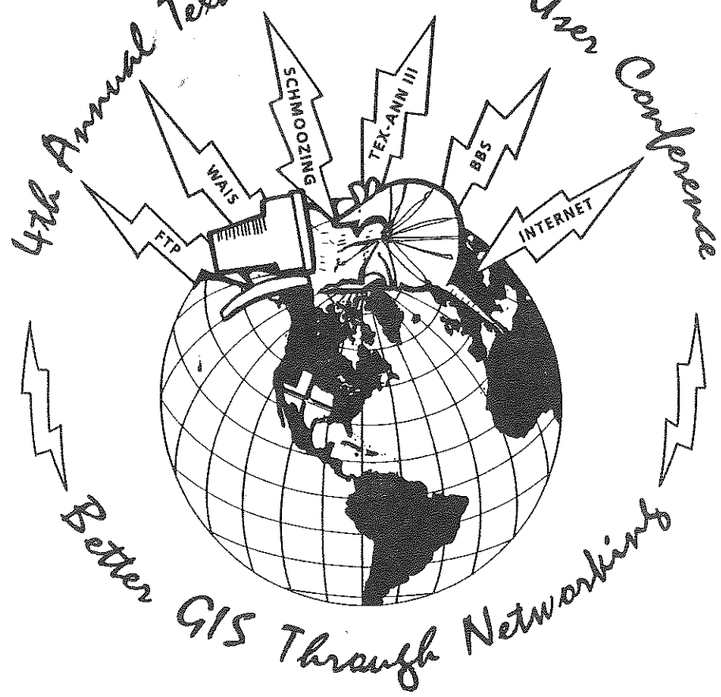
Texas ARC/INFO User Group



Fourth Annual Conference

October 25-27, 1993

adam's mark
houston

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September 1, 1993

Dear Texas ARC/INFO Users:

It is time once again for the annual Texas ARC/INFO User Group Conference. I will have the honor of attending your conference as I did last year in San Antonio (and because I am a former Texan). I look forward to meeting and visiting with you in Houston October 25, 1993, to October 27, 1993.

As an ARC/INFO user, the Texas ARC/INFO User Group Conference is perhaps the best investment you can make in your GIS. It provides an opportunity for you to learn how others make GIS successful, as well as to share your own knowledge and experience. Plus, you'll meet your peers - people who work every day to make GIS a success within their organizations. Users who attend the conference come back in subsequent years because they understand the value of this time together.

As an ESRI employee, I am a member of the Software Development and Release Team in Redlands, California. Our goal is to deliver high-quality, usable GIS software to you. Most of us on the ESRI Software Development team are GIS specialists just like you. Thus, we are very interested in what you do. We want to know more about your needs as well as your accomplishments. We want to learn more about how you use GISs like ARC/INFO, ArcView, and ArcCAD, what machines you use, and what you like and don't like about our software. We want to find ways to improve the products we deliver to you.

We look forward to the various Regional ARC/INFO User Group meetings so we can gain first-hand knowledge and experience of what you do and how you do it. Last year in San Antonio, I gained insight into the GIS issues, applications, and interests that are important to Texans. I hope to do the same again this year.

I look forward to meeting you in Houston!

Warm regards,

Clint Brown

Clint Brown
Manager, ARC/INFO Software Products

CB/dd

adam's mark
houston

The Adam's Mark Hotel extends a warm welcome to the

TEXAS ARC/INFO USERS GROUP
4TH ANNUAL CONVENTION PARTICIPANTS

We know you have a full convention agenda while you are here, but in your free time we encourage you to take advantage of the Adam's Marks great restaurants, fun entertainment establishments and the other guest services our hotel has to offer.

RESTAURANTS:

PANTRY ON THE PLAZA

Our family restaurant features selections for the whole family, including our "Corpus Christo" sandwich and house specialty "Chicken Tortilla Soup." Whether it's a Breakfast Buffet, Luncheon Pasta Bar, or a late night snack, Pantry on the Plaza will meet your needs.

MARKER

Join us for a fine dining experience amidst the quiet elegance of our Library setting. Feast on our succulent live Maine Lobster or watch as our waiters prepare your Caesar Salad tableside. Please visit the Marker Restaurant; our mark of excellence.

ENTERTAINMENT:

QUINCY'S

Quincy's, our high energy nightclub, features live entertainment Monday through Saturday and free daily happy hour buffets during the week. In addition, our D.J.'s are playing the hits you love to dance to. If you are going to step out, step into Quincy's where the night begins in Houston.

PLAYERS

The Sports and Game Bar of the 90's, featuring our lunch time Deli Buffet and your favorite sporting event. Enjoy the vast array of video games while viewing sports from around the world.

FOUNTAIN COURT

Come have a drink in our atrium lobby bar while you relax and people watch.

