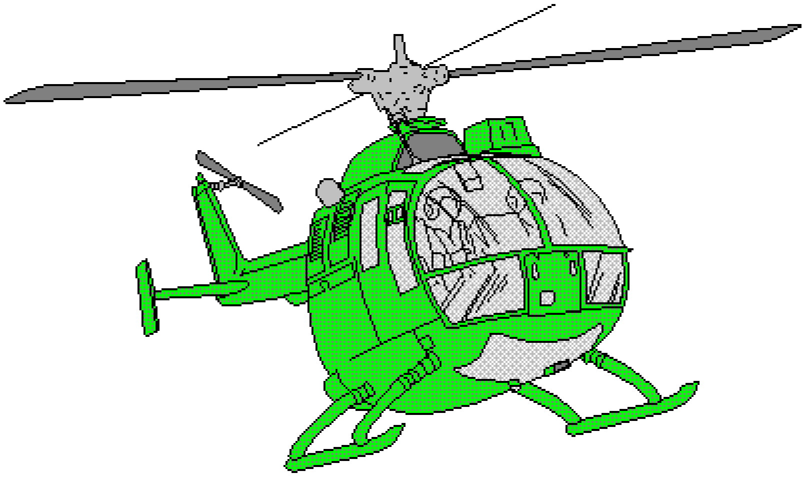
Step-by-Step Tutorial 1
Selecting and Placing Objects

This tutorial shows you how to:

- Set the Target Printer and Page Layout
- Set the Viewing Level
- Select and Place a symbol
- Enter and Place Text
- Save a Document and Exit EXPRESS

Selecting and Placing Objects



Chopper

Set the Target Printer and Page Layout

Each time you start EXPRESS, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the File menu and choose **Print Setup.** The Print Setup dialog box appears.

⊞ **See example.**

2. Click on the Default Printer or one from the Specific Printer list.

⊞ **See example.**

3. Choose Landscape (horizontal page Orientation) and Letter 8 1/2 x 11 (Paper size) and click on **OK.**

⊞ **See example.**

4. At this point, you might see a message box that reads, "Printer page size does not match document page size. Respecify Page Setup?"

⊞ **See example.**

If you see this message, click on **Yes.** The Page Setup dialog box appears.

If you do not see this message, pull down the File menu and choose Page Setup. The Page Setup dialog box appears.

5. Click on **Use Printer Page** to reset the document page size and orientation to the same values you specified for the target printer in step 3.

⊞ **See example.**

Click on **Get Printer Minimums** to reset the page margins to the minimum allowed by the target printer, and then increase the margins if desired.

Click on **OK.**

Viewing Level

The viewing level determines how much of your document is displayed in the work area. When you first start EXPRESS, the viewing level's default setting is at Current Page. (The default paper size is 8 1/2 by 11 inches, at a portrait, or vertical orientation.) At the beginning of this tutorial , the default setting was displaying a portrait, or vertical orientation of pages. Because of the shape of most monitors, two portrait pages are capable of being represented at this setting. When the page orientation was changed on page 2, Step #3, only one page was displayed. If needed, you can change the view level in the View menu.

1. To change the view level, pull down the View menu and select **Actual Size**. At this setting, objects are displayed at an approximation of the size they will appear on a printed page, however, the physical size of the images will be different from monitor-to-monitor.
2. Select **All Pages** from the View menu. There should be either four or six pages visible of drawing space available.
3. To return to the original view level, select **Current Page**.

Select and Place Symbol

1. Pull down the Draw menu and select **Clip-Art Manager.**

⊞ **See example.**

2. The Clip-Art Manager dialog box appears. In the left-hand **Collection...Opened** window is an alphabetically-arranged selection of libraries, with the first entry highlighted. If there is no Collection shown, choose one from the Collections menu.

⊞ **See example.**

In the right-hand **Image Name...Available** window, you will see a scrolling list of one of the EXPRESS collections. Using the scroll bar in that window, you can see the numerous symbols that are ready to be selected and placed in your document. You can also scroll through the list of libraries in the left-hand window to see what general categories of symbols are available. Thumbnails at the bottom of the box can be hidden by selecting **Hide** from the Thumbnails menu.

3. Select the collection **Aircraft--Helicopters.** When you do so, the Image Name list changes to display the contents of the Aircraft--Helicopters' collection.

⊞ **See example.**

4. Click on the word **BO-105MMB.** The name is highlighted. Also notice that a gray box surrounds the appropriate clip-art image in the thumbnail dialog. Another way to select the clip-art is to click once on the thumbnail images. The corresponding image name will become highlighted as you click on each image. Using the thumbnail scroll bar is yet another way to select clip-art.
5. With the **BO-105MMB** image selected, click on **Add to Document.**

   The Clip-Art Manager dialog box disappears, the cursor turns into an Hourglass while EXPRESS loads the symbol from the collection, and then it turns into the Add Object cursor.

6. Place the Add Object cursor at the upper left of the work area and click. A fully colored BO-105MMB aircraft appears on the drawing area.

⊞ **See example.**

Enter and Place Text

1. Pull down the Draw menu and choose **Text.**

⊞ **See example.**

-or-

Click on the Text tool T in the toolbox. The Enter/Edit Text dialog box appears.

2. Type **"Chopper"** and click on **Add.**

⊞ **See example.**

The cursor turns into an Hourglass while EXPRESS loads the typeface, and then turns into the Add Object cursor.

3. Place the Add Object cursor below the helicopter's left (your left) landing skid. This time, instead of clicking once to add the text, click and **hold down** on the mouse and **drag** the Add Object cursor (it will change to a bounding box once pressed) to where the length of the bounding box is about the length of the two helicopter skids. Release the mouse.

⊞ **See example.**

The text is drawn using the current type settings.

Appearance of Color on Your Monitor

If you have a color monitor, the helicopter is fully colored and the text is given the current type settings, or most likely, the default settings -- Cyan fill with a Black line style color. (The Cyan fill and Black line style attributes are EXPRESS' default attributes and will apply to any newly added text until these attributes are changed.)

If you have a monochrome monitor, the interior of the objects appears on your screen as a black and white pattern. There is a unique pattern for each color you select, and each pattern varies from monitor to monitor.

Saving a Document and Exiting EXPRESS

In the previous lesson, you created an image that included a helicopter. It is always a good idea to name your documents so that you can easily understand what the documents contain.

1. To save a document in EXPRESS, pull down the File Menu and choose Save. The Save command opens the Save Document As dialog box.

   The Save Document As dialog box contains 5 scrolling dialog boxes. The first, **File Name**, is where you type the name of your document. (Remember that a document is the same thing as a file.) Since EXPRESS saves EXPRESS documents under DOS conventions, enter the name "chopper.ged" -- a name of no more that eight characters (not including the extension characters).

   Ensure that the directory in the **Directories** dialog is where you want to save the document. Also check the **Drives** dialog to ensure that the correct disk drive is selected. (You cannot save to CD ROM drives. They are read only, or, **R**ead **O**nly **M**emory.)
2. Under Save File as Type, choose Graphics Files (*.GED). This should already be selected.
3. In the right hand side of the Save Document As dialog box, there is a **Description** dialog. Enter the words "**EXPRESS Step-by-Step Tutorial 1 -- Chopper."**
4. Click on the toggle beside **Make Backup.** In the current directory, a duplication of your document will be made with an extension of **.bak.**
5. Check to see if the **Include Thumbnail** is toggled (checked) on. If not, click on the toggle beside **Include Thumbnail.** When you open the document at a later time, a small image of your drawing will appear in the **Show Thumbnail** dialog window.
6. Click on **OK** to save the document.
7. To set up for the next part of this tutorial, select the text "Chopper" and move the text block down, slightly away from the clip-art chopper.

Exiting EXPRESS

To exit EXPRESS, pull down the File menu and choose **Exit.** A prompt **"Save Changes to (untitled)?",** will appear because a change was made to the file since it was last saved (this change was the moving of the text block). If you were to exit the program, which we will **not** do at this time, this is one way to do so (by clicking on Yes). However, at this point, click on **Cancel.** (Clicking on **No** would exit the program without saving any changes made to the file.)

Do Not Exit at this time. Continue to the next Step-by-Step Tutorial page.

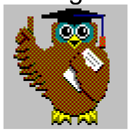
Step-by-Step Tutorial 1 Review

This tutorial showed you how to:

- ⊞ Navigate the EXPRESS Interface
- ⊞ Set the Target Printer and Page Layout
- ⊞ Set the Viewing Level
- ⊞ Select and place a symbol
- ⊞ Enter and place text
- ⊞ Save a Document in EXPRESS and Exit EXPRESS

In the next tutorial you will manipulate objects and add text.

To begin the next tutorial, pull down the Tutorial menu and choose Tutorial 2.

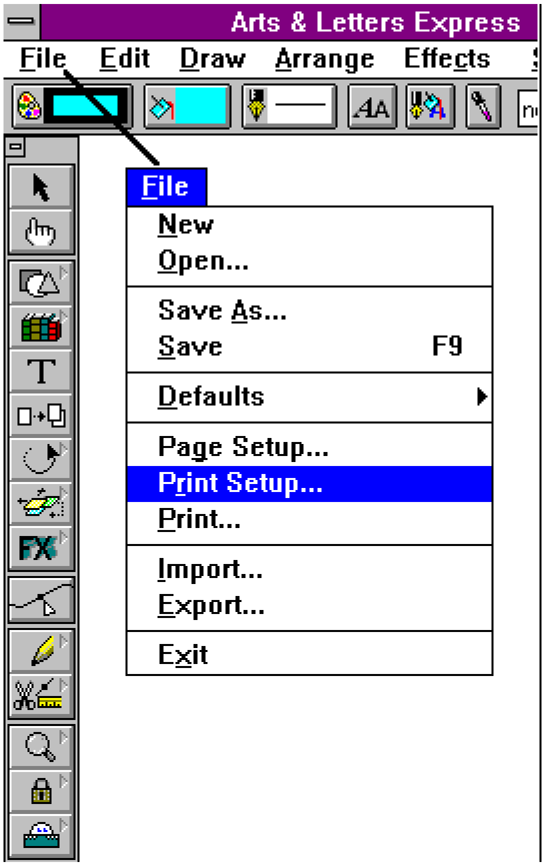


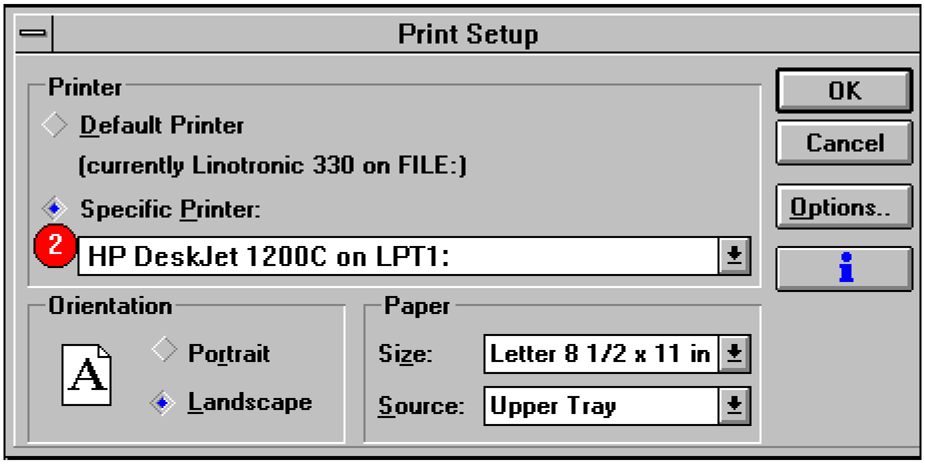
Selecting and Placing Objects Review

TUTORIAL 1
REVIEW

Congratulations!

