The U.S. Army Integrated Training Area Management (ITAM) community is geographically dispersed. The Internet provides a mechanism for communication for this community. The ITAM Geographic Information and Services (GI&S) Web Site is used as a delivery mechanism to provide geographic data products and information to the ITAM community from a central place. The information provided includes maps that can be downloaded and printed locally, spatial data, GIS tools, and administrative information (sample statements of work, standards, etc.). Information on the Army's ITAM GIS Regional Support Centers is available as well as a conduit to pass data to and from centers. A valuable service provided is interactive maps, with a focus on ITAM installations.

1.0 Introduction

The U.S. Army Environmental Center (USAEC) is responsible for providing and managing environmental technical support to the Integrated Training Area Management (ITAM) Program in accordance with AR 350-4. Enterprise Geographic Information System (GIS) functions as the foundation support element to provide spatial data and application support for all ITAM components, and to ensure effective mission support.

The ITAM GIS Regional Support Centers (RSCs) provide GIS technical support to 115 installations that encompass 125 installations, sub-installations, and training sites. The Western RSC (WRSC) is located at Colorado State University and the Eastern RSC (ERSC) is located at Fort A.P. Hill, VA. The primary mission of the RSCs is to increase the utility and cost effectiveness of GIS in support of the ITAM Program, its components, and their application.
2.0 Background

In the process of increasing support, the RSCs have developed a specific web site. In the past, the ITAM web site presented GIS information as pages directly integrated into the ITAM web site. The RSCs used this site, in collaboration with other Government agencies, to post information regarding the ITAM GIS program. The newly developed ITAM Geographic Information and Services (GI&S) Web Site has a large content area that specifically targets the ITAM GIS community. The vision of the GI&S web resource is information excellence, focusing on range enterprise GIS solutions by providing GIS and function as a one-stop shop for all ITAM GIS related materials.

Access to the ITAM web site and its components will be controlled through the Army Knowledge Online (AKO) Enterprise Directory Services, the Unclassified-but Sensitive (N) Internet Protocol Router Network (NIPRNET), and Secure World Wide Web protocols. The ITAM GI&S content area adheres to .mil requirements and Department of Defense Information Technology Security Certification and Accreditation Process (DITSCAP) certification. The ITAM GI&S web site uses standard HTML, Cascading Style Sheets (CSS), JavaScript, and similar dynamic page creation functionality used by the ITAM web site. The site will utilize Java Server Pages and Microsoft Access databases for dynamic page functionality.

3.0 Web Site Components

There are several components of the web site with the purpose of providing information about the program, available support, helpful documents and programs, maps, and software tools, and where to obtain more information. The home page contains six tabs to navigate the site. The tabs are: ITAM GI&S Home, Regional Support, Tools, Maps, Training, and Resources. Graphics for each tab are included at the end of this paper.

3.1 ITAM GI&S Home

This component is the first tab to begin navigation of the site. It includes an introduction to the site, overview information on the ITAM GIS program, and links to the following pages:

3.1.1 Announcements Located here are announcements regarding current events, related GIS news, and other Hot Topics that may prove useful to ITAM GIS personnel.

3.1.2 Feature Article This location displays a feature article regarding ITAM GIS related topics.

3.1.3 RSC and ITAM GIS Points of Contact (POC) This location has information on how to contact RSC personnel, the web site developer, and key ITAM GIS personnel.
3.1.4 ITAM Web site This is a link to the ITAM Web site home page which contains much more information regarding the entire ITAM Program.

3.2 Regional Support Center (RSC) Information This component includes an introduction to the RSCs, RSC locations, products and services, details on support levels for installations, how to request support from the RSCs, and user testimonials.

3.2.1 Introduction This gives an introduction to the RSCs and their mission of ensuring GIS capability at all ITAM Installations.

3.2.2 RSC Locations This provides a map of which RSC (East or West) would provide direct support to an ITAM installation depending on geography. Information on how to contact each RSC is displayed here.

3.2.3 Products and Services This indicates products and services available to the whole ITAM community.

3.2.4 Installation Support This indicates the level of support provided by the RSCs dependent on Installation ITAM Category I-IV. There are two levels of support: Full and Partial.