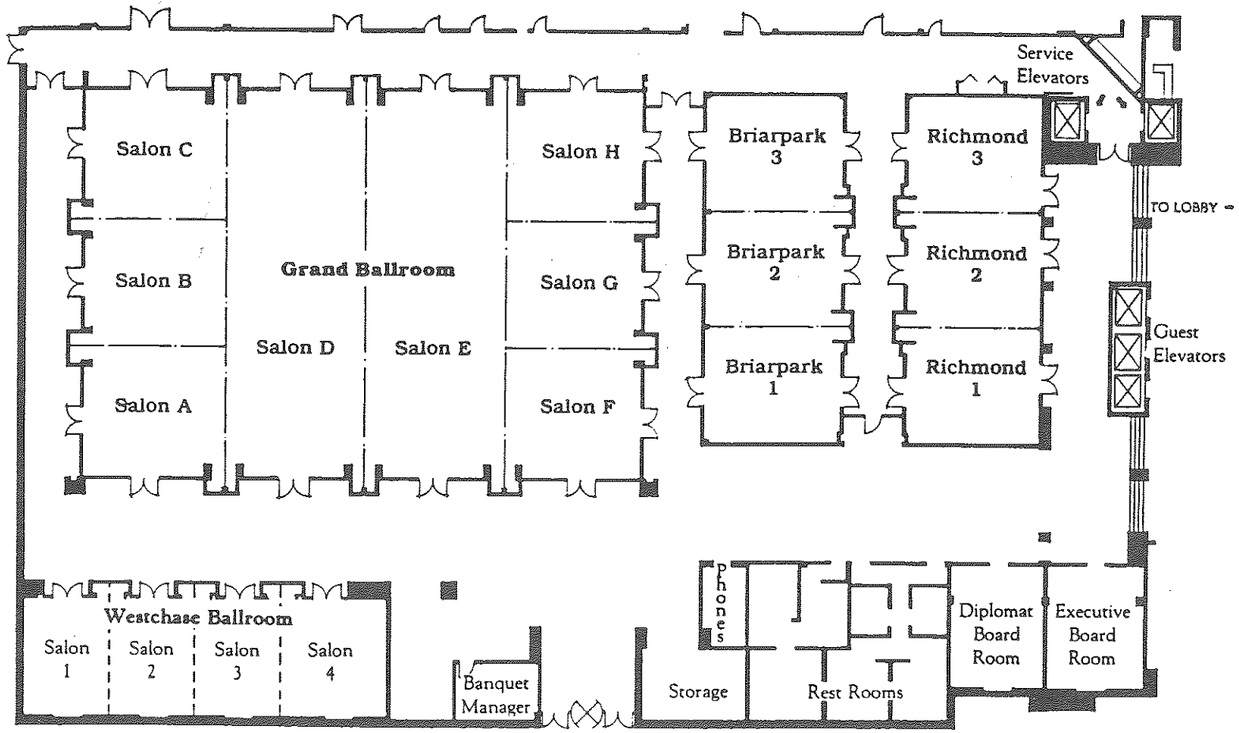
OTHER GUEST SERVICES

*Take a relaxing swim or have a stimulating workout in our indoor/outdoor pool and fully equipped health club.
Hours 6:00 a.m.-11:00 p.m.(Monday-Friday)
7:00 a.m.-11:00 p.m. (Saturday & Sunday)

*Come see the uniquely different items in our gift shop.
Hours 7:00 a.m.-10:00 p.m. (Monday-Saturday)
7:00 a.m.-9:00 p.m. (Sunday)

*Take care of your business needs in our full-service Business Center

FUNCTION SPACE AT THE ADAM'S MARK HOUSTON



A separate entrance for the meeting rooms

TAIUG 1992-1993 Executive Committee Members

President: David Dignum
Jefferson County Appraisal District

Vice President: Leann Gilley
The University of Texas at Tyler

Secretary: Carolyn Meanley
The University of Houston

Treasurer: Bobby Boykin
Washington County Appraisal District

Conference Coordinator: J. Scott Sires
Texas State Comptroller's Office

Publications Editor: Homer Riley
Tracor Applied Sciences, Inc.

Membership Coordinator: Tony Smith
City of Denton

ARCMail Coordinator: Jim Hoffman
Database Systems International

ESRI Liaison: David Allen
City of Euless

Conference Committee

Conference Coordinator: J. Scott Sires
David Dignum Leann Gilley Homer Riley

Special Thanks To The Following Organizations

Texas State Comptroller's Office
Environmental Systems Research Institute
Jefferson County Appraisal District
Unocal
Houston Council of Governments
Tracor Applied Sciences, Inc.
The University of Texas at Tyler
The City of Denton
Turner, Collie and Braden
Fairfield Industries

New Attendee Orientation

This year will be the first for many of the first to attend a Texas Arc/Info User Group Conference. We invite you to make full use of the conference and attend as many of the presentations as possible. Please attend the conference business meeting if you can as there will be an election for certain officers of the executive committee.

We urge you to take full advantage of the facilities offered by the many vendors who are exhibiting at this conference. Salon D of the Adam's Mark is reserved for the vendors and they will have trained personnel in their exhibit booths to answer your questions about the products and services they offer.

Please plan to attend the poster and AML/SML exhibit on Tuesday night. Each person will be given a ballot to vote on the various entry categories. Your votes will determine the prize winners for the exhibits.

If you have or need any assistance please feel free to contact one of the conference staff or the TAIUG officers. We will also have a communications central area in the Ballroom Foyer of the hotel. This area will have a message board, announcement board, needs box, and suggestion box. The needs box will offer you an opportunity express concerns and ask questions about ESRI products. The forms in this box will be gathered and reviewed by ESRI staff and responses will be made to you during the general session meeting on Wednesday afternoon.

Conference Theme

One of the best and most exciting things about the world of GIS is also the biggest challenge. We work in a technological environment that is fast paced and changing almost on a daily basis. There are hardware advancements, software enhancements and changes in techniques that we have the pleasure of interacting with those advances in our daily work. However, as our field moves forward, we must make an effort to keep up. We must stay abreast of the literature, master the new skills and perhaps most importantly, communicate with each other as GIS professionals.

This conference is about honing those networking skills that allow us allow to stay atop the crest of the GIS wave. We have all come from diverse backgrounds and have much to offer each other in terms of new systems of thought, new data, new ways of relating GIS to other fields as well as entirely new skills.

It is the hope of the conference directors that this Fourth Annual Texas Arc/Info Users' Conference will facilitate the personal and professional links that strengthen the GIS network in Texas and create a more solid, progressive and diverse GIS environment from which we all will benefit.

Conference Information

Conference Meals and Snacks

Those people taking part in the GIS facilities tour on Monday will receive lunch at Turner, Collie and Braden.

