## Let's Take a PEEK at PEAC-WMD v.5

Just some of the ways you can customize the PEAC-WMD program. *by S. Bruce King* 

## User Defined Data Files in the PEAC-WMD application

The last two months (March and April 2005) we deviated some from our previous examples of how information is displayed in the PEAC-WMD application to demonstrate the use of the **Working Entries** List, the **Threat Matrix**, and access to separate **Reference Sources** (specifically the CHRIS Manual, NIOSH Pocket Guide and the Emergency Response Guidebook). This month we'll begin a discussion of how the PEAC-WMD application provides access to user defined data files. The feature is an important and powerful part of the PEAC-WMD application. It will take more than one article to properly describe how it works and how a user can tailor their own information to meet their needs for access inside the PEAC-WMD application.

#### Background

The PEAC developers have always recognized that a user's concept of necessary or required information doesn't always match up with the PEAC developer's idea of what is necessary or required. This doesn't mean that the First Responders don't find the functionality of the PEAC-WMD data, assessment algorithms and computations useful for their needs; it's actually a statement of the fact that each user has specific needs and requirements that no software developer is going to be able to satisfy for all customers.

Since its conception and offering as a COTS product in 1996, the PEAC developers have been offered suggestions and sometimes requested by customers to incorporate new and different types of data into the PEAC application. The PEAC developers' philosophy has been that if it's information that many can use and benefit from having the data in the PEAC application then we'll work to make it a new feature so that all users can share in the benefit. The majority of these suggestions/requests for new types of data have been a benefit, not just to a single customer but to all customers. This process has driven many of the new features of the PEAC application. Nevertheless, in a few instances, the information the customer needed was specific to their needs and might not be of benefit to other customers.

The question then became, for those instances where users needed access to information but it was not of a type that all users would see the benefit and didn't want to be burdened with excess data files, how do you find a happy medium? At the same time, the PEAC developers recognized that the users wanted to be able to access this new information when at the scene of an incident and they wanted to do that within the framework of the PEAC application.

With that thought in mind, the recent PEAC-WMD version 5.0 incorporated a feature called **User Defined Data** to provide the flexibility such that a user could select the information they wanted to access via the PEAC-WMD application and its interface. The **User Defined Data** feature is available in both the Pocket PC and the Windows versions of the PEAC-WMD application.

The PEAC-WMD application allows a user to create a text (txt), htm or html file that contains the information they want to later access and place (or import) the file in a specific location (folder) such that the user can later display the information from within the PEAC-WMD application. There are some obvious benefits:

- 1. the user can access their defined data without having to jump to a different application to display the pertinent information,
- 2. the user can print the information just as they would any other data display screen,
- 3. the information is automatically indexed for later retrieval making it easy to find, and
- 4. the information is bundled together with the existing PEAC-WMD data via an easy to use and familiar interface.

#### Different Types of User Defined Data

A quick discussion is required to allow the reader to understand there are two types of **User Defined Data**. The reason for two types of data is the concept that there are two types of information a user might want to access at any particular point in time.

First, there is **Global Data**, which is available regardless of which hazardous material is highlighted in the PEAC-WMD database. Types of information that fit into this category are check-off lists, personnel contact information, SOPs, report forms or any other information that might be common for any type of incident.

Second, there is **Indexed Data**, which is available (for display or printing) only when a specific hazardous material is selected from the PEAC-WMD database. The concept being that information that is specific for many different materials is not necessary for display when accessing information on a different material, it only tends to confuse or overload the user with unnecessary information. Common types of **Indexed Data** would be an MSDS or a decontamination procedure for a specific material.

