Maximizing Efficiency in Database Exhibit Planning

Advice on using the NPS *Museum Exhibit Planner* content management software

Here are some important points to remember when using the National Park Service *Museum Exhibit Planner* application (MEP) with FileMaker Pro for Mac or Windows. Many frequently-asked questions are answered here.

1. Hardware and Software

Start off with the right hardware and software. The MEP is an application file that runs on FileMaker Pro. The MEP is free, but you may have to purchase FileMaker if you don't own it already.

Load FileMaker and the MEP on an up-to-date computer with a reasonable amount of memory, especially if you are doing a large project, or if you're incorporating graphics into the database. When using Version 20 or higher of the *Museum Exhibit Planner*, use Version 7 or higher of FileMaker Pro. Records from an old MEP file can be imported into a newer MEP file. As with any computer application, it's important to have at least a little training in FileMaker Pro and the *Museum Exhibit Planner* application.

2. Element Identification Numbers: LA-01-001

Use the standard NPS exhibit numbering system. The database is designed to work with this system, and may not operate properly with alternative systems. An individual number is called the Element Identification Number or ID.

Each record in the Elements table —and therefore each element of the exhibit plan—has one of these unique numbers. It's a three-part number separated by hyphens. Each part is a separate field. "LA-01-001" and "IM-05-045" are examples of ID's. The first part of the number gives the category of the element (Label, Image, Artifact, Audio Program, etc.) The second part is the exhibit number. The last part is the item number. Exhibit element "AR-04-012" would be an artifact in Exhibit 04, and the 12th item in the exhibit. Item numbers may repeat within an exhibit. For example, the photo IM-02-004 might have a caption LA-02-004.

AR-04-012	Element Identification Number or ID
AR-04-012	Element category
AR-**04**-012	Exhibit number
AR-04-**004**	Item number

It's best to have item numbers reflect some logical order in the exhibit, such as from top to bottom, or from left to right. Using this method, "LA-09-001" would likely

be the title of Exhibit 9. ID's can be changed and renumbered in the database at any time.

Avoid changing the form of ID's, or adding extensions to them. Unconventional numbers will hamper the performance and consistency of the database program.

Elements which do not yet have a final location in the exhibit may be temporarily given holding numbers such as "AR-00-000" or "EE-22-000." A record with "00" as an exhibit number means that that element has not yet been assigned to a particular exhibit. It may be a photo that you want to use, but you don't yet know *where* you want to use it. ." A record with "000" as the Item Number means that that element has not yet been assigned to a place within that exhibit. During plan development you are free to have duplicate Ex ID Nos, but, to avoid confusion, duplicates should be eliminated before the plan is completed.

In planning an exhibit you want to group items that belong together. You do that in the database by numbering them in the order in which they logically appear. However, in some larger exhibits you may also want to create subgroups of elements you want to keep together. You can do this by establishing a numbering protocol using hundred-series item numbers. For example:

Subgroup 1	LA-01-101	(This might be a group at the top of an exhibit)
	LA-01-102	
	IM-01-103	
	LA-01-104	
Subgroup 2	LA-01-201	(A group in the middle of an exhibit)
	IM-01-202	
	LA-01-203	
	AR-01-204	
Subgroup 3	LA-01-301	(A group at the bottom)
	LA-01-302	
	IM-01-303	
	LA-01-304	

You may skip item numbers if you wish. The gaps will not cause problems with the database. If you'd like to close the gaps, you can renumber. In the early phases of planning, renumbering should be easy. Later in the process, if numbers are established already on final drawings and elsewhere, renumbering might be less practical.

3. Assigning Exhibit Numbers: LA-<u>01</u>-001

The middle section of the ID No. is the Exhibit Number. It occupies two character spaces. Single-digit numbers such as "02" are preceded by a zero. It is strongly recommended that exhibit numbers be assigned in such a way as to limit the number of items in any one exhibit to less than 100.

In most cases it is better to have 25 smaller exhibits instead of 6 very large ones. Think of a numbered exhibit as a discrete physical structure that will be fabricated and installed as a unit, such as a 4' x 8' graphic panel or a pedestal with a vitrine. The efficiency of the database program is defeated when broad theme areas of an exhibition are considered single exhibits for numbering purposes.

4. Keep Labels Short

Try to keep labels concise. To the extent that individual field entries become long or complex, the database becomes a less efficient way of working. This can become a problem if you make long text entries. The program is set to accept labels as long as one and a half pages, but it would be wise to keep them *much* shorter. If long labels are required, try to break them up into segments, each with its own ID. Another option is to prepare long entries as attachments, including only references in the database. Park visitors will also appreciate concise labels.

The new MEP has a field for entering a *target* word count. The program also calculates an *actual* word count. A planner or designer can set a target for each label. You can go ahead and write a longer label at first, but then go back and edit down to the target. The target word count will help you write labels that will fit into layouts at the appropriate type sizes. Also, we know that most visitors do not like to read long labels in exhibits, and may avoid exhibits with lots of text.