Other snacks and breaks are provided to all attendees on the following schedule:

Monday 6:00 pm to 7:00 pm	Crudite, cheeses, tea, coffee and sodas	Westchase Ballroom
Tuesday 7:30 am to 8:30 am	Deluxe Continental Breakfast	Ballroom Foyer
Tuesday 10:45 am to 11:00 am	Coffee, tea and lemonade	Ballroom Foyer
Tuesday 12:00 pm to 1:00 pm	Boxed lunch	Ballroom Foyer
Tuesday 3:15 pm to 4:00 pm	Sodas, coffee and lemonade	Salon D
Tuesday 7:00 pm to 9:00 pm	Dinner Reception & Cash Bar	Salons E, F, G & H
Wednesday 7:00 am to 8:00 am	Deluxe Continental Breakfast	Ballroom Foyer
Wednesday 10:15 am to 10:45 am	Coffee, tea and lemonade	Ballroom Foyer
Wednesday 12:00 pm to 1:00 pm	Boxed lunch	Ballroom Foyer
Wednesday 3:30 pm to 4:00 pm	Sodas, coffee and lemonade	Ballroom Foyer

For those people attendee the training classes, the following schedule of refreshments will be provided:

Thursday 10:00 am to 10:15 am	Coffee, fruit juices, sodas croissants, danish and banana nut bread	Each training suite
Friday 10:00 am to 10:15 am	Coffee, fruit juices, sodas croissants, danish and banana nut bread	Each training suite

The Tuesday Evening Vendor Open House/Poster Exhibit/Dance

On Tuesday evening all the posters and macros brought to the conference will be displayed in Salon E of the Grand Ballroom. You are urged to attend and vote for the posters and macros you like best. Awards will be made to the authors of these works based on your votes. During the same time the vendors will be hosting an open house in Salon D of the Grand Ballroom. The vendor open house will allow you to see the exhibited software at a little more leisurely pace than during the breaks between the conference breakout sessions. While you enjoy these two events, you may also partake of the 1950's style dinner provided and listen to the 1950's classic music. At 9:00 pm, when the Vendor/Poster event ends, the Dance begins with the music shifting gears to more current classics accompanied by a laser light show. Enjoy!

Conference Information

Public Service Day

Once again this year the TAIUG is sponsoring a Public Service Day in conjunction with the conference. On Thursday morning and afternoon, 3 groups of students from 2 Houston area districts will be invited to the hotel for briefing and orientation on GIS. Students from Katy ISD and Southbranch ISD will visit the conference. These students and their instructors

Tour Vendor Area/User Community Get Together (UCGT)

In your conference guide daily events preview you will notice several references to "Tour Vendor Areas" and "UCGT." These are your opportunities during the days schedules activities to network with other users and to visit the vendor area in Salon D of the Grand Ballroom. Of course you are also encouraged to to get together with your colleagues outside these schedules times. The opportunity to meet and network with other GIS users is one of the prime benefits of the conference. You may also wish to use the information board in the Ballroom Foyer to communicate specific needs or info to other users, ESRI personnel or TAIUG officers.

Daily Events Preview

Monday, October 25

Conference Registration	7:00 am to 9:00 pm	Banquet Office Foyer
Tour Bus Loads	8:00 am to 8:15 am	Convention Entrance
Bus departs hotel	8:15 am	
Tour Unocal	8:45 am to 9:45 am	
Tour Turner, Collie & Braden	10:15 am to 11:15 am	
Hot Lunch!	11:15 am to 12:30 pm	Turner, Collie & Braden facilities
Tour Berger & Co.	12:45 pm to 1:45 pm	
Tour City of Houston/client of RJN Environmental	2:15 pm to 3:15 pm	
Tour Houston-Galveston Area Council of Governments	3:30 pm to 4:30 pm	
Bus returns to hotel	5:00 pm	
Reception	6:00 pm to 7:00 pm	Westchase Ballroom
Opening Session/Keynote address	7:00 pm to 9:00 pm	Salon A,B, & C

Daily Events Preview

Tuesday, October 26

Conference registration and information	7:00 am to 9:00 pm	Banquet office foyer
Deluxe Continental Breakfast	7:30 am to 8:30 am	Ballroom Foyer
Breakout session 1	8:30 am to 9:30 am	Salon A, B, C Westchase 1-2
Break	9:30 am to 9:45 am	
Breakout session 2	9:45 am to 10:45 am	Salon A, B, C Westchase 1-2
Beverage Break	10:45 am to 11:00 am	Ballroom Foyer
Breakout session 3	11:00 am to 12:00 pm	Salon A, B, C Westchase 1-2
Boxed lunch	12:00 pm to 1:00 pm	Ballroom Foyer
Breakout session 4	1:00 pm to 2:00 pm	Salon A, B, C Westchase 1-2
Break	2:00 pm to 2:15 pm	
Breakout session 5	2:15 pm to 3:15 pm	Salon A, B, C Westchase 1-2
Beverage break	3:15 pm to 4:00 pm	Salon D
Special Interest Group Meetings	4:00 pm to 6:00 pm	Salon A, B, C Westchase 1-2
Vendor Night/Poster/AML Exhibits	7:00 pm to 9:00 pm	Salons D, E, F, G, & H
Dance and Enjoy Yourself!!!!!!!!!	9:00 pm to 11:00 pm	Salons E, F, G & H

Daily Events Preview

Wednesday, October 27

Deluxe Continental Breakfast	7:00 am to 8:00 am	Ballroom Foyer
Breakout session 6	8:00 am to 9:00 am	Salon A, B, C Westchase 1-2
Break	9:00 am to 9:15 am	
Breakout session 7	9:15 am to 10:15 am	Salon A, B, C Westchase 1-2
Beverage Break	10:15 am to 10:45 am	Ballroom Foyer
Roundtable Discussions	10:45 am to 11:45 am	Salons A, B & C
Boxed Lunch	11:45 am to 12:30 pm	Ballroom Foyer
University Competition	12:30 pm to 3:30 pm	Salon A, B & C
Beverage Break	3:30 pm to 4:00 pm	Ballroom Foyer
Wrap Up Business Meeting	4:00 pm to 5:30 pm	Salon A, B & C