3.2.5 Testimonials Responses by installation staff in regards to RSC support given to them.

3.3 Tools This component contains links to downloadable tools developed by the RSCs and other sources, information on upcoming tools, and a place to submit requests for new tool development.

3.3.1 Downloadable Tools Content on the Surface Danger Tools (SDZ) tool, Military Installation Map Tools and Templates (MIMT), Range Facility Management Support System (RFMSS) import tool, and scripts.

3.3.2 Upcoming Tools Future ITAM GIS developed tools or utilities under construction.

3.3.3 Request Form A location to request that a tool should be developed to assist the ITAM GIS community or an existing tool could use more functionality.

3.4 Maps This component has maps created by RSCs and installation ITAM GIS personnel. Since information on these maps can be deemed sensitive, the interactive mapper will require additional access control in addition to AKO
3.4.1 ITAM GIS Interactive Mapper This site will take the viewer to the Military Activity GIS Interface Computer (MAGIC) application, an Internet Map Server (IMS) application designed to serve GIS interactive maps over the World Wide Web. MAGIC is intended to map installation geographic and military features. Users can create and print their own maps using feature data sets for their installation. Other RSC map services that are regional or global may be available on this page. In addition, there may be a link to other useful map sites.

3.4.2 ITAM GIS Map Gallery This section includes a repository for ITAM GIS developed maps to include Installation Specials developed by the RSCs and user-contributed map products. A standard operating procedure (SOP) describing how to submit maps to the GI&S Map Gallery is in development and will be posted on this site.

These map products will be static and typically be in Adobe Portable Document Format (PDF). Additional options for download or requests for delivery through CDROM or additional means are available. An additional level of security is required for this section of GI&S content for select products containing sensitive data.

3.5 Training This section contains two areas: ITAM/NGB GIS sponsored training courses and RSC training curriculum materials.

3.5.1 ITAM/NGB GIS Training ITAM and the National Guard Bureau (NGB) currently offer a joint GIS training program. Courses reflect the skills necessary to work in the evolving Army GIS environment. Courses are at NO COST to the installation other than temporary duty (TDY) pay. New courses and updates are made continuously.

3.5.2 RSC Training Curriculum The RSCs have developed an ITAM GIS Training Curriculum and materials to assist installation GIS personnel. The training curriculum and material are based on two modules:

1. Overview of the ITAM GIS Program goals and ITAM community to include committees, working groups, workshops, and ITAM Bridge Articles.

2. ITAM GIS geospatial standards for development, map making, reporting, and web site information.

There are also slides from conferences, indoctrination documents, SOPs, PowerPoint Presentations, and additional relevant training documents posted here.
3.6 ITAM GIS Resources  This section includes a number of communication tools including descriptions and links to ListServers, a GIS Forum, POC lists, and a user interaction area.

3.6.1 ITAM GIS User Working Group(UWG) The primary mission of the ITAM GIS UWG is to ensure the ITAM GIS program supports the Army training and testing mission.

3.6.2 ListServer ListServers are programs that automatically send email to a list of subscribers.

3.6.3 ITAM GIS Forum This forum is for posting GIS related questions.

3.6.4 RSC and ITAM GIS Points of Contact This location has information on how to contact RSC personnel, the web site developer, and key ITAM GIS personnel.

3.6.5 Contracting Support This area contains standard contract language, policies, employee qualifications, and other helpful items.

3.6.6 ITAM GIS Documents/Standards/Policies This section contains links to and downloads of pertinent documents, regulations, and memos regarding the ITAM GIS program. It also reviews polices regarding submission of maps, software tools, and using the interactive mapper.

3.7 ITAM GI&S Announcements This section appears on the left side of each navigated page and includes announcements, news, current events, and hot topics that relate to the ITAM GIS program.
Welcome to the Integrated Training Area Management (ITAM) Geographic Information and Services (GIS) web site. ITAM GIS supports the Army military training and testing mission by improving the flow of geographic information within the ITAM/SEP community.

