## Chapter 5.

# Reports, Letters and Labels



## Please the client – please the boss – please yourself ...

Everyone will be happy with the reports you create with Alpha Five. The power of a database is the multitude of ways the data can be viewed. Paper, PDF, Excel or the cloud – Alpha Five reports go wherever you send them.

So get ready for brilliance - you'll be shining in no time!

### Overview

Another long chapter packed with information. Here's a quick review of the topics and where you'll find them when you need a refresher. Exercises are in "teaching order," so look around for what you need.

Торіс	Page				
Part 1. The basics of report design					
"Understanding the Quick Report Genie" Sample reports; Preview: Toolbar description, Saving and emailing in other formats (PDF, HTML, etc.); Design toolbars and menus, Properties Pane.					
"Using the Quick Report Genie to create a Free Form report"					
"Understanding the Report Editor"					
"Examining the Report Editor Sections" Basic understanding of Report, Group and Detail sections.					
"Aligning and Moving Objects in Free Form reports" Moving groups, hiding sections, closing up space.					
"Customizing Free Form Reports"					
Understanding the report sections: Report Header, Group Header, Detail Section, Group and Report Footers, Page Footer.					
Part 2. Calculations, Filtering and Ordering					
"Combining text and date fields"					
"Creating simple numeric calculations"					
"Using a calculated field in an expression"					
Summaries. Create for group and report footers; labels, expressions					
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Part 3. Add these styles for more report magic					
"Creating a Sub-Report" A "report within a report." (Free Form reports only).					
"Creating a Layout Table Report" Use for transfers to Excel and as basis for Linked Reports.					
"Understanding Linked Reports" Insert one report into another for more detail. (Layout Table and Free Form)	247				
Part 4. Report wrap up					
"Important Things to know about Reports" Blank report, Data display, Add/remove Detail section, Headers/ Footers, Groups, Print records, Format objects, Import layout, Restore to prior version.					
Part 5. Letters, Labels and Envelopes					
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Image on reverse: Copyright archerix, 2012 used under license from Shutterstock.com.

## Preparation for the Lesson.

Open Alpha Five and navigate to the following file:

- •c:\A5\_MadeEasyDesktopBook\ABC\_DesktopLessons\ABC Seminars.adb\*
- Click on the Control Panel tab in the Window Bar at the bottom of the screen to bring the Control Panel to the front.

As fields are added to the form, the *Summary Genie* may pop–up. Accept the default settings and click *Finish*.

The techniques in this chapter may be applied to any report. To do so, open the report in design mode to begin the segment.

These exercises are designed to be done in book sequence. If you do the Operations section before this Reports section, the report may not match the steps in the book because some client names may have been deleted. To work around this problem, reinstall the companion files. They will overwrite any changes you have made.

• Because this is a long chapter, it has been broken into a series of exercises as noted on the opposite page.

## Learning Report Basics

If you are new to Alpha Five, you may have already looked at the report editor and might be feeling overwhelmed because its interface can look confusing at first glance. Not to worry, we will take the sections one at a time. By the end of this chapter, you will feel comfortable and be ready to start your own design.

There are two types of reports, Layout Table and Free Form. As is to be expected, each has its advantages.

**FREE FORM REPORTS** 

Free Form is the classic style. It is very powerful and is excellent for printed and PDF reports due to its flexible format.

**LAYOUT TABLE REPORTS** 

Layout Table is the newest report style. While it can be used as a stand alone report, its primary use is for exporting data to Excel and as the basis of a Linked Report.

**SUB-REPORTS** 

Sub-Reports can be placed in Free Form reports to give added design flexibility.

LINKED REPORTS

Linked Reports are a type of sub-report with even more functionality than standard ones because their calculations can be added to the main report. This style can be used in both Free Form and Layout Table reports.

**QUICK REPORT GENIE** 

The Quick Report Genie is the starting point for both Free Form reports and Layout Table reports (optional for the first and required for the second). It can even transmit data directly to Excel and can be saved for future use.

<sup>\*.</sup> Depending on how Alpha Five is opened, the file extension .adb may not appear. (For instructions on opening an existing database, see "Opening an Existing Database" on page 14.)

<sup>†.</sup> Promise!

