

INFORMATION RESOURCE CENTER

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USCG Training Center Petaluma

# Web Development Workshop

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## Course Introduction

Welcome to the Web Development Workshop. This course is designed to explain the basics of web site development including site design, site development with FrontPage 98, basic graphics, and publishing pages. To get the most out of this course you should have a good understanding of HTML and the World Wide Web.

The course is taught through demonstrations and hands-on exercises. In addition to this handout two books will be used during this course - FrontPage 98 Unleashed- 3<sup>rd</sup> Edition and The Non-Designers Web Book.

The exercises will step you through the process of creating a web site from the ground up. Concepts and techniques are presented then you are given a chance to practice. As you progress through the exercises you will be creating a web site about Coast Guard vessels and aircraft. To create your site you will use FrontPage for site design and development and Micrografx Picture Publisher for creating graphics.

### Objective

Using FrontPage and Micrografx Picture Publisher you will be able to create and manage web sites that conform to USCG Policy and include the following:

- ◆ Original images
- ◆ Frames
- ◆ FrontPage Components

### Policies

Because the pages you create will be posted on USCG servers it is important that you understand the policies for posting pages and page content. There are two options for posting pages- the Coast Guard Internet server at OSC and the Intranet server here at TRACEN Petaluma. Where you post your pages will determine, in part, what you can and can't do with your pages.

This course assumes you will be creating pages for the Intranet, but you should be familiar with policies for both Internet and Intranet pages.

## Internet

Pages that are posted to the server at OSC are required to conform to content guidelines explained in COMDTINST 5230.56. Additionally the webmasters at OSC have placed technical restrictions on pages. Pages will not include any active elements. This includes the following:

- ◆ ActiveX components
- ◆ Interactive forms
- ◆ FrontPage components that require the FrontPage server extensions
- ◆ Other FrontPage enhancements that require directories starting with the underscore character ( e.g. \_private)
- ◆ CGI or PERL scripts

Your pages must be static pages that use standard HTML. The only types of files that you can post are:

- ◆ .htm
- ◆ .html
- ◆ .txt.
- ◆ .gif
- ◆ .jpg
- ◆ .pdf

The URL for the Coast Guard homepage is [www.uscg.mil](http://www.uscg.mil). Training Center Petaluma's URL is [www.uscg.mil/hq/tcpet](http://www.uscg.mil/hq/tcpet).

## Intranet

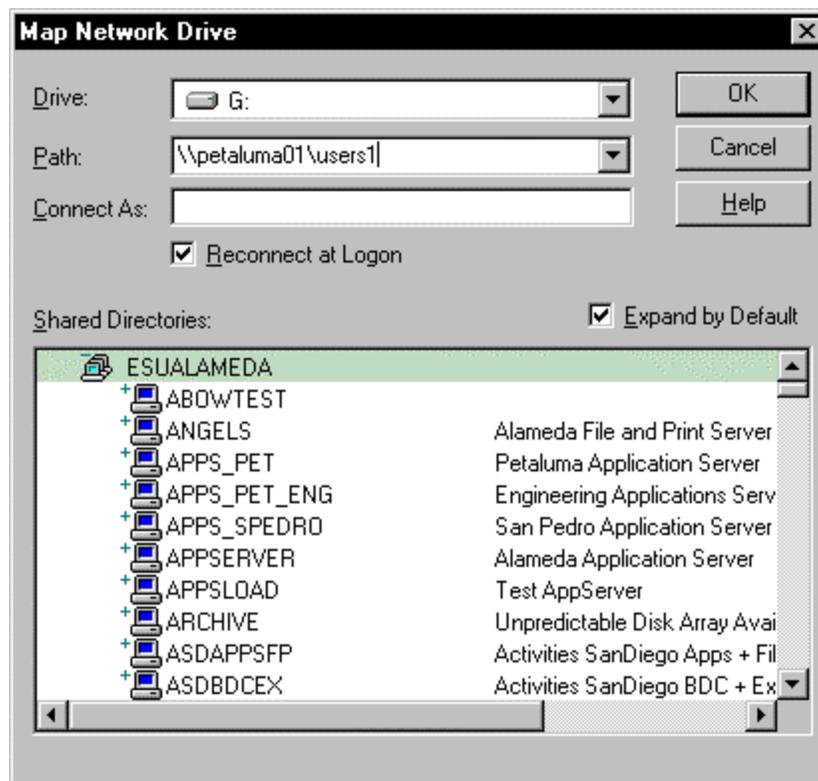
Pages posted to the Intranet server must conform to content and style guidelines established in COMDTINST 5230.57. Currently there are no technical restrictions on what you can and can't post, but all pages that contain active elements will be reviewed by the webmaster to ensure they will not cause any conflicts. You should check with the base webmaster before implementing any active elements on your pages.

## Setting Up

Before starting the exercises there are a couple things that need to be done. You will need to map a network drive and copy some practice files. To do this, follow the steps on the next page.

## Mapping G:\

1. Open **My Computer** .
2. Make sure the **Toolbar** is visible. If it is not, from the **View** menu choose **Toolbar**.
3. Click the **Map Network Drive** button.
4. In the Drive box select G:\  
**NOTE: You must use G:\**
5. In the path box type **\\petaluma01\users1**
6. Click the box next to **Reconnect at Logon**. The box will be checked. Your screen should look **exactly** like the example below.



7. Click **OK**. The drive will be connected. A window for the drive should open.

## Copying Files

1. Open **Network Neighborhood**.
2. Open **Petaluma01**.
3. Open the folder **SWIII Training**.
4. Open the folder **Practice Exercises**.
5. Locate and copy the folder **Web Workshop** to your **U:\** drive.

## Web Site Design

The word *design* means many things to many different people. Some think of graphic designers who design layouts for printed materials as well as graphic images. If you are an instructor you might think of instructional designers who develop training. When we talk about design in interactive media, we really are talking about three different types of design- information design, interaction design, and visual design. All three are distinctly different, but interrelated. Also, each one is equally important.

### Information Design

Information design should be the first step in creating a web site. Information design is where you decide the content and purpose of the site. Information design is mostly analysis and research to determine what your site will include. This includes determining the purpose of the site, the audience, what the content should be and how it is organized, and what resources you have available to develop the site. For instructional sites, this is generally accomplished through front-end analysis and curriculum design.

Some questions you would ask during information design include:

- ◆ What is the purpose of the site?
- ◆ Who do I want to look at this site?
- ◆ Why should they look at this site?
- ◆ What information do I want to include and how will it be organized?
- ◆ How can I actually get the site finished?

### Content Design

Part of information design is **Content Design**. Content design is really just determining what you want to include in your site and how you want to organize it. You don't have to have all the content you want to include, but you should have a complete content outline.

Once you have an outline, create a flowchart to show how the content is tied together. Remember that the web is not linear. People do not have to start at page one like they do in a book. You should have a home page, but from there the path people take may not be linear.

If you can create a flowchart for your site, you essentially have a site map. You don't yet know how the pages will look, but you know what pages you need and how they are organized. This serves as the blue print, or skeleton of your site. A blue print for a house tells you everything that will be in the house and how it is laid out. For example it shows how many bathrooms are included and where they are. You may not know what color the walls will be or what type of fixtures will be used, but you do know how many bathrooms and what each one includes. As you proceed through interaction design and visual design the blue print will become more detailed.

### Production Plan

Along with your blue print for the site, you need to develop a plan to actually build the site. Typically large sites will require several people working as a team, much like building a house requires many people. You will need people to help author web pages, create graphics, write content, and review the pages. Also, don't forget you need someone to manage this project. And don't think you can do it all yourself. You might be able to with a small site, but with large sites you will need to work as a team.

You will also need to determine how you will get the elements that you need. For example you may require photos in your site. Who will take the pictures and how will they get onto a computer? Do you need access to a scanner or a digital camera? Are you going to include illustrations, charts, or graphs, if so who will create them? Do you need to get copyright permission for some content? Do you have enough computers to do all this work? Where will your pages be posted and does the webmaster know what you're doing? Oh yeah, be sure to read the Commandant Instructions for the Internet and Intranet.

In other words, make plans before you start work. The more planning you do, the easier your project will be. And write everything down. You absolutely must document everything. All the documentation will be used as a guide for building the site. Six months or a year down the road you will need the documentation for something, I guarantee it.

## Interaction Design

Interaction design overlaps a lot with information design. Interaction design is basically determining how people move around your site. Sounds simple, you just provide some links to click, right? Yes, but interaction design is much more than just creating links. To make your site effective you really need to plan the interaction. Every link on your page must serve a purpose. Every link should also make sense. In other words, link when appropriate, and only when appropriate. Interaction design is creating the entire navigation scheme of your site that makes sense to users

There are several things you must consider when creating your navigation. First and foremost, it should be based on your flowchart. If you look at your flowchart you should see the basic navigation of the site. Some other considerations to think about are:

- ◆ You should link to the home page from every page.

- ◆ The home page only needs to link to the next level down.
- ◆ Will you include a site map?
- ◆ You should include an email link on every page.
- ◆ Are there links that need to be on every page, no matter how far down?
- ◆ Do you have a feedback page?
- ◆ Will parent pages only link to child pages, or will they link across to other pages at the same level?
- ◆ Will child pages link only to parent pages, or to other child pages.
- ◆ Aside from the navigation structure, what other links do you need?
- ◆ How will you link to other sites, if at all?

A good rule of thumb is to keep the navigation simple, while still allowing the user freedom.

Also, think in terms of page types. The home page will most likely have navigation different from other pages. Each section of your site will have an index page with similar links. Pages that are just content will have different links than section index pages. Although different page types will have different links, it is important that you stay consistent with the links on each type of page. For example, if on one section index page you have a link to the other section index pages, then all section index pages should have link to each other.

Again, write down your navigation plan. You and your team will need to refer to it often. This just adds more detail to your blueprint.

## Visual Design

Now that you know what will be in your site and how people will navigate through it, you need to determine how it will look. This is the visual design of the site. It includes color scheme, page layout, and graphic design. It also incorporates the decisions you made during information design and interaction design.

When designing the look of your site there are four basic design principles that if you stick to, you should be able to create visually appealing sites. These are **alignment**, **proximity**, **repetition**, and **contrast**. The principles are covered in detail in [The Non-Designers Web Book](#) in Chapter 6 starting on page 105.

### Alignment

Alignment means that all elements on a page are aligned with each other. It is easy to align text and images on a web page, so it is easy to use many different types of alignment. As a rule of thumb, pick one alignment and stick with it. Don't mix alignments.

Having everything use the same alignment will make your pages cleaner and easier to read. Alignment will add order and consistency to your pages.

## Proximity

Proximity means that related elements should be close to each other. That's all proximity means. Take a look at the examples below. In the first example the words "Aligning Graphics" are not in close proximity to the paragraph. In the second example the paragraph heading is directly above the paragraph. Visually you can see these things belong together

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### Section 4 - Graphics

#### Aligning Graphics

By default when an image is inserted into a web page the text is aligned with the bottom of the picture. You can specify the vertical alignment of text with images by adding the align attribute. Text can be aligned to the top, middle, or bottom of an image.

Example 1-The paragraph heading is not grouped with the paragraph

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### Section 4 - Graphics

#### Aligning Graphics

By default when an image is inserted into a web page the text is aligned with the bottom of the picture. You can specify the vertical alignment of text with images by adding the align attribute. Text can be aligned to the top, middle, or bottom of an image.

Example 2 - The paragraph heading is with the paragraph

## Repetition

Repeating elements throughout a web site adds consistency. Repetition is a powerful way to ensure all your pages go together, at least visually. To build consistency you can do simple things, like use the same background on every page or always use the same font for certain elements.