With the completion of this tutorial
you have moved another step closer
to completing the EXPRESS Step-by-Step Tutorials.

Arts & Letters Express
File
Edit
Draw
Arrange
Effects
File
New
Open...
Save As...
Save F9
Defaults
Page Setup...
Print Setup...
Print...
Import...
Export...
Exit



Print Setup

Printer

○ Default Printer

(currently Linotronic 330 on FILE:)

● Specific Printer:

HP DeskJet 1200C on LPT1:

Orientation

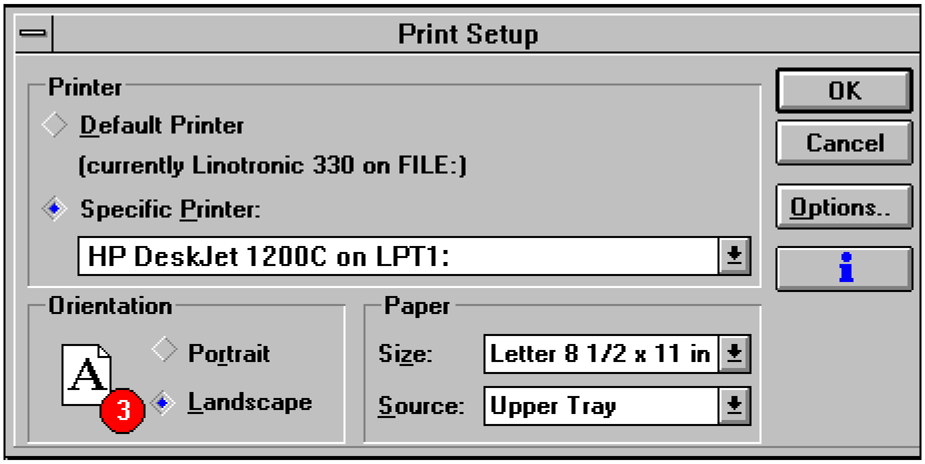
○ Portrait

● Landscape

Paper

Size: Letter 8 1/2 x 11 in

Source: Upper Tray



○ Default Printer
(currently Linotronic 330 on FILE:)

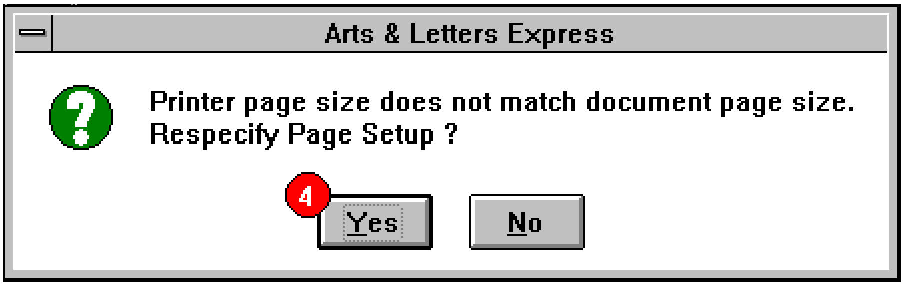
● Specific Printer: HP DeskJet 1200C on LPT1:

○ Portrait

● Landscape

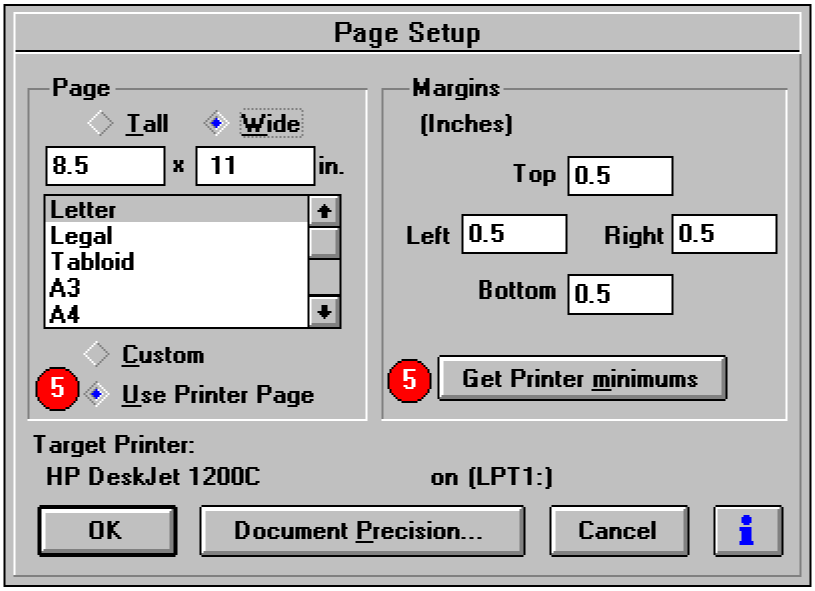
Size: Letter 8 1/2 x 11 in

Source: Upper Tray



Arts & Letters Express

Printer page size does not match document page size.
Respecify Page Setup ?



Page Setup

Page

○ Tall ● Wide

8.5 x 11 in.

Letter
Legal
Tabloid
A3
A4

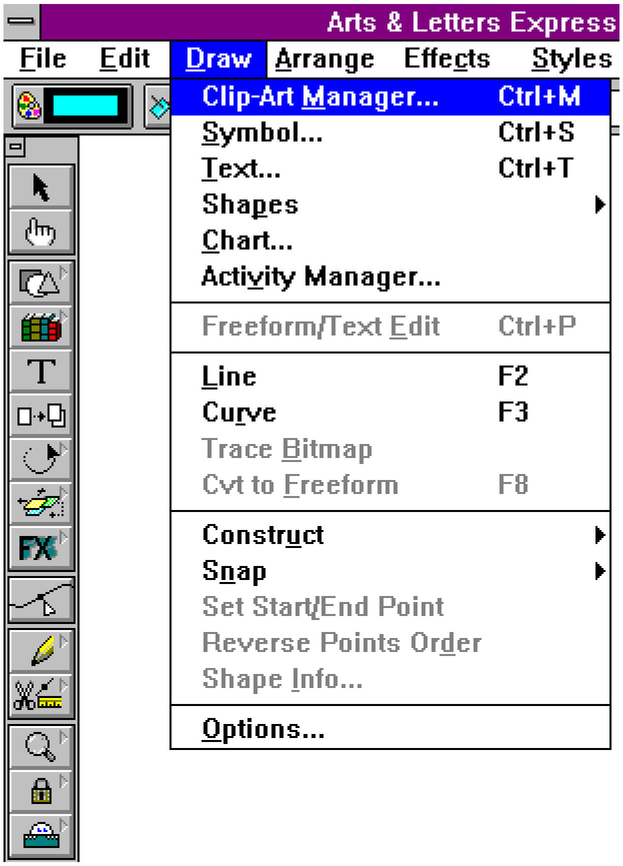
○ Custom
⑤ ● Use Printer Page

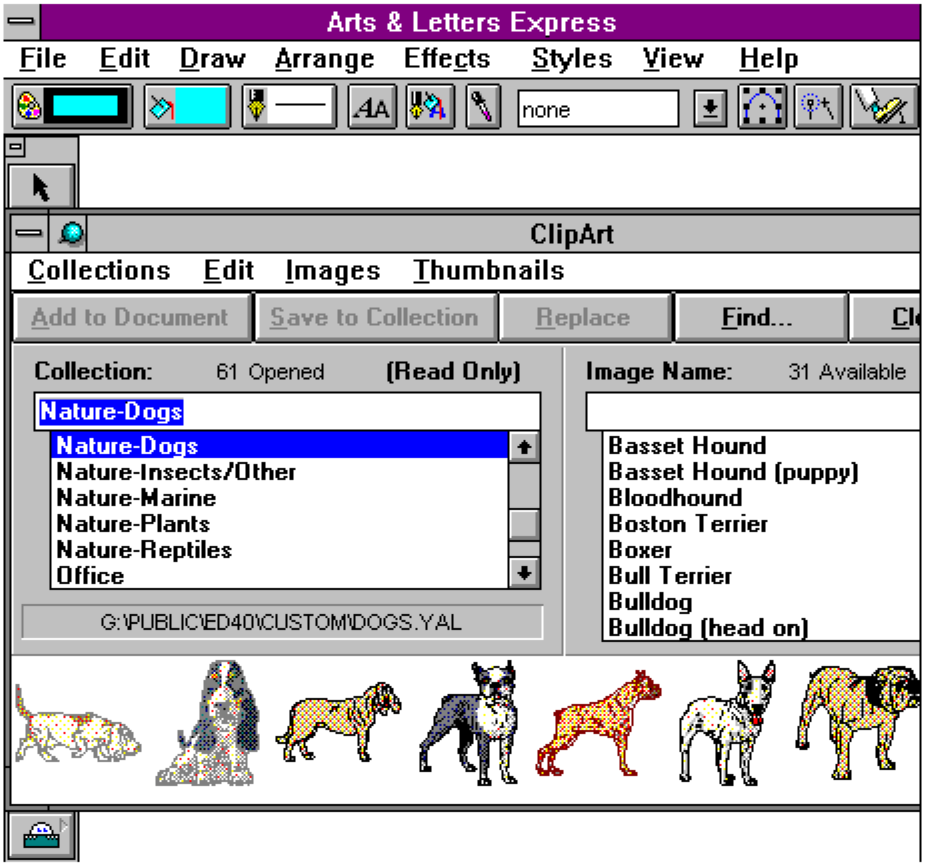
Margins (Inches)

Top 0.5
Left 0.5
Right 0.5
Bottom 0.5

⑤ Get Printer minimums

Target Printer:
HP DeskJet 1200C on (LPT1:)


Arts & Letters Express
File
Edit
Draw
Arrange
Effects
Styles
Clip-Art Manager... Ctrl+M
Symbol... Ctrl+S
Text... Ctrl+T
Shapes
Chart...
Activity Manager...
Freeform/Text Edit Ctrl+P
Line F2
Curve F3
Trace Bitmap
Cvt to Freeform F8
Construct
Snap
Set Start/End Point
Reverse Points Order
Shape Info...
Options...



none

Collection: 61 Opened (Read Only)

