



# CADD/GIS Bulletin

Tri-Service Information Exchange Bulletin

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## Center Homepage Improvements

by Jeff Egan and Laurel Gorman, Tri-Service CADD/GIS Technology Center

Over the past few months, the Tri-Service CADD/GIS Technology Center has significantly modified its homepage (<http://tsc.wes.army.mil> or <http://mr2.wes.army.mil>) to improve navigation links for a wide range of products and services. The Center homepage serves as the navigation menu that allows customers access to various Web site capabilities. Utilizing a popular Web design, the homepage is subdivided into two sections emphasizing products on the left side and current Center activities on the right side. Specific links on the left side of the home-page include **Projects**, **Products**, **Center Groups**, **Announcements**, and **Services** whereas, on the right side current information is organized by **Hot Topic**, **News**, and **Website Notes** links. The general overview that follows describes the content, available searching tools, and additional Web subsite links.

### Inside this edition . . .

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## Center Administration Table

The table located at the top of the homepage contains background information on the Center:

- ↳ **Center Organization** - The Tri-Service Center's external and internal organization links and components are summarized.
- ↳ **Center Personnel** - A table provides detailed information for individuals employed by the Center (name, phone, E-mail, and speciality).
- ↳ **Center Greetings** - Provides an audio (WAV file) message for visitors to the homepage.
- ↳ **Visitor Information** - For visitors to the Tri-Service Center office in Vicksburg, MS, this link provides maps for area airports, city and hotel links, and a map of the U.S. Army Engineer Waterways Experiment Station (WES).
- ↳ **Official DoD Websites** - Provides links for sponsoring organizations as well as other DoD sites.
- ↳ **Query WES Webservers** - This link leads to a query interface to the search engine for WES's World Wide Web servers.
- ↳ **WWWWebsite Help Files** - A pull-down menu accesses hints and suggestions for navigating through the Center homepage, including a current Web site map and directions.

Access the Tri-Service Center homepage at

<http://tsc.wes.army.mil>

<http://mr2.wes.army.mil>





Revised Center homepage

## Center Current Events

This graphic button accesses a database of announcements, events, meetings, and workshops. Visiting field users and customers can also add announcements. Updated information on workshops, training, and meetings sponsored by the Center is posted here.

## Navigation Menu for Center Projects

- **PROJECTS** - The primary link, **Projects**, provides current and detailed information on funded Center projects. This section enables querying for a project or set of projects matching various criteria, or proposing a new project for the Center's consideration. Four major links or subsites access specific project information, including:
  - ↪ **Current Project** - The project title, number, and status are listed here.
  - ↪ **Simple Search** - A project may be located using the Principal Investigator "pull-down" menu, official title, or by selecting key words in the description of the project of interest.

↪ **Detailed Search** - A detailed query can be done using text strings based on project number, title, alias, description, status, and principal investigator.

↪ **Project Proposal** - An interactive form is provided to propose a project for the next fiscal year.

- **PRODUCTS** - This link lists the major products/deliverables from Center projects. Supplementary links are listed for the Center's standards, which include:

- ↪ A-E Deliverables
- ↪ A/E/C CADD
- ↪ Spatial Data
- ↪ Facility Management
- ↪ CADD Details
- ↪ Technical Files

Standards and other Center products are available for on-line ordering by selecting the **Products** link.

- **CENTER GROUPS** - This link provides a list of subsites via pull-down menus for Center-related Groups, which are subdivided into three major categories:

- ↪ The Oversight Groups (Executive Steering Group (ESG), Executive Working Group (EWG), Field Technical Advisory Group (FTAG))
- ↪ The Field Working Groups (Military Planning, Civil Works, Design, Construction, Facility Management, Natural and Cultural Resources, Environmental, and Systems)
- ↪ Supplementary sites (i.e., Federal Geographic Data Committee (FGDC), Electronic Bid Solicitation, and USACE CADD Design Library).

Additionally, links are provided for **CONTACTS** and other useful Web site **LINKS** are located under the **CENTER GROUPS**.