University Focus

12:30 pm to 3:30 pm Wednesday
Salon A, B & C

TAIUG conference, Houston, Texas

University Student Competition

1. University of Texas at Tyler:
   Claire Anderson
   Maxine Coppinger
   Patrick Whitham

   "GIS as a Facilities Management Tool"

   Lori Sullivan
   Pamela Kersh
   "Managing Corporate Liability Using Contingency Plans and GIS"

2. Texas A & M:
   Esther Osborn
   "The SIGMA (Site Inventory and Garden Management System)"

3. University of Texas at Austin:
   Nancy Charbeneau
   "Using GIS in an Integrative Ecological Approach to Landscape Planning"

4. Stephen F. Austin State University:
   Michael Clark
   "Integration of GIS and Remote Sensing to a Regional Geological Analysis of the Llano Uplift, Texas"

   Xiangwen Liu, R.M. Whiting, D.L. McDonalds
   "GIS Application on Wildlife Studies: Analysis of Northern Bobwhite Habitat Relationships"

   Raymond Sims, Rick Turner
   "Developing a Master Plan for a New State Park Using Arc/Info"

   Jeffrey Williams
   "GIS and the Protection of the Archaeological Landscape: Fort Boggy State Park, Texas: A Pilot Project"

Presentation Schedule

Tuesday session 1 8:30 am - 9:30 am

The Global Positioning System and Its Control Survey Applications for Geographic Information Systems

Stephen W. Swarts — **Salon A**

The Global Positioning System (GPS) has become the choice for a myriad of positioning requirements due to its speed accuracy and economic savings. GPS has found especially wide acceptance as the foundation upon which to base control networks for Geographic Informations Systems.

The material presented will illustrate current GPS control survey applications for emerging GIS programs at the statewide, regional, county, city, and local levels. Also provided will be a brief overview of the GPS system, its history, present status, planned final configuration and future applications.

Steve Swarts is manager of GPS Survey Service Sales for Western Geophysical Company in Houston. Western is a pioneer in GPS survey operations, performing GPS control surveys continuously since 1984, longer than any other presently operating service company.

Steve majored in Business Administration at William & Mary College in Williamsburg, Virginia, and is a licensed Land Surveyor in 10 states.

The Pilot Study : Geocoding Applications for Rural Addressing

Tim Nolan — **Salon C**

The pilot study is a major component in testing a database design and final GIS implementation. The pilot study allows the designer to implement a GIS course to a smaller portion of the database. Collin County GIS executed a geocoding pilot study over a four month period. The study itself consisted of ADDRESSMATCHing a list of structure addresses in the northwest quadrant of the county to coinciding block ranges on the centerline coverage. This paper will describe the study's procedure as well as its pitfalls. Did the applications developed in the pilot study work ? What obstacles had to be overcome ? Do any changes have to be made before full implementation takes place ?

Tim Nolan has a bachelor's degree in Geography from the University of North Texas. He has five years of experience working with the GIS environment. Tim joined Collin County in 1992 as a GIS Database Administrator.

Presentation Schedule

Tuesday Session 1 8:30 am - 9:30 am

"Internet: What? Why? How?"

Ray Sanders

Westchase 1-2

This beginnner workshop introduces the internet and how the network is implemented. Basic concepts will be presented that will enable the potential new user to make the decision to join the network and how to go about accomplishing this task. Keywords: e-mail, addressing, domain, acceptable use, "netiquete."

Ray spent almost 25 years with IBM befofre taking early retirement in mid 1992. The last five years with IBM were in the GIS field, including ARC/INFO. Followng his departure from IBM, Ray worked as a GIS consultant and instructor under the name of Sanders Instructional. He joined the City of League City in April 1993 as a GIS specialist. Ray is a doctoral student at the University of Houston and teaches an evening graduate course in instructional technology. Recently, Ray was elected vice president (president elect) of the Houston-Galveston Area URISA chapter.

Presentation Schedule

Tuesday Session 2 9:45 am - 10:45 am

The Future of Aerial Control

Gerry Salsig

Salon A

The future of aerial control is up in the air. It is now possible to record Global Positioning System (GPS) data during a photo mission and computerize positions for the aircraft allowing camera stations as well as ground points to be used as control for photogrammetric aerotriangulation. Advanced kinematic GPS data processing techniques, where a GPA antenna is mounted on the tail of an aircraft and a second receiver is used at the ground reference station, can be used to determine high accuracy coordinates for the camera stations using satellite data recorded during the flight.

Since the GPS solution used to obtain positions is kinematic, there must be a reference receiver recording satellite data at a known point during the flight. Specialized GPS software, which can "initialize" the kinematic solution in midair is used to compute the GPS positions. This eliminates the need to initialize before takeoff which could be accomplished by using antenna swap procedures or occupying a known position with the aircraft. It also means that loss of satellite lock on the steep banks between flight lines is not a problem.

Four production projects have been flown along with the first pilot project. Gerry will discuss these projects.

Mr. Salsig is a senior technical specialist in photogrammetry and surveying at Hammon, Jensen, Wallen & Associates. He manages ground control design, analytical aerotriangulation, adjustment computations, orthophoto preparation and accuracy assessment. In addition, he provides technical assistance throughout the firm with regard to both photogrammetric and surveying problems. He has extensive experience in computer programming and has written and maintains a large library of software for photogrammetric and surveying applications.