#### Accessing Global User Defined Data

The **Global Information** categories can be displayed simply by clicking on the **Data Selection Field** as shown in Figure 1. The PEAC-WMD application comes with a few **Global Data** files already created for the user. The first is an example of what a user might create for a list of contacts for personnel or organizations that a user might have need for depending on the incident and other resources available. The data file was created as a simple text file (named *Contact Info.txt*) using the Windows NotePad application. If this selection is selected, by clicking on the **Contact Info** selection in the drop-down list of selections, a display similar to Figure 2 will be displayed. By clicking on the **Full Screen** icon

[1] a window similar that shown in Figure 3 will be displayed. The user can scroll the **Data Display** or print to the local printer the information shown in the **Data Display**.



Figure 1 – Accessing the Global Information in the Windows version of PEAC-WMD

PEAC-WMD         Elle Edit Tools Help         The information in the Data Display         portion of the window can be expanded         across the screen by clicking on the         Full Screen icon.		
Lookup:	•	Contact Info
(+/-) 2 [1(Ethoxvimino)butvi]-5-[2-(ethylthio)propyl]-3-hydro (+/-)-Allyl 1-[2,4-dichlorophenyl]-2-imidazol-1-ylether ester (+/-)2-[[E]-1-[3-chloroalluloxyimino]propyl]-5-[2-(ethylthio)p (1-Carbethoxyethylidene)triphenylphosphorane (1-Methylethyl]-2-chloroacetate (1-Methylethyl]-2-chloroacetate (1-Methylethyl]-2-chloroacetate	nopyl]·h	Contact Info
<ul> <li>(1An, 2r, 2an, 3r, 5s, 5a3, 7s, 7a3, Fei-3, 4, 5, 6, 5, 5h exaction (1AR, 2r, 2aS, 3s, 6r, 6aR, 7s, 7a5, Fei-3, 4, 5, 6, 9, 9-hexachlori (1R, 4s, 4aS, 5s, 6s, 7r, 8r, 8aR)-1, 2, 3, 4, 10, 10-hexachlori (1Z, 3e, 9e)-cyclododecatriene</li> <li>(2, 2, 2-Trichlorio-1-hydroxyethyl)-phosphonic acid dimethy</li> <li>(2, 4-Dichlorophenoxy) accelic acid</li> <li>2, (2-Arrinoathexu) at hexacl</li> </ul>	o-1a,2,2 o-1a,2,2 4,4a,5,1 I ester	Contacts Information from the 2004 ERG ===================================
2-(2-Aminoethoxy)ethanol, n.o.s. (2-Aminoethoxy)ethanol, n.o.s. (2-Aminoethyl) ethanolamine (2-Chloroethenyl)arsonous dichloride 3-(2-Hydroxyethoxy)-4-pyrrolidin-1-yl benzenediazonium z (2-Hydroxyethyl)diethylamine	inc chlo	CHEMTREC® 
(+/-) 2 [1(Ethoxyimino)butyl]-5-[2-(ethylthio)propyl]-3-hydro	xy-2-cyclohe	xen-1-one

Figure 2 – Displaying a text file

	PEAC-WMD	)			
Elle	Edik Too	oks Help ◆ 田田田田 日 + Ⅰ Name	The user can scroll and read all of the information in the <b>Data Display</b> or click on the <b>Print icon</b> [🕮] and print to the local printer.		
	Lookup:		Contact Info	-	
		Co	ntact Info		
	Modify or add to this file as necessary				
	Contacts Information from the 2004 ERG				
	in the United States				
	CHEMTREC®				
a 24-hour emergency response communication service, can be reached as follows: CALL CHEMTREC® (24 hours) 1-800-424-9300 (Toll-free in the U.S., Canada, and the U.S. Virgin Islands)					
	(+/-) 2 [1(Ethoxyimino)butyl]-5-(2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one				

Figure 3 – Displaying the information Full Screen and Printing the information

The user also has access to the **Placards** selection which is taken from the **Table of Placards and Initial Response Guides to Use On-Scene** of the DOT Emergency Response Guidebook. This table of placards gives basic information if only placard types are displayed on a hazardous material or its carrier and no other identifying information is available.

The other type of **Global** information provided is a category of **Forms** that contains two different forms a user can print and fill out or fill out on screen and then printed out on the local printer, Figure 4.