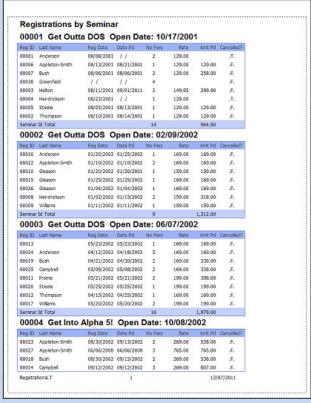
## LETTERS, LABELS & ENVELOPES

Let's not forget snail mail! You can easily prepare personalized letters and send them on their way with labels and envelopes.

### Comparing the report styles

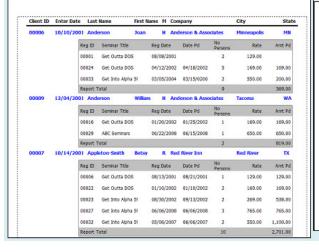
Here is a side-by-side comparison of Free Form (left) and Layout Table (right) reports. Both used the Quick Reports Genie as a starting point.





#### LINKED REPORTS

Linked reports can be added to both Free Form and Layout Table reports.







#### **SUB-REPORTS**

Only Free Form reports can have Sub-reports. In this case, the Sub-report is showing the cancellations for all seminars (yellow).

Our study will begin with the Quick Report Genie. We will use it as the basis for a Free Form report which, in turn, will show the fundamentals of the Report Editor. Then we will move on to Layout Tables, Sub-Reports, Linked Reports and other layouts like letters.

## Understanding the Quick Report Genie

The Quick Report Genie makes the initial selection of fields and groups very simple It is optional for Free Form reports and is required for Layout Table reports. First, we will go over the elements and then we will use it to create both report styles.



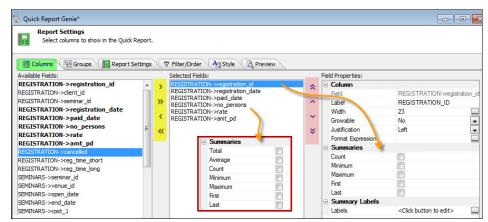
•Reports are organized into sections. We'll go into them in detail later, but the screen shot at left gives a quick overview. Most reports will have a title, many have one or more groups (in this case, the attendees are organized by seminar) and almost all reports have a detail section with the data (in this case, a list of persons attending the seminars).



- 1. Alpha Five Control Panel Tab: Reports.
- 2. Click the **New** button.
- 3. Data Source: registration\_rept.set
- 4. *Method:* Choose **Use Quick Report**. (Click OK)

Please review the following carefully because it contains important information.

• The Quick Report Genie has six tabs, *Columns*, *Groups*, *Report Settings*, *Filter/Order*, *Style* and *Preview*. First we will look them over and then put them to use.



Dialog: Quick Report Genie

#### **COLUMNS**

(See Labels and Detail above.)

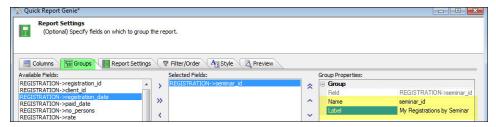
- All the fields in the table/set are listed in *Available Fields*.
- The fields that will appear on the report are added to *Selected Fields* by double clicking or using the arrows (yellow).
- Selected Fields: The listing is ordered with the arrows on the right (pink).
- Characteristics for each selected field are defined in the

Field Properties window. The "Summaries" options depend on the field type of the field – character, numeric, etc.

- Character and date fields: Count, Minimum, Maximum, First, Last.
- Numeric fields: Total, Average, Count, Minimum, Maximum, First, Last.

#### **GROUPS**

Reports can be organized by fields. In the coming exercise, we will show registrations by seminar.



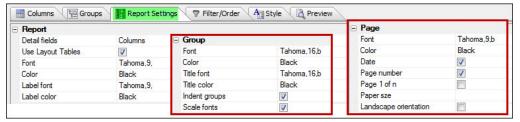
- Field selection for groups follows the same process as for columns. However, this time, instead of being bolded in *Available Fields*, the field is removed from the list.
- When the field is moved into *Selected Fields*, the

*Name* and *Label* entries are filled in with the field name. You can change them, but keep the following in mind:

- Name: Required entry. No spaces allowed.
- Label: Placed in the section above the group.

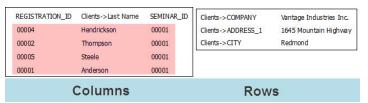
#### REPORT TITLE

Since we have only one group, the above *Label* will be placed in the Report Header and become the title of the report. If your report doesn't have a group, you can create one in the Report Editor.



