the Asset Management module. This code identifies the status or condition of an asset.

Step 3 - Taking Inventory:

Data Collection: Objective is to go into each room only once.

Catalog Information: Information needed for each item cataloged is Location, Tag Number, Item Number, Condition Code and Serial Number.

Exception Report: Create an exception report for items not on the Items Catalog. Scan the item with the newly created Item number once your back on the system. Enter all your Exception items before downloading the inventory from the scanner.

Step 4 - Timeline:

Inventory Manpower: A typical trained person should be able to inventory an average of 100-150 assets per day. With an estimated 20,000 assets in the Kennedy Center this task should take approximately 5 to 7 months to complete. This project could be completed within 10 to 12 months, depending on Facility support (a full-time inventory person) and the support of outside services. Depending on the long term goals and objectives by completing a complete inventory system during FY97, could be achieved with using outside services to expedite the inventory program. **(Refer to section Support for cost estimate).**

Phase II - First Quarter - Training

During the first quarter the initial training schedule should be set-up with ITS for the MIS Network administrator and the designated Facility Department personnel. Based on the initial training that the Kennedy Center purchased for three individuals for five 8 hour days, the following training schedule is recommended: ***This effort will take 5 days to complete.***

First Day
Attendees - Three Facility Users
Training - SPAN FM Introduction/Basics and Property Portfolio

Second Day
Attendees - Three Facility Users
Training - Asset Management and Bar Coding

Third Day
Attendees - Three Facility Users
Training - Maintenance Manager Standards, Help Desk Operations, Personnel Timesheets, and Vendor Invoicing.

Fourth Day
Attendees - Three Facility Users and One MIS Administrator
Training - Maintenance Manager Standards, Preventive Maintenance and System Administrator (Two Facility Users & One MIS Administrator).

Fifth Day
Attendees - Three Facility Users
Training - CAD Integrator (Property & Space) and (Furniture & Assets) and Questions & Wrap up.

Phase II - Second Quarter - CAD Integration

The efforts with setting up the existing CAD drawings should be a fairly simple process but a time consuming effort with the SPAN FM CAD Integration. The CAD Integration system which includes linking AutoCAD drawings to the SPAN FM database using the Property Portfolio and CAD Integrator modules. ***This effort will take 60 to 90 days to complete by ITS.***

CAD Integration: The use of the system should be available during the third quarter and will require extensive time usage (6 months) to completely utilize the full capabilities of the system. This feature of the system will provide the most value of the overall system with the numerous features and support services for space planning strategies, space allocations, facility activities.

Phase II - Second Quarter - CAD Integration Training

During the second quarter additional advance training should be set-up with ITS for two (min.) designated Facility Department personnel. The training should include two days CAD Integrator and Three days of AutoCAD®: ***This effort will take 5 days to complete.***

Phase II - Second Quarter - Custom Reports

During the second quarter the Facility staff should be familiar enough with the system to begin using InfoMaker, the report writing tool for customizing the various reports and graphs needed for Work Request forms, Requisition forms, weekly and monthly status reports on work loads, operating expenses, etc. ***This effort will take 10 to 30 days to complete, depending on the details of each report.***

Phase II - Third Quarter - System Utilization

During the third and fourth quarters of FY97, a continued effort of using the system and cross training other Facility personnel will be necessary. The initial training efforts should reduce future training expenses with cross training programs. As the staff become familiarized with SPAN FM, the Center can begin to customize the software system to full-fill the changing requirements of the Center.

Phase II - Fourth Quarter - Performance Review

During the fourth quarter, the Facility Department should begin collecting data from the system which will be necessary to establish benchmarks to determine the progress of the system. The benchmarks will provide a comparative analysis to the long term goals and objectives of the FIMS strategy in FY98.

Phase III Implementation - FY98

Based on the results of FY97 installation and system implementation efforts the Facility and MIS Department should be prepared to being the Cable Management program. This effort will require support from the primary CAD Integrator, MIS Administrator and the Telecommunication Technician.