5. Use the Menus and Work Screens

Work with data on the work screens which are accessed through the various menus. All the fields you need are there. It is not efficient to attempt to edit on the report screens. They are designed for viewing and printing only. Remember that no matter what layout you are working on, the data in the database is changed universally. For example, if you change a label on the "Labels" work screen, it is automatically changed on the "Label Schedule" report.

6. Look Before You Delete! Always back up files

Be careful not to delete records or groups of records accidentally. They cannot be restored. There is no "Undo" command. Unlike word processors, FileMaker memorizes entries on the fly, so you usually won't lose information when your computer crashes. However, deleted data is gone forever. The best way to insure safety is to back up files at least once a day.

Keep all backup disks properly labeled and in safe locations. It's also useful to save a few generations of old files so you can revert to them if necessary. If a file becomes damaged or corrupt, FileMaker can sometimes fix it using its "Recover" utility.

The new MEP incorporates a "Delete" button. Use it carefully. A dialog box will ask if you are sure. The most common use for the "Delete" button is to remove a record you created unintentionally, or as a test record.

7. New Features

Version 20 and later of the MEP has much of the look and feel of the application in use since 1993. However, the MEP is now a fully-relational database with many new fields and functions. Here are a few things to keep in mind:

- The new file contains five related tables: Project, Exhibits, Elements, Sources, and Graphic Layouts.
- There are now seven categories of exhibit elements: Labels (LA), Images (IM), Artifacts (AR), Display Objects (DO), Electronic Programs (EP), Electronic Equipment (EE), and Specialty Elements (SE).
- You may now have multiple windows open to allow you to work on different types of elements at the same time. To avoid the confusion of too many windows, close any windows you are not using by pressing the "x" in the upper right corner of the window. Always leave one window open until you're ready to exit the MEP.
- Begin a project by filling in the Project work screen, then create Exhibits using the Exhibits table and work screen, and then create elements in the Elements table and work screens.
- The Labels screen now has a "Text Intention" field. You may use this in the early stages of planning to indicate the kind of label needed without actually writing the final or draft label.
- All reports now print in "portrait" mode, avoiding print setup errors, and making better use of space. There are no "landscape" or horizontal reports.
- FileMaker Pro has four working modes. "Browse" mode is for entering and editing data—the primary mode. "Find" is for queries and searches. "Preview" is for viewing and printing reports—go back to Browse to operate buttons and run the program. "Layout" is for designing and modifying the program—so don't use this unless you intend to change the program and know how to do it.
- When viewing reports in Preview mode, the MEP will sometimes pause the program while you view or print. To return to full operation, press the "Continue" button on the FileMaker's gray control panel on the left side of the screen. "Continue" means to continue the program script or commands, and return you to the screen you were on. It operates like a "Back" button.
- Look for help along the way by holding your cursor over buttons or fields—yellow boxes will appear with tips on how to use the program.
- Look for additional help on the Harpers Ferry Center web site at <http://www.nps.gov/hfc>.

8. Don't Format Database Entries

In general, do not format text on FileMaker data entry or report screens. Font specifications are preset in the MEP, and additional formatting by the user will cause anomalies in reports. When writing labels, it is OK to use bold or italics, for example in writing a ship's name, "*USS Intrepid*." Do not attempt to change type sizes, leading, color, wordspacing, or other format specifications. If you want to

record type specifications, make entries in the appropriate field on the "Labels" work screen.

9. Print the Right Thing

Avoid printing errors by reading print dialog boxes before clicking "OK" and sending reports to print. FileMaker can print numerous things such as "Current Record," "Records Being Browsed," or "Field Definitions." Make sure you select the one you want from the print dialog box. If you bypass the MEP menus you may need to manually adjust dialog boxes.

10. Work Your Own Way

As long as you retain the basic structure of the database and maintain the NPS numbering system, you can have much freedom in customizing your work screens and reports. If you are a contractor, check with your Contracting Officer's Representative (COR) before making changes. Changes to a project file will not affect the NPS master template file.

There are very few restrictions built into the program. You will seldom see dialog boxes popping up to say you can't do this or that. This is intentional. The program is designed for exhibit professionals, and the program respects their ability to make judgements about how to manage their work. For example, if you create a label called "LA-01-001", and then create a new label with the same number, the program will not tell you that duplicate ID's are prohibited. It may be that you have two ideas for this exhibit title, and would like to enter both. At a later time you may delete the extra one.

If necessary, you may add a field or two to your database to cover special situations. However, do not change the existing field names in the *Museum Exhibit Planner*. Changing the field names or their spelling/format will make it difficult to import the project into newer versions of the application. It will also hamper NPS staff and others who will need to use the database as well.

Because our application is built to run on FileMaker Pro software, we have all the functionality of the parent database. If we had had a custom database designed for us from scratch, we would not be able to constantly refine and develop the database on our desktops.

Lastly, remember that the MEP is an efficiency tool, not an end in itself. It is designed to speed the work of the project team, to increase the quality and completeness of work, and to provide easy access to project data. It has the ability to record many fields of information, some of which may not be relevant for your project. If you are an NPS contractor, check with your COR on the data needed for your project.