Presentation Schedule

Tuesday Session 2 9:45 am - 10:45 am

GIS Coordination and Application: The Role of a Regional University

Leann Gilley — **Salon B**

This paper explores the advantages of utilizing the service role of a university in coordinating, directing and facilitating GIS development in a regional area. Specific discussions focusing on 1) planning for GIS development, 2) training and coordination of GIS, 3) controlling GIS growth and dealing with informational elites, and 4) confronting GIS technological growth in the future are presented. Common mistakes encountered in development, mis-perceptions regarding GIS and major issues related to basic GIS development provide concrete examples for discussion.

Ms. Gilley is currently the Data Systems Coordinator of the GIS Lab, Office of Research Services, University of Texas at Tyler. Additionally, she is an adjunct instructor at both the University of Texas at Tyler and Tyler Junior College in geographic information systems. She is also a certified PC ARC/INFO instructor by Environmental Systems Research Institute (ESRI).

Ms. Gilleyreceived an Associates of Arts/Sciences degree in Surveying from Tyler Junior College and a Bachelor's of Applied Arts and Sciences in Technology from the University of Texas at Tyler. She is presently pursuing a Masters in Public Administration (MPA) degree at the University of Texas at Tyler.

Ms. Gilley is the chairperson of East Texas Area Geographic Information Systems (ETAGIS), as well as Vice President and charter member of the Texas ARC/INFO Users Group (TAIUG).

Safely Navigating the Copyright Labyrinth While Protecting Your Own Intellectual Cargo

Salise Shuttlesworth, J.D. — **Salon C**

Copyright issues pop up in the most unexpected places. George Harrison had a big hit with "My Sweet Lord" and never expected to have to pay 1.6 million of the royalties to a 60's 'girl group' called the Shirelles for having stolen the melody to the song, "He's So Fine." So too, are GIS analysts, programmers and cartographers vulnerable to even inadvertent slips that may run them afoul of the complex copyright law.

The flipside of the coin is that many of the same professionals do not know the proper ways to protect their own work product from the fastest growing white collar crime in America--theft of intellectual property.

Salise Shuttlesworth did her undergraduate work in Government, Philosophy and Physics at the University of Texas at Austin and received a Doctorate in Jurisprudence from the University of Arkansas. She is a member of the Order of Barristers and is a former assistant district attorney. Ms. Shuttlesworth is currently employed by the Comptroller of Public Accounts where she has done work in the areas of redistricting, GIS, and most recently, local government.

Presentation Schedule

Tuesday Session 2 9:45 am to 10:45 am

"Internet: What? Why? How?"

Ray Sanders — **Westchase 1-2**

Repeat of the session 1 presentation

Tuesday Session 3 11:00 am - 12:00 pm

Rainforest Preservation

Curtis Clemenson — **Salon A**

The presentation is the result of 20 years of work and travel in the tropical rainforests of Africa, Central and South America and Southeast Asia. A one hour slide show explores the beauty of the rainforest followed by a discussion of their importance to the health of the planet. The reasons for their destruction will be examined along with ideas for their conservation, including the Adopt-an-Acre T-shirt project which empowers people to actively participate in the preservation of these important ecosystems.

Curt Clemenson has numerous and varied travel experiences contributing to his lifelong interest in nature and foreign countries. Specifically, this interest culminated into his dedication to teaching and working for rainforest preservation. He has degrees in economics and Spanish from North Dakota State University and an MBA from the University of Houston. The recipient of a number of foundation and corporate grants, Curt now visits over 200 schools a year, speaking to students about the environment. As director of the Earth Foundation, he not only teaches about the rainforests, he helps to empower students to actually work on saving these forests. He also leads dozens of workshops for science teachers and negotiates with industry to insure that development projects are well thought out and environmentally benign.

Presentation Schedule

Tuesday Session 3 11:00 am - 12:00 pm

What's New at ArcCAD Release 11.3

Robert Burke — **Salon B**

The discussion will focus on existing ArcCAD functionality and will provide information on new features and functionality. The main topics will be: Brief overview of ArcCAD functionality, Windows support, use of AutoCAD R12 dialog boxes, Hot Links and data integration, toolbar icons, and ArcCAD and ArcVIEW working together. This session could be of educational importance to new and existing users or anyone wanting to learn more about ArcCAD.

Rob Burke graduated in 1989 from the University of Wisconsin at Eau Claire with a BS degree in geography. He received a masters degree in Applied Geography in 1992 from Southwest Texas State University. His major study at SWTSU was "Predicting the Diffusion of the Africanized Honey Bees," and he developed a diffusion model to predict the spread of the Africanized honey bee. Rob has been with ESRI in Redlands since June 1991. He is an Educational Services Instructor, and his duties include teaching training courses and developing training course materials. Prior to joining ESRI, Rob worked as a teaching assistant at SWTSU and was an intern at the Texas Rehabilitation Commission. In Wisconsin he worked as a research assistant in the geography department of UWEC. He also worked as a project manager for GeoCode Computer Mapping of Eau Claire.

Safely Navigating the Copyright Labyrinth While Protecting Your Own Intellectual Cargo

Salise Shuttlesworth — **Salon C**

Repeat of the session 2 presentation

Presentation Schedule

Tuesday Session 3 11:00 am - 12:00 pm

The Internet

Cecil Lamb — **Westchase 1-2**

This presentation will cover successfully accessing and utilizing the resources of the world-wide computer network referred to as "The Internet." The level of this presentation is intermediate. Topics to be discussed include getting connected, e-mail, Usenet, mailing lists and discussion groups, Telnet, FTP, Gophers, WAISs, and advanced e-mail.

Cecil Lamb earned a B.A. in geography from the University of Buffalo, New York in 1986. He has been employed at ESRI-San Antonio since September 1992. Although his main focus is marketing, he is also involved in technical support and applications programming.

Prior to joining ESRI, Cecil headed the System Support Unit for the New York State Department of Transportation's Mapping and GIS Bureau where he was responsible for GIS research and development.