PEAC-WMD		
ie Edit Tools Help	The two forms provided by AristaTek are the CHEMTREC and CDC MMG Patient Follow-up form.	
Lookup	Contact Info	-
Modify or add to this file as necessar Contacts Information from the 2004 ===================================	Crientical Information Pesticide Information Synonyms Brand Names EPA Reactivity Information Results Reactions Summary Threat Matrix Prior Results Additional Reference ERG 2004 Erançais ERG 2004 Español User Data Stack Information Stack Information Stack Information	
	Logs Placards	CURUTE
(+/-) 2 [1(Ethosyimino)butyl]-5-[2-(ethylthio)propyl]-3	Prior Logs	MMG Patient

Figure 4 – Forms provided by AristaTek

The first form is the CHEMTREC<sup>1</sup> form provided from their web site for notifying CHEMTREC of planned exercises or drills. As shown in Figure 5, the information can be filled out on screen and printed for faxing to CHEMTREC.

The same procedure can be performed with the CDC MMG (Medical Management Guideline) Patient Follow-up Form and provided to a patient before discharge from a hospital or other medical facility.

PEAC-WMD				
e Edit Tools Help	This example has the blanks filled in and will be printed on the local printer for faxing to CHEMTREC to notify them of a scheduled exercise or drill.			
Lookup:				
WHEN CALLING, USE THE CHEMTREC EMERGENCY NUMBER (800) 424-9300, AND CLEARY STATE TO THE COMMUNICATOR ANSWERING THAT THE CALL IS FOR A <u>DRILL</u> .				
DATE OF EXERCISE: May 18, 2005	ERASTERN ECENTRAL REMOUNTAIN ERACIFIC			
OTHER(specify)				
DRILL COORDINATOR NAME/TITLE: Real	ice King			
DRILL COORDINATOR NAME/TITLE: Rmi (+/-) 2 [1(Ethoxyimino)butyl]-5-[2-(ethylthio)propyl]-3-	-hydroxy-2-cyclohexen-1-one			

Figure 5 – Filling out the CHEMTREC Exercise Form for subsequent printing and faxing

Accessing Indexed User Defined Data

The **Indexed Information** categories can be displayed simply by clicking on the **Data Selection Field** as shown in Figure 6 after selecting the specific hazardous material the user is interested in viewing. This example is for Chlorine and the only indexed data file currently provided by AristaTek is an MSDS for Chlorine that was downloaded from the Cornell University web site, Figure 7.

PEAC-WMD		
Edit Tools Help	Chlorine is the specific	hazardous material
	rselected. The <b>Data Dis</b>	splay Field has been
	clicked on to display the	e drop-down list of
Lasture Pur Name	selections and <b>indexed</b>	Information is
Lookup By: Name	bigblighted with the MS	
	nignighted with the MS	DS selection.
Lookup: Chlorine	Chemical Information	n 🖉
	Chemical Information	
Chlorine	Respirators	al Information
Chlorine 36	All Chemical Protective Clothing	aimornation
Chlorine bromide	Available Chemical Protective Clothing	/
Chlorine cyanide	Supportunity	
Chlorine dioxide Chlorine dioxide hudrate frozen	Synonyms	
Chlorine dioxide hydrate trozen Chlorine dioxide hydrate trozen fwhen spilled in wa	Symptoms	/
Chlorine dioxide riyulate nozen (when spiled in wa	EPA Reactivity Information	Б /
Chlorine fluoride oxide	Results	/
Chlorine monoxide	PAD Results	and their and/or
Chlorine oxide	NBC Indicator Matrix Results	ases - tuxic anurur
Chlorine oxide	Reactions Summary	<u>dizing</u> /
Chlorine oxyfluoride	Threat Matrix	
Chlorine pentafluoride	Prior Results	inisonous das often
Chlorine peroxide	Additional Reference	
Chlorine sulfide	Military Chemical Exposure Guidelines	
Chlorine sulfide (Cl2S)	EPG 2004	
Chlorine trifluoride	CHDIE Magual	Industria/chemical which
Chlorite solution	CRKD Mariual CDC 2004 Even exis	also been used in
Chlorite solution with more than 5% available chlor	ERG 2004 Français	bre
Chiorites inorganic n.o.s.	ERG 2004 Español	
1.Chlore 1.1.diffuoroethane	ATSDR Medical Management Guidelines	
1.Chloro-1.2.2.2.tetrafiuoroethane	NIOSH Pocket Guide	þefied gas under its own 📗
1-Chloro-2.2.2-trifluoroethane	User Data	• • • • • • • • • • • • • • • • • • •
1-Chloro-2,3-epoxypropane	Indexed Information 🔹 🕨	MSDS
Chloro-2-propanone	Global Information	tion
1-Chloro-3-bromopropane	Logs	
	Current Log	REPORT OF COMPANY OF COMPANY.
Chlorine	Prior Logs	
		1