Page layout is the best way to use repetition. All pages in a site should have the same or similar layout. This provides continuity among pages and makes them easier to use. People like familiar things, so all your pages should look similar. You can also use repetition within a page. For example, all your paragraph headings can be the same font and color.

Navigation elements are also an easy way to use repetition. You should use the same navigation scheme on every page. If you place your navigation bars in the same place on every page people become comfortable with the pages because they know where to look for links to other pages.

A good way to ensure all your text is the same is to use a cascading style sheet or a FrontPage Theme. These will be discussed later. Both offer easy ways to use repetitive styles on your pages.

## Contrast

Contrast draws your eye to the page, or to elements on the page. You can use contrast to create focal points on your pages. Contrast can be accomplished through colors or other methods, such as type style. Look at the examples below to see some ways of using contrast.

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### Color Contrast



Example 3 - USCG stands out from the rest of the text because of the black background and white text

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### Typographical Contrast



Example 4 - Here the words United States Coast Guard have been made all caps and larger, setting them apart from the next line. The contrast in typeface gives United States Coast Guard more importance

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## Combining Design Principles

These four design principles should never be used in isolation, you should use them together. The more you can remember and use these principles, the better your pages will become.

## Page Layouts

When working on the visual design of your pages you should develop different layouts for different types of pages. For example your section index pages should look slightly different from the home page and the pages in the section. You can create several layouts that will serve as templates for your web site. Once you create the templates, creating new pages is just a matter of inserting content into the template. The layouts should be similar to maintain consistency.

## Design Document

As you develop the design of your site you write everything down. All your design specifications from information design, interaction design, and visual design form a **design document**. When you actually start developing the site this document is your blue print for the site.

Earlier, during the information design phase, we used the analogy that a blue print for a house will show where the bathrooms are located. Blue prints for a house include much more information than just where each room is located. Continuing with the bathrooms, the blue print also tells you how the plumbing and electrical are connected. It also specifies the size of the bathroom and how it is framed into the rest of the house and where the door should be. Blue prints provide a detailed

map of how the house will be built and how the bathrooms fit into the larger structure. Your design document should do the same thing for your web site.

It may seem like a lot of trouble to write everything down, but it is well worth the time. Most of the work on a web site is in the design. You must have a solid plan before you start creating pages.

## Design Tips and Hints

Here is a list of things to consider while design our site

- ◆ Times New Roman and Garamond are easy to read fonts.
- ◆ Serif fonts (such as Times New Roman) are easier to read and should be used for extended sections of text.
- ◆ Sans Serif fonts (such as Arial) are more legible and are recognized easier in short headings.
- ◆ Use Serif fonts as your body and use Sans Serif as headings (For example Arial headings, Times New Roman text).
- ◆ Avoid using fancy fonts, not every computer has the same fonts. Stick with basic fonts.
- ◆ Fancy fonts are harder to read.
- ◆ Don't use the default background color, at least set it to white.
- ◆ Don't use the default font. People can change the default font, so you should specify your fonts.
- ◆ Text should be between 10 and 14 point.
- ◆ Use shorter lines of text. They are easier to read.
- ◆ Maintain sufficient contrast between the background and text.
- ◆ Don't use all caps unless you have to.
- ◆ Navigation buttons should be easily understood.
- ◆ Don't use borders on images, they should be framed by other elements on the page.
- ◆ Your home page should not need any scrolling. On the Internet, design the homepage for a 640x480 screen.
- ◆ Use Alternate labels for images.
- ◆ Spell Check.
- ◆ Don't abuse animated GIFS.

## Introduction to FrontPage

Once you have a plan for your site, it is time to start creating pages. FrontPage 98 makes the creation and management of web pages much easier than writing all your pages in html.

FrontPage actually includes several programs. The two main programs are FrontPage Explorer and FrontPage Editor. FrontPage Explorer is used to manage your site while Editor is used to create and edit web pages. FrontPage also comes with Microsoft Image Composer for editing graphics. We won't be using Image Composer in this workshop.

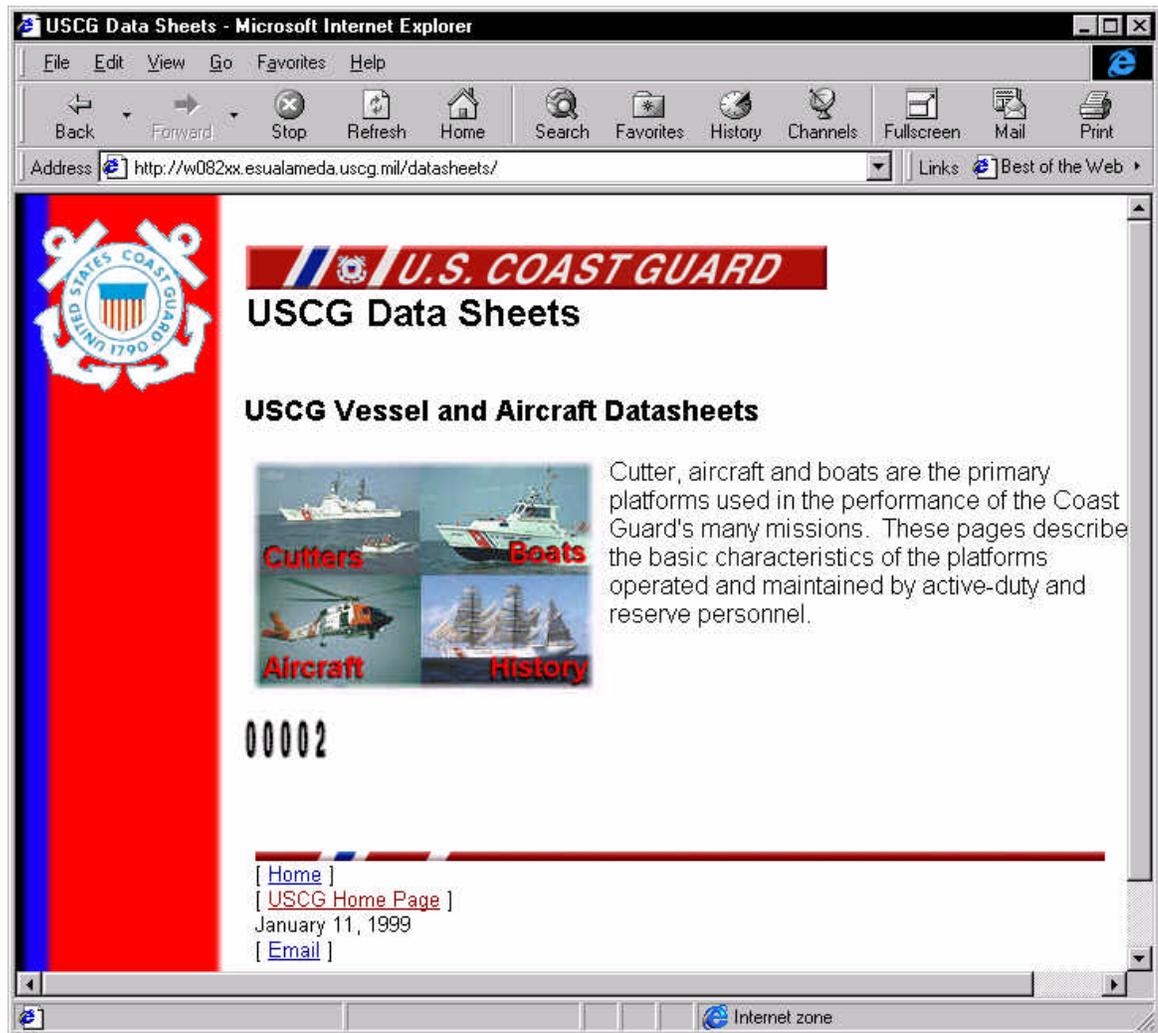
### FrontPage Webs

FrontPage doesn't really deal with individual web pages, rather it deals with web sites. When you use FrontPage you will open an entire site. Individual pages can be edited, but only after opening the site in FrontPage Explorer first.

There are a lot of reasons for this, most of which will become clearer as we work through the exercises. But the main reason is that it allows you to actually manage sites as a whole. There are a lot of functions of FrontPage that apply to the whole site. All of these functions are managed behind the scenes by FrontPage as you work. As you create your site, you will use many of these functions. For now it is important to start thinking of your site as a single entity made of many pages. That is how FrontPage thinks of sites.

### Web Site Design

To make your life a little easier, the design of your practice site has already been determined. Below is a screen shot of how the web site will look when we are done.



This page includes the design specifications:

- ◆ Background image to create the left border.
- ◆ Required Coast Guard elements for Internet pages at the top and bottom of the page.
- ◆ Links to section heading in the left border, except on home page.
- ◆ The title of the page directly below the CG banner. The text is Arial font and a heading 2.
- ◆ Text of the page in Times New Roman font.
- ◆ Links at the bottom of the page are 12 pt Arial font
- ◆ Page uses tables to establish layout.
- ◆ All pages use the same layout.

As we go through the exercises we will be creating pages that follow these design guidelines.

## Creating a Web Site

### Getting Started

Creating web sites is often a process of trial and error where you experiment with your pages until they are perfect. Then you find some other way to refine them. The following exercises will walk you through a more streamlined, step-by-step process of creating a web site.

For many exercises you will need to look in the book for step by step instructions. Some exercises will give you step by step instructions when there are specific outcomes required or the book doesn't cover the material. When step by step instructions are given, references to the [FrontPage 98 Unleashed](#) book are given in gray boxes to the left of the exercise. Even when step by step instructions are given with the exercise you should read the related pages as they may contain other important information.

FrontPage 98  
Unleashed  
Pages 25-26

### Creating a New Web

In order to create web pages in FrontPage you must first create a web. For this class you will be creating a web in the instructor's public folder. To create a web, follow these instructions:

1. Open FrontPage. The **Getting Started** window will appear. If it does not, go to the **File** menu and select **New** and trace to **FrontPage Web**.
2. Click Create a New FrontPage Web.
3. Click **OK**. The **New FrontPage Web** window will open.
4. In the list of templates click **Empty Web**.
5. Click the **Change** button.
6. Enter the path to your web. Your web will be saved on your G:\ drive. Use the path given below, but insert your user name in place of *username*.
7. G:\ghegenbart\public\fpwrkshp\username
8. Click **OK**.
9. Enter your username as the title for the web.
10. Click **OK**.

Your web will be created and FrontPage Explorer will open to the Navigation view.

### Importing Files

FrontPage 98  
Unleashed  
Pages 29-30

Now that you have a web, you need to add web pages. You can create web pages using FrontPage Editor, but if you already have pages created you will want to import them into FrontPage. For the exercises, the basic pages have been created. You just need to import them into FrontPage. To import files follow these steps:

1. From the **File** menu choose **Import**. The **Import File to FrontPage Web** window will open.
2. Click **Add File**. The **Add File to Import List** window will open.
3. In the **Look in** field select **G:\**.

4. Open **Ghegenbart**.
5. Open **Public**.
6. Open **fpwrkshp**.
7. Open **Files**.
8. Click the first file.
9. Press **Ctrl + A** to select all the files.
10. Click **Open**. The files will be added to you import list.
11. Click **OK**.

The files will be imported to your web.

### Managing Files

All the files you will need for the exercises were imported into your web, but they are not organized. You will need to create some folders and move files to better organize the pages in your web. First we'll create the folders then move the files.

FrontPage 98  
Unleashed  
Ch. 46

### Creating Folders

1. Change the view in FrontPage Explorer to **Folders**.
2. From the **File** menu, trace to **New** and select **Folder**. A new folder will be created.
3. Name the folder **cutters**.

