

# ARRIS\_USERS

THIRD ISSUE SIGMA CONSULTING SERVICES, INC. SUMMER 2003

## Welcome

Sigma Consulting Services, Inc. is pleased to present the third issue of **ARRIS\_USERS**. My goal in publishing this newsletter is to provide you, the ARRIS user, with useful technical and sales information about the ARRIS software and related products and to assist you in becoming a more productive ARRIS user. Topics will vary with each publication, but hopefully each newsletter will contain something of interest to both new and experienced users.

## Sigma Consulting Services Update

It has been a busy 6 months at Sigma Consulting Services since my last newsletter. The final push to get as many users as possible upgraded to ARRIS 8 by the end of the year was huge. I spent most of December and January on the phone getting the word out and taking upgrade orders. I'm pleased to report that thanks to Sigma Design's *early bird discount* upgrade pricing and the tremendous number of users who took advantage of it, December was a record-breaking software sales month for us. I know that *Helping Hands Services* experienced a successful sales month as well.

Thanks to all of you who placed your upgrade orders through your favorite ARRIS dealer. Your continued patronage keeps us in business and allows us to continue providing you with the best sales and technical support we can deliver!!

With all the new upgrade seats in place, I've been doing lots of ARRIS 8 training trying to bring new users (and ARRIS 2001 users) up to speed. I must say that I'm always surprised (appalled?) by the number of users who are still unaware of (or not yet proficient with) many highly productive ARRIS features. There are a lot of users, for example, who still have not assimilated the powerful *sheets* and *viewports* feature that has been available since ARRIS 7. Virtually every ARRIS user that I have worked with to help integrate the concept of sheets and viewports into their office has reported back to me that this feature alone has totally revolutionized the way they work on new projects. Of course most ARRIS companies who have used this feature for years wonder how they ever survived without it back in the *pre-ARRIS 7* days.

Fortunately, the demand for technical support in this latest release has been very minimal for me. Except for a few early glitches with the backwards compatibility to ARRIS 2001, I think the transition to ARRIS 8 has been the smoothest of any new release in the 18+ years I've been associated with the ARRIS software – technically speaking.

For those of you unfamiliar with Sigma Consulting Services, here is an overview of the software sales and technical expertise we provide to the ARRIS community:

- ❑ ARRIS CAD Software Sales
- ❑ Expert InfoCAD Software Sales
- ❑ Render Plus Software Sales
- ❑ Beginning & Advanced ARRIS Training (on-site or off-site)
- ❑ Annual Telephone Support
- ❑ Database Conversions and Translations
- ❑ ARRIS CAD Implementation and Setup of Office Standards
- ❑ 2D and 3D Drafting Services
- ❑ Colored Renderings of ARRIS Elevations and Site Plans
- ❑ Web Site and Logo Design

For more information about any of these services or to view sample renderings and web site designs, please call or visit [www.sigmaserv.com](http://www.sigmaserv.com).

## Frequently Asked Questions

Below is a list of frequently asked questions that I have collected from numerous technical support calls and from the *Paladin List Server*. Hopefully you will find one or two that *you* were wondering about as well... thanks to all who contributed:

**Q:** After doing a *move/scale rotate* on a group of smart walls, my new smart walls will no longer clean up with the rotated walls. What can I do to get the wall intersections to clean up?

**A:** Try using the mnemonic command:

`mn_wlplane` <Enter>

Now place an edit fence around all the walls that won't clean up. The *mn\_wlplane* command was designed to set the workplane flags of walls to the current workplane settings and will usually fix the intersection cleanup problem.

**Q:** I need some help embedding a *.jpg* or *.gif* into an ARRIS layer. Every time I load the image using the View menu, it disappears as soon as I *redraw* or *pan*. Am I not inserting the image correctly?

**A:** Follow these steps to create an ARRIS *raster entity* that you can place permanently into your ARRIS layer and that won't disappear every time you do a *redraw*:

Step 1: Convert your *.jpg* or *.gif* formatted image to a *.bmp* file type. You can do this using any standard raster file editing program (i.e. Adobe Photoshop, MS Paint, ACDSee, Hijaak, etc.).

Step 2: Select the Camera icon near the lower right corner of the drawing area. Now select the *Image File Load* button from the pop-up menu. It will give you the choice to load a *single image*, *multiple images* or to *import a BMP file*. Select *import a BMP file*.