Figure 6 – Selecting an Indexed Information category (MSDS)

Edit <u>To</u>	D ols <u>H</u> elp ♦ III III III III + Name	The Cornell University MSDS for Chlorine shown in the Full Screen mode. This information can be scrolled or printed to the local printer.
Lookup:	Chlorine	MSDS
	DOD Hazard For Col	ous Material Information (ANSI Format) nell University Convenience Only
The info Departm and appl Cornell informat	rmation in this docum tent of Defense (DO icability of this inform University does not in ion to any person or :	ent is compiled from information maintained by the United States D). Anyone using this information is solely reponsible for the accuracy ation to a particular use or situation. any way warrant or imply the applicability, viability or use of this or use in any situation.
•	Secti	on 1 - Product and Company Identification CHLORINE
Product Date of FSC: 68	t Identification: CH MSDS: 01/01/1985 330 NIIN: 00-985-72	LORINE Fechnical Review Date: 08/31/1984

Figure 7 – Viewing the Chlorine MSDS or printing the MSDS

In the remainder of this month's discussion, we'll describe how to create, edit and import a **User Defined Indexed Data File**.

### Creating a User Defined Indexed Data File

The user has some options for creating the **User Defined Data File**. The following discussion will describe how to create an **Indexed Data File** and import the file into the proper location so the application can access it. As explained earlier there are three types of files automatically recognized by the PEAC-WMD software for display in the **Data Display** portion of the main PEAC-WMD application window. These are text, htm and html file formats. There are multiple methods of creating and downloading and modifying these types of files for incorporation into the PEAC-WMD application. These won't be dwelled on except to demonstrate some rather common methods available. Most users have access to the Microsoft<sup>®</sup> Windows NotePad and the Microsoft Office Word applications. NotePad is a very simple text editor that allows creation, editing and saving of text documents. Word is a feature rich text editing application that will handle text, htm and html files.

The user simply needs to create or download a text-based document to begin the process. In the example below, an MSDS (for Boron Tribromide) was downloaded from the Cornell University (<u>http://msds.ehs.cornell.edu/msdssrch.asp</u>) web site that contains a number of MSDS's and saved to a folder on a local PC, Figure 8.



Figure 8 – Saving an htm file using Microsoft Internet Explorer

Once the **Save As** selection is clicked, a window will appear asking where to save the specific file and the option of naming the file. In the example, a folder was created in **My Documents** named **MSDS** and the new file was given the default name **Boron Tribromide**, Figure 9.



Figure 9 – Completing the Save As operation to download the htm file

The file was opened with Microsoft Word and edited to remove some graphic images in the header and a table at the top of the document with hyperlinks to different sections of the MSDS, Figure 10.



Figure 10 – Editing the downloaded htm file with Microsoft Word

The file can be saved back to the PC's hard drive as an htm file with the name **Boron Tribromide** which is the name the htm file will be indexed to inside the PEAC-WMD application. The file could also be **Saved As** to a new name and/or location, and in Figure 11 the **Save As** option has been selected but the file name and location have not been changed.