Presentation Schedule

Tuesday session 4 1:00 pm - 2:00 pm

GIS Responding to the Needs of the Disables in the State of Texas

Salon A

Modern GIS technologies assist state government in greatly improving the quality and affordability of public services for Texans. The strategic implementation of GIS technology at the Texas Rehabilitation Commission promotes our ability to assist Texans with disabilities to become gainfully employed, independent, fully functional members of the community.

TRC has significantly increased our resources over the last year and as a result of our management's vision and commitment we are positioned to respond to the needs of the disabled at a higher level than ever before.

This increased response results in better communication of our activities to the Leadership of Texas, more sophisticated spatial capabilities of GIS at the field level.

Texas Rehabilitation Commission clients are promised the best service we can provide. GIS is enhancing our ability to deliver that promise.

Charles E. Harrison, Jr.
Mr. Harrison has a bachelor degree in Business Administration in Accounting from the University of Texas at Austin and is a Certified Public Accountant. Mr. Harrison has 20+ years experience working in state government and private industry. He has worked as the Chief Financial Officer for the Attorney General of Texas, the Chief Financial Officer for the State Property Tax Board, and currently is the Deputy Commissioner for Financial & Planning Services for the Texas Rehabilitation Commission.

Larry Juergens
Mr. Juergens has a bachelor degree in Business, and Masters degrees ib Business and Economics. He managed the Property Accounting and Joint Operations Accounting for fourteen years at Coastal States Energy Corporation and Valero Energy Corporation, both Fortune 500 companies. Mr. Juergens has over 20 years experience in accounting, economic studies, SEC and FERC reports. He has been with the Texas Rehabilitation Commission for 5 years and is currently working as an Information Analysis Manager in the E.I.S. department.

Coley Day
Mr. Day has over 30 years experience in engineering and computer science working with Dresser Industries, NASA, Datapoint Corporation and International Systems Corporation. He is currently with the Texas Rehabilitation Commission maintaining the operation of the Financial Planning Services departmental computers and provides support with the SAS analysis and GIS mapping software. He completed Sun's Advanced System Administration Course and is currently taking a series of ESRI courses.

Xinnong Yang
Mr. Yang has a Bachelors Degree in Industrial Automation and a Masters Degree in Systems Analysis and Regional Planning from the Shanghai Institute of Mechanical Engineering. He has finished the thesis draft for his Masters Degree in GIS Application in Transportation at the University of Nevada, Las Vegas. He is also working on a thesis on statistics at UNLV. Mr. Yang has been working on a UNIX system in programming and GIS applications for three years. Mr. Yang is currently employed by the Texas Rehabilitation Commission as a GIS System Specialist.

Presentation Schedule

Tuesday Session 4 1:00 pm - 2:00 pm

Design and Implementation of a Geographic Information System for the City of Norman, Oklahoma

Bert Dorrestijn

Salon C

In August 1991, the City Manager, started by installing a GIS Steering Committee, the GIS project for the City of Norman. The task of this committee, the implementation of a Geographic Information Systems, will be reviewed. The project phases will be used as guideline for a GIS implementation in a local government. The result of the needs analysis will be related to the selection process of the three major GIS tools : hardware, application software and data. The selection of data conversion contractors will be related to their most important task: Quality Control. The quality control and acceptance criteria of the products will be described. The implementation of the system and the training of the users will be presented as a marketing and sales tool for the system.

Bert Dorrestijn is currently the GIS Manager for the City of Norman, Oklahoma. After a 17 year international career in which he worked in 41 countries worldwide, he came in 1985 to the U.S.A. to join a Photogrammetric and Geographic Information conversion firm in San Antonio, Texas. He assisted 3 Geographic Information conversion firms in using digital techniques in their production process. He is a Certified Photogrammetrist (ASPRS) and has 25 years of experience in Digital Mapping and Geographic Information System applications.

Presentation Schedule

Tuesday Session 4 1:00 pm - 2:00 pm

Advanced Internet Concepts: Getting Started

Jerry Bohannon — **Westchase 1-2**

Getting connected to the Internet is not as simple as having a telephone installed. There is no single local Internet provider. There are many competing providers which offer varying types of services. To choose the right service, you need to know four things: who you are, where you are, what you want to do and how much you want to do. This presentation will review the issues in each area and suggest directions for individual investigation.

Service providers can be divided into three broad groups. One group provides the basic services E-mail, UASENET News and ftp. The second group adds login related services, such as , telnet, archie, gopher, WAIS, WWW, IRC, and games. These services are provided as terminal sessions on a remote computer. The third group allows direct connection to the Internet via SLIP, PPP or dedicated line. These advanced services and connection protocols will be reviewed.

Jerry Bohannon, GIS Specialist and exploration geophysicist, has spent 12 years with Shell Oil Company. Along with geophysical computing, his primary fields have been plotting systems, digital mapping, geographic information systems and Unix system integration. Interests in E-mail and the Internet grew out of an assignment which required extensive communcication with a vendor for software support and project administration.

Bohannon received a BS (1974) degree in physics from Texas A&M University and MAS (1978) and Ph.D. (1980) degrees in space physics and astronomy from Rice University. He is a member of the Society of Exploration Geophysicists, the American Geophysical Union, the American Meteorological Society, the American Society for Photogrammetry and Remote Sensing, and the American Congress for Surveying and Mapping.

Presentation Schedule

Tuesday Session 5 2:15 pm to 3:15 pm

Video of Dr. James Burke

Salon A

Dr. James Burke is an award winning television host, author, educator and is best known to American audiences for the PBS science series *Connections,The Real Thing* and *The Day The Universe Changed.*

On May 25, 1993, Dr. Burke gave the keynote address at the ESRI User Conference at Palm Springs. We are fortunate to have a tape of the fascinating presentation to view at our conference this year as his topic is particularly pertinent : Networking.