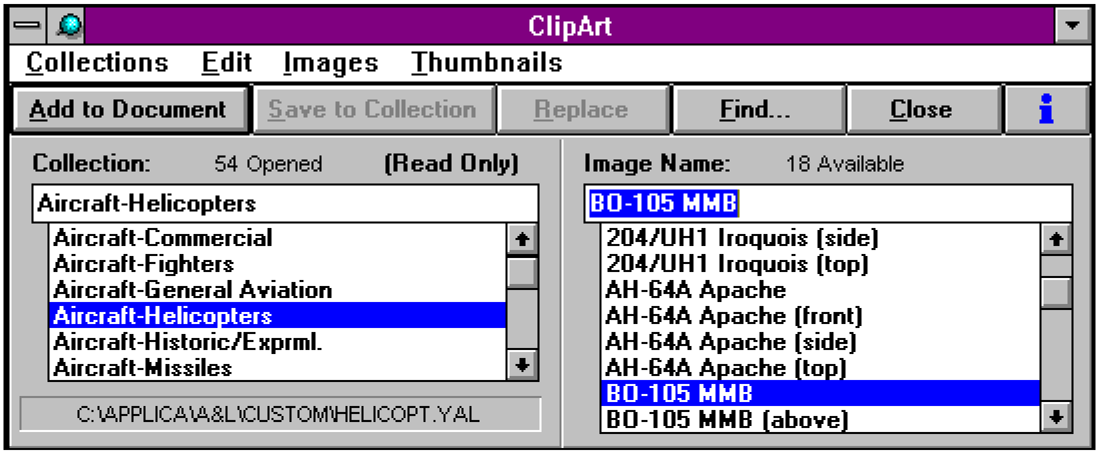
Nature-Dogs

- Nature-Dogs
- Nature-Insects/Other
- Nature-Marine
- Nature-Plants
- Nature-Reptiles
- Office

G:\PUBLIC\ED40\CUSTOM\DOGS.YAL

Image Name: 31 Available

- Basset Hound
- Basset Hound (puppy)
- Bloodhound
- Boston Terrier
- Boxer
- Bull Terrier
- Bulldog
- Bulldog (head on)



Collection: 54 Opened (Read Only)

Aircraft-Helicopters

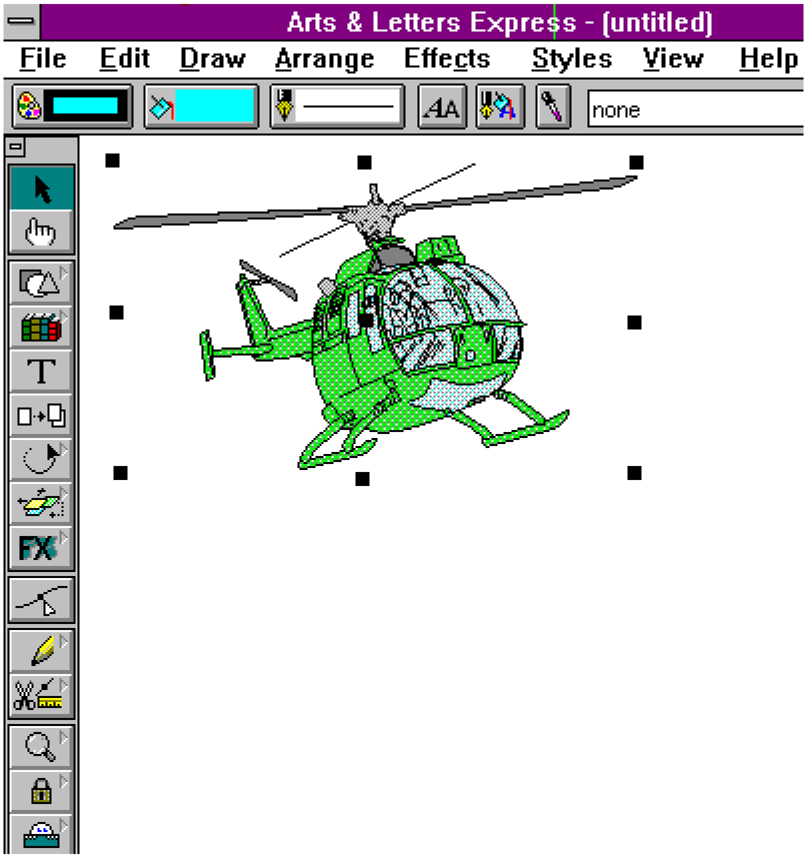
- Aircraft-Commercial
- Aircraft-Fighters
- Aircraft-General Aviation
- Aircraft-Helicopters
- Aircraft-Historic/Exprml.
- Aircraft-Missiles

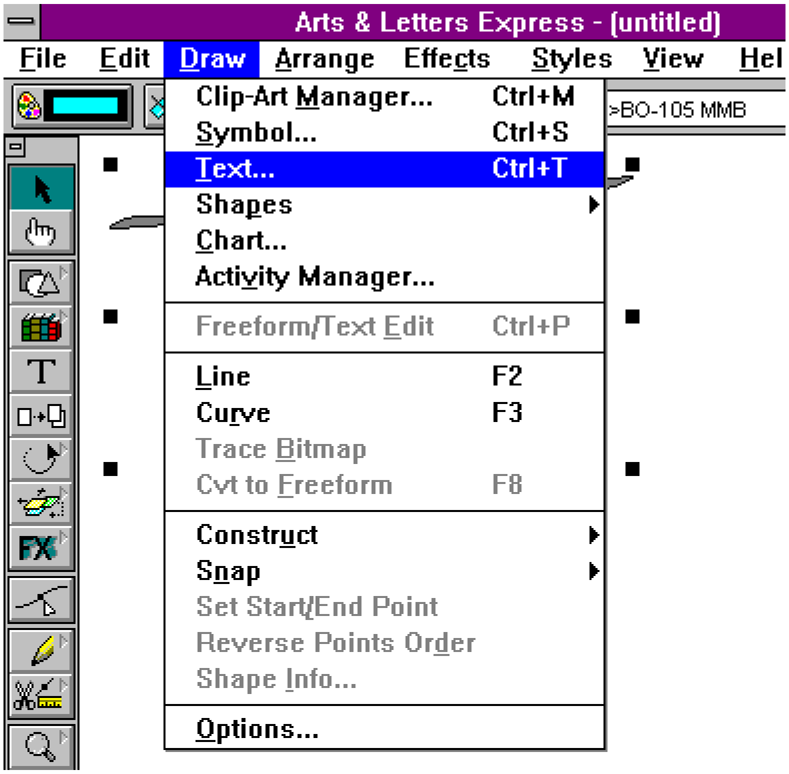
C:\APPLICA\A&L\CUSTOM\HELICOPT.YAL

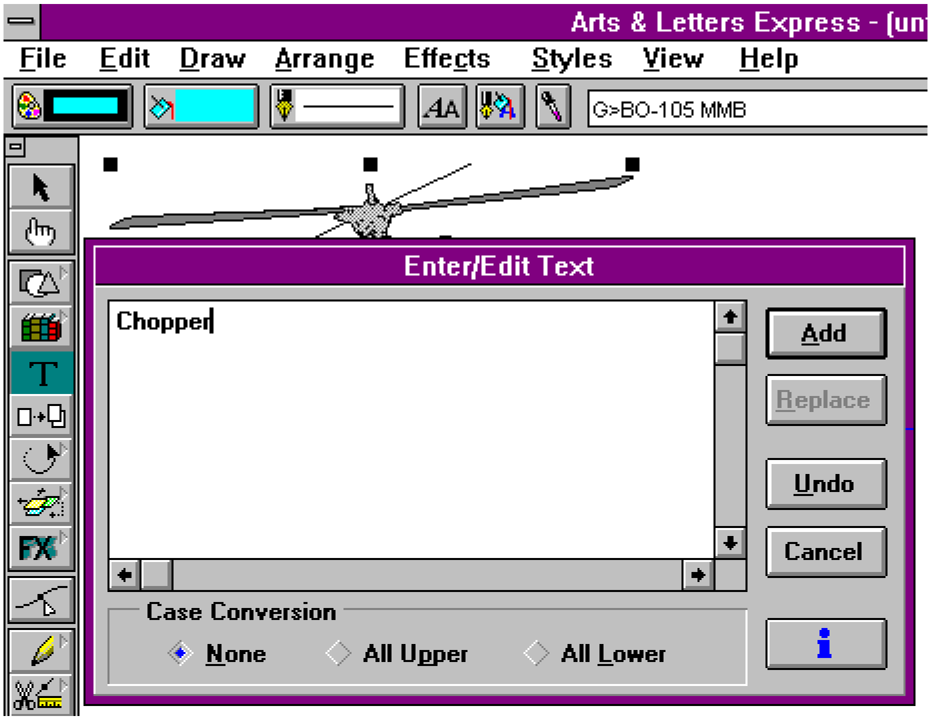
Image Name: 18 Available

BO-105 MMB

- 204/UH1 Iroquois (side)
- 204/UH1 Iroquois (top)
- AH-64A Apache
- AH-64A Apache (front)
- AH-64A Apache (side)
- AH-64A Apache (top)
- BO-105 MMB
- BO-105 MMB (above)

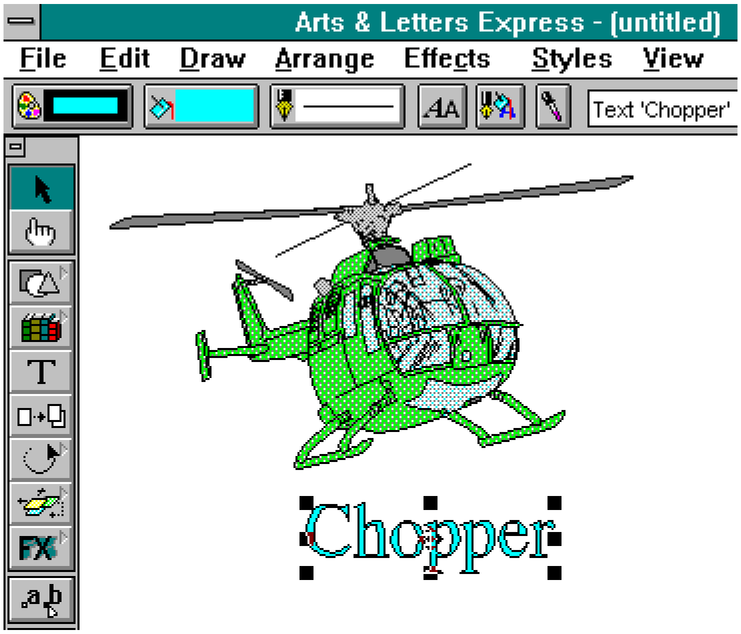

Arts & Letters Express - (untitled)
File
Edit
Draw
Arrange
Effects
Styles
View
Help
none


Arts & Letters Express - (untitled)
File
Edit
Draw
Arrange
Effects
Styles
View
Hel
>BO-105 MMB
Clip-Art Manager... Ctrl+M
Symbol... Ctrl+S
Text... Ctrl+T
Shapes
Chart...
Activity Manager...
Freeform/Text Edit Ctrl+P
Line F2
Curve F3
Trace Bitmap
Cvt to Freeform F8
Construct
Snap
Set Start/End Point
Reverse Points Order
Shape Info...
Options...



