



# CADD/GIS Bulletin

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## New Directions for Field Working Groups

by Lee Byrne, Technology Transfer Specialist, and Laurel Gorman, Tri-Service CADD/GIS Technology Center

Under the leadership of the Tri-Service CADD/GIS Technology Center's Field Technical Advisory Group (FTAG), the Field Working Groups (FWGs) have made significant contributions to the core-mission, mission-related, and mission-support Tri-Service Center projects. Since restructuring that began in 1995, the FWGs have been reduced from 21 single-discipline groups to 7 process-oriented groups. The most recent change took place this past year when the Design and Construction FWGs were combined. This updating of the coordination and organizational role of the FWGs has mapped new directions for the FWGs, as outlined in the revised Tri-Service Strategic Plan.

To ensure that the Tri-Service mission and goals are met, a Tri-Service Strategic Plan based on the Balanced Scorecard<sup>1</sup> approach has been adopted. This approach links measures of performance to the Strategic Plan from four perspectives: strategic result (mission accomplishment), customer goals, internal process goals, and learning and growth goals (Figure 1). Based on the definition of

"strategy" as a set of cause-and-effect relationships among the goals in the four perspectives, the Balanced Scorecard ties together performance, end products, and return on investment (ROI). The ROI provides a method of comparing life-cycle benefits with life-cycle costs. Using the Balanced Scorecard approach, weights are applied to the computed values, and the results are ranked.

Additional information about the Tri-Service FWGs is available on the Internet at <http://tsc.wes.army.mil/contacts/groups/>.

<sup>1</sup> Robert S. Kaplan and David P. Norton, 1996, *The Balanced Scorecard*, Harvard Business School Press, Cambridge, MA.

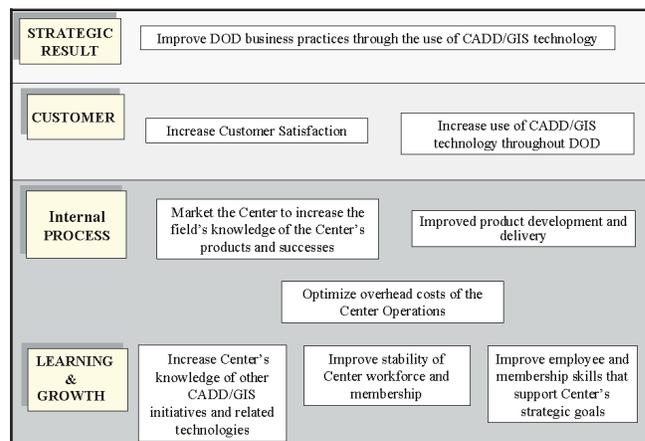


Figure 1. The Tri-Service CADD/GIS Technology Center's Balanced Scorecard

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

# Setting Goals and Measuring Success with the Balanced Scorecard

by Lee Byrne, Technology Transfer Specialist,  
and Harold Smith, Chief, Tri-Service CADD/GIS Technology Center

Traditionally the business world measures success in strict financial terms; i.e., the profit a corporation earns within a given time. Realizing the restrictiveness of this viewpoint, in 1990 representatives from a dozen organizations devised a model for measuring their companies' performances that encompassed more than financial indicators. Designated the Balanced Scorecard (BSC), this unique approach was originally geared to the private sector, but with its built-in flexibility and long-range capabilities, an increasing number of federal managers have found it offers equal benefits to the government. In response to a direction from its Executive Steering Group (ESG) to build a revised plan based on measurable results, the Tri-Service CADD/GIS Technology Center utilized the BSC approach. The resulting strategic plan is given in Table 1.

The framework for a corporate BSC is presented in the format of four "perspectives": financial, customer, internal process, and learning and growth (Wise 1997). The first of these, the financial perspective, has limited applicability in the government arena and in this context is labeled "strategic results." These four perspectives are used to develop questions that serve to further define strategic goals — usually two to five. Each goal is accompanied by a performance measure that certifies whether or not the goal has been accomplished; e.g., for customer perspective, a goal may be to increase customer satisfaction, and the measure for this goal might be measured in the percentage of repeat customers. Only measurable goals can be included on the BSC, and the scorecard is "balanced" only when goals and measures are designated for all four perspectives. For the business world, this means that short-term goals cannot become the "end all." For the government, this means that long-term goals have a greater chance of being fulfilled.