- **ANNOUNCEMENTS** - A compendium of CADD/GIS symposiums, conferences, and Center-sponsored training workshops is located at the **Announcements** subsite. Specific discipline-oriented conferences are also listed that include

The Tri-Service Center is dedicated to fostering the application of computer-aided design and drafting (CADD) and geographic information system (GIS) technologies for facility life-cycle efforts throughout the Army, Navy, and Air Force. The CADD/GIS Bulletin is published by the Tri-Service CADD/GIS Technology Center of the Information Technology Laboratory, U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199.

CADD/GIS project applications. Beneath the **Announcements** link, the Center Newsletter can be accessed via Adobe Acrobat Portable Document Format (PDF).

- **SERVICES** - This section of the Web site is designed as a gateway to services and applications beyond the traditional web page format. The Center has created the following services to better serve customer needs:

- ↳ Technical Files
- ↳ Open Access Files and Documents
- ↳ WWW Browser Applications
- ↳ Emerging Internet and Intranet
- ↳ Technologies Test Bed Site

Beneath the **Services** link, two additional links are available to users, **Center Mailing Lists** and **Training**.

- **CURRENT CENTER ACTIVITIES** - Recent Center activities are announced and featured on

the right side of the homepage. Three listings describe the latest Center announcements:

- ↳ **Hot Topic** - Special events, such as the Tri-Service CADD/GIS/FM Symposium, are announced under this link. Additional on-line help is also available (for example, the Symposium has specific links to program topics, registration, exhibit information, and hotel reservations).
- ↳ **News** - Articles describing the latest Center standards and available technical reports are posted here.
- ↳ **Website Notes** - Documentation of the Center's Web site and Internet services are posted here. A maintenance schedule and subsites that will be affected by maintenance are also provided under this link.

The Tri-Service CADD/GIS Center is committed to providing a World Wide Web site that is a useful tool in support of CADD/GIS project work.



Jeff Egan and Matt Hale maintaining the Center's Web File Server

## Center Salutes

These innovative tools were made possible by Messrs. Jeff Egan, who redesigned the current Center Web site, and Matt Hale, who developed the Center's original homepage in 1992. As with many CADD/GIS initiatives, the Center WWW site is evolving and growing with the technology. Users are invited to add articles, information, and/or comments that will benefit the community at large.

## Tri-Service Community News

Congratulations to the incoming Chairman of the Executive Steering Group, Dr. Get Moy, Headquarters Navy Facilities Engineering Command; Chairman of the Executive Working Group, Mr. Don Ritenour from HQ Air Force Center for Environmental Excellence; and Chairman of the Field Technical Advisory Group, Mr. Joe LaVoie, U.S. Army Aberdeen Proving Ground.

Accolades to Mr. Serdar Ertep, Natural Resources Manager at U.S. Army Infantry Fort Benning, on publishing an article, "GRASS Supports Natural

Resources Management at Fort Benning" in the September 1996 issue of GIS World.

Welcome to the newest staff member of the Tri-Service CADD/GIS Technology Center, Mr. Brian Perdue, coming from the U.S. Air Force, Kadena Air Base, Japan.

Special thanks to Mr. Gerald O'Hara of U.S. Quantico Marine Corps installation, VA, and Mr. Ken Bristol, U.S. Eglin Air Force Base, FL, for serving as a metadata test site.

## Training Now Available for Electronic Bid Solicitation

by Matt Hale, EBS Project Manager

As part of the Center's Electronic Bid Solicitations (EBS) Project, and in conjunction with field offices and Headquarters, U.S. Army Corps of Engineers



Matt Hale and Teresa Pace review the training manual for the EBS Workshop

(USACE), the Tri-Service Center has developed a course to teach the procedures for assembling an EBS package on CD-ROM. The instructors are from USACE Fort Worth, Omaha, and Mobile Districts; SourceView; and Adobe. USACE instructors are contract specialists, specification writers, and CADD managers who have released over 100 EBS combined. In order to effectively implement EBS, it is recommended that teams with similar specialties be sent to the course.

There are three workshops scheduled for FY97:

↳ March 18-21

↳ April 1-4

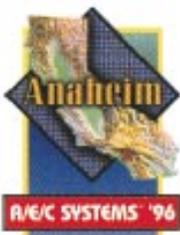
↳ April 15-18

For more information, go to URL: <http://tsn.wes.army.mil> and click on "Workshop for Federal Employees," or contact Matt Hale directly at 601-634-3509, [halem@ex1.wes.army.mil](mailto:halem@ex1.wes.army.mil).