Step 3: After locating your BMP file from the *MENU* option, select the F10 key to place your BMP file at the lower-left corner of the screen, and another F10 to retain the size and proportion of the original image. (Note: If the image is too large to fit on your screen, you may have to reduce the resolution of the original image by using one of the programs mentioned in Step 1).

Step 4: After you have placed your image, but before initiating any *redraw* commands, select the *Camera* icon again and then select *Image File Save*: enter a *directory name*, an *image name*, and then select *partial* to draw a box around the portion of the displayed image you would like to become your new *raster entity*.

You have now converted your original *.bmp* image to a file named *some\_name.sc*. The *.sc* suffix stands for *screen* file and it is the native ARRIS image format from which you can now create your new *raster entity*.

Step 5: Select the *Raster Entity* menu (the icon that looks like a tree in the picture frame from ARRIS DRAW/Main menu). Select the *File for Raster Entity* box from the popup menu that appears: browse to the *.sc* file you created in Step 3, enter a point on your

ARRIS screen that will represent the *lower left* corner of your image, enter a point on your ARRIS screen that will represent the *lower right* corner of your image.

(Note: You may wish to first create a scaled *outline box* or *baseline* for the area you wish to contain your new *raster entity* image so that you can snap to the bottom corners of the box or endpoints of the baseline in response to the prompts above).

Now that you've placed your image, you can safely *redraw* the screen and your image will remain. You can adjust *the resolution quality, color mode, pen and color* from the Status menu at the bottom of your ARRIS screen.

**Q:** I have experienced this a few times - for no apparent reason some (or all) of my doors and windows change their scale. This seems to have happened after recreating the display list of some or all layers, is there an easy fix for this problem?

**A:** Try loading the ARRIS Architect Plug-in. Make sure all the appropriate layers are *on* for *edit*. Then go to RI Scale and enter a scale factor of *1* (even if it already displays 1). Now recreate the display list for RI's only (or use the *rifx* mnemonic) and the openings should rescale correctly.

**Q:** Lately I've been making quite a few changes to my prototypical *master sheet* (*\_sht.*) drawing. Is there a way to get these changes updated in the sheets that I've already created for that database?

**A:** Yes. Open a sheet that needs to be updated with the latest changes from the *\_shtmaster.sht*. Then make the following menu selections in ARRIS:  
FILE DRAWER → Sheet Info → Load Fields

**Q:** Sometimes when I export my ARRIS sheet to Autocad, it translates more layers than are being displayed in my viewports. Why does this happen and how can I get rid of them?

**A:** The sheet layer keeps track of all the layers that have been *loaded* (added) into the various viewports, even if they were subsequently *removed*. These will often be translated along with the sheet unless you open the sheet and select the VP → Reload Layers button and answer *Yes* to the prompt: *Also remove any unreferenced model layers?* Then save your sheet and export it again.

"To err is human ... to really foul things up requires an *X-Ref* and *AEC Objects...*"  
**Jeff Rath, MAS Associates, Inc.**

## Tips, & Tricks

### □ The Coordinate "A0"

Sometimes I find myself in a situation where I need to make a modification to an existing RI that contains an origin point which is not directly associated with any points on the RI. This can be a real pain when you try to remake the RI using the previous origin point if you can't remember where it was after freezing it.

To make this process go a little smoother, I like to place the RI to be *frozen* and *modified* at the coordinate location of **A0**. The coordinate value **A0** will place the origin of the RI at *absolute zero* (i.e. database origin), regardless of whether your coordinate mode is set to *relative* or *absolute*. When I'm ready to *remake* the modified RI, I can respond to the prompt *Enter Origin for RI* by entering **A0** again which will ensure the origin point gets reset precisely to its original location.

#### □ Adding Arrowhead Symbols To Line Endpoints

I have a button mapped to my TOOLBAR that allows me to quickly add my favorite arrowhead symbol to the endpoint(s) of any line for things like *UP* or *DOWN* arrows, *Floor* or *Roof Framing* member directions, etc. Once I select this button, all I have to do is click on a line, then again near the endpoint requiring an arrowhead, and my symbol magically appears at the correct size and rotation. I can then repeat this step for any other endpoints needing arrowhead symbols.

To accomplish this, I made use of three old ARRIS mnemonic commands: **sym** (set symbol type), **ssp** (set symbol parameters) and **lts** (line terminator single). But before mapping these commands, with their respective responses, to my TOOLBAR, I first went to the Dimension Setup menu and scrolled through the available dimension *marks* until I found the symbol I wanted use for my arrowheads which was symbol *type 33*.