From another consideration, the composition of the BSC ensures balance by providing both external and internal indicators of performance; i.e., measures that reflect reactions to the organization and those that reflect actions from within the organization. Strategic results and customer measures are both external, or "lagging," indicators in that they

relate responses from outside the organization. These responses provide feedback to the organization "after the fact" as to the success of a product, process, or service. Internal process and learning and growth measures are internal, or "leading," indicators that provide ongoing feedback from within the organization as to how well a product, process, or service is being accomplished.

Another function of the four perspectives is to define the strategic plan. Kaplan and Norton (1996) define "strategy" as "a set of hypotheses about cause and effect" that forms the basis for success. Three links connect the four perspectives in a cause-and-effect relationship: the customer perspective links to strategic results (satisfied customers tend to be repeat clients), the internal process is linked to customer perspectives (high-quality products and/or services build satisfied customers), and the learning and growth perspective is linked to the internal process (well-trained employees deliver high-quality products, etc.). Thus, a chain of events is set in motion, building success within and between the different perspectives, while the performance measures allow for continuous analysis of targeted processes. Figure 2 illustrates this cause-and-effect relationship in the Center's BSC.

The BSC approach can benefit a federal organization by providing the framework for development of a strategic plan to accomplish its mission, a methodology for determining measurable goals, and the capability of obtaining feedback on whether or not goals are being met at any point in time. According to Wise (1997), federal managers will find that the BSC is an effective tool in strategy management — a tool that will help them refine the strategic vision of their agency and the means to achieve it.

## References

- Kaplan, R.S., and Norton, D.P. (1996). *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press, Cambridge, MA.
- Wise, R.I. (1997). "The Balanced Scorecard Approach to Strategy Management," *The Public Manager*, 47-50.

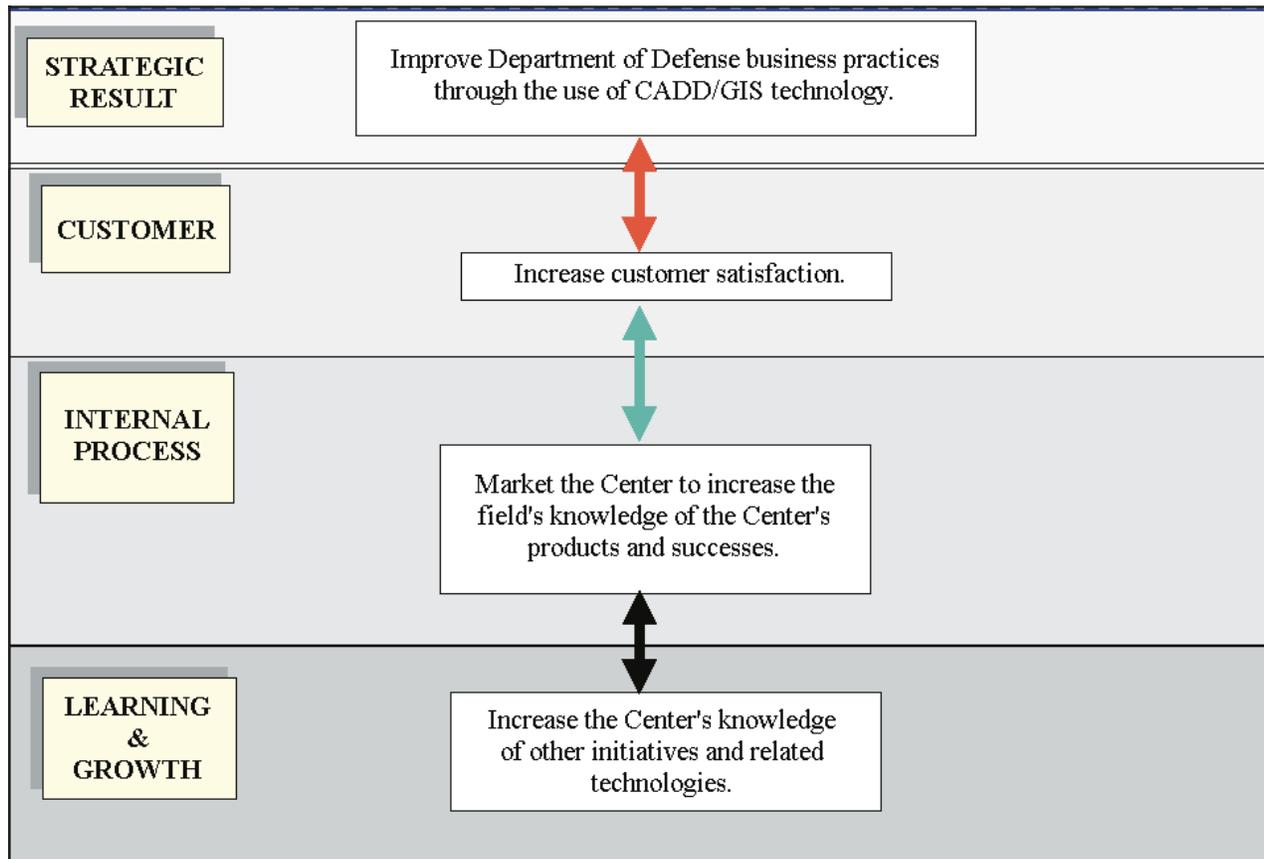
*The Tri-Service Center is dedicated to fostering the application of computer-aided design and drafting (CADD) and geographic information system (GIS) technologies for facility life-cycle efforts throughout the Army, Navy, and Air Force. The CADD/GIS Bulletin is published by the Tri-Service CADD/GIS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