GIS is the foundational support element of the ITAM program. ITAM GIS provides information dominance to ensure ITAM provides effective mission support. Information dominance is supported by the ITAM GIS Program through providing the best, most accurate, complete data through user-friendly GIS products and applications, provided by the best trained GIS technicians in the Army. This GIS support includes development of GIS databases meeting Core ITAM GIS data requirements, establishment of central GIS product and applications support to ITAM and other installation mission support offices, and adherence to Federal, DoD and Army spatial data standards. The ITAM GIS program participates in installation and Army Enterprise GIS initiatives to eliminate redundancies in data development and applications, and reduce costs for these items to the ITAM program.
Regional Support Centers (RSC) Information:

Introduction

ITAM GIS RSCs were created to ensure a GIS capability exists at all ITAM installations, and gain efficiencies through standardization and geographically centralized support. The USAEC serves as the central point of contract for the ITAM GIS RSC program.

One of the USAEC ITAM Team’s primary missions is management and oversight of the RSCs. The USAEC is responsible for RSC contracting and contract management, identifying installation GIS support requirements, validating requirements through NACOM’s and Department of the Army, and incorporating requirements into RSC operations. RSC operations require contract development and monitoring, and resourcing, installation Support Agreements for facilities, equipment and supplies in support of RSC’s.

Mission

The mission of ITAM GIS Regional Support Centers is to increase the utility and cost effectiveness of GIS in support of the ITAM Program, its components (LCTA, URAM, EA and TR), and their application through the development of standardized products and analyses.
### Military Installation Map Tools and Templates (MIMT)

**File Name:**
**File Size:**
**Developer:** AEC/RSC
**Description:**
MIM Template: ArcGIS/ArcMap template at 1:50,000 Military Installation Map (MIM)
MIM Style Sheet: Symbol set for Military features commonly affiliated with MIMs.
Map Surround Elements: Tools utilized with the MIM template for development of common military map surround elements. The map surround elements include a north arrow, slope guide, SI conversion graph, military grid reference system, and projection information template.
**Release Date:** August 2003
**Software Requirements:** ESRI ArcGIS/ArcMap
**Intended Use:** GIS Technicians / Military Installations
**Certification:** None

### Noise

**File Name:**
**File Size:**
**Developer:** AEC/RSC (G/1/S Inc. Alabama, GA)
**Description:** Development of noise zones as GIS vector data, based from military firing range activity.
**Release Date:** TBD
**Software Requirements:** ESRI ArcGIS/ArcMap
**Intended Use:** GIS Technicians / Military Installations
**Certification:** TBD

### RFMSS Database Conversion Tool

**File Name:**
**File Size:**
**Developer:** AEC/RSC
**Description:** Converting and reformating existing GIS files into RFMSS data layers
**Release Date:** Not intended for release
**Software Requirements:** ESRI ArcGIS
**Intended Use:** GIS Technicians / Military Installations
**Certification:** None

### Surface Danger Zone (SDZ)
ITAM GIS Maps:

Map Gallery

Downloadable PDFs of RSC developed, as well as other contributed, map products suitable for local printing can be found here. The Map Gallery is divided into two sections; installation maps and regional maps.

ITAM Interactive Mapper

The ITAM Interactive Mapper offers the following products; Army Atlas, Active / Inactive Range Inventory mapping services, and installation mapping services.

▲ Return to Top of Page
MAGIC IMS Application
ITAM GIS Training:

**Welcome to the ITAM NGB GIS Training Website**

National Guard Bureau and ITAM currently offer a joint GIS training program. Courses reflect the skills necessary to work in the evolving GIS environment in the Army.

Courses are at NO COST to you or your installation other than TDY. [Click here](#) to read about the courses and intended audience. Check back frequently! New courses and updates are being made continuously.

Upon registration, your application is reviewed by NGB/ITAM for approval. Priority is given to those who best meet the target audience for each course.

To register for a course please click [Schedules & Registration](#) and fill out the online registration form. Don’t forget to press the [Register](#) button. You will be notified when your application has been approved via Email. Register soon, as these courses will fill up quickly.

Once you have completed a class, please complete the [Training Evaluation Form](#). Return the form to [ITAM GIS](#).

This site best viewed with [Microsoft Internet Explorer](#).
Conclusion

The ITAM GI&S Web site was designed to improve the knowledge of ITAM GIS support, maps, products, policies and more. The site supplies information that will assist GIS users in accomplishing their daily tasks. Numerous components on the site are available for the user to browse and find what they are looking for. Since this web site is directly associated with the ITAM Home Page there is an opportunity to tap into much more information about the ITAM program.
Works Cited