## Center Participation in National Conferences

by Laurel Gorman, Tri-Service CADD/GIS Technology Center

As a key aspect of the Tri-Service CADD/GIS Center's mission, the staff promotes the benefits and advantages of CADD/GIS through professional presentations and exhibition booths at major national conferences specializing in CADD, GIS, Automated Mapping (AM), and Facility Management (FM) technologies. The Center has previously participated in national conferences, such as A/E/C Systems, Urban and Regional Information System Association, GIS/Land Information System, Global Positioning System/GIS, and AM/FM. The Center will participate in conferences this year with a combination of booths, standards presentations/panels, and technical sessions.



An example of Center involvement in national conferences was **A/E/C Systems '96 Conference** held last June 17-20, in Anaheim, CA, with 480 exhibits and more than 25,000 attendees in four exhibit halls. The Center co-sponsored with Naval Facilities Engineering Command Headquarters (NAVFACENGCOM HQ) an exhibition booth and government technical session at the Conference. Attendees saw the latest

developments in the A/E/C industry, including object technologies, 2D/3D rendering, visualization, animation applications, virtual reality, and Internet products as demonstrated by the leading vendors. Considerable GIS technology was also showcased.

Center Participation in 1997 Conferences		
Date	Conference	Center Participation
April 9-11	Annual Federal Planning Workshop	• Technical Sessions
June 16-19	A/E/C Systems '96	• Booth • Technical Session
July 7-11	ESRI Users Conference	• Military Environment Users Group Meeting • Technical Session
August 18-22	Tri-Service CADD/GIS/FM Symposium 97	• Booth • Workshops • Technical Sessions
October 28-30	GIS/LIS	• Standards Presentation • Booth

The 1996 theme, "Partnering for Standards, Integration and Solutions," was used throughout the Center-sponsored activities. Several Center staff and Tri-Service users gave presentations on major projects and CADD/GIS application demonstrations. Within the open, diamond-shaped booth, graphics, brochures, and on-line workstation demos were used to showcase DoD solutions for applying information technologies. Laurel Gorman and Matt Hale, the Center's conference coordinators, and Mark Kleinwicks and Tim Tickle, Tri-Service coordinators for NAVFACENGCOM HQ, configured workstations demonstrating a diversity of military and civil works CADD/GIS applications. Teamwork among the Tri-Service user community, Center staff members, and the Headquarters coordinators contributed to the success of the booth and presentations given for the government session. Conference attendees saw multimedia products at the Center's booth, including on-line demonstrations, handouts, brochures, CD-ROMs, and Center technical reports. Over 200 attendees visited the Center/NAVFAC booth during the June 18-20 exhibition period. The keynote speaker at the Government session was Dr. N. Radhakrishnan, Director of the Information Technology Laboratory, U.S. Army Engineer Water-

ways Experiment Station, who gave an overview of advancements in computer technology.

The Tri-Service Center has participated in the Department of Energy's (DOE) **CAD/CAE User's Conference** for the last two years, which has contributed greatly to a standards partnership with DOE. At the DOE GIS Steering committee panel session of the 1996 conference, the Center gave a presentation entitled "AEC and Spatial Data Standards and Products for Natural and Cultural Facilities Management." This committee is developing a strategic plan for implementation of standards throughout the DOE GIS community utilizing the Tri-Service standards suite for their CADD/GIS applications. Lessons learned from Tri-Service CADD/GIS implementation were emphasized in this presentation to the DOE community.

By participating in these types of conferences, the Center raises its visibility, and products such as the Tri-Service standards and related CADD/GIS implementation initiatives are shared. The Center staff looks forward to meeting and coordinating with users at the affiliated CADD/GIS conferences in 1997. For the latest Center-sponsored conference events, please visit the Center Web site at <http://tsc.wes.army.mil> or <http://mr2.wes.army.mil>.