**Table 1. Tri-Service Strategic Goals, Measures, and Operational Definitions**

<b>Strategic Result Goal: How will the larger community be different?</b>		
Goal No. SR-1	Improve Department of Defense (DoD) business practices through the use of CADD/GIS technology.	
	Measure SR-1	Annual ROI realized from Center's annual work plan.
	Operational Definition	Annual ROI is defined as the benefit/cost ratio of the Center's ESG approved annual work plan. The numerator of the ratio is the net present value of life-cycle benefits of the work plan. The denominator is the life-cycle cost of the work plan. The life-cycle payback is 5 years. Reimbursable work is not included in the formula.
<b>Customer Goals: How will customers be different?</b>		
Goal No. C-1	Increase customer satisfaction.	
	Measure C-1	Positive customer feedback.
	Operational Definition	Percent of positive customer feedback is defined as the number of positive feedback forms received and logged in by the Center divided by the total number of feedback forms received from customers. The percentage will be calculated at the end of each quarter in the fiscal year (FY).
Goal No. C-2	Increase use of CADD/GIS technology throughout DoD.	
	Measure C-2A	Number of customers using Center standards.
	Operational Definition	A Tri-Service standard (not Details) means the Tri-Service Spatial Data Standards (TSSDS), Architectural, Engineering, and Construction (A/E/C) CADD Standards, or Tri-Service Facility Management (FM) Standards. Use of a standard is defined as producing products or services using a standard or requiring contractors to produce products or services using a standard. Evidence of use is a positive response to an annual random survey of DoD components.
	Measure C-2B	Number of Center products in use (excluding Center standards).
	Operational Definition	Center products are those that have been approved and funded by the annual work plan. Use of a Center product is defined as producing deliverables or requiring contractors to produce deliverables using a Center product. Evidence of use is a positive response to an annual random survey of DoD components.
<b>Internal Process Goals: How will service delivery be different?</b>		
Goal No. IP-1	Market the Center to increase the field's knowledge of the Center's products and successes.	
	Measure IP-1	Number of productive contacts with prospective DoD customers.
	Operational Definition	A productive contact by Center/Membership is one that results in a sharing of information about the Center's products and successes. The number of contacts will be measured quarterly.
Goal No. IP-2	Improve product development and delivery.	
	Measure IP-2A	Percentage of products delivered on schedule.
	Operational Definition	Delivering on schedule is defined as placing the completed (90 percent) product on the Center's homepage on or before the scheduled delivery date in the project plan, unless scheduled changes are approved by the FTAG. The percentage of products delivered on schedule each year will be calculated as the number of products completed on or before the schedule date divided by the total number of products.
	Measure IP-2B	Percentage of products with associated training.
	Operational Definition	Associated training is defined as classroom instruction, videos, tutorials, manuals, etc. The percentage will be calculated quarterly.
	Measure IP-2C	Number of customer contacts completed by the Center after a product is delivered.
	Operational Definition	A customer contact is defined as a follow-up telephone call or visit initiated by Center personnel in order to obtain feedback regarding a delivered product. The contact is made 3 or 4 months after delivery and is logged by the Center. The total number of contacts will be determined on a quarterly basis.
Goal No. IP-3	Optimize overhead costs of Center operations.	
	Measure IP-3	Center's overhead as a percentage of total budget.
	Operational Definition	Overhead costs are the dollar value of those Center, FWG, FTAG, Executive Working Group (EWG), and ESG expenditures that cannot be appropriately charged directly to a specific approved project account and are instead charged to an overhead account. The total dollar value of overhead accounts will be determined annually from Center records.
<i>(Continued)</i>		