Phase III - First Quarter - Cable Management Set-up

During the first quarter the SPAN FM - Cable Management system should be implemented. This system is a fully automated cable tracking software package that allows the user to obtain information concerning every aspect of the telecommunications, voice and multi-network environments and inter-phases with the Asset Management module. The Cable Management has graphics capabilities of AutoCAD that can visually display the connectivity between all of the systems components and the optimum and or alternative flow paths of the cable network.

This system is used in conjunction with the other modules that provides a complete alpha-numeric and graphic representation of the Kennedy Center. The system will track all cable routes, cable types, characteristics of the cables and allows for analysis down to the wire level within the cable. The system will provide on-line

Depending on the existing facility CAD drawings the integration of the Cable Management system and separate Work Request system will require the full cooperation of the three Departments mentioned above. ***This effort will take approximately 60 to 90 days to complete.*** This system can be completed in the first quarter with additional training as needed.

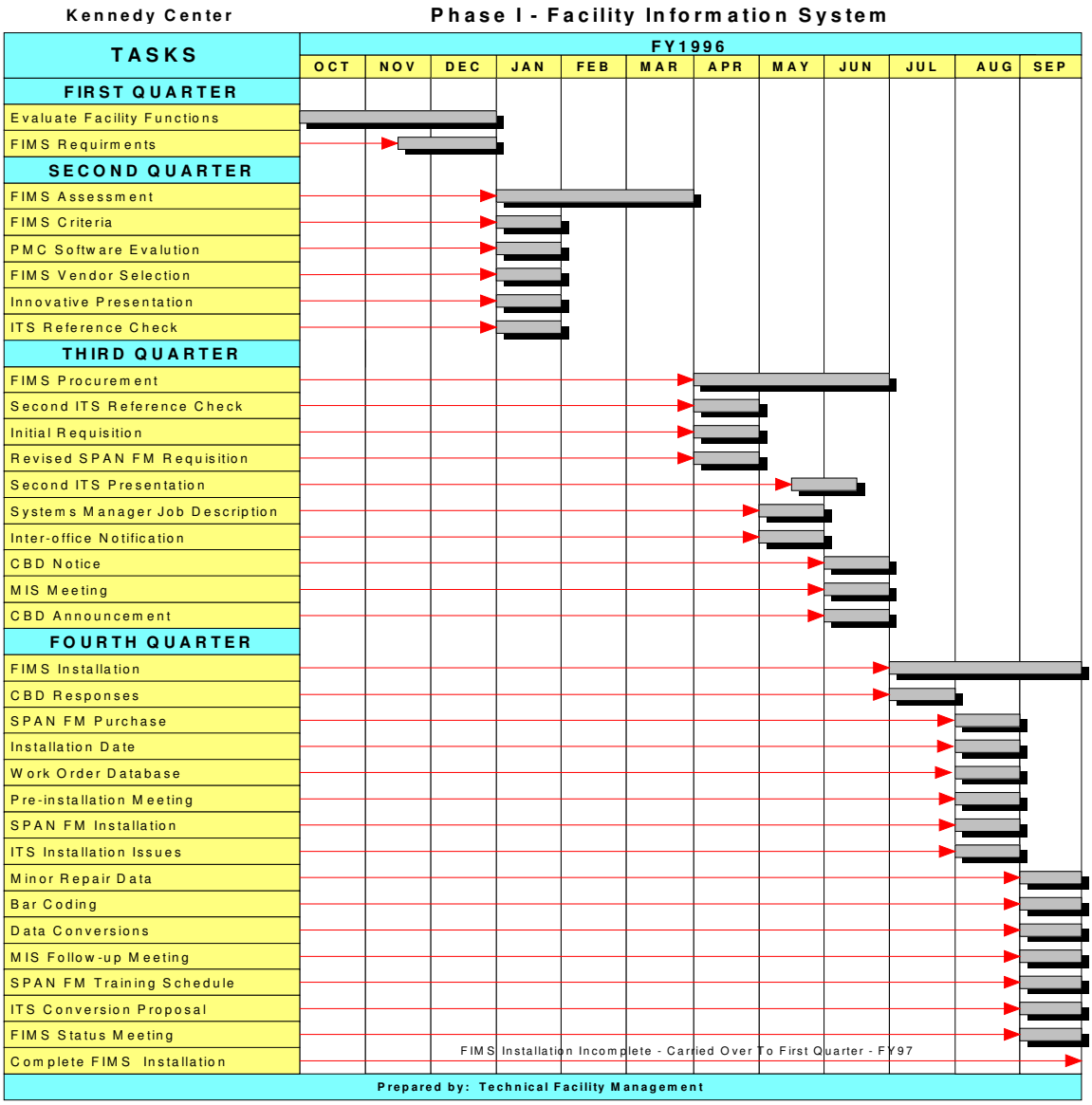
Phase III - First Quarter - Cable Management Training

