How to Make your Posters
on the HP 5500 Printer in the
Environmental Remote Sensing Laboratory

Business Details

Posters are widely used in science for communicating a lot of information. This memo won't deal with the "best" ways of communicating; there are lots of other white papers dealing with that. This memo deals strictly with the process by which members of the CSU College of Science and Health Professions can use the printer in the Environmental Remote Sensing Laboratory for printing posters or other large-format items. If the details of your application aren't covered here, contact Dr. Clapham at 687-4820. This memo is also oriented primarily toward the COS Research Day, where students and faculty across the College will be printing large numbers of posters.

The printer is available to all members of the College of Science and Health Professions. The Dean's office will pay for supplies and paper for professional (college) use of the printer, including posters for Research Day, other professional meetings, and other research applications.

You will print your own posters; we will not do it for you. We will, however, make it as easy as possible.

First, some **DOs** and **DONTs**.

Do: Please remember that this printer is a shared resource that is being used by a lot of people. At times when many people are using the printer (e.g. Research Day) try to sign up for early time slots, and be prompt when usage is heavy.

Do: Have your poster file ready to go when you come to the laboratory. **Proofread** it *before you come to the laboratory* so that you know that it's correct.

Do: Use a program designed to make posters for your poster. The one most easily available to students is Open Office Draw. It is on all IS&T laboratory computers, and it's a free download if you want to make your poster in another lab.

Don't: Don't waste ink. Especially, do NOT use a saturated background to your poster!

Don't: Use PowerPoint to make your poster unless it is entirely text. If you *must* use PowerPoint, please recognize that we have had problems with posters made with that software that don't become obvious until you try to print it (and it doesn't work). It *will* work if you save it as a PDF file first. If the computer you are using does not have the plug-in to save your file as a PDF, you can download the plug-in from the Microsoft web site. The plug-in is also on the computer in the printer lab.

Making your Poster

Many people use PowerPoint to make their posters, although you can, in principle, use any graphics program capable of making posters. As indicated above, OpenOffice Draw is actually better suited to making posters than PowerPoint is. It's also free. To download it, go to www.openoffice.org and download the program. If you are used to PowerPoint, OpenOffice Draw will seem very familiar to you.

Regardless of what program you use to create your poster you need to be *absolutely sure that you set your page size appropriately*. You should *always* make your poster in the size in which you will eventually print it! In PowerPoint 2007, you set page size on the Design tab by clicking on the Page Setup icon all the way to the left. In OpenOffice Draw, you set page size by clicking on Format -> Page.

The standard size for a poster is 48 inches wide by 42 inches high. You can't go more than 42 inches for the smaller dimension (although you can go less). Figure 1 shows what the page size setup screen looks like in PowerPoint; Figure 2 shows what this looks like in OpenOffice Draw. Note that

Figure 1: Page setup dialog box for PowerPoint 2007

you can also set your background in the page setup dialog in OpenOffice Draw. You will probably want to do that, although again please remember not to use a highly saturated background – there's no reason to waste a lot of ink!
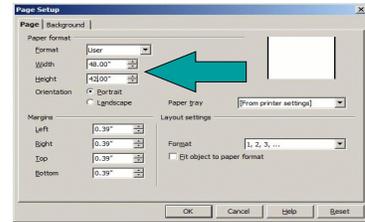

Figure 2: Page setup dialog box for OpenOffice Draw

If you use a draw program such as OpenOffice Draw or Corel Draw, you can save your program on a jump drive and bring it to the Environmental Remote Sensing Lab. If you use a slide-making program such as PowerPoint, you should save your file as a PDF. Again, make sure that your PDF file is set to the correct page size. To check on PDF page size, open your PDF file (if it doesn't open automatically, as it probably will) and click on File -> Properties. Figure 3 shows what this window should look like. Note that PowerPoint saved the poster to the right size.
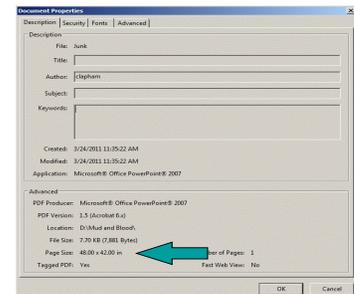

When you have your poster completed in the correct size and an appropriate format, you should save it to a jump drive, a CD, or a DVD. You are now ready to bring it to the Environmental Remote Sensing Laboratory (SR G-71 and G-76) for printing.

Figure 3: Properties box for PDF file

If you are printing your poster for the College Research Day, you will need to sign up for a time slot in which to print your poster. The signup sheets will be on the wall outside the room housing the printer (SR G-76). If you are printing posters at a time of lower demand, you can go directly to the printer laboratory (SR G-76).

Using the Environmental Remote Sensing Laboratory

The instructions here should give you enough information to enable you to print your poster. If you have any questions, please address them to Dr. Clapham in SR G-70 or to a student from the ERS Lab who appears to know how to answer questions. We will attempt to have a student familiar with the printer available to answer questions for a week or two prior to Research Day. Based on experience so far, you should allow 15-20 minutes to print a poster of the standard 42x48 size. Larger posters take longer!

To print a poster, you will have to log into the ERS Lab network. The current user ID is **poster**; the current password is **HP5500**. Note the case in both instances. Put your jump drive (or whatever) into the computer and click on the Computer Icon. Open your poster file in the program in which you saved it. Verify that it looks like it's supposed to!