**Table 1. (Concluded)**

Learning and Growth Goals: How will the Tri-Service Center staff and support systems be different?		
Goal No. LG-1	Increase Center's knowledge of other CADD/GIS initiatives and related technologies.	
	Measure LG-1	Number of exposures to non-Center initiatives.
	Operational Definition	An exposure to non-Center initiatives or related technologies is defined as attending an event (such as a meeting, presentation, or demonstration) in which a CADD/GIS activity or related technology not sponsored by the Center is the topic of the event, or by studying documents (such as manuals or reports) related to such CADD/GIS activities or related technologies. The total number of exposures is calculated quarterly for all Center employees.
Goal No. LG-2	Improve stability of Center work force and ESG, EWG, FTAG, and FWG membership.	
	Measure LG-2A	Percentage of turnover.
	Operational Definition	Work force/membership turnover is defined as the number of departures by employees or members. The percentage of such turnovers is calculated by counting the total number of turnovers and dividing by the total number of employees and members. Individual percentages will be calculated quarterly for Center staff/membership.
	Measure LG-2B	Employee/membership satisfaction index.
Goal No. LG-3	Improve employee/membership skills that support the Center's strategic goals.	
	Measure LG-3	Number of training days completed that supports the Center's goals.
Operational Definition	The number of training days is calculated annually by counting the total number of training days reported by employees and their memberships in groups related to the strategic goals.	



**Figure 2. Example of inter-related cause and effect of Goal No. C-1 in the Center's BSC**

# Field Working Group Summaries

by Bryan Perdue, Dr. V. Danushkodi, Stephen Spangler, Nancy Towne,  
Bobby Carpenter, Laurel Gorman, and Milton Richardson

## Military Planning

### Current Membership

**FY 98 Chair:** Randall Mayne, Fort Worth District, TX

**FY 98 Vice-Chair:** Jay Hart, Atlantic Division,  
NAVFACENGCOM, VA (FY 99 Chair)

**Center Facilitator:** Bryan L. Perdue

### Air Force

Roger Blevins, Brooks AFB, TX

Dennis Diamonti, Langley AFB, VA

Jane Goldberg, Vandenberg AFB, CA

### Army

Greg Kuester, Aberdeen Proving Ground, MD  
(FY 99 Vice-Chair)

Gordon Weith, Fort Eustis, HQ TRADOC, VA  
Vacancy

### Corps of Engineers

Ricky Truluck, Savannah District, GA  
Vacancy

### Navy

Robert Henderson, Southwest Division,  
NAVFACENGCOM, CA

Vacancy

The purpose of the Military Planning Field Working Group is to facilitate the exchange of ideas and information within DoD concerning military planning issues (e.g., master/comprehensive planning, remote sensing, satellite imagery) and to facilitate the use of CADD and GIS technology as a tool in accomplishing military planning activities.

The FY 98 projects have included:

(1) *Tri-Service Guidelines for Installation Mapping and Geospatial Data*. This project will provide standard mapping features, scales, and accuracy requirements for the Tri-Services.

(2) *Master/Comprehensive Planning Template for the Tri-Service Spatial Data Standards (TSSDS)*. This effort identifies the mapping feature requirements established by the individual services for their master/comprehensive plans and links these requirements to the TSSDS. The resulting template will allow planners to develop database structures compatible with the TSSDS. A draft spreadsheet of features has been sent to Command Planners for

review. This project is scheduled for completion by 30 September 1999.

(3) *Field Data Gathering Protocol*. This project will result in the development of visual basic protocols for field personnel to gather data from the field and update a database in a Tri-Service Compliant format. This project is scheduled for completion by March 1999.

In addition the Military Planning Field Working Group has sponsored briefings at:

(1) *The Federal Planners Division* (a subdivision of the American Planning Association). This briefing was on the Tri-Service Center and the products and services it provides. An emphasis was placed on the TSSDS.

(2) *ESRI 18th Annual Users Conference*. This workshop focused on implementing a GIS on military installations.

The proposed FY 99 projects include the following:

(1) *Explosive Safety Quantity Distance ARCs*. This program will develop the geometry needed for Installation Planners to determine explosive safety quantity distance zones. A Statement of Work has been written and has been submitted for review and comment. This project is scheduled for completion by 30 December 1998.

(2) *GIS Implementation Guide*. This project will provide a guide for Commanders and GIS Managers in facilitating the implementation of enterprise-wide GIS technology. Additionally, a PROSPECT course will be developed for the target audience. This project is scheduled for completion by 31 May 1999.

(3) *Airfield Obstructions/Waiver*. This project will develop an application for all flying units to manage airfield obstructions on their installations. This project was championed by the Military Planning FWG but has not received funding through the Tri-Service Technology Center. The Air Force has indicated a strong desire to see this proposal funded and will look into obtaining funding from Air Force sources.