Chopper

Case Conversion: ● None ○ All Upper ○ All Lower


Arts & Letters Express - (untitled)
File
Edit
Draw
Arrange
Effects
Styles
View
Text 'Chopper'
Chopper

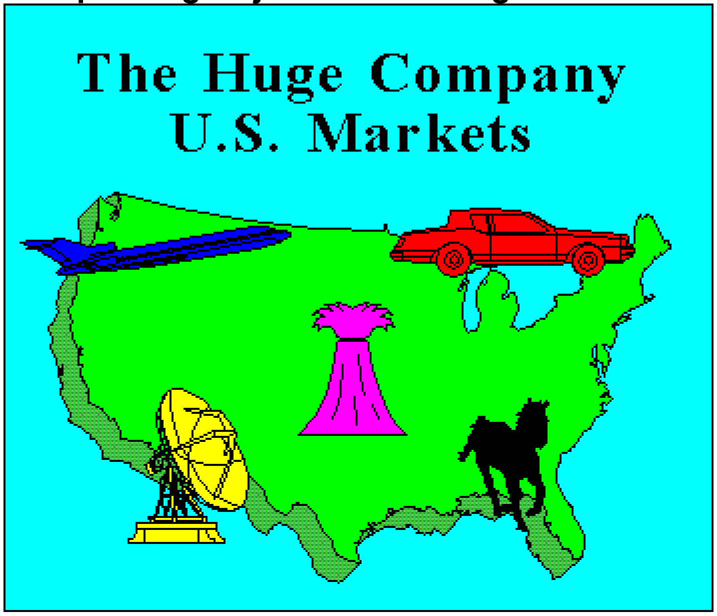
Step-by-Step Tutorial 2

Manipulating Objects and Adding Text

This tutorial shows you how to:

⊞ Color symbols
⊞ Duplicate symbols
⊞ Make a Drop Shadow
⊞ Align Text
⊞ Block Select and Group symbols
⊞ Move symbols
⊞ Select symbols
⊞ Resize symbols
⊞ Align objects
⊞ Open a document
⊞ Rotate symbols
⊞

Manipulating Objects and Adding Text



To get the most out of this tutorial, you should know how to:
⊞ Specify the target printer
⊞ Specify a page size and orientation
⊞ Specify the viewing level
⊞ Place a symbol in a document
⊞ Place text in a document
⊞ Exit EXPRESS
⊞

Open a New File

If you are continuing from the previous tutorial, use the New command and then skip to the next page.

1. Pull down the File menu and choose **New.**

You will be prompted to save any changes made to the open file since the last save. The previous window is cleared, and a new blank work area is displayed.

If you exited and restarted EXPRESS before beginning this tutorial, set the page and printer specifications.

Use the **Page Setup** and **Print Setup** commands in the File menuto specify Letter Page size and Landscape (Wide) page Orientation.

3. Pull down the View menu and choose **Current Page.** (It should still be set at this view level.)

⊞

Select and Place an Object (Symbol)

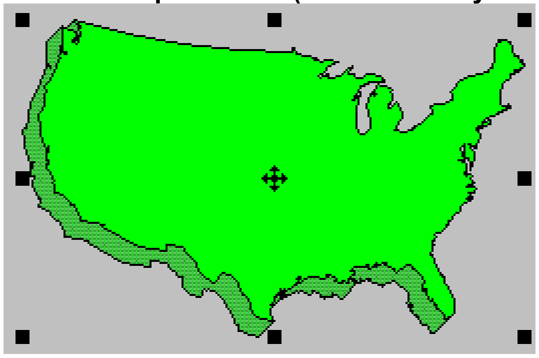
1. Pull down the Draw menu and choose **Clip-Art Manager.** (**Note for Express users who installed with diskettes:** If you haven't updated your thumbnails you should do so for **this Collection only.** Thumbnail updates of all collections could require hours and should be done when your computer is not being used.)
2. From the Collections list, choose the **Maps-USA (med-res)** collection.
3. From the Image Name list, click once on the Image Name: ***U.S. w/Drop Shadow #1.**
4. To demonstrate the Drag & Drop feature, move the cursor to the highlighted clip-art image. (The arrow cursor changes to a hand.) Depress and hold the mouse left mouse button. Drag the image downward until the Add Object cursor is just below the thumbnail dialog box and release the mouse button.
5. Click on the **Close** button in the clip-art manager. Only the top portion of the map is visible, due to the size of the image, and the viewing level.
6. Select the map by clicking directly on it, then hold the mouse key down and drag the image to the center of the page. (Do not click on the black handles to move the object.)
7. Change the view level to **Actual Size**.

⊞

Color the Map

The maps provided in EXPRESS are pre-colorized green and have dark green drop shadows. But for the purpose of this exercise we will color the map a different color to show you how to use the Color Palette.

With the map selected (surrounded by handles):

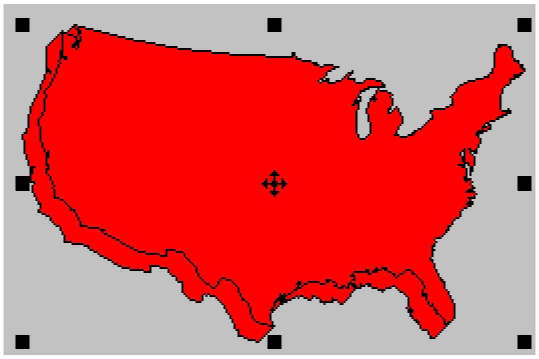


1. Click the Color style button on the Styles Bar. The Color palette dialog box appears.

(continued)
+

2. Whenever you change the color of an object, you can apply the color to the interior fill of the object, the lines/outlines that define the object, or both. In this case, we only want to change the color of the **Beg Fill.** (End Fill applies only to the second color of gradients and raster and vector fills). You can toggle the Fill and Line option boxes on and off by clicking on them. Make sure that just **Beg Fill** is selected.

   Choose **Red.**



3. Select the map by clicking on it. Then delete the map by choosing **Clear** from the **Edit menu.**

Duplicate an Object

This exercise will teach you how to use the Duplicate tool. This tool is handy for making copies of objects quickly. For example, to make a drop shadow, you need to duplicate the object then drag it. The Duplicate tool allows you to do both. (**Note:** Some of the images such as maps provided in EXPRESS come with pre-drawn drop shadows which you can remove by Ungrouping and Clearing. However, there will be cases when knowing how to make drop shadows for other objects will be helpful.)

To duplicate an object and make a drop shadow:

1. Pull down the Draw menu and choose **Clip-Art Manager.**
2. From the Collections list, choose the **Maps-USA (med-res)** collection.
3. From the Image Name list, choose the same ***U.S. w/Drop Shadow #1** used on the previous page of this tutorial.

Notice that the map has a pre-drawn drop shadow. You will not need the pre-drawn drop shadow in this exercise, so:

4. Select the map by clicking on it with the left mouse button.
5. From the Arrange menu choose **Ungroup** or press the Shift+G keys. Another method of ungrouping is to clicking once with the content menu mouse button.
6. Notice that the object viewer now displays: "Block (2 objects)." Select the drop shadow portion of the map. Notice the label **Symbol #7465** that appears in the symbol list box in the button bar.
7. Delete the drop shadow portion **Symbol #7465** by pressing the delete key.

⊞ **See example.**

8. From the Arrange menu choose **Duplicate.**

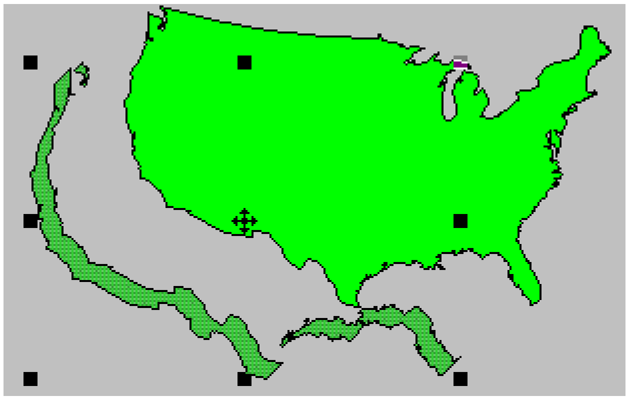
   -or-

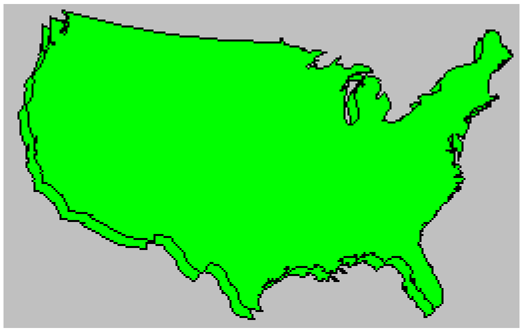
   Click on the Duplicate tool in the toolbox. Either way, the Duplicate tool appears.
9. Point on the map, drag it up and to the right, and then release the mouse button. Since the Duplicate tool is selected, a copy of the map is created.

⊞ **See example.**

10. To cancel Duplicate, click in an open area with the content menu mouse button. The Pointer cursor is restored.
11. If the map is not positioned approximately as shown above, point on it and drag to reposition it.

⊞





Select Symbol

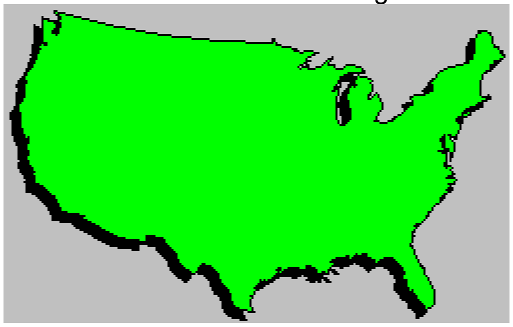
To change any attribute of an object you must first select it. Point on the maps and click. You can tell which map is selected by the location of the handles.

Pull down the Object Viewer. Notice that the label **Symbol #7461** is the same for the symbols. However, you can select any object by choosing a label from the object viewer. Notice that the object handles reposition of the selected map.

⊞

Make a Drop Shadow

With the bottom (left-most) map selected, click on the Color style button ⊞ in the Styles Bar and change the fill color to **Black.** The image is redrawn, giving the map a drop-shadow effect.



⊞

Save Your Work

Save your work at this point.

1. Pull down the File menu and choose **Save As.**
2. The Save Document dialog box appears. Type **USA** and click on **OK.**

   The map is saved in a file called "USA.GED." (The .GED extension is the default. You can specify any extension you want.) Note that the title bar on the top of the EXPRESS screen changes from "(untitled)" to "USA.GED."

3. Keep the map on your screen if you plan to continue this tutorial.

⊞

Add Text

Text (or words) can be considered graphic objects as well as text objects, and manipulated the same way that graphic objects can. You can control the line and fill of each character, and change its shape. For this exercise we will explore entering text into the Enter/Edit Text dialog box and adding it to your document.

To add text:

1. Pull down the Draw menu and choose **Text.**

   -or-

   Click on the Text tool in the toolbox. The Enter/Edit Text dialog box opens.
2. Type **The Huge Company.** Press Enter to advance to the next line. (The enter key in this case does not add the text to your document.) Type **U.S. Markets.**
3. Click on **Add.** The Pointer turns into the Add Object cursor. (Remember that the text can be used just like the clip art you find in the Clip-Art Collections.)
4. Move the cursor above and to the left of the U.S. map and click. The text is placed above the map.

Align Text

The default alignment for multiple lines of text is flush left.