Repeat these steps to create folders named **boats** and **aircraft**.

### Moving Files

1. To move files you simply click and drag the file to the desired folder. You can drag files into folders in either the left or right pane of the window.
2. Move all the image files to the **images** folder.
3. Move the following files to the **cutters** folder:
  - ◆ 175wlm.htm
  - ◆ 378ctr.htm
  - ◆ icepolr.htm
  - ◆ 180wlb.htm
4. Move the following files to the **aircraft** folder:
  - ◆ hc-130.htm
  - ◆ hh-60.htm
  - ◆ hh-65.htm
  - ◆ hu-25.htm
5. Move the following files to the **boats** folder:
  - ◆ rhi.htm

#### Tip

You can hold down the **Ctrl** key while clicking to select multiple files.

- ◆ psuboat.htm
- ◆ 47msb.htm
- ◆ mlb-44.htm
- ◆ 41utb.htm

You should now have all your files organized.

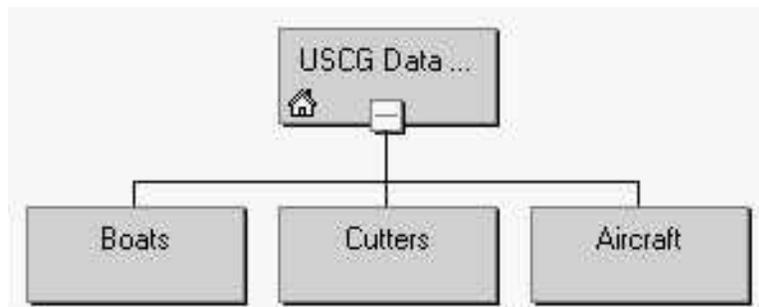
## Navigation

FrontPage 98-  
Unleashed  
Ch. 46

The navigation view allows you to establish how pages in your web site are related to each other in a hierarchical diagram. The navigation view can also be used to create navigation bars on web pages that are based on the hierarchical structure of the web. Navigation bars will be covered in a later section. The index.htm page should always be at the top level. In our web, index.htm is the only page at the top level, but you can have other pages at the top level. Read pages 790-793 and complete the following exercise.

### Exercise

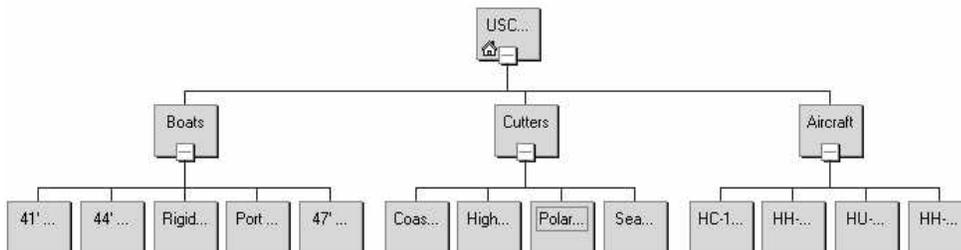
1. Use the navigation view to create the hierarchy as shown below. When asked if you would like FrontPage to create navigation bars, click No.



#### Tip

In the **View** menu select **Size to Fit** to see the entire navigation structure.

2. Now go into each folder and add the pages under their respective parent page. For example all the pages in the cutter folder would be under the Cutters page. When you are done, your navigation view should look similar to the example below.



## Editing Pages

Up to this point you have been working on your web site, but you haven't worked on any pages. It is now time to open up pages and use the FrontPage Editor to modify them. We'll start with some basics using `index.htm` as the example.

In either **Folders** view or **Navigation** view double-click **index.htm** to open it. FrontPage Editor will open.

### Page Properties

Before you begin making changes to the page, you need to set the properties of the page. Properties include things like background, default font colors, and other things. Read *Setting Page Properties* on pages 54-66 and then set the following properties:

- ◆ Background color - White
- ◆ Default text color - Black
- ◆ Hyperlink color - Navy
- ◆ Visited link - Maroon
- ◆ Active link - Blue
- ◆ Leave the rest of the settings at the default value

### Formatting Text

FrontPage allows you to easily change the appearance of text just as you would in Microsoft Word. Once you have read the pages referenced in the book, make the following changes to the page:

1. Set page heading as a Heading 2 – Pages 67-68
2. Format the words *Cutters*, *Aircraft*, *Boats* and *History* as a bullet list – Page 80-88
3. Make the list **Bold** and change font of list to **Arial** – Pages 94-97, 98-100

### Creating Hyperlinks

At the heart of any web site is the links between the pages and to pages outside the web site. FrontPage makes it easy to create and edit links. Read pages 72-78 then create the following hyperlinks:

1. Using the words in the list, create links to the corresponding pages. For example, use the **Cutters** as a link to the page Cutters.

### Inserting Images

Not only does FrontPage make it easy to insert images, but it also has many image editing capabilities built in. In addition, FrontPage comes with Microsoft Image Composer, a full-featured image editing program. Chapter 7 (starting on page 107) covers working with images in FrontPage and Chapter 16 (starting on page 273) covers Image Composer.

For this exercise we will only insert an image into our page. More advance image topics will be covered later.

## Exercise

1. After reading pages 109-112, open **4l1utb.htm** and insert the image file **4l1ft.gif**.

## Practice Exercises

Now that you've had a chance to see some of FrontPage, it's time to practice what you have learned. To this point we have only worked on the index.htm page and haven't made any changes to the other pages. To practice what you've learned so far make the following changes:

1. On every page set the following page properties:
  - ◆ Background color - White
  - ◆ Default text color - Black
  - ◆ Hyperlink color - Navy
  - ◆ Visited link - Maroon
  - ◆ Active link - Blue
2. Insert the following images into the pages noted:

Image	Folder/file
44mlb.jpeg	boats/mlb-44.htm
47mlb.gif	boats/47msb.htm
B75.jpeg	boats/rhi.htm
hc130.gif	aircraft/hc-130.htm
hh60.gif	aircraft/hh-60.htm
hh65a.gif	aircraft/hh-65.htm
hu25.gif	aircraft/hu25.htm
psu.jpeg	boats/psuboot.htm
whec.gif	cutters/378ctr.htm
wlb.gif	cutters/180wlb.htm
wlm.gif	cutters/175wlm.htm
icebreaker.gif	cutters/icepolr.htm

We will not be inserting any hyperlinks at this time. That will be done in the next section.

## Shared Borders

Shared borders allow you to easily include repeated content on every page. This feature is designed so that you can put common page headers, footers, left borders, or right borders on every page in your web. For Coast Guard pages this feature is useful for adding the required elements to pages. Initially when you create shared borders they are included on every page, but you can turn them off on individual pages.

## Turning on Shared Borders

We will use the shared borders to put the required Coast Guard elements on every page. Turn on shared borders by following these steps:

1. Go to FrontPage Explorer.
2. From the **Tools** menu select **Shared Borders**.
3. In the window that appears, check the boxes next to **Top** and **Bottom**.
4. Click **OK**.

The shared borders will be applied to every page in your web.

## Editing Shared Borders

To edit shared borders you must open a page in FrontPage Editor. Follow these steps to modify the shared borders.

1. Open **index.htm** in FrontPage editor. You will see the shared border at the top and bottom of the page. A dashed black line shows where the borders end and start. The page banner and some navigation buttons will automatically be placed in the top border. A comment will be placed in the bottom border.
2. Delete the navigation button in the top border.
3. Align the title to the left.
4. Format the page banner so that it is a heading 2 and Arial font.
5. Before the title insert the image **rcstripe.gif**.
6. In the bottom border delete the comment.
7. Insert the image **cgsmbar.gif**
8. Insert a line break and enter the following text with 10 pt Arial font:  
[ USCG Home Page ]  
[ Email ]  
Last Updated:
9. Using the text you just typed create links to the USCG home page and your email address.

### Tip

The **Page Banner** is a FrontPage Component. For more info see Ch. 24

### Tip

To insert a line break press **Ctrl+Enter**.

## Timestamp

Timestamps automatically insert a date onto your page. Follow these steps to insert the date the page was last updated in your bottom border.

1. In the bottom border place the cursor after *Last Updated: .*
2. From the **Insert** menu select **Timestamp**.
3. In the window that appears select **Date page was last updated**.
4. Choose a date format and leave the time format at **None**.
5. Click **OK**. The date will be inserted.
6. Save the page.

The changes you just made will now appear on every page in your web.

## Tables

One of the most powerful features of FrontPage is the ability to easily create and manipulate tables on web pages. Our page layout requires that we set up tables in the web pages and the borders. We could not have used a left border because borders do not allow you specify the size of the border. Read Chapter 8 and then complete the following exercise.

1. Open index.htm.
2. In the body of the page create a table with the following specifications:
  - ◆ One row and three columns
  - ◆ Fixed table width of 700 pixels
  - ◆ No border
  - ◆ Cell spacing and padding of 2
3. Move all the text and images on the page (excluding the borders) into the third column of the table.
4. Set the width of the first cell to **15 pixels** and the vertical alignment to **Top**.
5. Set the width of the second cell to **120 pixels** and the vertical alignment to **Top**.
3. In the top border, create a table with the following specifications:
  - ◆ One row and two columns
  - ◆ Fixed table width of 700 pixels
  - ◆ No border
  - ◆ Cell spacing and padding of 2
6. Set the width of the first cell to **135 pixels** and the vertical alignment to **Top**.
7. Repeat these steps with both the top border.
8. Delete any extra line breaks or paragraphs.
9. Set the page background to the image **stripe.gif**.

When you are done you should see everything in the page contained in tables. Preview the page in Internet Explorer to verify your changes were made.

### Practice Exercise

Make the following changes to the rest of the pages in the web site:

1. Make sure the shared borders are set to **web default**.
2. Create a table in the body of the page as done in the previous exercise and move the text of the page into the table.
3. Preview your pages in Internet Explorer.

## Navigation Bars

Your web site already has a structure and navigation set up. FrontPage will automatically create links to pages based on the navigation scheme we set up earlier. Navigation bars are FrontPage components that translate the navigation scheme into hyperlinks. Navigation bars are specifically designed for use with FrontPage themes, but they can be used in pages that do not use a theme.

When using navigation bars you have little choice in how the navigation bar is displayed. In pages that do not use themes you must use text for the links. The text that will be used as the link is the page title as shown in Navigation View. Read pages 794-798 and then complete the following exercise.

### Tip

You can use the **HTML** view to add a line break if you can't in **Normal** view.

1. Open **index.htm** in FrontPage Editor if it is not already open.
2. In the bottom border insert a line break before the *USCG Home Page* link.
3. In the line before *USCG Home Page*, insert a navigation bar with the following properties:
  - ◆ Navigation only to the **top level**
  - ◆ Orientation set to **Horizontal**
  - ◆ Appearance set to **Text**
4. Open **cutters.htm**.
5. In the body of the web page click in the first column of the table.
6. Insert a navigation bar with the following properties:
  - ◆ Navigation only to the **Same level**
  - ◆ Orientation set to **Vertical**
  - ◆ Appearance set to **Text**
7. Click the navigation bar.
8. Change the font to 10 pt Arial bold.
9. Repeat for aircraft.htm, boats.htm, history, and history.htm.
10. Save all pages and preview them in Internet Explorer.