#### **REPORT SETTINGS**

Defines the look of the report itself and its groups.



- Report section:
- Detail Fields: Choose if the fields should be in columns (like a browse) or rows (like a form). The detail is the listing of registrations (pink).
- *Use Layout Table*: Determines the type of report. Checked = Layout Table; Unchecked = Free Form.
- Font and Color: Field formatting for the detail fields.
- Label font and Label color: Label formatting.
- **Group** section: Governs formatting and layout of groups.

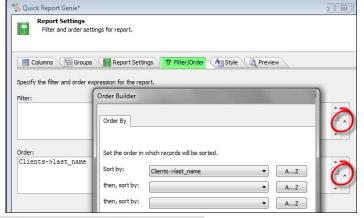


• Page section: Adds date and/or page number. Font and color determine their appearance (at left, we set the *Color* to Red. Appears at BOTTOM of page.

#### FILTER/ORDER

Define the filter and/or ordering parameters.

• To use the Filter Builder and Order Builders, click the arrows (red circles).



#### **STYLE**

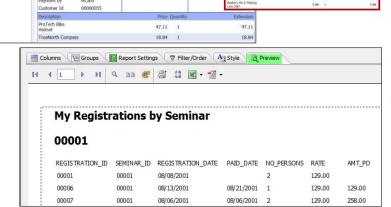
There are two styles available, Minimal and Section Borders. You can also add alternating color to the rows and change the color from blue to gray, olive or tan. *Layout Tables only*.

• Report Settings tab:

Use Layout Tables = Yes.



Watch your report develop as you go along. You can also export to Excel or email the report from this window (see "Understanding the preview toolbar" on page 204).



☐ Columns ☐ Groups ☐ Report Settings ☐ Filter/Order A Style

John Baker

Invoice # 000001

Date 01/10/2007

**Invoice** 

## Saving the Quick Report settings

After the report settings have been defined in the Quick Report Genie, the next step is to go to the report editor (*Open in Report Editor* button on the toolbar). Once that has been done, the Quick Report Genie will no longer be available. You can, however, save the settings themselves for future use.

We really like being able to save the genie, at least while developing a report because some things are easier to do there than at the report editor. Of course, you can't do everything in the genie and once you start editing at the report editor, it may loose its value.

To save the Quick Report Genie settings, see "Switching to the Free Form Report Editor" on page 203 and "Switching to the Layout Table Report Editor" on page 239.

• Now that you understand how the genie works, let's set up our first Free Form report. We will also save a copy of the Genie settings.

## Using the Quick Report Genie to create a Free Form report

• This section continues from the previous one. The *Quick Report Genie* should be open.

Free Form reports give you complete control over the layout. You can set up simple or very complicated designs. They are ideal for printed (hard copy, PDF) reports, but are **not** suitable for transfer to Excel.\*

We begin with a Free Form report so that you can see all the design features of the Report Editor. While you can go straight to the editor for new reports, the genie will definitely get you off to a faster start.



1. Referring to the screen shot for "Columns" on page 198, read the explanations for *Width*, *Format Expression* and *Summaries* below and then set the following parameters.

Table	Field	Label	Width	Justify	Format Expression	Summary
Registration	Registration_ID	Reg ID	Size to Fit	Left	<value></value>	
Clients	Last_Name	Last Name	25	Left	<value></value>	
Registration	Registration_date	Reg Date	15	Left	12/31/2004	
Registration	Paid_date	Pd Date	15	Left	12/31/2004	
Registration	No_Persons	Number	10	Center	<value></value>	Total
Registration	Rate	Rate	10	Right	123,456.78	Total
Registration	Amt_Pd	Amt Pd	10	Right	123,456.78	Total

#### **WIDTH**

The width of the field can be defined as follows:

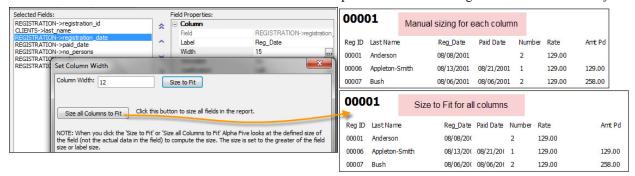
- **a.** Default: Sized large enough to accommodate the field name that appears as the label. Often this can be shortened.
- **b.** Define manually by entering a number.