To center the subtitle under the title:

1. With the text still selected, click on the **Type style button** AA with the content menu button. The Custom Type dialog box appears.
2. Select **Centered** alignment, then click on **Apply.**

+

Block Select and Group Objects

Block select allows you to select several objects at one time. It behaves like a net which scoops up its contents in one swoop. By casting the block select bounding box around a collection of objects, EXPRESS automatically selects them together as if they were one object. To make your tasks even easier, you can **Group** the block selected objects into one big object. (Remember that they can be **ungrouped** at any time.) But, for this exercise we will block select and then make the two objects you've been working on (the maps) into a group.

To Block Select and Group the maps begin by:

1. Select the map and drag one of the corner object handles to make it a little larger. Duplicate the map using the Duplicate tool in the tool box.
2. Pull down the Edit menu and choose **Block Select.**

   -or-

   Click on the Block Select tool in the toolbox.

The Block Select cursor appears.

3. Point the cursor above and to the left of the maps.
4. Hold the mouse button and drag the block select bounding box completely around the maps to the opposite diagonal corner.

Release the mouse button. The status bar above the work area should display **Block (2 objects).**

5. Pull down the Arrange menu and choose **Group.**

   -or-

   Click the content menu button.

   The maps are grouped as a single object, and the Status Bar now displays Group.

6. Pull down the Arrange menu and choose **Ungroup.**

   -or-

   Click the content menu button (right) mouse button.

The maps are now ungrouped and are 2 separate objects, and the Status Bar again displays **Block (2 objects).**

For the purposes of the next exercise, delete the maps. Ensure that the text remains.

⊞

Moving Objects

Now that you know how to make a drop shadow, we will start again but using the pre-drawn map from the Clip-Art Manager.

To add the map to the drawing area:

1. Pull down the Draw menu and choose **Clip-Art Manager.**

   -or-

   Simply press the **Enter** (Return) key to bring up the Clip-Art Manager.
2. From the Collections list, choose the **Maps-USA (med-res)** collection.
3. From the Image Name list, choose the United States map ***U.S. w/Drop Shadow #1.**
4. Place the map on the drawing area by clicking the left mouse button.

Move the map to make room to size it:

1. Point on the map and hold down the left mouse button. A solid line bounding box appears. Drag the bounding box down and to the left.
2. Release the mouse button.

Resize Symbols

1. Select the map by clicking on it, then point on the upper right object handle and hold the mouse button. Drag the bounding box toward the upper right.
2. When the bounding box is about twice as large as its original size, release the mouse button. The map is redrawn at the new size.

⊞

⊞

Align Objects

TUTORIAL 2
PAGE 17

Center the map under the title:

1. Pull down the Edit menu and choose **Select All.** One set of handles appears around the title and the map.
2. Pull down the Arrange menu and choose **Align.** The Align dialog box appears.
3. Choose **Center** in the Left to Right orientation and click on **Apply.** The title and map are aligned vertically.
4. With both objects still selected, point and drag to move the objects to the center of the document.

⊞

Exit EXPRESS

At times you will need to exit EXPRESS before completing a document. A document can be saved and EXPRESS closed at any time. Later, when you return to EXPRESS, you can open your document (a GED) and pick up where you left off.

Pull down the File menu and choose **Exit.**

A message box will prompt you to save your work if you have not already done so. If you wish to exit the EXPRESS at this time click on **Yes** to save the document before exiting EXPRESS. If needed, assign a name to the document.

Do NOT exit EXPRESS at this time.
Click on Cancel so that you can continue.

Open an Existing File

To resume work on the document: (You may skip this page if continuing from page 18)

1. Pull down the File menu and choose **Open.** The available document files are listed in the Open dialog box filename list.
2. Choose **USA.GED** and click on **Open.** Your U.S. map and titles are displayed on the screen.

⊞

Add More Symbols

The Clip-Art Manager contains a wealth of clip art and symbols. Clip art is generally referred to as stylized images or colorized pictures that have fine details. Since the each clip art image consists of numerous other objects and/or symbols, they can be ungrouped and each object can be modified. For example, in a clip-art image of a person's face, the eyes would be one set of objects and the hair another set. Therefore you can give the person blue eyes and brown hair without coloring the entire image. Symbols, on the other hand, are simple drawings that can have only one fill color and minimal detail. A symbol cannot be ungrouped for it is only one object. For this exercise we will work with simple symbols.

To add symbols to the U.S. map:

1. From the **Aircraft (i)** collection, add **Commercial Jet (side)** from the Clip-Art Manager to your document. Place it on the map in the vicinity of Washington state. (**Note for Express users who installed with diskettes:** If you haven't updated your thumbnails you should do so for **this Collection only.** Thumbnail updates of all collections could require hours and should be done when your computer is not being used.)

   The symbol is too large. Any one of the four corner handles can be used to proportionally size the object.

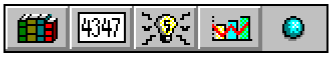
2. Point on the upper left handle, hold the mouse button down, and make the jet smaller. Then move it back onto Washington state.

   It's not necessary to place an object before sizing it. You can size an object while you place it.

⊞

3. Choose **Clip-Art Manager** from the Draw menu.

   -or-

   Click on the **Clip-Art Manager tool** the first in the flyout  in the toolbox.

   -or-

   Simply press the **Enter** (Return) key to bring up the Clip-Art Manager.

   Choose the **Communications** Collection, and double click on the **Dish Antenna** either from the Image Name list or from the scrolling thumbnails. The Add Object cursor appears.
4. **Press and hold** the mouse button and drag the cursor to the right and down. A bounding box shows the size of the object.
5. Drag the bounding box until it is the size desired, (about the height of California) and before releasing the left mouse button, depress and hold the content menu mouse button. As long as you hold the content menu mouse button down, the bounding box size will be locked, and you may move the box to a desired location.
6. Position the satellite dish on the lower left side of the map, then release the both mouse buttons.
7. Click on Clip-Art Manager Tool (or the **Enter** key) again and choose the collection **Nature-Animals/Domestic.** Double click on the **Horse (running)** image. When the add object cursor appears, add the horse to your document. Place it on the map in the vicinity of Kentucky at the size shown.

⊞

8. Add the image **Wheat (sheaf)** from the **Agriculture (i)** collection to your document. Place it in the center of the map at the size shown.
9. Add image **Car-Mercury Cougar** from the **Automotive (i)** collection. Place it on your document in the vicinity of Michigan at the size shown.

You now have all the elements of the graphic on the screen. Move and resize any of the symbols as desired.

⊞

Rotate

Rotating the airplane slightly will make it appear to be taking off.

1. Select the airplane.
2. Pull down the Arrange menu and choose **Transform.**

   -or-

   Click the **r:** button on the Numeric Bar at the bottom of your screen.

   The Transform dialog box appears.
3. Select **Rotate.**
4. Position the cursor in the **Angle** field and click. Enter **-10** degrees.

   Click on **Apply.** The plane is redrawn, rotated 10 degrees counterclockwise.

⊞

Change Color

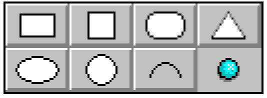
All the symbols you just placed on top of the map are either light green or fully colored.

1. Select the car. Select the Color style button ⊞ in the Styles Bar and change the **Beg Fill** color to **Red.**
2. Change the color of the airplane to blue, the horse to black, the dish antenna to yellow, and the sheaf of wheat to magenta.

⊞

Add the Background

To add a background:

1. Click on the Shapes tool in the box and click on the second tool in the Shapes flyout  in the Toolbox.
2. Position the Add Object cursor in the upper left corner of the Huge Company illustration and drag to the lower right until the square covers the illustration completely.
3. With the square still selected (object handles visible) size the square to match the illustration's frame.
4. Pull down the Arrange menu and select **Send to Back.**
5. Change the color of the square (background) to Cyan.
6. Choose **Select All** from the Edit menu.
7. Group the illustration by clicking with the content menu button.
8. Save your work by selecting **Save** from the File menu.

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Tutorial 2 Review

This tutorial showed you how to:
⊞ Color symbols
⊞ Duplicate symbols
⊞ Make a Drop Shadow
⊞ Align Text
⊞ Block Select and Group symbols
⊞ Move symbols
⊞ Select symbols
⊞ Resize symbols
⊞ Align objects
⊞ Open a document
⊞ Rotate symbols

In the next Tutorial you will learn to Manipulate text.

To begin the next tutorial, pull down the Tutorials menu and choose Tutorial 3.
⊞

Manipulating Objects and Adding Text Review

+

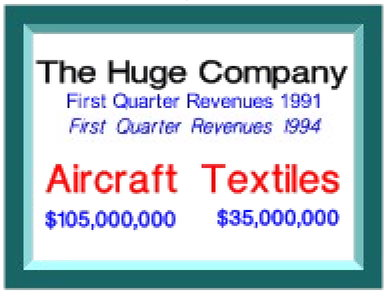
Step-by-Step Tutorial 3

Manipulating Text

This tutorial shows you how to:

- ⊞ Change typeface, type size, and letter spacing
- ⊞ Save and copy attributes
- ⊞ Italicize type
- ⊞

Manipulating Text



The Huge Company

First Quarter Revenues 1991

First Quarter Revenues 1994

Aircraft Textiles

$105,000,000 $35,000,000

To get the most out of this tutorial, you should know how to:
⊞ Specify the viewing level
⊞ Place symbols and text in a document
⊞ Size a symbol
⊞ Color an object
⊞ Align objects
⊞ Block Select objects
⊞ Group objects
⊞

Open a New File

If you are continuing from the previous tutorial, use the New command and then skip to the next page.

1. Pull down the File menu and choose **New.**

   You will be prompted to save any changes made to the open file since the last save.

2. The previous window is cleared, and a new blank work area is displayed.

If you exited and restarted EXPRESS before beginning this tutorial, set the page and printer specifications.

Use the **Page Setup** and **Print Setup** commands in the File menuto specify Letter Page size and Landscape (Wide) page Orientation.

Pull down the View menu and choose **Actual Size.**

+

Place the Background

1. Pull down the Draw menu and choose Activity Manager. Select the **Backgrounds** collection and **Bevel-window (Blue)** image name then press **Add to Document.**
2. Drag the Add Object cursor to size the bounding box on the drawing area.

⊞

Color the Background

To color the background:

1. Select the background.
2. With the activity selected, click the content menu button to ungroup the background.
3. Click on the center of the work area until you see **C>Background** in the Style bar. With the content menu button, press and **hold down** over the Fill style button and release on **Solid.**
4. Select the Color style button ⊞ in the Style bar and change the color of the background to **White.**

⊞

Set Text Color

You can choose the color of an object before adding the object to your document.

To set the color for the text:

1. Point and click on the drawing area where no objects are located.
2. Change the **Fill & Line** color to Red. The Color style button + in the Style bar changes to show the new default color. Until you change the fill color again, any objects (symbols, text or freeform closed shapes) added to the document will have this red fill and line color.

+

Add Text

1. Choose **Text** from the Draw menu or click on the Text tool in the toolbox. Type **Textiles** and add it to the background.
2. Move the text to the right-hand side of the background.
3. Add the word **Aircraft** to the background.
4. Move the text to the left-hand side of the background.

(continued)

5. Add the text **$105,000,000** to your document.
6. Place the text under Aircraft.
7. Add the text **$35,000,000** to your document.
8. Place the text under Textiles.

⊞

Block Select

You can select several objects and change their attributes simultaneously.