## Practice

1. In cutter.htm, boats.htm, history, and aircraft.htm insert a navigation bar with the following properties:
  - ◆ Navigation only to the **Child level**
  - ◆ Orientation set to **Vertical**
  - ◆ Appearance set to **Text**
  - ◆ Font formatted as 10 pt Arial bold
2. For all the pages in the **cutters**, **boats**, and **aircraft** folders insert a navigation bar with the following properties in the first column of the body:

- ◆ Navigation only to the **Same level**
- ◆ Orientation set to **Vertical**
- ◆ Appearance set to **Text**
- ◆ Font formatted as 10 pt Arial bold

## Style Sheets

Formatting text in FrontPage is relatively easy, but still time consuming. For every text element you want to be bold you have to select the text and use the bold command. Style sheets offer a quick way of formatting elements in your web pages by defining the style once and applying it throughout a page or site. For example if you want all text that is H1 to be 16 pt, bold, Arial font you can include that in a style sheet and the formatting is applied to all H1 text.

Style sheets make it easy to apply formatting throughout your web site. This will help ensure that all your pages will have a consistent look and feel.

There are actually three different types of style sheets- in line styles, header-defined styles, and external styles. FrontPage makes it easy to define the in line and header- defined styles, but has no way of defining external styles. External styles are stored in a text file and are referenced in the Head section of a page. You can use external style sheets, it is just a little more work.

Even when you use a style sheet, you can override the style specifications by applying formatting to text. For example if a style sheet defines H3 as 10 pt, bold, Times New Roman you can override the style specification by applying a different font to any H3. Browsers will use the text formatting and ignore the style sheet. This is important because if you apply a style sheet after you have formatted some text, the style sheet will be ignored.

### Header Defined Styles

In this exercise we will create a header-defined style sheet in FrontPage. Before you begin you need to read chapter 11 starting on page 185 to get more information on how FrontPage supports style sheets.

### Exercise

1. Open **index.htm** in FrontPage Editor, if it is not already open.
2. From the **Format** menu choose **Stylesheet**. The Stylesheet window will open.
3. Place the cursor just after the **<!--**
4. Press the **Enter** key to insert a blank line.
5. Type **h2**.
6. Click the **Style** button. The **Style** window will appear.
7. In the **Alignment** tab set the **left margin** to **10**.
8. Click the **Font** tab.

#### Tip

For a list of style elements see page 192.

9. Set the font to **Arial Black** with a size of **16 pt**.
10. Click the **Colors** tab.
11. Set the **Foreground** color to **Blue**.
12. Click the **Text** tab.
13. Set the Letter Spacing to 3px.
14. Click **OK**. The styles will be inserted into the style sheet.
15. Click **OK**. The style will be applied to the page.
16. Save the page and preview it in Internet Explorer

### External Style Sheets

While header-defined style sheets are great, you still have to create them for every page. If you are going to use the same style sheet on every page you can create one style sheet and just reference it in your pages. The only real trick to style sheets is using the proper syntax. To ensure we use proper syntax we will use a header-defined style sheet to create an external style sheet.

In this exercise we will create a header-defined style sheet then copy it into a text document in Notepad. This will be saved and used as an external style sheet. We will then delete the header defined style sheet.

### Exercise- Header-Defined Styles

1. Open **index.htm** in FrontPage Editor, if it is not already open.
2. From the **Format** menu choose **Stylesheet**. The Stylesheet window will open showing the styles defined in the previous exercise.
3. Place the cursor just before the - - >
4. Press the **Enter** key. A blank line will be inserted into the style sheet.
5. In the blank line type **p**. This will format text in paragraphs.
6. Click the **Style** button.
7. Add the following styles: 12pt, Arial, color - black.
8. Insert another blank line and type **li**. This will format line items
9. Add the following styles: 14pt, Arial, bold, color - green.
10. Click **OK**.
11. Click **OK** to close the **Stylesheet** window.
12. Switch to **HTML** view.
13. In HTML view locate the style sheet in the head section.
14. Highlight and copy the following text:
 

```
h2{ font-family: Arial Black; font-size: 16 pt; color: rgb(0,0,255); letter-spacing: 3px;
margin-left: 10 }
p{ font-family: Arial; font-size: 12pt; color: rgb(0,0,0) }
li{ font-family: Arial; font-size: 14pt; color: rgb(0,128,0)}
```

15. Open Notepad.
16. Paste the text.
17. Save the file as **style.css** into your FrontPage web folder. This will be on you **G:**\ drive – **G:\ghegenbart\public\fpwrkshp\username**
18. Return to FrontPage Editor.
19. In HTML view locate the style sheet in the header. This starts with the <style> tag.
20. Delete the style sheet from the header. The style sheet is between the <style> and </style> tags. Be sure to delete the style tags as well.
21. Save the page.

### Exercise- External Style Sheets

Now that we have created an external style sheet, it needs to be linked to every page in your web. Follow these steps to link the style sheet to a web page.

1. You should have **index.htm** open in FrontPage Editor. If not, open it.
2. Go to HTML view.
3. Place the cursor before the </head> tag and press enter to create a blank line.
4. In the blank line before the </head> tag type the follow tag:  
<link rel="stylesheet" HREF="style.css">  
**NOTE:** The **style.css** file must be in the root folder of your web.
5. Save the page.
6. Preview the page in Internet Explorer. The styles in the style sheet should be applied to your page.

### Practice Exercise

Repeat the above exercise for every page in your web.

For information on advanced uses of Style Sheets see chapters 11 and 12 of FrontPage 98 Unleashed.

## Graphics Basics

### Types of Images

Computer generated images come in two forms, bitmaps and vector based graphics.

A **bitmap** is created by coloring individual pixels in an image which are then displayed (or mapped) onto the screen. With bitmaps, each pixels in a bitmap image is assigned a color value. When you view a bitmap image all the pixels appear to run together. However, if you zoom into a bitmap you can actually see the different pixels. The examples below show an example of this.



Example 5-Bitmap image viewed normally



Example 6 - Zoomed in image shows pixels

---

Some common bitmap file formats include GIF, JPEG, BMP, PICT, and TIFF. These file can be read by most image editing programs.

A **vector** graphic is created based on mathematical definitions in the file, which are computed to display the image. Vector graphics do not assign color values to pixels, rather they essentially tell the computer how to draw an image. When you zoom in on a vector graphic, you won't see pixels because the image is re-drawn.

### Web File Formats

Web pages deal entirely with bitmap images that are either GIF or JPEG format. Each type of image offers different advantages and disadvantages. For more information see the Introduction to HTML web site at <http://cgweb.tcpet.uscg.mil/ltc/htmlcourse>

### Bit depth-

One thing that greatly impacts the file size of a bitmap image is the bit depth. The bit depth determines how many colors are in the image. The more bits an image has, the larger the file size. Below is a listing of various bit depths and their corresponding number of colors.

32 bit - Millions of colors + Alpha channel, or CYMK

24 bit - Millions of colors, RGB, 8 bits each

16 bit - Thousands

8 bit - 256 colors or grayscale

4 bit - 16 colors or grayscale

2 bit - 8 colors or grayscale

1 bit - 2 colors, black and white

When using images in web pages file size is one of your major concerns. The larger the file, the longer the download time. If you can reduce the number of colors in an image, you can reduce the file size. This is what a GIF does. GIF images can only have 256 colors, so their file size is much smaller than a 24 bit file. JPEG can have 24 bit color and accomplishes smaller file size through compression.

While 256 colors may not sound like a lot, it can usually be sufficient. In general unless your image is a photograph or has a lot of subtle color gradients 256 colors will be more than enough. That is why GIFs are better for graphics such as buttons, logos, illustration, and line art.

### Indexed Color and Color Palettes

One great advantage to 8 bit images is that you can pick the 256 colors in the image. Say for example your image has a lot of blue shades. You can create a color palette that contains mostly blue. This is often referred to as indexed color.

### Browser Safe Colors

Not all browsers and computers can display the same colors. Different browsers and operating systems use slightly different color palettes. As a result your images may not display properly on all computers. If you want to make sure your images will be properly displayed, you will need to use what is known as a browser-safe palette. This palette contains the most common 216 colors used by all browsers. On page 288 of [The Non-Designers Web Book](#) there is a chart of these colors along with their hexadecimal codes and RGB values.

Microsoft Image Composer has a browser safe palette available, but Micrografx does not.

## Micrografx Picture Publisher

Micrografx Picture Publisher is a bitmap editing program. To open Picture Publisher click the **Start** menu, trace to **Programs**, trace to **Micrografx** and select **ABC Picture Publisher**.

### Picture Publisher Overview

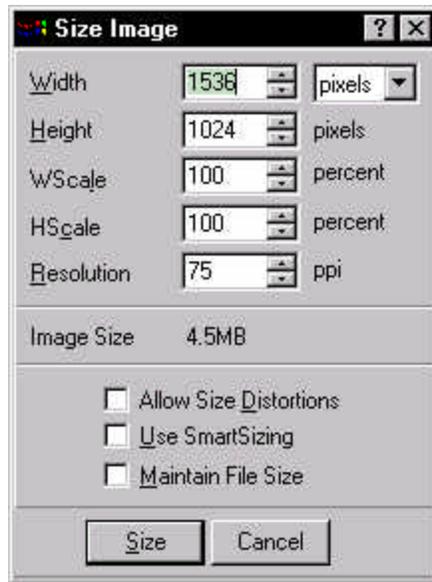
The overview of Picture Publisher is given as a demonstration by the instructor. If you would like more information on Picture Publisher see Help. Picture Publisher has a good help system that gives a complete overview of the application including step-by-step how to directions for specific task.

Help topics you should review are:

- ◆ Getting Started
- ◆ Working with Tools
- ◆ Working with Masks
- ◆ Working with Objects

### Resizing Images

To resize an image you need to open the **Size Image** window. From the **Image** menu choose **Size**. The **Size Image** window is shown on the next page will open. The Size Image window allows you to resize, scale, and change the resolution of an image. At the bottom of the window are boxes that allow you to set sizing options. By default images are proportionally sized. You can allow size distortions by checking the **Allow Size Distortions** box. In most cases you will not need any of the boxes at the bottom of the window checked.



### Exercise

To complete this exercise you will need to open the file P0000289.JPG. Follow these steps to open and size this image.

1. Click the **Open** button. The **Image Browser** window will open.
2. Click the **View Files** button. The window will change to the **Open** window.
3. In the **Look in** field select **U:\**
4. Located and double click the **Web Workshop** folder.
5. In the **Files of Type** field select **All Supported Files**.
6. Locate and open the file **P0000289.jpg**.
7. From the **Image** menu choose **Size**. The **Size Image** window will open.
8. Change the resolution to **72**.
9. Change the width to **500**.
10. Click the **Size** button. The image will be resized.

### Cropping

Cropping allows you to cut out portions of the picture that you don't need. Since bitmaps can only be squares, the crop tool can only select rectangular areas. To crop an image select the crop tool from the Mask Tools and then click and drag a selection. As soon as you release the mouse button the image will be cropped.

An alternate and more effective way to crop is to create a mask and then crop to the mask. To do this use the rectangular mask tool to create a mask over the area of the picture you wish to keep. From the **Mask** menu choose **Crop to Mask**. The image will be cropped to the mask. If your mask was not a rectangle, Picture Publisher will crop to a rectangle based on the farthest edges of the mask. To illustrate this use the circular mask tool to create a mask then crop to the mask.

## Exercise

1. From the **Mask Tools** select **rectangle and elliptical mask** tool.
2. Position the cursor above and to the left of the building.
3. Click and drag to the lower right corner of building to create a mask.
4. From the **Mask** menu choose **Crop to Mask**. The image will be cropped to your mask.

## Adding Text

When text is added to an image it is automatically added as a separate object. This allows you to move or change the text after it has been created. If you have applied any effect to text then try to edit the text you will get a message warning you that the effect's changes will be lost.