Then I mapped the following command sequence to one of my TOOLBAR buttons:

|                    |  |
|--------------------|--|
| <b>:sym;33</b>     | (types the <i>sym</i> mnemonic and responds with type <i>33</i> )                        |
| <b>:ssp;.125;0</b> | (types the <i>ssp</i> mnemonic and responds with size <i>.125</i> and <i>0</i> rotation) |
| <b>:lts</b>        | (types the <i>lts</i> mnemonic which prompts for <i>Line Location</i> )                  |

The only caveat to this quick arrowhead routine is that you need to reset the current symbol type back to **0** before continuing to draw, or the arrowhead you selected will be attached to every subsequent point you enter into the database...doh!

To do this, simply type **:sym;0** This will reset the symbol type back to the *null* symbol. I placed this command sequence on the button next to my arrowhead button for faster access.

Tip: For fast *double arrowheads*, substitute the mnemonic **ltd** (line terminator double) for **lts**.

#### □ Adding Icons To Your TOOLBAR menu

Don't forget that you when you customize your TOOLBAR menu, you can use repeated items to graphically represent the button's function rather than just a cryptic string of text. This can be especially helpful in assisting new ARRIS users in coming up to speed faster (you know what they say about a picture's worth...). For example, I created icons of a text label, a footing detail and a company logo for my TOOLBAR buttons which bring up the RI Select menu for my notation RI's, my detail RI's, and my company's standard RI's respectively.

If this sounds interesting, simply create an RI of any size, scale or color that you would like to use as a TOOLBAR icon. Keep it very simple since it will become greatly reduced to fit your TOOLBAR button. Now save the RI into a library that will always be accessible. I add my TOOLBAR RI's to a library named (oddly enough) *toolbar.ri* and store it in my *STANDARDS* directory.

To add the new RI as a TOOLBAR button icon, *right-click* on any TOOLBAR button, then hit *Enter*. Now select the *ICON* box at the top of the popup menu, then select the first empty box

to the right and enter the name of your new RI. Now select the next box to the right and enter the name of the RI library into which it was stored.

Don't forget to save the TOOLBAR menu after customizing it by selecting the button labeled *TOOLBAR* (next to the STOP SIGN), then choose *SAVE*, then select the *def:* option (which is typically your login name). This way each user can design their own icons or they can be shared by selecting the *save to STANDARDS* then *load from STANDARDS* options.

#### □ Customizing Your Entity Style Thumbnails

In addition to creating custom RI icons for your TOOLBAR buttons, you can create custom RI's for the sample thumbnails that ARRIS uses to represent your user-created Entity Styles for *text*, *line*, *pattern* and *dimension* entities. Why would you want to do this you ask? Well, to make it easier to associate the thumbnails with their usage of course. Trust me, new users love this.

For example, the Gap (ARRIS user extraordinaire) customized their ARRIS text style thumbnails to display the text sample in the context for which it would be used. For *Note* style text, they made an icon of a small paragraph of text with a leader. For *Sheet No.* text, they created the string **A-1** in the color and font they used for sheet numbers. The same for *drawing label text*, *detail bubble text*, etc.

To do this, create an RI of any size, scale or color that you would like to use as a style sample for your thumbnail menu. Again, keep it very simple since it will be reduced to fit your sample thumbnail window.

The repeated item library, where ARRIS stores the sample thumbnails for the Entity Styles, is named *mn\_sfikons.ri* and is located below the *styles.dir* directory in a sub directory named *default.prj* (or *xxxxx.prj* if you have renamed your directory to something more meaningful).

If you view the *mn\_sfikons.ri* library via the *ARRIS Repeated Item Select* menu, you will see that all of the RI have special 3-letter prefixes such as *@dm* for dimension styles, *@ln* for line styles, etc. Although ARRIS won't let you create a new RI that starts with an *@* character, it will let you place any RI with an *@* character already in its name, freeze it, update it, and remake it using the existing name as the default value. This will allow you to overwrite the default entity thumbnail with one of your own design. You will be stuck with the previous RI name (derived from the style name given when it was created), so make sure the style names are accurate. Also, you are limited to 8-character style names so that ARRIS can put the 3-letter *@xx* prefix in front of the corresponding RI name.