Dr. Burke's observations about technology and its impact on society led to the production of the 10-part *Connections* series. This series achieved the highest audience ever for a documentary series in the United States. Dr. Burke was born in Northern Ireland and educated at Jesus College, Oxford. Upon leaving Oxford, Burke taught at the universities of Bologna and Urbino, Italy and was the director of the English schools at Bologna and Rome.

Presentation Schedule

Tuesday Session 5 2:15 pm to 3:15 pm

The Future is Now

David W. Allen

Salon B

Our user group has a direct line to the ESRI software development team through Mr. Allen. This gives us a chance to interject our own ideas into where we think Arc/Info is heading, as well as enhancements to features we currently use. Attend this session with your list of software enhancement ideas or irritating bugs, as these will be relayed to the Arc/Info developers. Also be prepared to express your opinions on the good and bad of ArcView, ArcCAD, ArcDATA or any of the ESRI products. They readily solicit our input to guide the future of the software, and the only previous channel they have had for this information is the Palm Springs User's Conference. Now is our chance to let our voices be heard, without having to travel to far.

David graduated in 1983 from the University of Texas at Arlington with a B.S. in Architecture. He spent five years with a drafting service bureau in Arlington completing various architectural and mapping projects.

In March 1989, David joined the staff of the City of Euless to implement a GIS using ESRI's Arc/Info software running on a Sun Microsystems workstation. Full functionality of the system, encompassing an area of 15 square miles and a population of over 40,000, was achieved.

Multi-purpose Parcel Mapping Project of Jefferson County, Texas.

David Dignum

Salon C

The organization of the project and the support for the development of the digital planimetrics, orthophotos and first order NGS blue-booked control points and the current construction of the parcel database will be discussed. Details on the design of the parcel database and links that are being setup for the interaction with other entities, the sharing of data between entities, database updating and future plans will be presented. Presentation has previously been given at the TNRIS 4th Biennial Conference and at the October ARGIS meeting.

David Dignum has a BS degree in Forest Management (1983) and an MS degree in Forestry, both from Texas A&M University (1988). He specialized in GIS and Remote Sensing. Since 1989 he has been with Jefferson County Appraisal District, and presently serves the appraisal district as a GIS specialist. He has provided numerous consulting services for South East Texas Regional Planning Commission, Oraange County Appraisal District, Louisiana-Pacific/Kirby Forest Industrices and Jasper County Appraisal District. He is co-founder and president of Texas ARC/INFO Users Group. He chaired the Texas Association of Appraisal Districts Methods and Technology Committee.

Presentation Schedule

Tuesday Session 5 2:15 pm to 3:15 pm

Applying a Realistic Concept of Data Accuracy

Susan Overton

Westchase 1-2

Before the availability of GIS/GPS technologies, the information on a hard copy map was assumed by customers to be positioned correctly without the benefit of source documentation. With the introduction of GIS/GPS, the customer assumed that absolute accuracy was easily achievable. This paper uses a case study of a remapping project of oil and gas fields to examine the concept of data accuracy. This concept emphasizes data quality based on the accuracy of the information sources and allows a choice to improve data where the most value is added. The original assignment of the Digital Mapping Team was to provide accurate hard copy maps for infield development. The team decided to achieve additional objectives with this project, including the building of a GIS database, developing a data maintenance process, and marketing the GIS concept to management and customers. The case study demonstrates the mapping requirements for the project, how these requirements were met, and the experience the team gained. The project produced a paradigm shift from the need for absolute accuracy to a concept of knowing the source quality of the data, thus enabling the customer to make a decision whether the value added justifies the additional cost of improving the data.

Ms. Overton has been with Shell Oil Company for 14 years. Currently, she is the Group Lead for Lease Posting and Co-Lead of Digital Mapping Group. Previously, she worked in Louisiana and Kansas. She was educated at Washburn University in Topeka, Kansas, Louisiana State University in Baton Rouge, Louisiana and the University of New Orleans.

Lisa Neely

Ms. Neely, of Berger & Co., Houston, Texas has two years experience with GIS. Previously, she worked as a research assistant for the Gulf of Mexico Stratigraphic Structural Synthesis Project at Texas A&M University. She holds a B.S. degree in geography from Texas A&M University.

Presentation Schedule

Wednesday Session 6 8:00 am - 9:00 am

Distributed Computing - The Answer to Complete Computing Integration

Sheila Sullivan-Weems — **Salon A**

Office automation has traditionally been a segmented process. Historically, each department with in an organization has handled it's own data processing needs independently of the rest of the company. However with the advent of "open systems" technology, the idea of distributed computing is spreading. Improved hardware networking capabilities as well as improved software integration has enabled offices to tie their functions together into a more continuous process. This presentation will concentrate on the following areas of distributed computing:

1) The traditional computing environment as opposed to a more integrated system.

2) Migration considerations when moving to a distributed computing system.

3) Sharing a common database between departments.

Sheila Sullivan-Weems is a certified ARC/INFO instructor. She specializes in customizing ESRI's standard courses to address the client's specific applications interest. She has taught on all levels from beginning PC users to a class of University Geography professors.

Although Sheils's primary responsibility at ESRI is technical marketing, she has increased her role as a consultant during the past year and is in considerable demand as an on-site implementation and conversion expert. Her application experience has grown to include such areas as environmental protection, retail marketing, fadilities management and epidemiology.