## Lessons Learned: NT Security for FTP Service

*by Jeff Egan, Tri-Service CADD/GIS Technology Center*

This article summarizes "lessons learned" from setting up anonymous FTP (File Transfer Protocol) service and directory permissions for various users on a Windows NT 3.51 workstation operating system. These procedures provide general guidance for security measures. The article is intended for users who are at least familiar with Windows NT 3.51, the FTP process, and establishing groups and users for workstations. The following procedures apply generally for establishing security precautions under a Windows NT 3.51 workstation, but the FTP access sections will not apply if FTP service is not implemented.

The **concern** is that a Windows NT 3.51 workstation "straight out of the box" may leave some security gaps, allowing unlimited access to files and directories, especially with regards to FTP sessions. In the implementation, if the FTP server is configured to allow anonymous logins, then the entire file/directory structure of the PC immediately becomes available to any anonymous FTP

user. Security precautions need to be added over the base implementation to address this concern.

The **solution** lies in the group user permissions that NT allows the user to establish to control access and user capabilities defined on a particular machine. This only applies when using the NTFS (NT File System) rather than the FAT (File Allocation Table). User permissions cannot be set on an FAT machine. This article provides only a brief description of the User Administrator program which NT uses to control access to files and directories.

The User Administrator program establishes several default groups when the NT 3.51 workstation is installed. Among these are the *Everyone*, *Users*, *Administrators*, and *Guests* groups. Security hinges on the *Everyone* group. If this group exists, then permissions given to the *Everyone* group apply to any directory/file structure where the *Everyone* group is given permission. Any user

who logs onto a machine, including anonymous users not requiring a password for access, are automatically part of the *Everyone* group. The significant problem lies in the way that NT handles anonymous FTP calls. A directory does not have to be shared to be available to FTP clients. A regular logon to a machine or a direct mount of a machine by another system (NT directly or UNIX through NFS) allows access only to those directories that have been explicitly shared. Directory sharing is usually accomplished through File Manager. Access permissions for shared (and non-shared) directories and files can be established using the Security menu of File Manager. However, if the *Everyone* group is allowed any access to a directory, shared or not, the FTP server allows anonymous FTP clients the same rights. The anonymous login capability can simply be disabled from within the FTP Server applet if there is no requirement for allowing anonymous login.

The quickest solution is to *remove entirely* the *Everyone* group access from any directories that are not to be open to the public. The *Everyone* group may not be required at all. The User Administrator program allows creation of groups with specific IDs, should a direct access location be desired for a select group of people. Each group or user can be allowed limited access to Read, Write, Execute, and to perform other operations on files and directories. The author created an Anonymous user as well so that he could grant specific permissions to anonymous logins without allowing similar permissions for the *Everyone* group. When removing the *Everyone* group access, the following points should be kept in mind:

- ↪ Sharing the root directory is dangerous but also potentially very useful. NT share functionality does limit direct “mounts” of the PC structure to shared directories only, but sharing the root drive allows access to the entire directory tree. Therefore, users must be particularly aware of permissions and access granted to root directories. The test machine established Read, Add, and Execute rights for users, which were defined in the *Users* group and Read-Only rights for guests and anonymous logins and attachments.
- ↪ FTP Server configuration is accomplished within the Windows Control Panel. Go to the Network icon, select “FTP Server” and the “Configure” button (or double-click).
- ↪ Users can be created and administered through the Windows NT User Manager applet, which comes with the Windows NT 3.51 workstation. The program icon is normally found in the Administrative Tools group in Program Manager.
- ↪ Directory permissions can be selected from File Manager by choosing the key icon at the end of the toolbar or from the Security menu pull-down. Directories can be shared (and permissions established for the share) by using the hand/folder icon from the toolbar.

To establish an open area for FTP, the permissions need to be set within File Manager of the PC as illustrated in the tables below. The groups and permissions shown below are not required, but are given for illustration purposes only.