## Civil Works

### Current Membership

**FY 98 Chair:** Ron Santos, Baltimore District, MD

**FY 98 Vice-Chair:** Blaise Grden, Walla Walla District, WA (FY 99 Chair)

**Center Facilitator:** Dr. V. Danushkodi

### Members:

Arthur Bennett, Jacksonville District, FL  
Patrick Fitzgerald, Jacksonville District, FL  
Dave Gerczak, Detroit District, MI  
Stephen Long, Philadelphia District, PA  
Steve Meyerholtz, Seattle District, WA  
Ralph Scheid, New Orleans District, LA  
(FY 99 Vice-Chair)  
Terry Theisen, Huntington District, WV  
Steve Williamson, Memphis District, TN  
Mark Wingate, New Orleans District, LA

The purpose of the Civil Works FWG is to provide a forum for civil works issues not covered by other FWGs. This forum is achieved by sharing ideas, problems, and solutions through the application of GIS, CADD, Facility Management (FM), and other related technologies in order to better serve civil works within the U.S. Army Corps of Engineers (USACE), DoD, and the Nation. At the May 1998 Joint EWG/FTAG/FWG meeting in Arlington, TX, the FTAG appointed five new members to the Civil Works FWG. The members developed a vision statement and goals to achieve that vision at the Arlington meeting. The vision is to promote applications of CADD/GIS/FM and other technologies within civil works activities throughout the entire life-cycle process. The goals to achieve that vision are to improve communications within the civil works GIS/CADD/FM community and to ensure civil works is fully addressed within TSSDS.

During FY 98, the Civil Works FWG continued development and refinement of the GIS Planning Project Clearinghouse. This project led to a Web-based tool for sharing information about applying GIS to USACE civil works projects. Additionally, the Survey and Mapping Task Group of the Civil Works FWG continued development of the Survey Engineering Monument Management System (SEMMS). The Survey and Mapping Task Group met at the Tri-Service CADD/GIS Technology Center on 2-3 February 1998 to resolve submitted comments on SEMMS Beta Test Release 1.0 and to add additional features to SEMMS.

A Civil Works Task Group, consisting of members from the Civil Works FWG, met at the Tri-Service CADD/GIS Technology Center on 7-8 April 1998. Members discussed the relevance

of each entity type to civil works projects and flagged the relevant entity types along with the associated attribute tables in the TSSDS. This work will be incorporated as a civil works filter in Release 1.8. The Task Group also developed proposals for new projects such as automation of U.S. Geological Society (USGS) digital data into the TSSDS and an aerial photography management system.

## Design/Construction

### Current Membership

**FY 98 Chair:** Brenda Langheld, Brooks AFB, TX

**FY 98 Vice-Chair:** Marsha Walkup, Kansas City, MO, District (FY 99 Chair)

**Center Facilitators:** Stephen Spangler and Elias Arredondo

### Air Force

Jim Roesch, Grand Forks AFB, ND  
Larry Strother, Tyndall AFB, FL

### Army

David Gutierrez, Fort Sam Houston, TX  
Alex Shum, Fort Sam Houston, TX  
Mike Luhrman, Fort Sam Houston, TX

### Corps of Engineers

Richard Allwes, Pittsburgh District, PA  
Stan Shirk, Omaha District, NE  
Lisa Edwards, Huntington District, WV

### Navy

Gary Body, Southern Division,  
NAVFACENGCOM, SC  
Omar San Antonio, Navy PWC, Norfolk, VA  
Gary Horne, ROICC, Camp Lejeune, NC

The Design FWG has had two meetings over the past fiscal year. Both meetings were primarily concerned with developing projects that the group could champion in FY 99.

One main project the Design FWG championed, the Tri-Service A/E/C CADD Standards, Release 1.7, was released via the Internet on 1 August 1998. The final standard had the input of the entire group in its development. Concurrently, the CADD Details Library grew, with the addition of Civil/Site, Telecommunications, and Structural Details to the Internet site. The Chair of the Design FWG also oversaw the initial development of a queryable Internet plant database for landscape architects. Future efforts will include continuing the update of the A/E/C CADD Standards and adding details to the CADD Details Library.

Based on the sharing of efforts between the Design and Construction FWGs, it was suggested

at the May meeting in Arlington, TX, that the Construction FWG be merged with the Design FWG. The Construction FWG was inactive in FY 98 because of a lack of funded projects. The group consisted of only three members. Because design and construction are so interrelated, merging the groups will be a more efficient use of field resources.