Once you have updated the appropriate *mn\_sfikons.ri* library with your custom RI's, be sure to make a backup copy of it in the same directory. I say this because the original will be overwritten the first time somebody accidentally selects the *Regen Ikons* button at the bottom of the Entity Select menu.

#### **More Microsoft Haikus**

Your file was so big.  
It might be very useful.  
But now it is gone.

First snow, then silence.  
This thousand-dollar screen dies  
So beautifully.

Out of memory.  
We wish to hold the whole sky,  
But we never will.

## Limited Pricing On Summer Specials

From now until August 31<sup>st</sup>, 2003, Sigma Consulting Services is pleased to announce discount pricing on the following ARRIS software products and services:

### ARRIS Software

- ❑ 10% Discount on new seats of ARRIS 8 Architect Studio
- ❑ 10% Discount on new seats of ARRIS 8 ARRIS CAD
- ❑ 8% Discount on Upgrades to ARRIS 8 from ARRIS version 2001
- ❑ 10% Discount on Upgrades to ARRIS 8 from ARRIS version 7.0 or older

### Technical Services

- ❑ 20% Discount on Annual Telephone Support Contract
- ❑ 10% Discount on ARRIS Training Rate (On-site or Off-site)
- ❑ 10% Discount on Web Site Design Services
- ❑ 10% Discount on Rendered Elevations

Call for a detailed pricing quotation on any of the items listed above.

## ARRIS Training Classes

Sigma Consulting Services offers training and on-site consulting in the following areas:

- ARRIS CAD (Beg. → Adv.)
- ARRIS For Power Users
- Intro To 3D Modeling and eZ
- Customizing Your ARRIS Environment
- Implementing Office Standards
- ARRIS Productivity Evaluation
- ARRIS Translating and Plotting
- System Administration
- Implementing In-House Training
- ARRIS Problem Solving

## Software Buzz

### Expert Info Cad News

- ❑ **GEMarchitect** is in its final developments stages. Salleh Diab, owner of Expert Info Cad, hopes to be ready to release this new addition to the **CADminer** family of software at the end of the summer. Briefly, **GEMarchitect** can generate complete smart wall *floor plans* and highly detailed *wall sections* from simple line sketches. The software contains a powerful *Object Oriented* relational database engine that leverages your existing CAD investment by providing an effective alternative to the *Building Information Model* or BIM.
- ❑ A new upgrade release 7.301 for the ARRIS Translator is due out this fall. It will contain many enhancements including support for AutocadR2004. A moderate upgrade charge will be associated with this release.
- ❑ Steve Clark, ARRIS *programmer extraordinaire*, has joined efforts with Expert Info Cad to integrate and bring this technology to ARRIS. More information will follow. To get on the

mailing list to evaluate the first release of **GEMarchitect**, please send an email with your name and address to: [sallehdiab@expert-infocad.com](mailto:sallehdiab@expert-infocad.com).

## Render Plus Systems News

Now that the cycle of their furniture software - *Giza* - has reached full circle, Rich Hart and Al Hart (formerly of ARITEK Systems) have decided to re-enter the ARRIS world and see if they can assist the ARRIS community by developing new products. They now call their company **Render Plus Systems** instead of ARITEK.

First up, they made a Windows version of **Topographer** to help those users who want to run **Topographer** but no longer have a UNIX box. They plan to add some features - such as updated input file formats, the ability to automatically place RI's at input points - to identify trees, rocks, etc. used as landmarks, and the ability to automatically input and process cliffs and other discontinuities.

For those of you not familiar with **Topographer**, the currently available version performs many of the functions that many ARRIS users felt were left out of ARRIS' **Site Design** application. For example, **Topographer** can:

- Read electronic XYZ data files generated directly by the surveyor (or ARRIS contour lines from Site Design) then automatically interpolate the contours and draw the corresponding 2D topo map.
- Further processes the 2D topo map to create a highly detailed 3D topo model complete with finished edges and base. Automatically elevates 3D RI's (such as trees, buildings, etc.) to their proper Z height in the newly generated topographic model.
- Perform cut and fill calculations based upon overlaying an *existing* and *proposed* contour map.
- Display the cut and fill volume parameters graphically using a 3D model of the topo map.
- Automatically generate cross-section site profiles at user-specified locations directly from the topo map.