1. Choose **Block Select** from the Edit menu, or click on the Block Select tool ⊞ in the toolbox.
2. Position the cursor above the word Aircraft, and to the left of both Aircraft and $105,000,000. Hold the mouse button and drag the block select bounding box so that all four text objects are selected.
3. Release the mouse button, and the window in the Style bar should read **Block (4 objects).**

⊞

Change Typeface

1. Click on the Type style button AA in the Style bar, with the content menu button. The Custom Type dialog box appears.
2. Choose **Modern Medium** from the list and click on **Apply.** The text objects redraw in Modern Medium.

+

Specify Type Size and Letter Spacing

You can change the size of a text object; either drag a handle or:

1. Make sure the four text objects are still selected. Click on the Type style button AA in the Style bar with the content menu button. The Custom Type dialog box appears.
2. Enter **26** (point size) in the Size field.
3. Click on **Spacing.**

The Type Spacing Adjustment dialog box appears.

+

4. Enter **2** in the Letter (spacing) field and click on **Apply.** Click on **Apply** in the Custom Type dialog box. The selected text objects redraw using the values specified.
5. Block Select $105,000,000 and $35,000,000. Click on the Type style button ⊞ with the content menu button and change the size to **18** points.

⊞

Left Align

To align Aircraft and $105,000,000 flush left:

1. Use the Block Select tool ⊞ to select Aircraft and $105,000,000.
2. Choose **Align** from the Arrange menu menu. The Align dialog box appears. Choose **Left** in the Left to Right orientation.
3. Click on **Apply.** The text is redrawn, flush left.
4. If necessary, move the block-selected text to position it in the background box.

⊞

Right Align

To align Textiles and $35,000,000 flush right:

1. Block Select (with +) Textiles and $35,000,000.
2. Choose **Align** from the Arrange menu menu. Choose **Right** in the Left to Right orientation. Click on **Apply.**
3. If necessary, move the block-selected text to position it in the background box.

+

Bottom Align

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PAGE 15

To align the text on the same baseline:

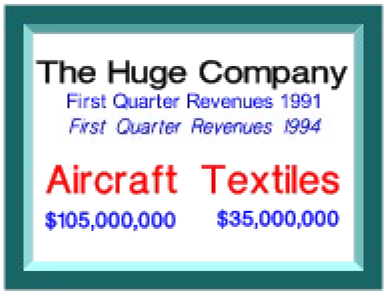
1. Use the Block Select tool ⊞ to select Aircraft and Textiles.
2. Choose **Align** from the Arrange menu menu. Choose **Bottom** from the Top to Bottom orientation and ensure that **No change** is selected for Left to Right.
3. Click on **Apply.** The text redraws with the objects aligned along a common baseline.
4. Block Select $105,000,000 and $35,000,000.
5. Choose **Align** from the Arrange menu. Choose **Bottom** from the Top to Bottom orientation, and click on **Apply.** The text redraws along a common baseline.

⊞

Add Titles

Add the main title and a subtitle.

1. With no objects selected, click on the Type tool ⊞ and add the text **The Huge Company** at the top of your document.
2. Add the text **First Quarter Revenues 1994** under the title.



⊞

Adjust Type Size and Color

1. Use the Block Select tool to select the sub title, First Quarter Revenues 1994.
2. Click on the Type style button in the Style bar with the content menu button, and change the type size to **14** points.
3. Click the Color style button and change the fill color to **Blue.**
4. Block Select the dollar amounts and change the fill color to **Blue.**

Save and Recall Styles

To assign the Save and Recall styles of the Aircraft text object to the title The Huge Company:

1. Select the text object Aircraft.
2. Click with the left mouse button on the Eyedropper button in the Style bar. All of the styles associated with the Aircraft text are now saved in memory.
3. Use the Block Select tool to select the main title First Quarter Revenues 1994.
4. Now click with the content menu button on the Eyedropper button in the Style bar. The size and color attributes of the main title will change to those of the text object Aircraft.
5. Select the Color style button and menu and change the fill color to **Black.**
6. Click on the Type style button with the content menu mouse button and change the type size to **32** points.

Italicize

To italicize the subtitle:

1. Select the subtitle, then click on the Type style button ⊞ with the content menu button.
2. Click on **Italic** in the Styles box.
4. Enter **10** in the Italic field and click on **Apply.**

The subtitle redraws in italics slanted 10 degrees right.

⊞

Group

TUTORIAL 3
PAGE 20

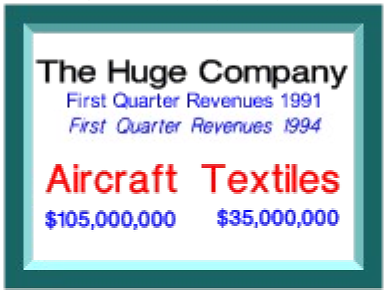
To group the background and its text:

1. Use the Block Select tool to select the symbol and the text on the symbol. Do not include the titles.
2. To group the objects, click the content menu button. Now the symbol and the text objects will be treated as one object. You now have three objects on the screen: the title, the subtitle, and the grouped object.

Align Vertical

To center the titles above the grouped object:

1. Choose **Select All** from the Edit menu menu.
2. Choose **Align** from the Arrange menu.
3. Choose **Center** in the Left to Right orientation. Click on **Apply.** The titles redraw, centered above the grouped object.



4. Save the completed illustration to the filename **Revenues.**

Text Kerning and Style Changes within a Text Block

Text kerning and style can be changed for each letter within a text block.

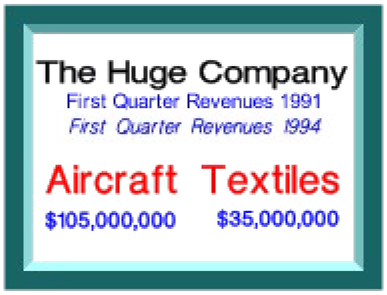
1. Select **Textiles** from the work still on your screen. Click with the left mouse button on the Eyedropper button in the Style bar. All of the styles associated with the Textiles text are now saved in memory.
2. Click on the Text tool in the toolbox. Type **Textiles**, press **Enter** and type **$35**,**000**,**000** so that you have two lines of text. Press **Add**, then click the resulting cursor near the right of your previous work.
3. With the text block still selected, click on the Type style button with the content menu button, and select **Right** Alignment and **Apply.**
4. Notice that a new tool ab has appeared in the middle of the Toolbox. It's the Freeform Text tool. Click on it.
5. Use the Block Select tool to select all of the small open text handles along the baseline of $35,000,000. They become black squares when selected.
6. Again click on the Type style button with the content menu button and select **18** points for the size and **Apply.**
7. Click on the color palette button and select **Blue** and **Apply.**
8. Drag the **vertical space control** at the lower left of the text block up or down to subtract leading (line space). This correction can also be applied to selected individual letters, too.
9. You can drag the **horizontal space control** left or right to change the tightness or looseness of all characters, or to correct kerning problems. For example, the **T** and the **e** are too far apart. Correct this by clicking on the very first text handle. Pressing the **Shift** key to hold movement to the baseline, drag the handle to the right. Give a click with the content menu button when you're finished.

Tutorial 3 Review

This tutorial showed you how to:
⊞ Change typeface
⊞ Change type size and letter spacing
⊞ Save and copy attributes
⊞ Italicize type

In the next Tutorial you will learn freeform drawing.

To begin the next tutorial, click on the Contents button and choose Tutorial 4.
⊞



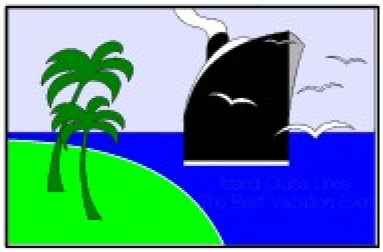
The Huge Company
First Quarter Revenues 1991
First Quarter Revenues 1994

Aircraft Textiles
$105,000,000 $35,000,000

Step-by-Step Tutorial 4
Freeform Drawing

This three-part tutorial will show you how to:
⊞ Use the Line and Curve tools to draw freeform objects
⊞ Size and position objects using Transform
⊞ Stack freeform objects to create a finished image
⊞ Change the line width of an object
⊞ Mix colors using the Hues mixing method
⊞ Flip an object
⊞ Slant an object
⊞

Freeform Drawing



To get the most out of this tutorial, you should know how to:
⊞ Place and size objects
⊞ Duplicate objects
⊞ Rotate objects
⊞ Color objects
⊞ Block select objects
⊞ Align objects
⊞ Group objects
⊞

Open a New File

If you are continuing from the previous tutorial, use the New command and then skip to the next page.

1. Pull down the File menu and choose **New.**

   You will be prompted to save any changes made to the open file since the last save.

2. The previous window is cleared, and a new blank work area is displayed.

If you exited and restarted EXPRESS before beginning this tutorial, set the page and printer specifications.

Use the **Page Setup** and **Print Setup** commands in the File menuto specify Letter Page size and Landscape (Wide) page Orientation.

Pull down the View menu and choose **Actual Size.**

⊞

Divide and Conquer

As you begin to work on more complex documents, you may find it useful to create individual segments of the document and then place them together to produce the finished illustration. In this tutorial, we've divided the document into three parts: creating the backdrop, drawing the ship, and adding the finishing elements.

⊞

Part One: Create the Backdrop

The backdrop for the illustration shows the land, sea, and sky.

It is composed of four clip-art symbols: a rectangle for the sky, a rectangle for the sea, a geometric shape for the land, and a rectangle used as a frame around the image.

⊞

Add Symbol and Size Using Transform

1. Click on the shapes tool in the Toolbox. Drag a rectangle to size with the resulting cursor. Release the mouse. To dismiss the cursor, click in an open area with the content menu button.
2. Choose **Transform** from the Arrange menu, or just press **W** while holding down the **Ctrl** key. The Transform dialog box appears.
3. Click on **Absolute measurement** and **Size.** Enter in a Width of **3.75** and a Height of **1.25.**
4. Click on **Apply.** The rectangle is resized.
5. Move the rectangle to the top center of the work area.

⊞

Color Symbol Using Color Mixing

1. Click on the Color style button ⊞ in the Style bar.   The Named Colors dialog box appears.
2. Click on **Custom.**   The Color Mixing dialog box appears.
3. Choose **Blue** from the Named Colors list.

(continued)
⊞

4. The color mixing bars at the upper right of the dialog box should be labeled Hue, % White, and % Black. If they are not, choose **Hues** from the Models menu.
5. Drag the scroll box in the % White mixing bar to set the percentage to **88%.** You can click on the arrows at the end of the mixing bar to increase and decrease the percentage in 1% increments.
6. Since we want to apply the mixed color to the interior of the rectangle, make sure the Beg Fill is checked and the Line attribute is not checked. Click on **Apply.**

⊞

Duplicate and Position Symbol Using Transform

1. Choose **Transform** from the Arrange menu menu.
2. Click on the Check box for **Add to/Subtract from the existing value** and for **Position**, type **1.25** in the Y Position field, and click on **Duplicates** so that a check mark appears in the box.
3. Click on **Apply.** A duplicate rectangle is placed below the original, and is automatically selected.

   Since the original rectangle is 1.25 inches high, specifying a Y position of 1.25 places the duplicate immediately below the original.