Printing from a PDF File

Printing on a large-format printer is a little bit different from using a desktop laser or inkjet printer. When you've opened your PDF file, you will click on the printer icon (or File -> Print on the menu bar). The print dialog will open. The default printer for the ERS Lab is the Phaser 8560. You will need to click on the dropdown box to the right of that printer and choose the HP DesignJet 5500ps 42 HPGL2 (Figure 4). You will then click on the Properties button to the right of the printer name. The Properties box will open (Figure 5). The default paper size is ANSI A (Letter). You need to change this to the size of your poster. Click on the Custom button. This will bring up the custom paper size dialog box (Figure 6).
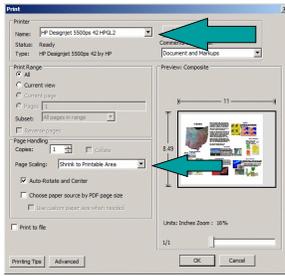
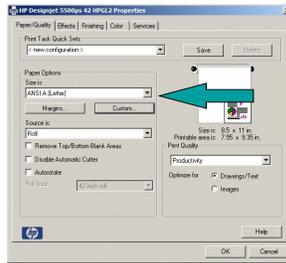Figure 4: Print dialog box showing that output will go to the HP 5500
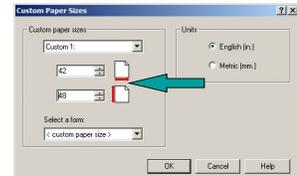

Figure 5: Properties box

Figure 6: Custom Paper Size Dialog Box

Enter the size of your poster in the appropriate windows. Note that the upper box cannot be larger than 42 inches! Because the *paper* in the printer is 42 inches wide, you need to enter 42 inches or less in the width field and the other dimension of your poster in the length field. When you've entered the size of your poster, click OK.

The properties window should then show your poster at the correct size (Figure 7). Be sure that the Autorotate box is checked. Click OK.

Figure 7: Properties Box showing paper size

The main printer dialog will reopen (Figure 8). Verify that everything is as it should be. These include:
• You are using the HP Designjet 5500ps 42 HPGL2
• Page Scaling is "Shrink to Printable Area"
• The "Autorotate and Center" box is checked
Assuming that these are correct, click OK.

Take a look at the printer. After your poster has spooled, the small monitor window on the right will show that the printer is Receiving your poster. Then you will hear it start and it will be Preparing Printheads. It will then start to print. Note that posters are printed on two kinds of paper: heavy flat bond and shiny "photo" paper. Either is OK for most purposes, but most people want the shiny paper for meetings. The flat bond paper can be taken off the printer as soon as it is printed. The shiny "photo" paper will take some time for the ink to dry, and the poster will remain in the printer while drying takes place. When your poster is finished printing, the printer will do nothing until the ink is dry. You can check on the status of the drying in the monitor window on the right hand side of the printer. In any case, the printer will cut off your poster at the end of the drying time, and you can walk off with it!

Figure 8: Print box

That's all there is to it!

Printing from an OpenOffice File

Printing from OpenOffice Draw is almost identical to printing from Adobe Acrobat. When you've opened your OpenOffice Draw poster, you click on the printer icon (or File -> Print from the menu bar). The print dialog will open. Choose the HP DesignJet 5500 as your printer (Figure 9).

You will then click on the Properties button below the printer list. The Properties box will open (Figure 5). The default paper size is ANSI A (Letter). You need to change this to the size of your poster. Click on the Custom button. This will bring up the custom paper size dialog box (Figure 6). Enter the size of your poster in the appropriate windows.
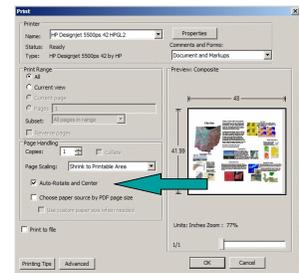
Figure 9: Print Dialog from OpenOffice Draw

Note that the upper box cannot be larger than 42 inches! Because the *paper* in the printer is 42 inches

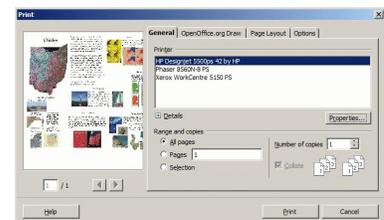wide, you need to enter 42 inches or less in the width field and the other dimension of your poster in the length field. When you've entered the size of your poster, click OK.

The properties window should then show your poster at the correct size (Figure 7). Be sure that the Autorotate box is checked. Click OK. You will be returned to the main print dialog box (Figure 9). Click the Print button.

Take a look at the printer. After your poster has spooled, the small monitor window on the right will show that the printer is Receiving your poster. Then you will hear it start and it will be Preparing Printheads. It will then start to print. Note that posters are printed on two kinds of paper: heavy flat bond and shiny "photo" paper. Either is OK for most purposes, but most people want the shiny paper for meetings. The flat bond paper can be taken off the printer as soon as it is printed. The shiny "photo" paper will take some time for the ink to dry, and the poster will remain in the printer while drying takes place. When your poster is finished printing, the printer will do nothing until the ink is dry. You can check on the status of the drying in the monitor window on the right hand side of the printer. In any case, the printer will cut off your poster at the end of the drying time, and you can walk off with it!

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