Presentation Schedule

Wednesday Session 6 8:00 am - 9:00 am

See Update Sheet — **Dr. Darrel McDonald** — **Salon B**

Pen Based Computing — **William A. Lloyd** — **Salon C**

After the long hard struggle of evaluating, designing and implementing an AM/FM/GIS project, the next step is maintaining the integrity of the information. Advancements in pen-based computing present an opportunity for the field workforce to play a key role in maintaining and enhancing an AM/FM/GIS project. Facilities inventories, field annotations and even digital images may be recorded for data updating and saved for ready future access or for uploading to the office-based AM/FM/GIS.This session will focus on the following sytem maintainance issues : data capture techniques which are unique to pen-based computers, hardware and communications considerations and implementation of pen-based computers for maintaining an AM/FM/GIS.

Mr. Lloyd joined Hansen Information Technologies in 1990. He is responsible for major utility and municipal accounts in te Eastern United States. Hansen provides public utilities with field to office sloutions using pen-based computers, facilities management and work management application software, and intergration between these applications and leading AM/FM/GIS products.

Dr. James Burke — **Westchase 1-2**

repeat of the video presentation

Presentation Schedule

Wednesday Session 7 9:15 am - 10:15 am

Requirements for Road Centeline Digital Map Databases

Michael G. Sheldrick — **Salon A**

Road centerline databases are the indispensable foundation for a variety of GIS applications. These included AM/FM (Automated Mapping, Facilities Masnagement); Fleet Management, including routing & scheduling and computer-aided-dispatch; traffic planning and management; and in-vehicle navigation and driver information systems, as well as travel information available through kiosks, home computers, portable computers or personal digital assistants.

The requirements for map data in these various applications is detailed, including coverage, currency, connectivity, classification and accuracy.

Mike Sheldrick is Southwestern Regional Sales Manager for Etak, Inc., the country's largest digital-map producer and a leader in the technology of in-vehicle navigfation. Previously, he was Etak's Director of Automotive Business Development. Sheldrick joined Etak in September 1990, after a career encompassing journalism and consulting. Sheldrick participated in writing the organization's widely heralded "Strategic Plan for IVHS in the United States." Prior to joining Etak, Mr. Sheldrick served as the founding managing editor of Automotive Electronics Journal, a weekly trade newspaper. He also founded Ward's Automotive International, a publication devoted to international business and technical developments in the automotive industry. A chemical engineer by training, Mr. Sheldrick spent 15 years at McGraw-Hill covering business and technical stories for a variety of publications. He holds a B.S. CHE. from the New Jersey Institute of Technology.

Presentation Schedule

Wednesday Session 7 9:15 am - 10:15 am

Using GIS as a Decision Tool for Executive Management

Robert W. Taylor, Ph.D. — **Salon B**

GIS can be a valuable tool for expert systems support and executive level decision-making. GIS capabilities extend from a variety of disciplines to include environmental management, crime analysis, marketing research, and project modeling. The important points of these applications focus, not only on visual impact, but on the statistical and progressive products which are yielded through advanced analysis. Projections and forecasts can be developed with a high degree of probability and accuracy. This report concentrates on "selling" GIS as an important tool for those executives often times not completely literate in the MIS/GIS arena.

Dr. Robert W. Taylor is currently Professor of Public Administration and Criminal Justice and the Director of the Office of Research Services at The University of Texas, Tyler, Texas. In addition, Dr. Taylor coordinated the graduate program in Public Administration (MPA) within the Department of Social Sciences. Previous to assuming these positions, he chaired the Department of Criminal Justice at Northern Arizona University. He has an extensive background in academic and professional criminal justice, having taught at three major universities and served as a sworn police officer and major crime detective (Portland, Oregon) for over six years.

Dr. Taylor was appointed as a Research Fellow at the International Center for the Study of Violence at the University of South Florida, Tampa, Florida (1984). He conducted numerous studies involving international and domestic terrorism, public violence and homicide. He is the recipient of numerous research and training grants. He has authored and co-authored over forty articles, books and manuscripts. He has been a consultant to the U.S. Army, the U.S.Department of Treasury, Federal Law Enforcement Training Center, the U.S. Department of Justice, the Federal Bureau of Investigation, Drug Enforcement Administration and numerous state and local municipalities as well as private corporations. Dr. Taylor is a graduate of Michigan State University (M.S., 1973) and Portland State University (Ph.D., 1981).

Presentation Schedule

Wednesday	Session 7	9:15 am - 10:15 am

ARC/INFO Regions

Robert Burke

Salon C

Regions are the newest feature that will be part of ARC/IKNFO Rev. 7.0. Regions allow modelling of overlappng polygons and disconnected areas. The following application areas may find regions very useful: Oil and gas leases, natural resources, public land records, hydrology, wetland studies, plant communities, wild life habitat, and floor plans (AM/FM). Any applications which model change over time will also benefit. Some examples include: Air pollution, landcover treatment, and fire history.

Several of the application areas will be examined. A discussion of the data model will include characteristics of regions, the region subclass, and associated files. The basic functionality of regions will also be discussed. These topics include: display, creation, editing and analysis of regions.

Rob Burke graduated in 1989 from the University of Wisconsin at Eau Claire with a BS degree in geography. He received a masters degree in Applied Geography in 1992 from Southwest Texas State University. His major study at SWTSU was "Predicting the Diffusion of the Africanized Honey Bees," and he developed a diffusion model to predict the spread of the Africanized honey bee. Rob has been with ESRI in Redlands since June 1991. He is an Educational Services Instructor, and his duties include teaching training courses and developing training course materials. Prior to joining ESRI, Rob worked as a teaching assistant at SWTSU and was an intern at the Texas Rehabilitation Commission. In Wisconsin he worked as a research assistant in the geography department of UWEC. He also worked as a project manager for GeoCode Computer Mapping of Eau Claire.

Round Table Discussions

This year, it is your turn. You tell me what round tables we will have and who will host each table. I am looking for volunteers.

What better time to volunteer and begining exercising your networking abilities.

Who's first?

The **TAIUG** would like to extend a special thank you to the vendors who have supported this conference. Their efforts on our behalf are sincerely appreciated.

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