To add text to an image, first select the color you want the text to be. Then select the text tool. Set the font, size, and style on the ribbon. Then click in the image where you want the text to be located. An text insertion point will be created allowing you to type the text.

## Exercise

1. Change the active color to Red.
2. Click the text tool
3. Change the font to **Arial Black, 26 pt**.
4. Click in the image where you want the text to be located. An insertion point will appear.
5. Type **Bauer Building**.
6. Click the selection tool. The text object will be created.

## Saving Files

When you save a Picture Publisher file as a bitmap such as BMP or GIF all objects are automatically combined with the base. However, you can save as a Picture Publisher file and all objects will be maintained. The Picture Publisher format is .ppf.

Picture Publisher is not without it faults. One fault is that every time save you a .ppf file, you get the following error-



This is normal and does not mean the file was not saved. In fact, **your file will be saved.**

Also, if you close a file then reopen it, and try to save it you might get the following message in addition to the one above-



Again, the file is really saved, but you still get an error.

One way to avoid these errors is to save the file under a different name every time you save. Although this is somewhat laborious, you avoid the errors and ensure your file is saved.

One last little bug. When you close a PPF file Picture Publisher will ask you if you want to save changes. If you click **Yes**, the file will be saved and you will get the first error mentioned above. The file won't close. When you try to close it again, Picture Publisher will again ask you if you want to save changes. This loop goes on forever. The only way out is to make sure the file is saved and click **No** the second time you are asked if you want to save changes.

#### Exercise -Saving a file

Now that you know all the problems with saving files, it's time to actually try it. The steps below should work, but since the program is somewhat buggy your experience may be slightly different.

1. From the **File** menu choose **Save As**. The **Save As** window will open.
2. Check to make sure you are saving to your **Web Workshop** folder. If not use the **Save in** box to move to your **Web Workshop** folder.
3. From the **Save as type** pop up menu choose **Micrografx Picture Publisher (\*.ppf)**
4. Enter **bauer** as the file name.
5. Click **Save**.

The file will be saved as a Picture Publisher file maintaining all objects.

If you didn't get any error messages when you saved the file, you will the next time you save the file.

## Creating a Montage

A montage is simply a collection of images combined into one. The image on the home page for sample Data Sheets site is a simple montage of four images with text. The following exercise walks you through the steps necessary to create this same montage. The functions you will be using in Picture Publisher include:

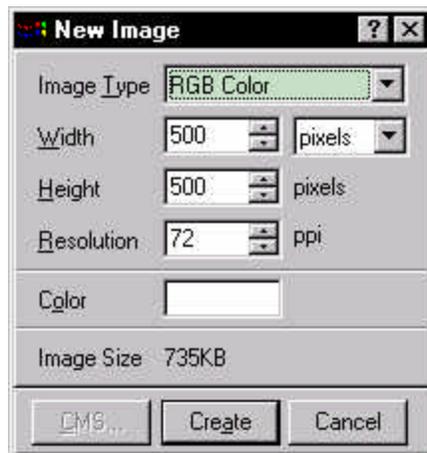
- ◆ Creating a mask
- ◆ Copying and pasting
- ◆ Adding text
- ◆ Feathering a mask
- ◆ Cropping
- ◆ Saving

### Starting a New Image

The first thing you will need to do is create a new document and open the four images that make up the montage.

#### Exercise - Creating a New Image

1. From the **File** menu choose **New**. The **New Image** window will open as shown below.



2. Set the following options  
**Image Type** - RGB Color  
**Width** - 500 pixels  
**Height** - 500 pixels  
**Resolution** - 72 ppi
3. Click the **Create** button. A new image will be created.
4. Save the file as **Montage.ppf**

### Exercise Opening Files

1. From the **File** menu choose **Open**. The Open will open.
2. In the **Look in** box select **U:\**.
3. Open the folder **Web Workshop**.
4. Open the folder **Raw Images**.
5. Locate and open the file **whec.gif**.
6. Repeat steps 1-4 to open the following files:  
**4ft.gif**  
**hh60.gif**  
**eagle04.jpeg**

You should now have the four files open that will make up the montage.

### Copying Images

To copy images in Picture Publisher you must use the mask tool. To copy part of an image you simply create a mask and then use the copy command to place the masked part of the image on the clipboard. You can then paste the image into another document.

In the sample montage all the images are the same size, so when you copy them you need to make sure the mask is the same size every time. The easiest way to do this is to use the Rectangular Mask tool to specify an exact size. This will create a mask that is always the same size.

You may have noticed the image **eagle04.jpeg** is quite a bit larger than the other images, but in the montage all the images need to be the same size. The **hh60.gif** image is the smallest image at 106 pixels wide by 72 pixels high so we will set the mask to be the size of that image. But first the Eagle04.jpeg image needs to be reduced and all the images need to set to 72 ppi.

### Practice - Scaling an Image

1. Make **eagle04.jpeg** is the active document.
2. Resize the image so that it is **106 pixels** wide and is **72 ppi**. The eagle04.jpeg image should now be resized.
3. Resize all the images so that they are **72 ppi**. Do not adjust the height or width.

### Using the Mask Tool

Since we know the **hh60.gif** image is 106x72 pixels we can specify the rectangular mask tool to create a mask that exact size. If we use the same size mask to select and copy each image the four images in the montage will be the same size.

### Exercise - Copying Images

1. Make **whec.gif** the active window.
2. Select the **Rectangular Mask** tool.

- In the **Tool Ribbon** (shown below) set the **Method** to **Constrain Size**.



- Set the size to **106** pixels wide and **72** pixels high.
- Place the cursor in the middle of the image and click once. A mask will be created.
- Copy the selection.
- From the **Window** menu choose the **Montage** file.
- Paste the image. The image will be pasted as an object.
- Click and drag the image to the desired position.
- Press the **Enter Key**.
- Repeat steps 5-10 for **41ft.gif**, **eagle04.jpeg**, and **hh60.gif**.
- Arrange the images so that they form a square montage as shown below.



- Save the file.

When you are done you should have all four images in your **Montage** file.

## Feathering

Right now the square montage has a hard edge. Feathering softens edge so that it blends with the background. Feathering can be applied to either an object or a mask. Right now the montage is four different objects positioned together. Before feathering is applied the objects need to be combined.

### Exercise - Feathering

- Select the **whec** object.
- Hold down the **Shift** key and click the other three objects to select them all.
- From the **Object** menu trace to **Combine** then select **Objects together**. The object will be combined.
- From the **Object** menu choose **Feather Object**. The **Feather Object** window will open as shown below.



5. Set the **Amount** to **4** and the **Edge** to **Normal**.
6. Click the **Feather** button. The Object will be feathered.
7. Save the file.

#### Practice -

1. Add the following text over the appropriate image:
  - ◆ Cutters
  - ◆ Boats
  - ◆ Aircraft
  - ◆ History
2. Crop the image so that there is almost no white space around the image.
3. Save the file.

#### Saving

The montage is now complete and needs to be saved as a JPEG file. Remember, when saving as a JPEG all objects will be combined with the base. If you want to make changes to the file at a later time, you can always open the PPF file.

#### Exercise

1. From the **File** menu choose **Save as**. The **Save as** window will open
2. In the **Save as type** box select **JPEG File Interchange (\*.jpg)**.
3. In the **Save in** box select **U:\**.
4. Locate and open the folder **Web Workshop**.
5. Click the **Save** button.

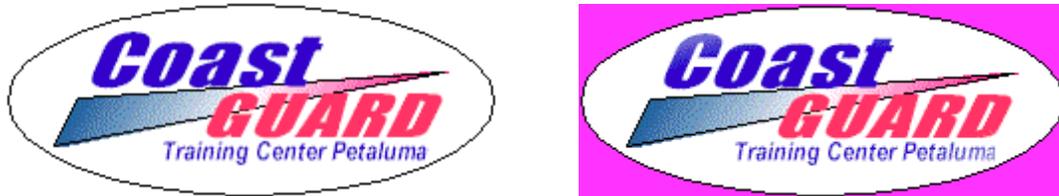
The file will be saved as a JPEG file.

#### Practice

1. Open your web in FrontPage and import the **montage.jpg** file.
2. Add the **montage.jpg** file to the **index.htm** page

## Transparent GIF Files

GIF files have the ability to have a color be transparent so that the background will show through. GIFs are bitmap images so they have to be rectangles. But what if you want to include a graphic that is not a square? The only way is to make the background color transparent. This feature is a great way to make graphics that are not rectangular display properly on a web page. In the example below the Training Center logo is shown with transparency and without.



Example 7 - The image on the left has a transparent background while the image on the right does not.

Picture Publisher can save files a GIF files, but it cannot create GIFs with transparent colors. Fortunately FrontPage can. So creating a transparent GIF is a two step process. Step one you must create the GIF in Picture Publisher and step two you have to make it transparent in FrontPage.

One thing you have to be sure to remember is that transparent GIFs can't tell the difference between the background and the image. They only make a single color transparent. You also have to be sure that the transparent color is not included in the graphics. Take a look at the example on the right. The background is white, but the graphic also includes white. In this case you would fill the area around the graphic with another color that is not used the image and make it transparent.

In the next exercise you will be making a transparent GIF using the image shown in Example 10. To do this you will be using the **Smart Mask** tool to select the background and then filling with a different color.



Example 8 - The background and graphic both contain white, so which cannot be transparent.

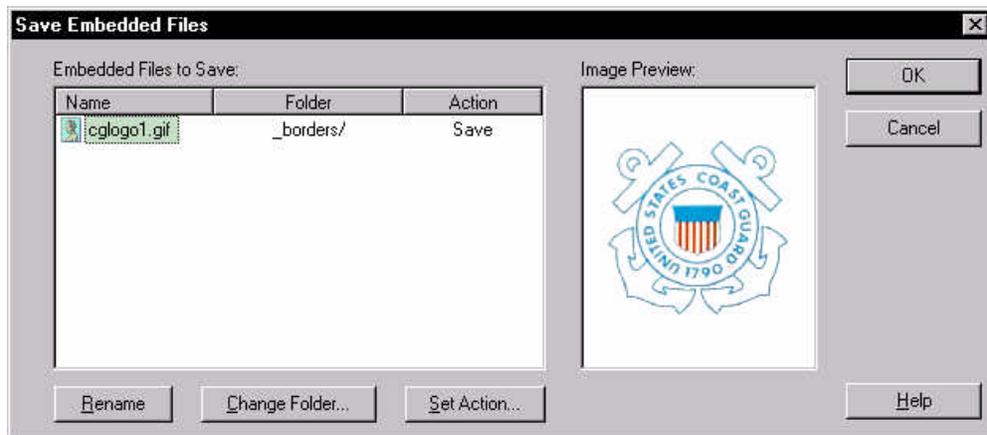
### Exercise - Setting the Background

1. Open **Picture Publisher** if it is not already open
2. From the **File** menu choose **Open**.
3. In the **Look in** box select **U:\**.
4. Locate and open the **Web Workshop** folder.
5. Locate and open the **Raw Images** folder.
6. In the **File of type** field select **All Supported Formats**.
7. Locate and open **cglogo1.gif**. The image shown in Example 10 will open.
8. Select the **Smart Mask** tool.

9. Set the **Wand Range** to 5%.
10. Using the Smart Mask tool, select the background of the image  
**NOTE:** Because the background is not a uniform color the entire background will not be selected. You will need to click in any areas of the background that were not selected to select them.
11. Once the entire background is selected, change the active color to **Purple**.
12. Using the **Fill** tool, fill the selected area with purple.
13. Save the file.
14. Close Picture Publisher.