Subsequently this recommendation was approved by the FTAG. How this merger will increase the membership for FY 99 is still uncertain. Regardless, Marsha Walkup will be the chair of the FWG for FY 99 and a Vice-Chair is to be determined.

## Facility Management

### Current Membership

**FY 98 Chair:** Jeff Bryant, Atlantic Division, NAVFACENCOM

**FY 98 Vice-Chair:** Ray Consoli (FY 99 Chair)

**Center Facilitators:** Nancy Towne and Laurel Gorman

### Air Force

Marta Reiner, Shriever AFB, CO (FY 99 Vice-Chair)

Betty Marchbanks, McClellan AFB, CA

### Army

Bob Riley, Fort Carson, CO

Vacancy

### Navy

Bill Hudson, Naval Surface Warfare Center, IN

Vivian Sanchez, Southwest Division,

NAVFACENCOM, PA

The vision of the Facilities Management Field Working Group (FM FWG) is to improve mission readiness and increase effectiveness of infrastructure management by incorporating current FM technology. The revised goals of the group are to develop and facilitate implementation of the Tri-Service Facility Management Standards (TSFMS) and to improve access to FM information through document management technology.

The top projects championed by the group include development of space management entity sets for the TSFMS and the continuation of the Electronic Document Management Systems (EDMS) project. Last year the group developed the report entitled "Government Interoperability Relating to Facilities Management (Focus on Emergency Management Systems)." The intent of the report was to provide the Tri-Service community with a specific example of an organization's effort to develop communications interoperability among numerous local, State, and Federal agencies having

public safety responsibilities. Another FWG-sponsored project, EDMS, focused on EDMS implementation for engineering and FM documents and conveying lessons learned from DoD organizations using EDMS. A draft report of the "Guidelines for EDMS for Facilities Management" was reviewed and directed by the EDMS Task Group that was established by the FM FWG.

In the future, the FWG will work on enhancing the TSFMS to provide, expand, and extend the TSSDS data model and Tri-Service A/E/C CADD Standards into specific areas of installation and facility management for all groups.

## Environmental

### Current Membership

**FY 98 Chair:** Philip Hunter, Brooks AFB, TX

**FY 98 Vice-Chair:** Georgette Myers, Aberdeen Proving Ground, MD

**Center Facilitator:** Bobby Carpenter

### Air Force

Joseph Ceerle, Tinker AFB, OK

Parrish Swearingen, Robins AFB, GA (FY 99 Vice-Chair)

### Army

Burla Martin, Fort Carson, CO

Emmet Gray, Fort Hood, TX

### Corps of Engineers

Sam Bass, Omaha District, NE (FY 99 Chair)

Lawrence Mann, Seattle District, WA

Margarette Martin, Baltimore District, MD

### Navy

William Mullen, Atlantic Division, NAVFACENCOM, VA

Christopher Kyburg, Navy Research and Development Lab, CA

Thomas Stephan, Northern Division, NAVFACENCOM, PA

During 1998, the Environmental Field Working Group (EFWG) met on March 24-25 in San Diego, CA, and on May 18-20 in Arlington, TX. Minutes for these meetings are available on the EFWG's Web site at <http://fwgcom.wes.army.mil/fwg/environ/environ.htm/>.

The EFWG has been instrumental in development of the environmental restoration and compliance areas of the TSSDS. Environmental restoration and compliance activities generate large volumes of data. To be useful, these data must be stored in a database format and structure that facilitate analysis and reporting to environmental

regulatory agencies, higher commands, and the public. An intense effort has been expended by various EFWG members in the development of standardized data structures and information management systems (IMS) for environmental restoration and compliance data. Some of these DoD initiatives and existing environmental restoration and compliance IMS that have contributed to the content of the TSSDS include: (1) Air Force, "Installation Restoration Program Information Management System" (IRPIMS); (2) Alaska District, "Environmental Data Management System" (EDMS); (3) Army Environmental Center (AEC), "Installation Restoration Data Management Information System" (IRDMIS); (4) Southwest Division Naval Facilities Engineering Command, "Navy Environmental Data Transfer Standard" (NEDTS); (5) USACE, "Formerly Used Defense Site (FUDS) Database - Users Guide"; (6) Air Force Aeronautical Systems Center (ASC) and Louisville District, "Draft System Specification for the Technical Data Management System"; (7) Defense Environmental Security Corporate Information Management (DESCIM), "Cleanup" Data Models; and (8) working GISs at military installations (e.g., Edwards AFB and Patuxent River Naval Air Station), Defense Information System Agency's (DISA) Defense Data Dictionary System (DDDS), and Environmental Protection Agency's Envirofacts.