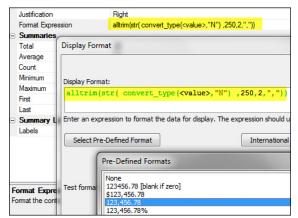
<sup>\*.</sup> Use Layout Table reports for Excel. See "Creating a Layout Table Report" on page 236.

#### c. Click the button and choose Size to Fit.

• Notice the Size all Columns to Fit button.

SIZE TO FIT Our experiments with *Size to Fit* produced mixed results, working well sometimes, but not others. Below is a comparison of manual sizing and *Size all Columns to fit*.





#### **FORMAT EXPRESSION**

Use the following process to select predefined formats.

- a. Selected Fields: Click on the field to select it.
- b. Format Expression: Click the button.
- c. Click the **Select Pre-Defined Format** button.
- **d.** Choose the format in the table; i. e. Rate = 123,456.78.
  - Bug fix: It seems that once you select a format for one field, it is likely to appear in others. Select the ones you care about (date and numeric fields as above), then go back over each field and enter **<value>** where you want just the field contents to appear.

#### **SUMMARIES**

We want to see the totals for the No\_Persons, Rate and Amt\_Due fields. Here's where to look for them at Preview.



- Group totals are under each group. Label is determined by name of group. Can be modified in the Report Editor.
- **Report total** is on the last page. Gives totals for entire report.
- Now that we have some work done, let's save the Quick Report.
  - 2. CTRL + S or click Save to save as **My Quick Registrations**.
    - Using a convention such as starting the genie saves with "Quick" will make these stand out from those made at the report editor.

## **Creating a group**

We want to show the registrations by seminar, rather than in one long list. The selection process is simple enough, but there is one serious caution.

- Name: Required field. The *Name* will default to the field name. You can change it, but be sure there are no spaces in the new one.
- Label: The Label will become the title of the report and it can be anything you like. Spaces are allowed.
  - •Refer to screen shot for "Groups" on page 198.\*
  - 3. *Group* tab: Place **Registrations** -> **Seminar\_id** in *Selected Fields*.
  - 4. Properties: Name<sup>†</sup>: Seminar\_ID; Label: My Registrations by Seminar.
    - The label for the group will become the title of the report.

## Ordering the report

We want to show the registrations in last name order.

- 5. Filter/Order tab: Click the arrow. Sort by: Last\_name.
  - •Screen shot: see "Filter/Order" on page 199.

## **Defining the appearance**

Both the Report Settings and Style tabs affect the appearance of the report. For this exercises, we will not make any Style changes (the default is "Minimal"). We will, however make some edits at Report Settings.

6. Report Settings tab: Edit as below. Accept other defaults.

**REPORT** 

- Detail fields: Columns.
- Use Layout Tables: No.
- •Label color: Dark Green.
  - You can type this in directly or click the button and choose the color.

**GROUP** 

- Font: Ariel,14,b.
  - You can type this in or click the button to select font style and size. Once you click the button, the original entry is removed.
  - •Bolding: Add a ,b so it appears as above.
- Color: Brown.
- Title color: Red.

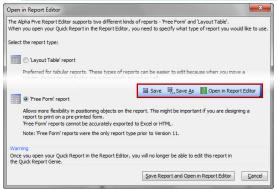
**PAGE** 

- Color: Blue.
- Date: Yes.
- Page number: Yes.

<sup>\*.</sup> We changed the capitalization to distinguish the group name from the field. You may keep the default, seminar\_id, if you wish.

<sup>†.</sup> If you are already familiar with the Report Editor, this will appear as the *Label* for the Group. See "Writing summary expressions" on page 224.





### Previewing the report

Now we will take a look at what we have so far.

- The report title is red.
- The *group header* is brown. The default value is the Seminar\_id field. We will change that at the report editor.
- The *column labels* and *group totals* are green, as is the *report total* (see last page).
- The detail fields are black.
- Each page has a *date* and *page number* in blue (at bottom).

## Switching to the Free Form Report Editor

Next, we will take our first look at the report editor. Before leaving the Quick Report Genie, however, we will save it so we can use it again later. (Inset: toolbar buttons)

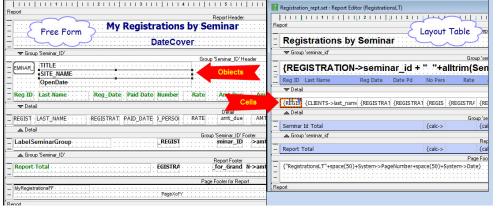
- 7. Click *Save* to keep the Genie settings:
- •MyQuickFreeForm.
- 8. Click *Save As...* to save it under the report name:
- •MyRegFreeForm.
- 9. Click Open in Report Editor.
- The layout will be saved and opened as MyRegistrationsLayout.
- 10. Click OK to open the Report Editor.