During the first quarter additional training should be set-up with ITS for four (min.) designated Facility Department personnel. The training should include One day CAD Integrator and One day of Cable Management. ***This effort will take 2 days to complete.***

TIMELINE

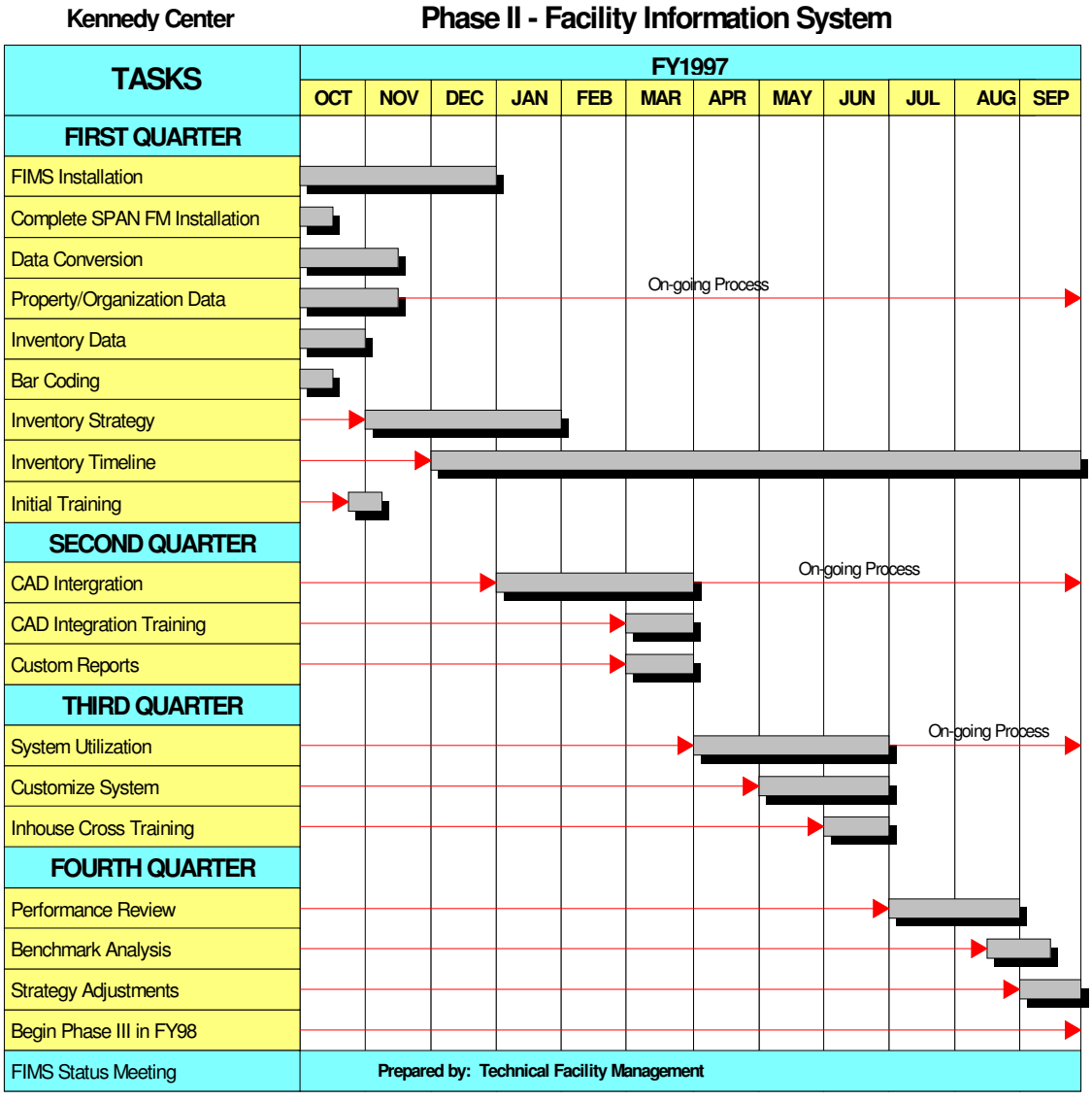
Phase I Implementation - FY96

The timeline chart below reflects the Phase I, FIMS Task and activity time periods for FY96. The FIMS software installation was not completed due various delays and will be carried over to the First Quarter of FY97.



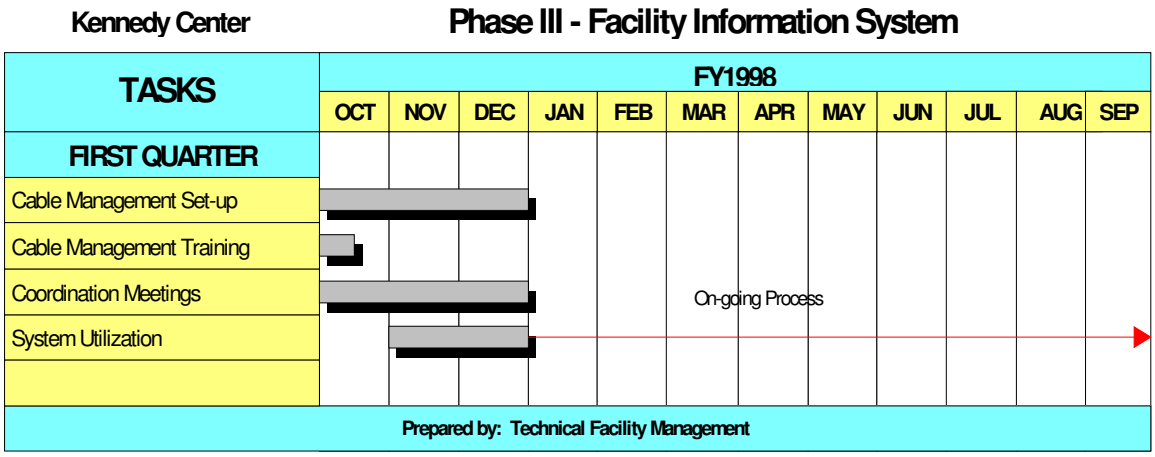
Phase II Implementation - FY97

The timeline chart below reflects the Phase II, FIMS Task and activity time periods for FY97. The FIMS software installation was not completed due various delays and will be carried over to the First Quarter of FY97.



Phase III Implementation - FY98

The timeline chart below reflects the Phase III, FIMS Task and activity time periods for FY98. The Cable Management module will be the last system component to implement in the First Quarter of FY97.



SUPPORT

FIMS Implementation Budget

The following budget cost for setup and implementing the various Task for each Phase of the FIMS implementation strategy. The budget project for the SPAN FM applications cover software, support, training and data/ drawing conversion services (building data, converting data from other sources, and building/linking the CAD drawings to the database). Budget projections only includes services from the software manufacturer, Innovative Tech Systems, Inc., and does not include any cost associated with other outside consulting services.

Phase II - FY97 Implementation Budget

During this phase the set-up of the "operations" which includes the Project Budgeting, the Maintenance Manager, Asset Management, Materials Handling modules and setting up the CAD Integration to the system which includes linking AutoCAD drawings to the SPAN FM database using the Property Portfolio and CAD Integrator.

FY97 Budget Projections

Implementation Budget Cost:	$50,000
Inventory Data Conversion:	$15,000
Additional Training:	$10,000
Total FY97 Cost:	**$75,000**

Other Budget Expenses

Annual Service Contract:	$6,000
Additional software seats:	$5,000 each (Needed for additional workstations)

Phase III - FY98 Implementation Budget

During this phase the set-up of the "Cable Management" includes voice and data cabling.

FY98 Budget Projections

Implementation Budget Cost:	$30,000
Additional Training:	$ 5,000
Total FY97 Cost:	**$35,000**