Other past projects of the EFWG have included: (1) the identification of environmental restoration and compliance initiatives and points of contact completed during 1996 and (2) the development of an interactive Environmental GIS Tutorial (which can be viewed from the EFWG Web site), completed in 1997.

The FY 98 EFWG projects focused on: (1) development of Web pages depicting actual case studies and "success" stories for development of an environmental restoration and/or compliance GIS, (2) "Decision Tree" type guidance for planning and implementation of an environmental restoration and compliance related GIS, and (3) the identification of Internet sources of environmental restoration and compliance related data.

## **Natural and Cultural Resources FWG**

### **Current Membership**

**FY 98 Chair:** Ken Bristol, Eglin AFB, FL

**FY 98 Vice-Chair:** Arte Rahn, Fort Stewart, GA  
(FY 99 Chair)

**Center Facilitator:** Laurel Gorman

### **Air Force**

Tracy Kissler, HQ AFCEE, TX

### **Army**

Serdar Ertep, Fort Benning, GA

### **Corps of Engineers**

Lonnie Mettler, Walla Walla District, WA

Tad Britt, Vicksburg District, MS

### **Navy**

Robin Church, Naval Air Station, North Island, CA  
Vacancy

During the joint FTAG/FWG meeting in May 1998, the Natural and Cultural Resources FWG (NCR FWG) redefined its mission and goals in support of new Center strategies for project investment metrics. The revised mission of the NCR FWG is to evaluate issues surrounding and develop tools pertaining to the application of CADD and GIS technologies as they relate to natural and cultural resource management. The resulting goals are to provide tools to end users, focus on natural and cultural resource issues, and keep end users apprised of leading edge GIS technologies.

Since 1995, the NCR FWG has been addressing issues pertaining to the application of CADD, GIS, and remote sensing (RS) technologies for natural and cultural resources management. The members of the NCR FWG meet two to three times annually at military installations around the country to promote a Tri-Service approach to GIS project applications and data standards. Notably, GIS demonstrations and key meeting activities have been held at Falcon AFB; U.S. Air Force Academy; U.S. Army Fort Carson; U.S. Army Fort Lewis; NAVFAC, Southwest Division; Puget Sound Naval Shipyard; Seattle District; and Colorado State University's Center for Ecological Management of Military Lands. Through the efforts of individual members in activities such as the joint-DoD Mojave Desert Ecosystem Initiative project and the U.S. Army Integrated Training Area Management program, the Tri-Service Center has gained new members and TSSDS contributors. Two new members, Chris Hamilton from Fort Benning, GA, and Emilie Luciani from Miramar Marine Corps Base, CA, will be joining the NCR FWG in FY 99. The FY 99 Vice-Chair will be selected at the next meeting.

Each year, the FWG actively manages and contributes to a Center project focusing on the NCR field. A series of reports that give guidance on RS and GIS applications have been written. This year's project, Analysis of Erosion Model for Natural and Cultural Resource Applications, will provide guidance on available soil erosion model and an evaluation of the strengths and weaknesses of all collected models. Additionally, work-flow diagrams will be developed for those models that can be integrated with a GIS. Next year's project will focus on accessing existing sensitive species databases to comply with current Tri-Service/Civil Works GIS databases.

## Systems

### Current Membership

**FY 98 Chair:** Roger Porzig, Jacksonville District, FL

**FY 98 Vice-Chair:** Sharon Shaw, Brooks AFB, TX

**Center Facilitator:** Milton Richardson

### Air Force

David Duffer, Whiteman AFB, MO

### Army

Rebecca Shamblen, Fort Eustis, VA

### Corps of Engineers

Mary Diel, Sacramento District, CA

Dick Farmer, HQ USACE, DC

Wayne Hashiro, Pacific Ocean Division, HA

John Kincaid, Rock Island District, IL

Tom Seiner, Walla Walla District, WA

### Navy

Charles Colwell, Southwest Division,

NAVFACENGCOM, CA (FY 99 Vice-Chair)

The overall mission of the Systems FWG (SFWG) is to promote the integral use of CADD/GIS technology. The goals of the SFWG are to improve communications among the services, review supporting systems and networking technology, disseminate systems and network information to the other Tri-Service FWGs and customers, support the development and application of standards, provide technology support to other FWGs, and support the development and use of the Tri-Service Workspaces (TSWS).