#### Exercise - Make Transparent in FrontPage

1. Open your FrontPage web.
2. Import the **cglogo1.gif** into your web.
3. Open index.htm
4. Insert **cglogo1.gif** into the first cell in the top border.
5. Select the image. The drawing toolbar will open.
6. Select the **Make Transparent** tool 
7. Click anywhere in the purple area of the cglogo1.gif file. The background will become transparent.
8. Save the page. When you save the page the following window will open:



9. Click **OK**. This will replace the original image with the new transparent one.
10. Preview the page in the Internet Explorer.

Because the **cglogo1.gif** file is in the top border it will appear on all your pages.

## Creating Frames

Creating Frames will allow you to create web pages that have multiple independent regions, somewhat like and independent window. Each page is somewhat like a mini- Web Browser. They can have scroll bars, size manipulators and borders, even headers and footers. It is important to remember a few important issues when creating frames.

### Targeting

Be careful about what types of web pages you link to from framed pages. A link on your framed page may take the viewer to another framed page. That page may in turn, take the viewer to another framed page. Eventually the person viewing the site is framed into a corner and is left to view information in a two-inch square on the screen. The person will get annoyed and probably leave your site. For this reason along with setting up frames, **Targeting** is equally as important as the frame setup itself.

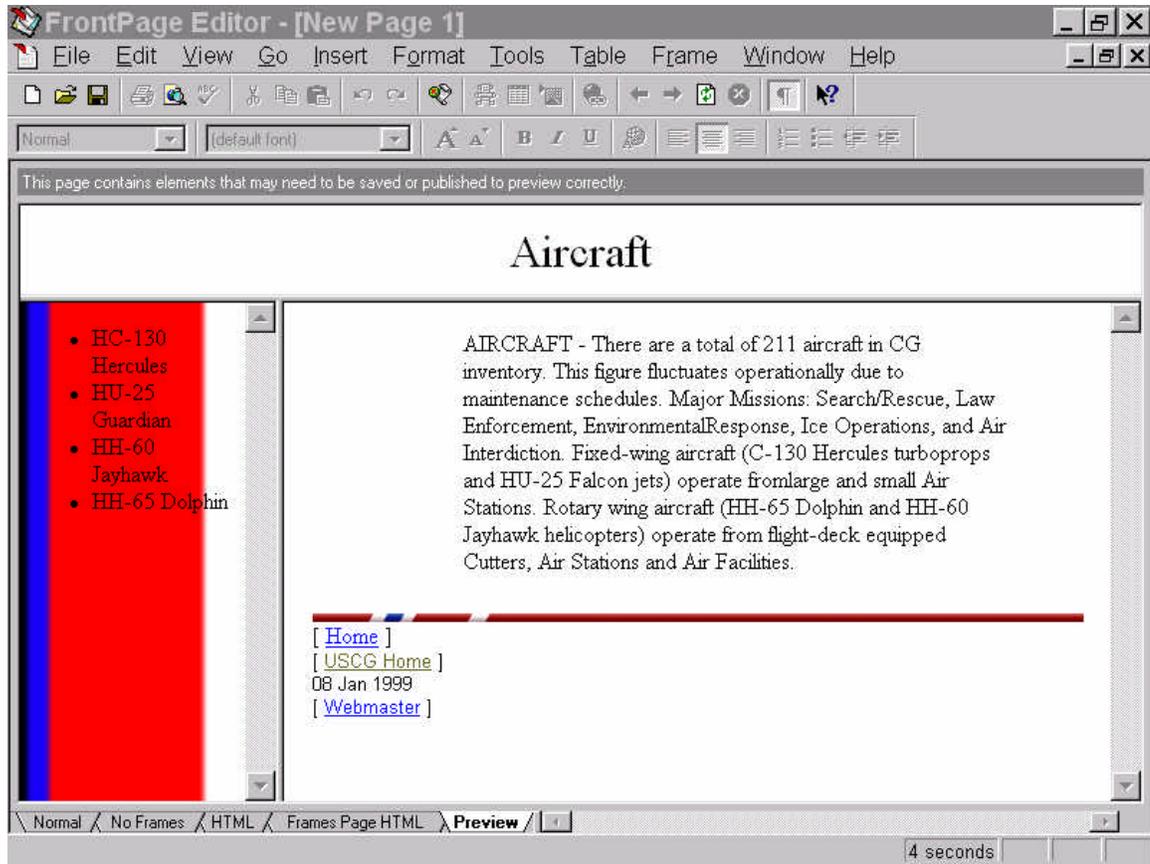
Think carefully about the pages you are going to set up as frames. It is possible to overdo it. Ask yourself the following questions: Will framing enhance the navigation of this site? Are there links to other framed pages on my site? Are there links to framed pages on other web sites?

### Working with Frames

The best thing about frames is that it allows the developer to create pages that are not limited to one simple top-down page.

We refer to the common window for frames as the Frame Source Page. This page defines the size and attributes of each frame. It also specifies the web page that occupies each frame. Thus creating the page shown in the example below, requires a total of 4 HTML pages:

- ◆ A frames source page
- ◆ Three HTML Pages, one for each frame.



Exercise – Create a new a new frames page using a template.

It is possible to create frames from scratch. FrontPage has a variety of preset frame templates using the most common settings.

**Tip**

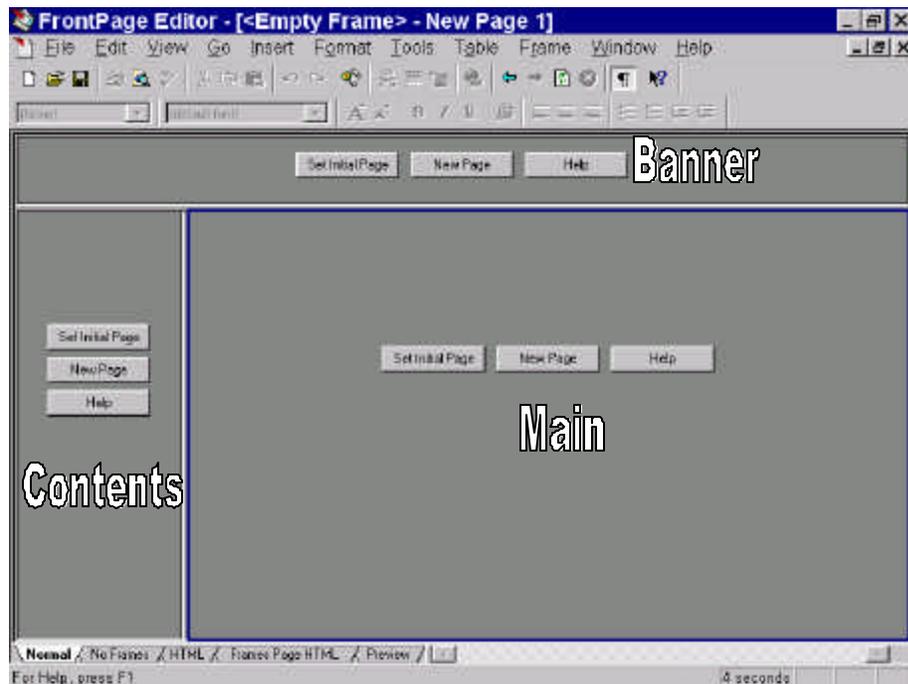
The description box is only a suggestion. You may put any information you desire into the frame.

1. In the **FrontPage Editor**, open **Aircraft.htm**.
2. On the **Frame Menu**, select **New Frames Page**. A dialogue box of choices will appear.

There is a list of templates from which to choose. The preview section of the dialogue box displays a picture of how the browser window is displayed.

3. Select **Banner and Contents**
4. Click **OK** to set the Frames Page.

There are now three frames on the screen. For the purpose of this instruction, we will refer to each of the frames as follows: The top frame is the **Banner**, the bottom right frame is the **Main**, and the left frame is the **Contents**.



## Editing Frames

There are no set rules for the information that can be inserted into a frame. Once in the frame set is chosen, the borders may be moved and sized to suit the needs of the developer. For instance: the banner frame may also contain a series of navigational buttons.

### Exercise – Editing Frames

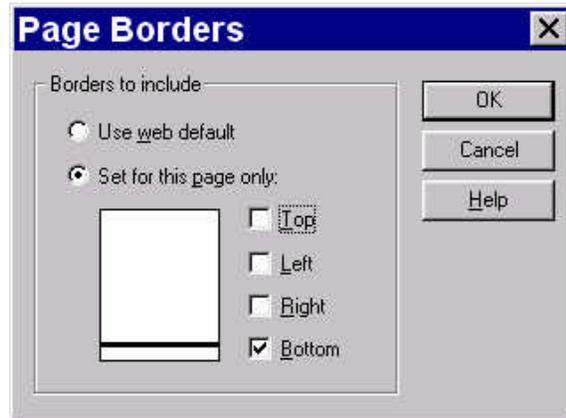
1. On the Main Frame (bottom right frame) click **Set Initial Page**. A Create Hyperlink dialogue box will appear
2. Locate and **select aircraft.htm**.
3. Click **OK**. The Aircraft page will load into the frame.

Next, we will adjust the Shared Borders on the page. For this exercise, it is not necessary to have the top border or any side borders in the Main Frame. We do want to keep the bottom border. The bottom border contains some navigation information we want to keep.

4. On the **Tools Menu**, trace to and select **Shared Borders**. The Shared borders dialogue box will appear
5. Select the **Set For This Page Only** option

**Note:** be careful not to select the “Use Web Default” option, which would change all of the pages in the web, and would undo much of the work we have already accomplished.

6. **De-select** the **Top** checkmark to remove the top border.



7. Click **OK** to apply the changes. The top border disappears.

Next, we will remove the background image from the Main Frame. We will add a background later in this module to the other frames.

8. On the **Format Menu**, trace to and select **Background**.
9. In the Page Properties dialogue box, **de-select** (uncheck) the **Background Image** checkbox.
10. Click **OK** to apply the change and close the dialogue box.

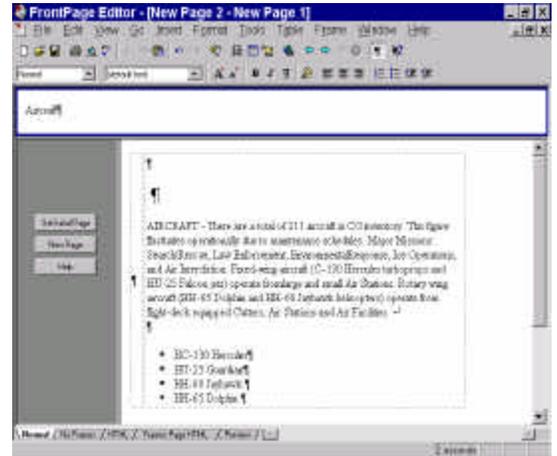
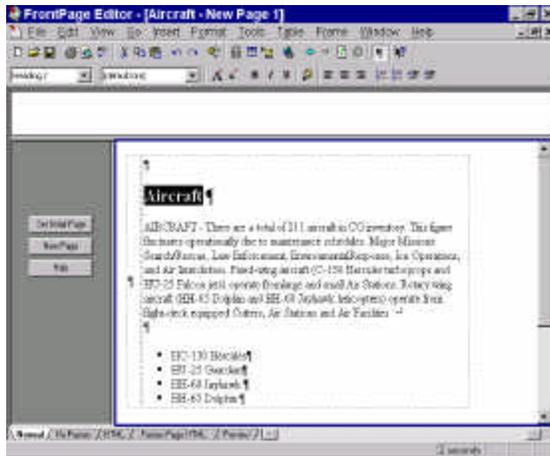
Often times a web developer wants to try to avoid too many scroll bars in a frame. This is particularly true when the eventual plan is to create borderless frames. To help accomplish this, we will reduce the width of the information in the frame. In this case, the information is in a table, so we will simply reduce the width of the table.