Figure 11 – Completing the edit of the htm file by saving the file

The PEAC-WMD application provides an import feature to simplify the incorporation of the newly created or modified text, htm or html file into the proper location so it will be recognized and made available the next time the PEAC-WMD application is started. In the example, the user selects **Boron Tribromide** as the hazardous material to be displayed as shown in Figure 12 and selects the **Import Files** selection from the **File** menu. There are two options under the **Import Files**, import an **Indexed** or a **Global** type data. As shown in Figure 12, the selection is **Indexed** and there is an option within this category which is **MSDS**. If there are multiple types of **Indexed** data files, these would be shown as optional selections. The user selects **MSDS** by clicking on the selection and a standard **Open** window is displayed for the user to select the location of the **User Defined Indexed Data File** to be imported for **Boron Tribromide**.

PEAC-WMD	1-
e Edit Tools Help Open	
Save	
Save As	
Import Filer Indexed	MSDC
Add Jodeved Category Global	
Add Global Category	Chemical Information
Import Database	
n under)	Chemical Information
Print pn land)	Chemical information
Exit	Boron tribromide (when enilled
Boron trifluoride acetic acid complex	Boron a monute (when spilled
Boron trifluoride acetic acid complex, liquid	on land)
Boron trifluoride acetic acid complex, solid	
Boron trifluoride compound with methyl ether	CAS 10294-33-4
Boron trifluoride dihydrate	UN 2692
Boron trifluoride dimethyl etherate	GUIDE 157 - Substances - toxic and/or
Boron trifluoride ether complex	corrosive (non-combustible /
Boron trifluoride ethyl ether	water-sensitive)
Boron trifluoride propionic acid complex	
Boron trifluoride propionic acid complex, solid Boron trifluoride, compressed	Colorless Furning liquid with pungent odor
Boron trioxide	
Botrilex	WARNING: This reacts with water to
Bottle gas	I produce Acid and heat. The results given
Borop tribromide	
Deren distantide	

Figure 12 – Selecting the category an Indexed data file is to be imported to

Figure 13 demonstrates how the example MSDS is specified for importation into the proper PEAC-WMD folder for later access by the application.



Figure 13 – Specifying the location of the file to be imported

As shown in Figure 14, the MSDS for **Boron Tribromide** is now available for access and display from within the PEAC-WMD application.

PEAC-WM	ID				
Lookup B	y: Name	The new MSDS is now available for access only when <b>Boron Tribromide</b> is the selected hazardous material.			
Lookup	boron tribromide	MSDS			
	DOD Hazardous Material Information (ANSI Format) For Cornell University Convenience Only				
BORON TRIBROMIDE					
The information in this document is compiled from information maintained by the United States Department of Defense (DOD). Anyone using this information is solely reponsible for the accuracy and applicability of this information to a particular use or situation. Cornell University does not in any way warrant or imply the applicability, viability or use of this information to any person or for use in any situation.					
Boron trib	romide				
1	Figure 14 – A	ccessing the Boron Tribromide MSDS			

# from the PEAC-WMD application

As the reader can see, this facility provides the user with a powerful tool to customize the PEAC-WMD application to meet their needs and requirements. Next month we'll continue the discussion on how to work with the Global files that are always available regardless of what hazardous material is selected.

If our newsletter readers, whether a customer or not, have specific questions related to this topic or other topics, please contact AristaTek via our toll free number (877-912-2200) or email us at <a href="mailto:support@aristatek.com">support@aristatek.com</a> and we'll work to answer your questions.

<sup>1</sup> CHEMTREC® was established in 1971 by the chemical industry as a public service hotline for fire fighters, law enforcement, and other emergency responders to obtain information and assistance for emergency incidents involving chemicals and hazardous materials. CHEMTREC's 24-hour Emergency Communications Center is located in Arlington, Virginia (Washington, DC metropolitan area) and is an integral part of the American Chemistry Council.