(continued)

⊞

4. With the duplicate selected, pull down the Styles menu menu, choose **Color**, and change the fill color to **Blue.**
5. Choose **Select All** from the Edit menu menu to select both rectangles, then choose **Group** from the Arrange menu menu to group them.

(continued)

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Add, Color, Align, and Size the Land Symbol

1. Click on the Clip-Art Manager tool ⊞ in the Toolbox, or just press the **Enter** key. From the collection entitled **Geo. Shapes (general) (i),** double-click on the symbol entitled **Geometric Shape #52.** Drag it to size with the resulting cursor. Release the mouse.

   If you click on the Preview button above, you see that this ready-made land shape does not perfectly match the illustration. You could use the EXPRESS masking tool to clip out just that part of the shape you wanted. This concept is presented in Tutorial 10. You could also draw the shape yourself as explained later in this tutorial.

   For the moment, just drag the upper middle object handle downward so that the shape is flat. This will serve as the land shape for now.
2. Click on the Color style button ⊞ in the Style bar to change the **Beg Fill** color of the symbol to **Green**, and again to change the Line color to **White.**
3. Choose **Select All** from the Edit menu.
4. Choose **Align** from the Arrange menu menu and choose **Left** from the Left to Right orientation.

Make sure that the "Relative to Page" box is clear (not checked). Click on **Apply.**

(continued)
⊞

5. Choose **Align** again and **Bottom** align the objects.
6. Select the geometric shape. Drag the top center handle to resize the shape vertically, making it slightly shorter than the sea rectangle. Drag the right midpoint 7handle to resize the shape horizontally, making it approximately half the length of the sea rectangle.
7. Choose **Select All** from the Edit menu, then click the content menu button to Group the objects.

⊞

Add, Size, and Position the Border

1. Click on the shapes tool in the Toolbox. Drag a rectangle to size with the resulting cursor. Release the mouse. To dismiss the cursor, click in an open area with the content menu button.
2. Change the Line color to **Black.**
3. Click on the Fill style button with the content menu button. The Custom Fill dialog box appears. Choose **None** and click on **Apply.**

The rectangle redraws with no interior fill.

4. Choose **Line** from the Styles menu or Click on the Line style button with the content menu mouse button.

The Line Attributes dialog box appears. Enter a Line Width of **1.5** points and click on **Apply.**

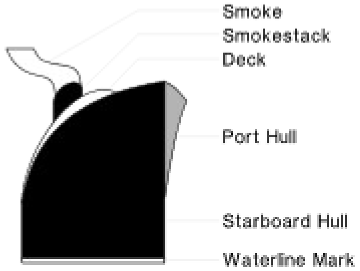
(continued)

5. Choose **Transform** from the Arrange menu menu. The Transform dialog box appears.
6. Choose **Absolute measurement** and **Size**, make sure the "Proportional" box is clear (not checked) and enter a Width of **3.75** and a Height of **2.5.**
7. Make sure **Duplicates** is turned off, then click on **Apply.** The border resizes.
8. Choose **Select All** from the Edit menu. Align by clicking **Center** orientation from both the Top to Bottom and Left to Right orientations, then choose **Group** from the Arrange menu.

⊞

Part Two: Draw the Ship

Although computer graphics can be drawn like traditional paper-and-ink graphics, it is common to create a computer image as a set of separate and distinct objects that are then sized and positioned relative to each other. In the case of the ship, there are six different pieces:



(continued)
⊞

In this section of the tutorial you will draw each piece of the ship, and then size and position the pieces to produce the finished image.

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Draw the Smoke

To make room for drawing, choose **Current Page** from the View menu.

1. Choose **Curve** from the Draw menu or click on the Curve tool (the first in the Draw flyout) in the toolbox. The Pointer changes to the Curve tool.
2. Drag the curve tool to draw a curved line similar to the example shown, then release the mouse button.

⊞ **See example.**

Special Note.

(continued)
⊞

If you are unfamiliar with computer drawing or with using a mouse, your sketch may not closely match the illustration. Don't panic. As you become more experienced, you'll be able to draw quickly and accurately. Until then, there's still no problem: you can easily adjust any line or curve to the shape desired.

3. Choose **Line** from the Draw menu or click on the Line tool in the toolbox. The Curve tool changes to the Line tool.

4. Place the Line tool on the endpoint of the curved line. Hold the **Shift** key and drag the Line tool to draw a horizontal line to the right. Release the mouse button and the Shift key.

⊞ **See example.**

Holding down the Shift Key.

(continued)
⊞

Holding the Shift key while you draw a line lets you draw exact horizontal and vertical lines. If you do not hold the Shift key, you can draw straight lines in any direction.

5. Choose the Curve tool (the second in the Draw flyout ⊞) again. Draw a curved line from the endpoint of the horizontal line.

⊞ **See example.**

6. To complete the smoke, choose the Line tool again and draw a line between the two remaining endpoints.

⊞ **See example.**

Note: Click on the Review button to see a summary of these steps.

⊞

Edit the Smoke

1. Check the Style bar. It should read "Closed shape." If it does not, use the Edit tool to Drag one endpoint on top of the other end-point to join them.

⊞ **See example.**

2. Click the content menu button to cancel the drawing tool and start editing the shape. The cursor changes from the Line tool to the Edit tool.

⊞ **See example.**

3. You can select any point handle and drag it to reshape the object if needed.

Using Point Handles.

(continued)
⊞

If there is no point handle where you would like to make an adjustment, choose **Construct** from the Draw menu. A submenu appears and select the **Add Handle** option. The Edit tool changes to the Add Handle tool; point on a line or curve and click to add a handle. Pressing **F5** is a shortcut that does the same thing.

4. Choose **Point Display** option from the View menu   A submenu appears and select the **Control Points** option or click on the Points Display tool in the Style bar.

   Click on a point handle.   If the handle is on a curve, control points are displayed.   You can drag control points to reshape curves.

5. If there are unneeded point handles on the shape, you can delete them.   Click on a point handle to select it and choose **Clear** from the Edit menu or push the **Delete** key on the keyboard.

6. When you are done adjusting the shape, click the content menu button.   The cursor changes from the Edit tool to the Pointer, and object handles appear around the object.

⊞

Set Object Attributes

1. Click the Fill style button ⊞ with the content menu button and change the fill to **Solid.**
2. Click the Color style button ⊞ and change the fill color to **White.**
3. Click the Line style button ⊞ with the content menu mouse button and change the line width to **0.5** points.

⊞

Create the Remaining Ship Components

Using the techniques learned by drawing the smoke, draw the rest of the shapes that make up the ship. Draw the shapes at any size desired; later you will resize the shapes in relation with each other.

1. Use the Line and Curve tools ⊞ to draw the smokestack shape.
2. Use the Curve tool to draw the deck shape.
3. Use the Line and Curve tools to draw the starboard hull shape.
4. Use the Line and Curve tools to draw the port hull shape.
5. Create the waterline mark by clicking on the shapes tool ⊞ in the Toolbox and dragging a rectangle to size with the resulting cursor. Release the mouse. To dismiss the cursor, click in an open area with the content menu button. Drag the top center handle down to create a long, narrow rectangle.

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Color the Ship Components

1. Select the smokestack shape and change the fill color (under ⊞) to **Black.**
2. Select the starboard hull shape and change the fill color to **Black.**
3. Select the port hull shape. Select the Color style button ⊞ with the content menu button and change the fill color to **Blue** with **37% Black** added.
4. Select the waterline mark shape. Select the Color style button ⊞ with the content menu mouse button and change the fill color to **Red** with **50% Black** added.

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Size the Ship Components

Resize the shapes by selecting them and dragging corner handles. Don't worry about precision at this point; just approximate the size of each shape in relation to the others.

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Position the Ship Components

Move the shapes into their correct positions relative to each other. When in place, resize shapes as needed to make them fit properly. If necessary, use the **Stacking Order** command in the Arrange menu to change the positions of selected objects in the stacking order. Stacking separate objects in this manner to compose a drawing is a powerful technique that eliminates the need to create identical boundaries between the components of the drawing.

When the ship is complete, use the Block Select tool ⊞ to select all of the shapes and Group them (press **Ctrl+G**). Size and position the ship on the backdrop.

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Part Three: Add Finishing Elements:

Add the Birds

1. Click on the Clip-Art Manager tool ⊞ in the Toolbox, or just press the **Enter** key. From the collection entitled **Nature-Birds (i),** double-click on the symbol entitled **Birds in Flight.** Drag it to size with the resulting cursor. Release the mouse.
2. Change the fill color to **White.**
3. Size the symbol and place it on the backdrop.

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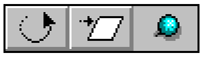
Add the Trees

1. Click on the Clip-Art Manager tool ⊞ in the Toolbox, or just press the **Enter** key. From the collection entitled **Nature-Plants (i),** double-click on the symbol entitled **Palm Tree.** Drag it to size with the resulting cursor. Release the mouse.
2. Choose **Flip/Horizontally** from the Arrange menu menu. The tree symbol is flipped horizontally.
3. Click on the Color style button ⊞ with the content menu button and make the tree **Green** with **50% Black.**
4. Use the **Duplicate** tool to create a second tree.
5. Click on the **Slant** icon in the toolbox, which is in the flyout to the right of the rotate tool



. The cursor changes to the Slant cursor.

Drag the top center handle of the tree to the right.

6. Size and place the trees on the backdrop.

⊞ Another way to slant objects

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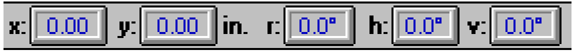
If you want to give an exact angle of slant to an object, select it and then click on the **h:** numeric button  at the bottom of your screen.

Add the Text

1. Click on the Text tool in the toolbox.   The Enter/Edit Text dialog box appears.
2. Type

   Island Cruise Lines

   The Best Vacation Ever!

   Click on **Add.**   The Pointer changes to the Add Object cursor.
3. Hold the mouse button and drag a bounding box at the lower right of the illustration to size the text.
4. Release the mouse button to add the text, then change the fill color to **Black.**

   Save your completed illustration.

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As you size the bounding box, you can also move it. To move the bounding box, press and hold the content menu button while continuing to hold down the left mouse button. As long as both buttons are held, you can move the bounding box. Release the content menu mouse button to end moving and continue sizing.

Tutorial 4 Review

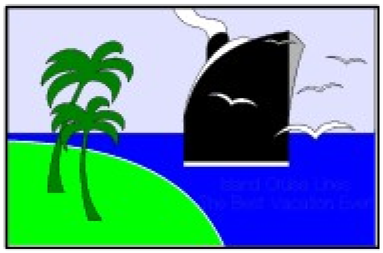
This tutorial showed you how to:
⊞ Use the Line and Curve tools to draw freeform objects
⊞ Size and position objects using Transform
⊞ Stack freeform objects to create a finished image
⊞ Change the line width of an object
⊞ Mix colors using the Hues mixing method
⊞ Flip an object
⊞ Slant an object

In the next tutorial you will learn to create a chart.