## Understanding the Report Editor

FREE FORM & LAYOUT TABLE REPORTS

• This section continues from the previous one. MyRegistrationsLayout should be open in Design mode.

The same report editor is used for both Free Form and Layout Table reports. There is, however, a difference in the appearance at Design mode.



At left are the Design mode views of the reports shown on page 196.

- Free Form reports: Fields and labels appear as objects. They may placed "freely" on the form.
- •Layout Table reports: Fields and labels appear as cells that are locked into rows and columns.

As noted above in green, this section applies to both styles, as do "Examining the Report Editor Sections" on page 209, "Viewing and Changing Calculated Fields" on page 228, "Filtering and Ordering Reports" on page 229 and "Understanding Linked Reports" on page 247. The sections that specifically apply to one style or the other are also clearly marked.

## Testing the design of the report

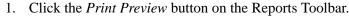
As we moved back and forth between design and form view to check the results of our forms, we will move back and forth between design and preview to check the content and design of the report. It will be even more important here, because we really can't see the report until it is previewed. So, your report BFF's are the Print Preview and Exit Preview buttons.

• In *Design* mode, press the *Print Preview* button. In *Preview* mode, click the **Exit Preview** button to return to *Design* mode. (Betcha already figured that out!)

Saving the form is not required when moving from Design to Preview. Alpha Five is quite stable at preview, however, it is highly recommended that you get in the habit of saving before changing modes. Report design uses a lot of Windows resources and the program may hang at *Preview* if you have a lot of unsaved edits. (Just when you least want it to happen!)



• You can also print without saving because Alpha Five will create a temporary file, but, for the above reasons, it is still a good idea to save first.



## Understanding the preview tabs

When you go to preview from the report editor, an additional tab is opened in the window bar below the report.



• If the tabs are not showing, choose Top Menu > View > Window Bar to open that section of your screen.

These tabs allow you to move quickly between design and preview. There are certain notations, however.

Any time you click Print Preview, another preview window is opened, but Alpha Five needs to freshly render the report each time changes have been made. Follow this procedure to be sure you are always viewing the current design.



**b.** Make any changes and click the Print Preview button

Saving is not required before previewing the report. If the report has unsaved edits, the editor TAB will show an asterisk (red circle above). To save changes to the report, you must click Exit Preview and then save the report. Properly done the asterisk (above) will be gone when you return to preview.

## Understanding the preview toolbar

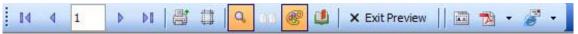
This toolbar is used for navigating, printing and viewing the report. It also gives a wide range of options for saving and/or emailing reports in one of five formats common







to most computer systems. This means recipients do not need Alpha Five installed on their computers to read your reports.



- The first group of buttons are for viewing pages in the report.
- The second group is for printing the report: Print and Print Setup
- The third group gives options for viewing the report on screen.
  - Zoom. There are two zoom settings, in and out. You may also zoom by moving the cursor onto the report. It changes to a magnifying glass. Click to Zoom In or Out.
  - Two pages: Shows 2 pages on the screen at one time. Zoom must be set to lesser magnification so there is room on the screen for both pages.
  - Color: Toggles colored areas of the report off/on.

X Exit Preview

- The Exit Preview button returns to report design mode.
- The next button takes you to the Alpha Five control panel.

## Saving reports as PDF, HTML, Rich & Plain Text and Excel files

• Even though Excel is given as an option, do not use it for Free Form reports because the style does not maintain spreadsheet columns and cells properly. Layout Table reports (page 236) are designed for sending data to Excel.

Our purpose at this time is to give an overview of the features available. There is further discussion in "Creating Letters" on page 259.



- The one on the left saves the report in one of the above formats to a specified directory.
- The second forms the report in the selected format and opens a Send Email form, with the report attached.

If you have not saved the report, you will get an error message at the next step advising you to return to return design mode and save the report before you can continue.