### Directory Structure and Permissions for Shared (Direct-Access) Directories for Enhanced Security on a Windows NT Workstation

*This table lists shared directories and permissions established for the share itself (which may be different than the global permissions for the files/directories themselves).*

Directory	Shared?	Notes	Group	Permissions
D:\(root)	Yes	Default share	Administrators	Full control
d:\users	Yes	Begins area for other users to access and modify	Users	Full control
..users\pub	Yes	Begins public area for guests, downloads, etc.	Administrators Guests Everyone	Full control Read Read
..pub\ftp	Yes	Default FTP login directory (set in FTP server applet under Control Panel)	Everyone	Read
..HTN\edit	No	The permissions set in the directory above flow down here, but this directory is not a “mountable” directory, as is the FTP directory. This is only one of the directories available and is given as an example.		

## Directory and File Permissions for All Access (Including FTP)

*This table lists the global directory/file permissions established through the Security (the key icon or the Security pull-down) capabilities of NT 3.51 for any and all access of the same directory structure discussed above.*

Directory	Notes	Groups	Permissions
D:\ (root)		Administrators	Full control
d:\users		Administrators Anonymous Everyone Guest	Full control Add and Read Special Access (directory read only; no file access) Add and Read
..\users\pub		Administrators Anonymous Everyone Guest	Full control Read Change List
..\pub\ftp	Set the same as the directory above		
..\HTMLedit	Set the same as the directory above		
<b>NOTES:</b> <ul style="list-style-type: none"> <li>• It is recommended that the Administrator group always be allowed full control of directories and files in order to troubleshoot.</li> <li>• The Special Access right allows picking and choosing what capabilities to allow to a particular user/group.</li> <li>• The Change right allows selection of options (Read, Write, Execute, Delete directories and files).</li> </ul>			

## Current Tri-Service Center Publications

Tri-Service, Part 3, Spatial Data Standards, Release 1.6	<b>POC: Bobby Carpenter</b> , (601) 634-4572, <a href="mailto:tssds@fwgcom.wes.army.mil">tssds@fwgcom.wes.army.mil</a>
Tri-Service, Part 2, A/E/C CADD Standards, Release 1.4	<b>POC: Toby Wilson</b> , (601) 634-3604, <a href="mailto:wilsonj@ex1.wes.army.mil">wilsonj@ex1.wes.army.mil</a>
Tri-Service, Part 1.2, A-E GIS Deliverable Standards. Final Draft	<b>POC: Bobby Carpenter</b> , (601) 634-4572, <a href="mailto:tssds@ex1.wes.army.mil">tssds@ex1.wes.army.mil</a>
Tri-Service, Part 1.1, A-E CADD Deliverable Standards. Final Draft	<b>POC: Bobby Carpenter</b> , (601) 634-4572, <a href="mailto:tssds@ex1.wes.army.mil">tssds@ex1.wes.army.mil</a>
Tri-Service CADD Details, Release 1.0.	<b>POC: Stephen Spangler</b> , (601) 634-3104, <a href="mailto:spangls@ex1.wes.army.mil">spangls@ex1.wes.army.mil</a>
Geospatial Data Documentation Support Package (Available in the Tri-Service Spatial Data Standards, Release 1.6)	<b>POC: Dr. Rose Kress</b> , (601) 634-3665, <a href="mailto:kressr@ex1.wes.army.mil">kressr@ex1.wes.army.mil</a> , and <b>Laurel Gorman</b> , (601) 634-4484, <a href="mailto:gormanl@ex1.wes.army.mil">gormanl@ex1.wes.army.mil</a>
Guidelines for the Use of Remotely Sensed Data, Final Draft.	<b>POC: Laurel Gorman</b> , (601) 634-4484, <a href="mailto:gormanl@ex1.wes.army.mil">gormanl@ex1.wes.army.mil</a>
Evaluation of Data Translation Software and CADD and GIS Data Conversion Methods. Preliminary Draft	<b>POC: Harold Smith</b> , (601) 634-4190, <a href="mailto:smithh2@ex1.wes.army.mil">smithh2@ex1.wes.army.mil</a>