In May 1998, the SFWG participated in the joint EWG/FTAG/FWG meeting held in Arlington, TX. Upcoming projects include establishing monthly conference calls for the SFWG, evaluating Internet desktop video teleconferencing, facilitating the development of and access to "lessons learned" documents, developing an improved FWGCOM Web site, facilitating installation and use of the standard TSWS, and facilitating the development of additional versions of the TSWS. The FY 99 Chair will be selected at the next meeting.

## New Standards Oversight Task Group

*by Toby Wilson, Tri-Service CADD/GIS Technology Center*

With the success and explosive growth of the Tri-Service Center's data standards initiatives, a new task group has been formed to oversee future planning and direction for the standards. The Standards Oversight Task Group (SOTG) will meet a need for interagency coordination and developmental management (on technical integration issues relating to standards) currently lacking within the Center.

The SOTG is chartered to provide oversight for the development of the Center's three standards initiatives: the Tri-Service Spatial Data Standards (TSSDS); the Architectural, Engineering, and Construction (A/E/C) CADD Standards; and the Tri-Service Facility Management Standards (TSFMS). The SOTG will:

- Provide resolution strategies when conflicts arise within the Tri-Service Standards integration efforts.
- Provide input on long-term strategic goals for the standards.
- Prioritize short-term (FY) goals to meet project objectives to include assisting in scheduling releases.
- Coordinate geospatial standards activities among DoD, vendors, and other Federal and national organizations.

The SOTG will help ensure that strategic alliances are selected wisely and offer the greatest benefit to the Center and the Tri-Services. For further information, please contact Harold Smith at [smithh2@ex1.wes.army.mil](mailto:smithh2@ex1.wes.army.mil).

# Field Technical Advisory Group

By

*Lee Byrne, Technology Transfer Specialist,  
Harold Smith, Chief, Tri-Service CADD/GIS Technology Center*

## Current Membership:

**FY 98 Chair:** Bobby Bean, Naval Air Station,  
Patuxent River, MD

**FY 99 Chair:** Randy Lierly, Brooks AFB, TX

**Center Advisor:** Harold Smith

## Air Force

Victoria Williams, Peterson AFB, CO

## Army

Jim Butler, Fort Hood, TX

Deborah Duncan, Fort Carson, CO

## Corps of Engineers

Phil O'Dell, Seattle District, WA

Eugene Tickner, New Orleans District, LA

## Defense Logistics Agency

Thomas M. Karst, Fort Belvoir, VA

## Navy

Carolyn Wilber, HQ NAVFACENCOM, VA

Robert Wood, Naval Construction Battalion  
Center, CA

The Tri-Service CADD/GIS Field Technical Advisory Group (FTAG) provides management-level field guidance to the Center's Executive Working Group (EWG). In this capacity the FTAG reports on the progress of the FWGs to the EWG. In accordance with its charter, the FTAG has the responsibility for establishing, combining, or disestablishing FWGs and directs and monitors

their efforts. The primary objectives of the FTAG are to develop requirements and priorities for the CADD/GIS program, facilitate standardization and integration, and promote the use of CADD/GIS technology.

Some of the activities of the FTAG include: communicating the goals and objectives of the ESG and EWG to the FWGs, recommending an annual work plan and monitoring its execution, identifying the 3-year vision of CADD/GIS technologies, establishing special interest task groups as needed, promoting communications and coordination among the FWGs, lending support to the FWGs in achieving their goals and objectives, establishing and annually reviewing Center metrics, and recruiting and approving FWG members.

FTAG members are appointed by the EWG and serve a maximum of 4 years. The FTAG Chair serves for 1 year with the chairmanship rotating among the Army/USACE, Navy, and Air Force.

Four FTAG meetings were held in FY 98 and are summarized in Table 1. One particular achievement at these meetings was the development and finalizing of the Tri-Service Strategic Plan and Balanced Scorecard. Additional information and updates about the FTAG can be found on the FTAG Web site at <http://fwgcom.wes.army.mil/ftag/>.

**Table 1. Summary of FY 98 FTAG Meetings**

Date	Location	Accomplishments
12-14 January 1998	Tri-Service Center Vicksburg, MS	Developed draft Tri-Service Strategic Plan. Developed a Balanced Scorecard.
18-19 February 1998	Naval Surface Warfare Center Port Hueneme, CA	Reviewed Strategic Plan. Revised Tri-Service mission statement, strategic goals, performance measures, and operational definitions.
18-22 May 1998	Arlington, TX	Met jointly with FWG's and EWG to rank FY 99 proposed projects. Made recommendations pertaining to budget and ROI. Confirmed recommendation to combine design and construction FWGs.
20-24 July 1998	Fort Carson Colorado Springs, CO	Met jointly with EWG. Developed FY 99 work plan for ESG approval.