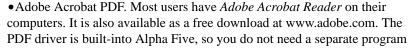


YOUR REPORT BEE

SAVE AS FORMATS



- 2. Click the drop down arrow next to the left button (red box at left).
- When you hover over the down arrow, bubble help reads: **Select format for saving report.**
- The icon on the button shows the last format used. (PDF is shown here, yours may be different.)



to create PDF files.

<sup>\*.</sup> You can also print directly from the Report Editor, but, in most cases, you will probably want to preview it first.

Save As

Save Report to a file.

Select File Format:

Excel

Open file with associated application?

Filename:



•Dynamic HTML File. Report will open in your browser. The HTML writer is also built-into Alpha Five.



•Rich Text File. This can be read and edited by users of *Microsoft Word* and *Corel WordPerfect*.

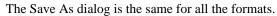


• Plain Text File. Removes all formatting. Can be read by any computer user.

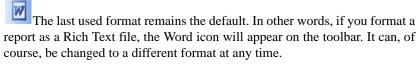


Click to set PDF Options

• Excel File: Report will open in Microsoft Excel, as a spreadsheet. *Layout Table reports only*.



- **a.** Click the current button or its drop down arrow.
- **b.** Choose the desired format (default is current button, but you can change).
- **c.** Choose the directory.

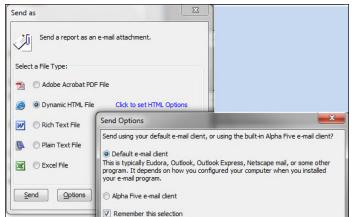


- •Next, we'll test out the PDF option.
- **3.** Choose *Adobe Acrobat* PDF File and return to *Alpha Five*.\*
- 4. File name:
  - C:\A5\_MadeEasyDesktopBook\ABC\_DesktopLessons\Samples\ MyRegFreeForm.pdf
- 5. *Open file with associated application?* Check (Yes)



- 6. Click OK.
- If it is unable to find a PDF driver, Alpha Five will ask for permission to try to install it. (Yes)
- If the PDF driver is installed correctly, the report appears on the screen.
- 7. Close the **Acrobat** file.

<sup>\*.</sup> This choice requires that Adobe Acrobat Reader be installed on your computer. You may get a free download at www.adobe.com. You may also choose another format if you prefer.



#### SEND EMAIL ATTACHMENT\*

The process for creating email attachments is essentially the same as above, except that the completed document is NOT shown on the screen.

In order to actually send an email, you will need to tell Alpha Five which email client to use. For the purposes of this exercise, we will use your existing (default) email client, such as Outlook or Outlook Express. We will set it so that, once the email client is defined, it will hold until changed.

- **a.** Click the current button or its drop down arrow.
- **b.** Choose the desired format from the Send As dialog.
- c. Click the **Options** button.
- d. Choose Default e-mail client.
- e. Remember this selection: Yes. (Click OK)
- f. Click Send.
- The report is formed and the send email window opens with the report attached.
- 8. Close the email window—or send yourself a test email. And while you're at it, send me a copy! I'll be sure to email you back a congratulatory note for getting this far!<sup>†</sup>
- 9. Click Color.
- The red My Registrations by Seminar title is changed to black.
- 10. Click **Color** again.
- The title is set back to red.



From \*

susan@libertymanuals.com

Susan Bush (susan@libertymanuals.com);

#### **POST IT!**

\_ •

Send

You can also post these files on your web site.

- •The PDF format works very well for this. Just put the link on your web page and store the actual file on the server.
- •The HTML format opens in your browser. To see the underlying HTML, go to the browser Top Menu > View > Source (IE) or Page Source (Firefox).
- 11. If possible, print a copy of the report, now. You will find the print—out handy to use as a reference for the following exercises.
  - Press CTRL + P or click the Print button on the Reports Toolbar.



- \*. In the unlikely event that you have not set up an email account, you may be directed to go to the "Mail Icon on the Control Panel." This means the WINDOWS CONTROL PANEL, not the Alpha Five Control Panel. Open the **Windows Control Panel** and click on **Mail** to set up the account. (This memo has been here since our earliest Alpha Five Made Easy book versions. Hard to believe there's anyone out there without an email setup these days, but we leave it in just in case.)
- †. My email address is susan@LibertyManuals.com. I've heard from lots of you over the years and I enjoy each one.
- ‡. I'm no HTML expert, but I assume (dangerous, I know!) that you can copy and paste the code into your web page. -SHB