After updating **Topographer**, they created a direct ARRIS to PDF translator application named **Render Plus PDF**. In addition to being less expensive than Acrobat, and much easier to install and use than Ghostscript, **Render Plus PDF** has the advantage of being able to create multi-page PDF documents, combining several plot files into a single document. A major enhancement they are planning to add is the ability to create title sheets, backgrounds or overlays which contain high-color, high-resolution bitmaps to make more impressive PDF files for client presentations.

Look for more things from **Render Plus Systems** now that they are developing ARRIS applications again. To download an evaluation copy of either of the **Render Plus Systems** applications, point your browser to:

[ftp://ftp.aritek.com/\\_download/ARICAD/Topo\\_w0801.exe](ftp://ftp.aritek.com/_download/ARICAD/Topo_w0801.exe)

or

[ftp://ftp.aritek.com/\\_download/ARICAD/pdf\\_w0801.exe](ftp://ftp.aritek.com/_download/ARICAD/pdf_w0801.exe)

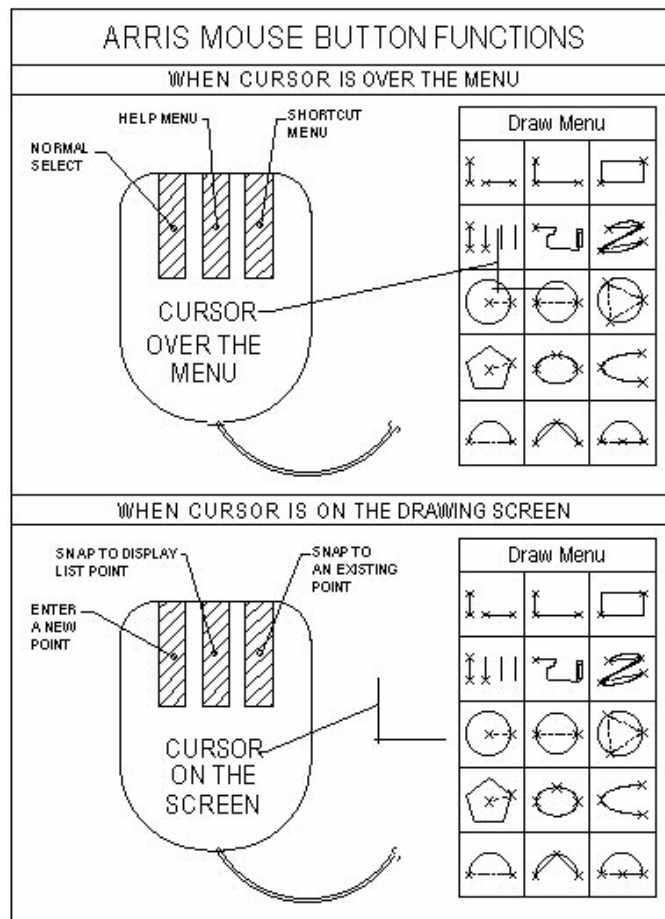
(Please call me for an *evaluation* authcode after installing either application. Topographer even comes with a built-in *demonstration* mode that takes you through all of the great features.)

## Other ARRIS Plug-in News

C. Jefferey Small has been busy adding a steady string of enhancements to his **ARRIS++ 3<sup>rd</sup>** party application including significant improvements to the *RI* and new *NOTES* system, the improved tool for inserting points into existing pattern boundaries and the huge set of enhancements to the *Recent Documents* feature to name a few. For more information on the latest enhancement to **ARRIS ++**, visit [http://cjsa.home.attbi.com/aplus/APLUS/ap\\_chg05.html](http://cjsa.home.attbi.com/aplus/APLUS/ap_chg05.html)

## ARRIS Training Tip

After years of teaching ARRIS classes I have found that one of the biggest obstacles for new users is assimilating all the different ARRIS functions associated with the 3 -button mouse. Put simply, the functions of the mouse buttons change depending on whether your cursor is over the *menu area* or the *drawing area* of the ARRIS screen...and let's not even mention the *cursor drag* (MCI) functions. To help reduce the learning curve, I like to print out the small diagram below and have the users post it on (or near) their computer screens for easy reference. I've found it helps.



Well fellow users, I hope you found this third newsletter to be as informative as the first two. If you have any questions about any technical services, support, software evaluation or software pricing contained within this third issue of **ARRIS\_USERS**, please don't hesitate to call us at the number listed below... *operators are standing by!*