11. On the **Table Menu**, trace to and select **Table Properties**. The Table Properties dialogue box will appear.
12. Under the **Minimum Size** area, **Specify** the width to **500 Pixels**.
13. Click **OK** to apply the change.
14. Repeat the previous step for the Shared border table at the bottom of the frame.

**Note:** To make the shared border table the active table, scroll the frame up and click anywhere inside the table.

15. In the **Banner Frame**, click **New Page**. The frame will change to a white background.

- From the **Main Frame**, **Cut** the bolded words **Aircraft**, and **Paste** them into the **Banner page**. To make the banner page the active frame, simply click anywhere inside it.



- Center** the text “Aircraft” and increase the font to fit the frame. You may also wish too bold the text as well.
- In the **Contents Frame** (left frame) click **New Page**. The background will change to white
- From the **Main Frame**, **Cut** and **Paste** the **Bulleted List** of aircraft types into the **Contents Frame**.
- In the Main Frame, clean up any extra remaining paragraph returns or bullet marks by deleting them.

**Note:** You may need to select the **Show/Hide** tool from the tool-bar to make the functions visible.

We have now created four Pages: (1) Frames page, (2) Main Page, (3) Banner Page (4) Contents Page. The next phase is to add in links and target them.

## Adding targeted pages to frames

Targeting frames is an important aspect of using frame sets. The choice of the frame in which information appears is vital to the overall “Look” the developer wishes to achieve.

### Tip

For more information on using Targeted Hyperlinks with frames, see chapter 10 of FrontPage Unleashed

Targeting is simply telling the browser what frame to use to display information.

If you are intending on targeting hyperlinks from one frame, to display in another frame, there are two key points to consider:

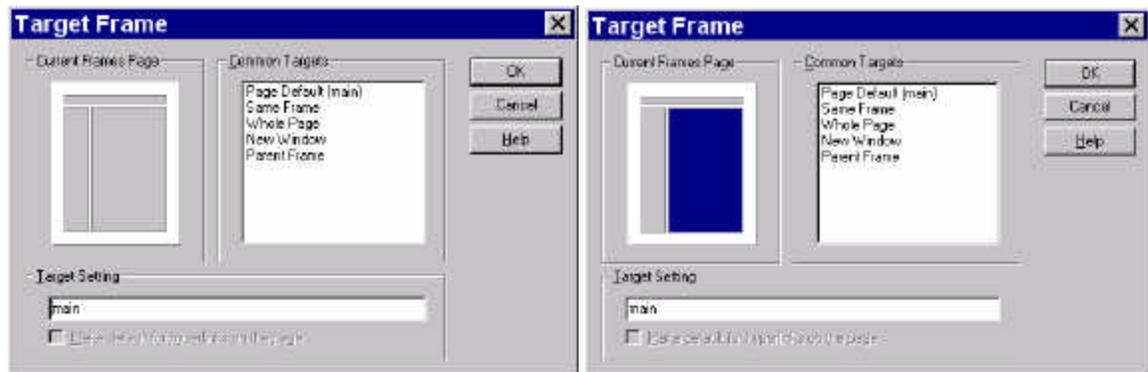
- ◆ Will this link use another page in the current site (such as a Contents Frame)? In this case, it is easy to adjust the information displayed. You can resize and manipulate the information displayed, because you are developing it.

- ◆ Will this link take the viewer to another web site (such as a “Link to other sites” Frame)? In this case, it is important to determine if the site you intend to link to uses framing. We do not want to “frame the user” into a corner. You may want to set the targeting to load a whole new page in this case.

For our exercise, we will only be setting the hyperlinks to use pages that we have created on our web site.

### Exercise - Targeted Pages and Frames

1. In the Contents Frame, **Highlight** the first item on the **Bulleted List**.
2. On the Tool-bar, click the **Create or Edit Hyperlink** tool. The Create Hyperlink dialogue box will appear.
3. Locate and Double click the **Aircraft folder** to open it.
4. Locate and **highlight the matching htm page** for the listed bullet. (In this case, it should be the hc-130.htm).
5. In the **Target Frame** portion, click the **Change Target Frame Icon**. The Target Frame dialogue box will appear.
6. In the **Current Frames Page** Picture, click on the **Main** (bottom right) frame. It will turn from Grey to blue.



**Note:** Take note of the “Target Setting” portion of the dialogue box.. “Main”

7. Click **OK** in the Target Frame dialogue box, then **OK** in the Create Hyperlink Dialogue box.

It is a good practice to test the hyperlinks right in the FrontPage Editor to be certain both the links and the targeting are correct.

8. Press **CTRL** while clicking on the new **Hyperlink**. The Main Frame will change to the page you selected in the Hyperlink.

9. **Repeat** the same procedure to create hyperlinks for the **remaining bulleted items** in the Contents Frame.

Now that the Hyperlinks are in place, the next phase is to fine tune the frames and enhance the appearance.

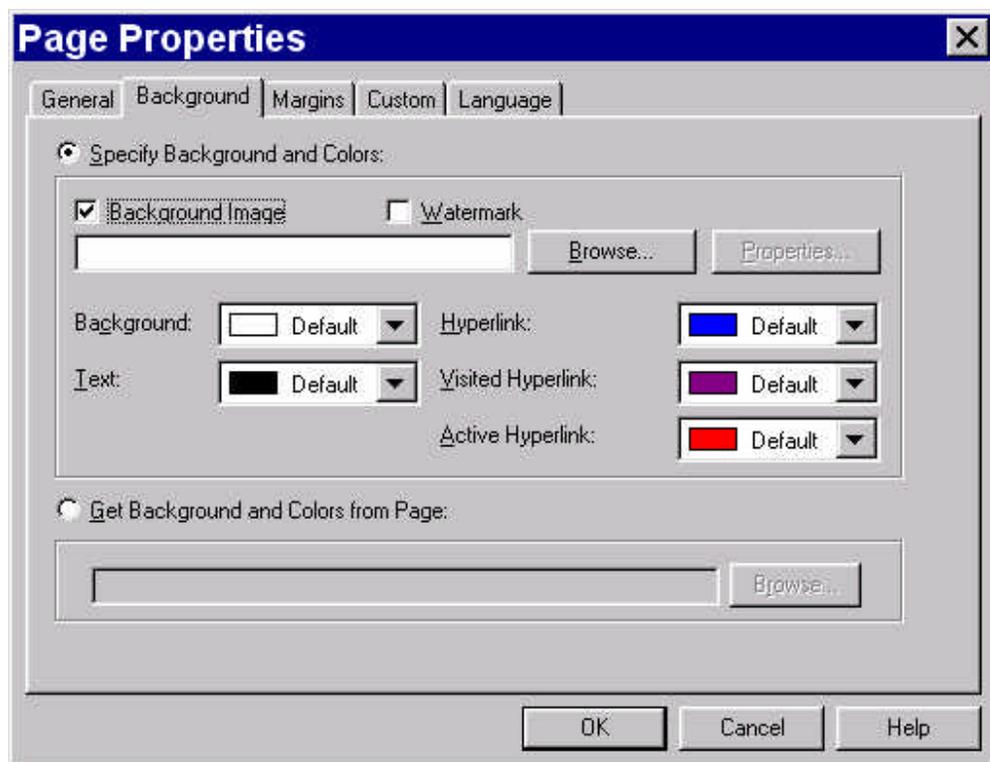
## Enhancing the framed pages

The final phase of creating framed pages is to use many of the features we have already learned. The ultimate plan is to create a borderless frame set. Keeping this in mind, we can now move on to accomplish this goal.

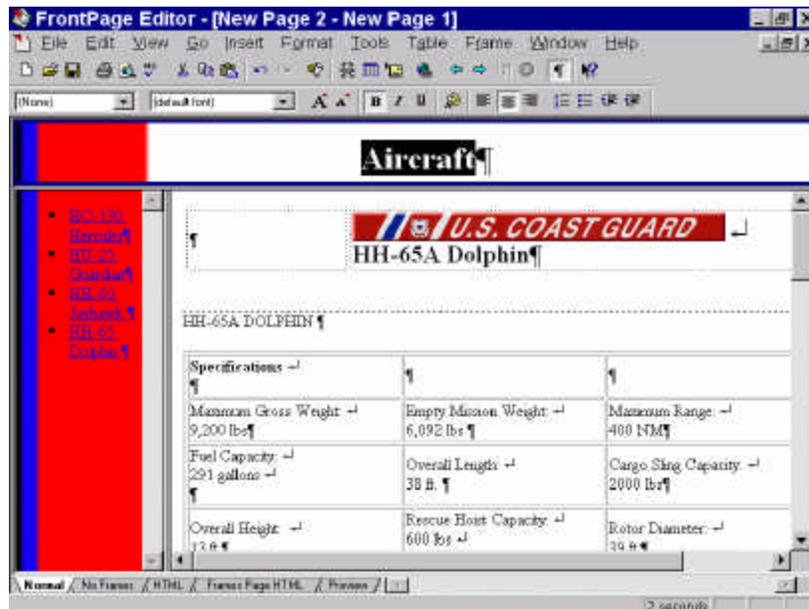
### Exercise - Adding background

In this exercise, we will add the background to the Banner and Contents frames.

1. Click anywhere inside the **Banner Frame** to make it the active frame.
2. On the **Format Menu**, trace to and select **Background**. The Page Properties dialogue box will appear with the Background Tab already selected.
3. Click inside **the Background Image Box**. A check mark should appear.



4. Click the **Browse** button, then locate and select the image **Stripe.gif** in the Images folder.
5. Click **OK** to back out of the dialogue boxes. The background is applied to the Banner Frame.
6. **Repeat** the process to set the background image for the **Contents Frame**.



## Creating Borderless frames.

FrontPage makes adding and removing borders as simple as a few clicks of the mouse. Removing the borders will give our frames a smooth, seamless look.

### Tip

To specify scrollbar and sizing, view the Frame Properties for each frame. For more info see chapter 10 of FrontPage Unleashed.

Scrollbars can divide borderless frames and seem to undo the seamless look we are attempting to achieve. There is no way to control the size of the window the user is using to browse our site. Hence, it is nearly impossible to know if scrollbars will be visible or not. There is a function within FrontPage, which will allow the developer to specify if scrollbars are visible. Keep in mind that we may not want to turn scrollbars off. Otherwise, the user may not see all the information that the developer intended.

### Exercise – Creating borderless frames

1. In the **Frame Menu**, trace to and select **Frames Page Properties**. The Page Properties Dialogue Box will appear.
2. **Remove** the check mark from the **Show Borders** box and click **OK**. The borders are removed.

**Note:** In the FrontPage Editor view, it may still appear as if there are borders. These thin lines will not show when viewed from a browser or in the preview mode. They are there as a guide to show where the edges of the frames are located.

To test your borders, select the preview tab at the bottom of the editor window.

To remove the slider bar at the bottom of the Main Frame, It may be necessary to edit the pages in the frame. There are many ways to accomplish this task. One of the most common ways is to reduce the width of the table the information is located, or place the information into a table, then reduce the width. Remember that we cannot control what size window the user will be using to view, so we may not have any control over the slider/scrollbars.

The final step is to create a link to your new pages from the Index page.

## Publishing Pages

In order for others to view your site it must be posted to a server. Basically, everything in your web needs to be copied to the server using an FTP program. With FrontPage, there's a little more involved than simply copying files. FrontPage does a lot of work behind the scenes and stores a lot of information in hidden directories. In order for your web to work properly you need all those hidden directories transferred as well. Fortunately the Publish command in FrontPage makes the process simple and doesn't require an additional FTP program.