To begin the next tutorial, pull down the Tutorial menu and choose Tutorial 5.
⊞

Freeform Drawing Review

TUTORIAL 4
PREVIEW



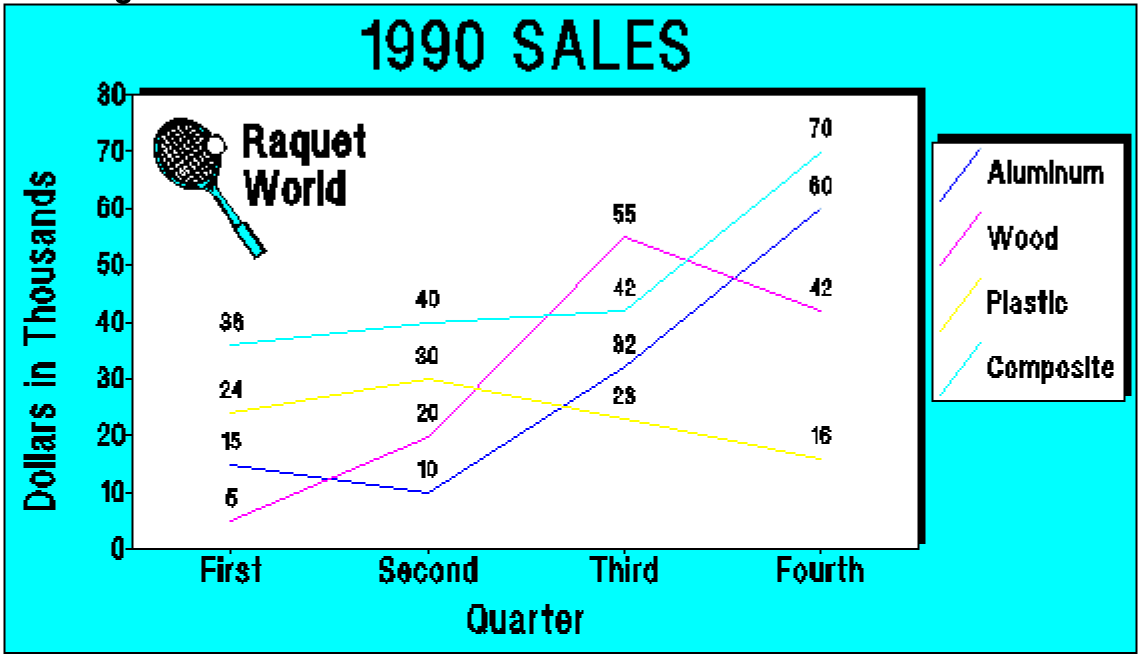
Step-by-Step Tutorial 5

Creating a Chart

This tutorial shows you how to:

⊞ Set chart defaults
⊞ Enter chart data
⊞ Enter chart titles, group names, and legends
⊞ Choose a chart type
⊞ Change chart attributes
⊞ Add clip-art to a chart
⊞

Creating a Chart



To get the most out of this tutorial, you should know how to:
⊞ Place objects
⊞ Size objects
⊞ Color objects
⊞

Open a New File

If you are continuing from the previous tutorial, use the New command and then skip to the next page.

1. Pull down the File menu and choose **New.**

   You will be prompted to save any changes made to the open file since the last save.

2. The previous window is cleared, and a new blank work area is displayed.

If you exited and restarted EXPRESS before beginning this tutorial, set the page and printer specifications.

Use the **Page Setup** and **Print Setup** commands in the File menuto specify Letter Page size and Landscape (Wide) page Orientation.

Pull down the View menu and choose **Actual Size.**

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Set Chart Defaults

A chart default file (CHART.DEF) is included with EXPRESS. This file contains default attributes optimized for charts.

To load CHART.DEF:

1. Choose **Defaults** from the File menu, then **Open.** If the message "Save Changes to (untitled)?" appears, click on **No.** The Open Document dialog box appears.
2. Double-click on CHART.DEF. The chart defaults are loaded into the current document.

Special Note.

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Note: You can change default files and create new ones to optimize EXPRESS for your documents. See the User's Guide for more information.

Set Viewing Level

Pull down the View menu and choose **Actual Size.**
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Enter Chart Data

Begin building a chart by entering the chart data.

1. Choose **Chart** from the Draw menu. The Chart window appears. The title bar shows the current chart type (BAR Chart) and the filename (untitled).
2. Place the cursor in data cell **A1** and click. The cell is highlighted, designating it as the "active" cell.
3. Data is not directly entered into the active cell. Instead, it is entered into a "data entry cell" where it can be edited, and then placed into the active cell.

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The data entry cell contains the blinking vertical bar cursor.

Type **15** and press **Enter.** The number is placed from the data entry cell into cell A1, and the highlight automatically moves down one cell.

4. Click on the Maximize arrow at the top right of the Chart window to view the entire window.
5. Enter more data as shown:

	Group	**A**	**B**	**C**	**D**
Symbol	-	1001	1001	1001	1001
Legend	-	-	-	-	-
1	-	15	5	24	36
2	-	10	20	30	40
3	-	32	55	23	42
4	-	80	42	16	70

Special Note about Entering Data. ⊞

Note: You can highlight any data cell by clicking on it, and you can move the highlight using the up and down arrow keys and the Tab and Shift-Tab keys.

Enter the Chart Titles

1. Pull down the Elements menu and choose **Titles.** The Chart Titles dialog box appears.

   Enter **1994 SALES** for the chart title, **Quarter** for the X-axis title, and **Dollars in Thousands** for the Y-axis title.

2. Click on **OK.**

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View the Chart

1. Click on **Add.**

   The Chart window disappears, and the Pointer changes to the Add Object cursor.

2. Place the Add Object cursor at the upper left of the drawing area and click. The chart draws and is automatically selected. The name "Chart" appears in the Status bar.

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Enter Group Names

Group names appear along the X-axis of the chart, and identify a common element of all the data entered in a particular row.

1. With the chart selected, choose **Chart** from the Draw menu. The Chart window appears, containing all the chart data.
2. Highlight the **Group 1** data cell.
3. Type **First** and press **Enter.**
4. Type **Second** in the Group 2 cell, **Third** in the Group 3 cell, and **Fourth** in the Group 4 cell.

	Group	**A**	**B**	**C**	**D**
Symbol	-	1001	1001	1001	1001
Legend	-	Aluminum	Wood	Plastic	Composite
1	First	15	5	24	36
2	Second	10	20	30	40
3	Third	32	55	23	42
4	Fourth	80	42	16	70

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Enter Legends

Legends appear at the right of the chart, and identify a common element of all the data entered in a particular column.

1. Highlight the **A:Legend** data cell.
2. Type **Aluminum** and press Tab.
3. Type **Wood** in the B:Legend cell, **Plastic** in the C:Legend cell, and **Composite** in the D:Legend cell.

Note: Click on the **- Page** button above to see chart data.

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Pressing **Tab** enters the data and moves the highlight one cell to the right.

Choose the Chart Type

1. Pull down the Gallery menu. The menu lists the available chart types.
2. Choose **Line.** The title bar of the Chart window changes to show the selected chart type.
3. Click on **Replace.** The chart redraws, incorporating the new entries.

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Change Chart Attributes

1. With the chart selected, choose **Chart** from the Draw menu.
2. Choose **Styles** from the Elements menu. The Chart Attributes dialog box appears.
3. Highlight Series A in the list box to make changes to the data in column A, then click on **Line.** The Line Attributes dialog box appears.
4. Enter a line width of **2** points and click on **Apply.**
5. Change the line width to **2** points for data series B, C, and D. When done, click on **Apply** in the Chart Attributes dialog box, then on **Replace** in the Chart window.

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Add Clip Art

1. Click on the Clip-Art Manager tool ⊞ in the Toolbox, or just press the **Enter** key. From the collection entitled **Sports & Recreation (i),** double-click on the symbol entitled **Tennis Racquet & Ball.** Drag it to size with the resulting cursor. Release the mouse.
2. Click on the Color style button ⊞ and color the racquet **Cyan.**
3. Choose **Flip/Horizontal** from the Arrange menu.
4. Add the text **Racquet World. Enter** each word on a separate line.
5. Change the fill and line color of the text to **Black.**
6. Size and position the racquet and text as shown, and save your completed chart.

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Tutorial 5 Review

This tutorial showed you how to:

- Set chart defaults
- Enter chart data
- Enter chart titles, group names, and legends
- Choose a chart type
- Change chart attributes
- Add clip art to a chart

In the next tutorial you will learn how to import and trace scanned images, as well as how to create and maintain your own libraries of images.

To begin the next tutorial, pull down the Tutorials menu and choose Tutorial 6.

⊞

Creating a Chart Review

TUTORIAL 5
REVIEW

⊞

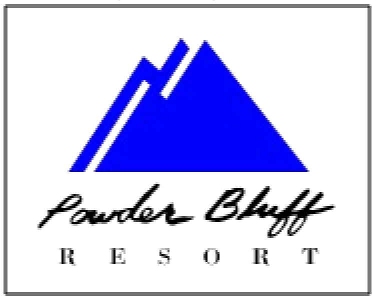
Step-by-Step Tutorial 6

Creating a Logo

This tutorial shows you how to:

⊞ Import a bitmap (TIF) image into EXPRESS
⊞ Set tracing options
⊞ Trace a bitmap
⊞ Delete objects
⊞ Delete point handles
⊞ Change fill pattern
⊞ Create a custom clip-art collection
⊞ Save objects to a custom clip-art collection
⊞

Creating a Logo



To get the most out of this tutorial, you should know how to:
⊞ Place and size objects
⊞ Color objects
⊞ Block select objects
⊞ Align objects
⊞

Scanning Images

Many paint programs and image scanners create images in bitmap format. You can import bitmaps into EXPRESS and automatically trace them to create object oriented versions.

Two bitmapped images, LOGO.TIF and POWDER.TIF, have been included in the Activity Manager for use in this tutorial.

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Open a New File

If you are continuing from the previous tutorial, use the New command and then skip to the next page.

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Pull down the View menu and choose **Actual Size.**

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Import a Bitmap

To import a TIF bitmap into EXPRESS:

1. Choose **Import** from the File menu. The Import dialog box appears.
2. If the Tag Image File format (TIF) is not already selected, click on it to select it.
3. Double click on LOGO.TIF. The Pointer changes to an Hourglass while the file is read and then changes to the Add Object cursor.
4. Position the Add Object cursor where you want the upper left corner of the image, then click the mouse. The bitmap image appears.

About Bitmapped Images.

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Bitmap images often have rough edges that make them unsuitable for high-resolution output. To see the "stairstep" effect on the edge of the bitmap, choose **Zoom I**n from the View menu. Click the Zoom cursor on the edge of the bitmap. When done viewing the rough edge, press **Shift+O.** Tracing the bitmap will produce a smooth-edged vector copy that can be printed at the resolution of your output device.

Set Tracing Options

To set tracing options:

1. Choose **Options** from the Draw menu The Drawing Options dialog box appears. The Bitmap Tracing section of the dialog box lets you set tracing parameters.
2. Enter **8** in the Accuracy field. Setting the accuracy to 8 will let the autotrace ignore "jaggies" of 8 pixels or less on the edge of the bitmap.
3. Since the logo is composed of straight lines, choose the **Faster** and **Lines Only** options. The Lines Only option forces a trace using line segments only, instead of both line and curve segments.
4. Click on **OK.**

Special Note.