## Tri-Service CADD/GIS Calendar

Date	Event		
<b>Organizational Meetings</b>			
March 27-28	Executive Steering Group, Vicksburg, MS <b>POC: Andy Covington</b> , (601) 634-4485, <a href="mailto:covingg@ex1.wes.army.mil">covingg@ex1.wes.army.mil</a>		
April 23-24	Design FWG, Location to be announced <b>POC: Stephen Spangler</b> , (601) 634-3104, <a href="mailto:spangls@ex1.wes.army.mil">spangls@ex1.wes.army.mil</a>		
May 20-22	Natural and Cultural Resources Task Meeting, Arlington, TX <b>POC: Laurel Gorman</b> , (601) 634-4484, <a href="mailto:gormanl@ex1.wes.army.mil">gormanl@ex1.wes.army.mil</a>		
May 20-22	Concurrent FTAG & FWG Chairmen Coordination Meeting, Arlington, TX <b>POC: Andy Covington</b> , (601) 634-4485, <a href="mailto:covingg@ex1.wes.army.mil">covingg@ex1.wes.army.mil</a>		
August 18	Concurrent EWG, FTAG, and FWG meetings		
<b>Training</b>			
March 18-21 April 1-4 April 15-18	Electronic Bid Solicitation Workshop, USACE WES, Vicksburg, MS <b>POC: Matt Hale</b> , (601) 634-3509, <a href="mailto:halem@ex1.wes.army.mil">halem@ex1.wes.army.mil</a> , and <b>Elias Arredondo</b> , (601) 634-3140, <a href="mailto:arredoe@ex1.wes.army.mil">arredoe@ex1.wes.army.mil</a> , Fax: (601) 634-4584		
April 11	FGDC Clearinghouse Tutorial Training (Unix platform), University of Washington Geography Department, WA. Sign up by April 4, 1997. <b>POC: Jennifer Fox</b> , <a href="mailto:jafox@usgs.gov">jafox@usgs.gov</a>		
June 23-27	Advance Mapping Techniques and GIS Data Bases Development Workshop, St. Louis, MO Registration Form due March 24, 1997. USACE, Professional Development Support Center, P.O. Box 1600 Huntsville, AL 35807-4301 <b>POC: Marsha Samples</b> , (205) 895-7449		
<b>Conferences of Interest</b>			
March 23-26	AM/FM International Conference, Nashville, TN <b>POC: AM/FM International</b> , 14456 East Evans Avenue, Aurora, CA, 80014, (303) 337-0513, <a href="mailto:amiminti@aol.com">amiminti@aol.com</a> , Fax: (303) 337-1001, WWW: <a href="http://www.amfmintl.org">http://www.amfmintl.org</a>		
April 5-9	1997 National Planning Conference of the American Planning Association, San Diego, CA <b>POC: R. Kaiser</b> , (312) 431-9100, Fax: 1-800-800-1589, <a href="mailto:rkaiser@planning.org">rkaiser@planning.org</a>		
April 11-13	Desert Science Symposium, National Training Center, Fort Irwin, CA. Abstracts due April 4, 1997. No registration fee. <b>POC: Steve Ahmann</b> , Fax: (610) 380-5293, <a href="mailto:ahmanns@irwin.army.mil">ahmanns@irwin.army.mil</a> or <a href="mailto:odomj@irwin.army.mil">odomj@irwin.army.mil</a>		
April 13-16	GPS/GIS 97. Annapolis, MD <b>ATTN: GPS/GIS 97 Conference</b> , Suite 300, 8120 Woodmont Avenue, Bethesda, MD 20814, (301) 664-8000		
April 21-23	MicroStation FORUM & Exhibition. Baltimore, MD <b>ATTN: MicroStation Institute</b> , P.O. Box 367, 10446 County Line Road, Madison, AL 35758, (205) 461-1042, Fax: 1-800-862-7990, and WWW: <a href="http://www.bentley.com/forum">http://www.bentley.com/forum</a>		
August 18-22	<b>Joint Conferences</b>		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Tri-Service CADD/GIS/FM '97 Symposium</b>, St. Louis, MO, Registration information at <a href="mailto:conference@smtp.lms.usace.army.mil">conference@smtp.lms.usace.army.mil</a>. No registration or workshop fees. <b>POC: Toby Wilson</b>, (601) 634-3604, <a href="mailto:wilsonj@ex1.wes.army.mil">wilsonj@ex1.wes.army.mil</a>, and WWW: <a href="http://mr2.wes.army.mil">http://mr2.wes.army.mil</a> </td> <td style="width: 50%; vertical-align: top;"> <b>USACE/NOAA Surveying, Mapping, and Remote Sensing Conference</b>, St. Louis, MO <b>POC: Bob Mesko</b>, <a href="mailto:conference@smtp.lms.usace.army.mil">conference@smtp.lms.usace.army.mil</a> </td> </tr> </table>	<b>Tri-Service CADD/GIS/FM '97 Symposium</b> , St. Louis, MO, Registration information at <a href="mailto:conference@smtp.lms.usace.army.mil">conference@smtp.lms.usace.army.mil</a> . No registration or workshop fees. <b>POC: Toby Wilson</b> , (601) 634-3604, <a href="mailto:wilsonj@ex1.wes.army.mil">wilsonj@ex1.wes.army.mil</a> , and WWW: <a href="http://mr2.wes.army.mil">http://mr2.wes.army.mil</a>	<b>USACE/NOAA Surveying, Mapping, and Remote Sensing Conference</b> , St. Louis, MO <b>POC: Bob Mesko</b> , <a href="mailto:conference@smtp.lms.usace.army.mil">conference@smtp.lms.usace.army.mil</a>
<b>Tri-Service CADD/GIS/FM '97 Symposium</b> , St. Louis, MO, Registration information at <a href="mailto:conference@smtp.lms.usace.army.mil">conference@smtp.lms.usace.army.mil</a> . No registration or workshop fees. <b>POC: Toby Wilson</b> , (601) 634-3604, <a href="mailto:wilsonj@ex1.wes.army.mil">wilsonj@ex1.wes.army.mil</a> , and WWW: <a href="http://mr2.wes.army.mil">http://mr2.wes.army.mil</a>	<b>USACE/NOAA Surveying, Mapping, and Remote Sensing Conference</b> , St. Louis, MO <b>POC: Bob Mesko</b> , <a href="mailto:conference@smtp.lms.usace.army.mil">conference@smtp.lms.usace.army.mil</a>		