Additionally, many active elements and FrontPage components require you to use the Publish command in order to work correctly. Often the active element uses an applet (mini application) that is created when you publish the site. Active elements will be discussed in the next section.

### Publishing Locally

Normally, you would publish to a web server, but often you will want to preview your site before it is published. FrontPage comes with a Personal Web Server that is installed on the workstation just for this reason. You can publish your web to the web server on the workstation to ensure that it is functioning correctly before you publish to real web server.

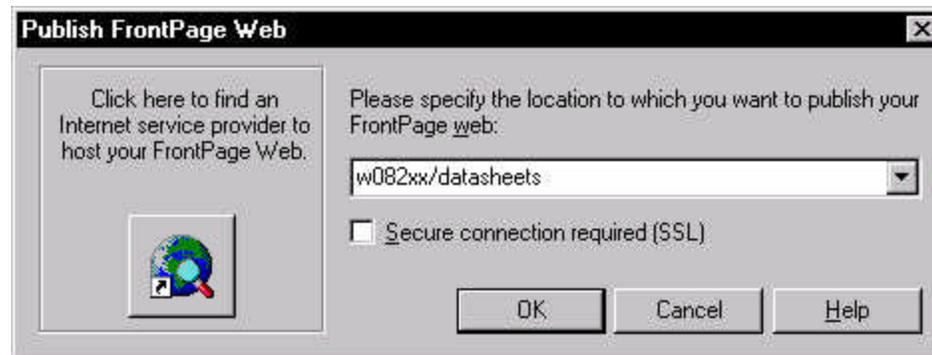
#### Exercise

1. Follow these steps to publish to the Personal Web Server.
2. From the **File** menu choose **Publish**. The **Publish** window will open.
3. Check the box next to **Publish Changed Pages Only**.

4. Click the **More webs** button. The **Publish FrontPage Web** window will open as shown below.



5. Click arrow next to the the location field. A menu will drop down.
6. Select your workstation. The workstation name will be in the format **w089xx** with **089** replaced with your workstation number.
7. Once you have selected your workstation the location field should look similar to the example shown in Step 4, except where it says **datasheets** you should see the name of your web.
8. Click in the location field after the name of your web.
9. Delete the words **copy\_of\_yourweb** .
10. Type the name of your web. When you are done your screen should look like the example below. Your workstation name will be slightly different and your web name will be different.



11. Write this information down. This is the URL for your site.
12. Click **OK**.

*Exercise continues on next page.*

13. The following window will open:



14. Enter **Admin** as the Name . (This is case sensitive.)
15. Enter **password** as the Password. (This is case sensitive.)
16. Click **OK**.
17. Your web will be published to the workstation's Personal Web Server.

The next time you publish your pages you will not have to enter a name and password, unless you quit FrontPage.

### Exercise - Viewing Your Web

To view your web, follow these steps.

1. Open Internet Explorer.
2. In the **Address** field type in the URL of your site. You should have written this down in Step 11 of the previous exercise.
3. Press **Enter**.

Your site should load.

## Publishing to a Web Server

### Coast Guard Internet

Currently OSC is not permitting users to publish FrontPage webs to the server. Files must be copied to the server. As discussed earlier, you are not allowed to include active elements or FrontPage components in web pages posted to the Coast Guard Internet server. The base webmaster is the only person authorized to post pages to the server.

### CGWEB

The Training Center web server does support FrontPage publishing. Only authorized pagemasters will be allowed to publish pages to the server, although many people will be able to create pages. Specific instructions on how to publish to the server will be given to the pagemasters on how to publish. For more information contact the pagemaster for your office or the webmaster directly.

## Enhancing Sites

FrontPage offers a variety of active elements, components, and templates that you can use to enhance your site and speed up development without having to know programming or scripting. A full discussion of these enhancements is not possible in the scope of this course, so we are going to focus on a few. If you would like more information on these and other enhancements, please refer to the pages noted in [FrontPage 98 Unleashed](#).

### Hit Counter

Hit counters allow you to get an idea of how many times your site has been accessed. Hit counters do not provide an accurate number of visitors because server log files don't track visitors, rather they track how many times a page is requested. So every time someone refreshes your page, it adds another hit.

For more information on hit counters see page 216 in [FrontPage 98 Unleashed](#).

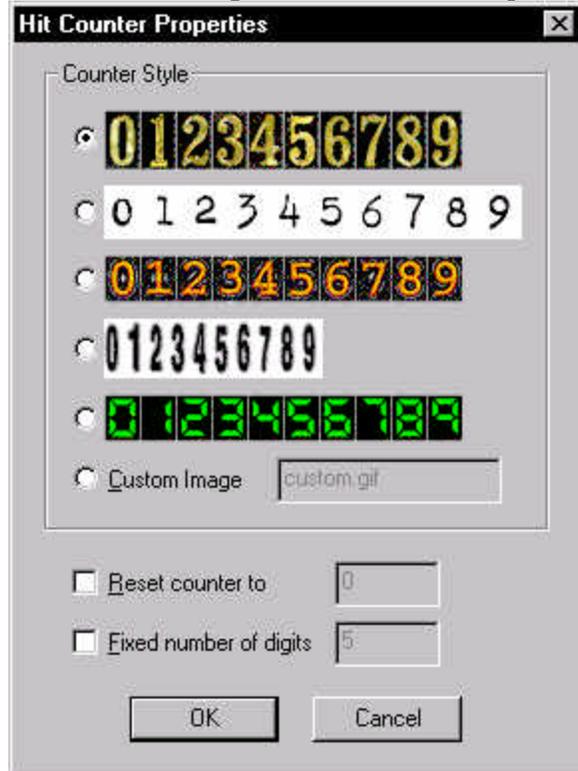
A word of caution - don't over use hit counters. They are only needed on your homepage or major section pages.

### Exercise

In this exercise you will add a hit counter to the **index.htm** page of your web.

1. Open **index.htm** in FrontPage Editor.
2. Place the insertion point at the bottom of the page, but not in the bottom border.

3. From the **Insert** menu, trace to **Active Elements** and choose **Hit Counter**. The **Hit Counter Properties** window will open, as shown below.



4. Select your desired number style.
5. Click **OK**.

A placeholder for the hit counter will be inserted into your page. You will not be able to view the counter until you publish the pages.

## Hover Buttons

Hover buttons are buttons that change when the mouse moves over them. This can be done with Javascript, but FrontPage makes it much easier. FrontPage actually writes the script for you.

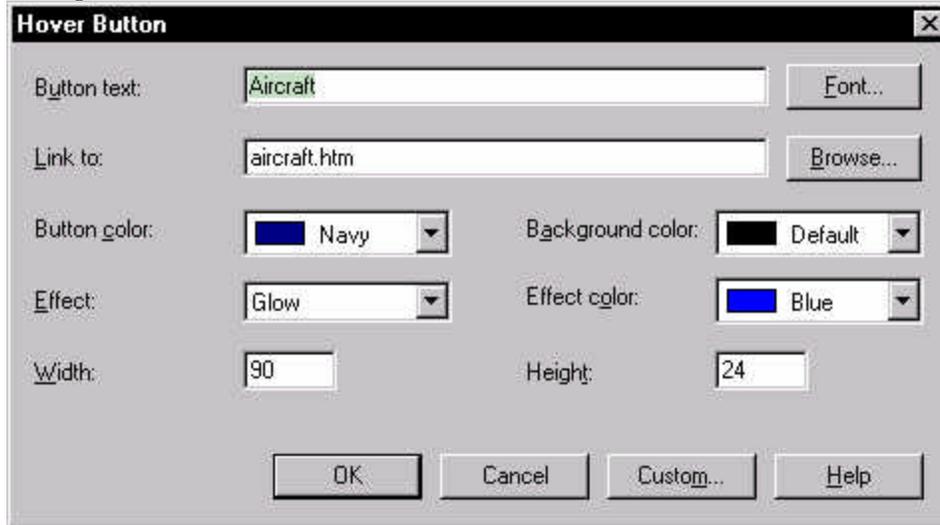
For more information on hit counters see page 225 in [FrontPage 98 Unleashed](#).

### Exercise

In this exercise you will create hover buttons that will link to the section index pages. These buttons will be placed on **cutters.htm**, **boats.htm**, **aircraft.htm**, and **history.htm**.

1. Open **cutters.htm** in FrontPage Editor.
2. Delete the navigation bar in the second cell of the table in the body of the page. This is the navigation bar that links to the other section index pages.
3. With the cursor still in the same cell, click the **Insert** menu.

- Trace to **Active Elements** and select **Hover Button**. The **Hover Button** window will open as shown below.



- In the **Button text** field enter **Aircraft**.
- Click the **Browse** button. The **Insert Hyperlink** window will open.
- Locate the **aircraft.htm** file and click **OK**.
- Set the following options:  
**Button color** - Navy  
**Background color** - Default  
**Effect** - Glow  
**Width** - 90  
**Height** - 24
- Click **OK**. The hover button will be inserted.
- Repeat steps 3-9 using the following information:

<b>Button Text</b>	<b>Link to</b>
Cutters	cutters.htm
Boats	boats.htm
History	history.htm

When you are done you should have hover buttons for each section index page.

### Practice

To practice creating hover buttons repeat the previous exercise on each of the following pages:

- ◆ cutters.htm
- ◆ boats.htm
- ◆ history.htm

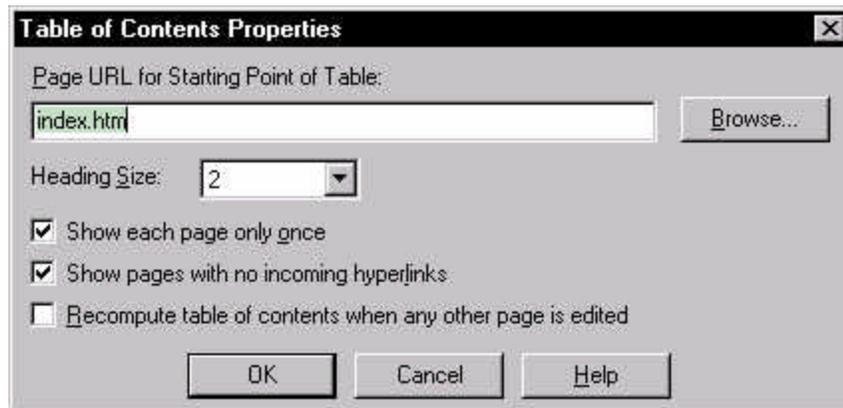
## Table of Contents

On a large site, a table of contents or site map can help people find their way through the site. FrontPage can create a text-based table of contents for every page in your site. This table of contents is based on the Navigation view in FrontPage Explorer.

### Exercise - Table of Contents

In this exercise you will create a new page containing a Table of Contents. The file **cutter.htm** will be used as a template for the new page.

1. In FrontPage Editor open **cutter.htm**.
2. From the **File** menu choose **Save as**. The **Save as** window will open.
3. Be sure you are saving to the root of your web.
4. Change the **URL** to **toc.htm**.
5. Change the **Title** to **Site Contents**.
6. Click **Save**. The file has now been saved as **toc.htm**.
7. Delete the contents of the third cell of the main table.
8. While still in the cell, click the **Insert** menu.
9. Trace to **Table of Contents**. The **Table of Contents Properties** window will open, as a shown below.



10. Be sure the settings are the same as shown above.
11. Click **OK**. A table of contents placeholder will be inserted into the page.
12. Save the file and preview it in Internet Explorer.