## **WEB Lagniappe**

<b>Speciality</b>	<b>Name</b>	<b>URL</b>
CAD/CIFM integrated demo	Public Building CAD Center	<a href="http://www.gsa.gov/pbs/cad/demo1.html">http://www.gsa.gov/pbs/cad/demo1.html</a>
Interactive GIS application	Mojave Desert Ecosystem Initiative	<a href="http://mojave.army.mil">http://mojave.army.mil</a>
WEB 3D and GIS applications	San Diego Support Computing Center	<a href="http://www.sdsc.edu">http://www.sdsc.edu</a>
Digital library for geo-referenced information	Alexandria Library	<a href="http://alexandria.sdc.ucsb.edu">http://alexandria.sdc.ucsb.edu</a>
Authoritative source on building regulations and technology	National Institute of Building Sciences	<a href="http://www.nbs.org">http://www.nbs.org</a>
On-line advertisement solicitations	Tri-Service Electronic Bid Solicitations	<a href="http://tsn.wes.army.mil">http://tsn.wes.army.mil</a>
Distributed environmental data access system	DoD Master Environmental Library	<a href="http://www-mel.nrlmry.navy.mil">http://www-mel.nrlmry.navy.mil</a>
GIS information for DoD users	Defense Special Interest Group for ESRI users	<a href="http://www.esri.com/base/users/federal/dsig.html">http://www.esri.com/base/users/federal/dsig.html</a>
On-line access to available flood maps	Federal Emergency Management Administration Map Service Center	<a href="http://www.fema.gov">http://www.fema.gov</a>



### **Call for FY98 New Projects**

The Tri-Service CADD/GIS Technology Center is soliciting project proposals for FY98 emphasizing partnership opportunities with the tri-service community. Project proposals should focus on CADD and GIS needs in planning, design, construction, and/or facility/installation management.

Organizations wishing to submit new projects or potential partnering projects should visit the Center Website at <http://tsc.wes.army.mil>. Use the "PROPOSE A PROJECT" link listed under "PROJECTS" to submit a proposal online. All projects must be received by the Center before April 11 1997 to be considered for FY98 funding.



Access and Reload the Center's  
WWW Homepage frequently at

*<http://tsc.wes.army.mil> or*

*<http://mr2.wes.army.mil>*

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