

**GeoSpatial Task Group
Meeting Notes
April 15-17, 2003
Denver, CO**

Meeting sponsored by US Fish and Wildlife Service

Attendees

BIA: Luther Arizana
BLM: Janis Reimers, Katy Hipke, and Susan Goodman
NPS: Brian Sorbel
FWS: Ken Bottle
USGS: Liz Lile and Mike Hutt
USFS: Dorothy Albright and Joe Frost
Eastern States: Sue McLellan, Florida
Western States: Skip Edel, Colorado
IRMWT Liaison: Andrea Olson, FWS

Guests:

Steve Gregonis, USFS
Judy Crosby, IRM-PMO
Doug Stephens, NPS
Dave Hammond, NPS
Jim Kelton, FWS
Lisa Warnecke
Greg Hill
Tom Sadowski, BLM

Next GTG Meeting: Anchorage – July 29-31, hosted by NPS

Next Conference Call: June 10th

Fire Congress GTG Meeting: Orlando – November 17, 2003

Agencies Updates – The following is a round robin discussion of recent happening from each of the agencies that belong to the GTG:

USFS

Summary of Forest Service GIS Conference

The Forest Service GIS Conference was held in Colorado Springs from April 8-10, 2003. The conference had many different kinds of presentations from remote sensing to Forest Service Centric presentation on INRIS (Natural Resource Information System). This conference had presenters from several different agencies including a presentation from USGS on the National Map (<http://nationalmap.usgs.gov>). John Varner gave a presentation on the new ICS application in ArcGIS. Fourteen different State Governments sent representative to the conference.

GIST Class

GIST Class was held in Sacramento April 8-10, 2003. 50 individuals were trained. Dorothy Albright handed out CDs of the training course. This class was the last for the California cadre.

GTAG (Geospatial Training Advisory Group)

A new group called the GTAG (Geospatial Training Advisory Group) has taken over the GIST training. Dorothy Albright is the GTG representative on that group.

GTG Action: Recommended GTAG as a Task Group under the NWCG Training group.

Leasing GIS Equipment for Fires

Dorothy Albright is working on leasing of PCs that will come with ArcGIS.

USGS

GeoMAC

USGS is still hosting GeoMAC at <http://www.geomac.gov> The business lead for GeoMAC is Nancy Lull, BLM-NIFC Public Affairs, and the project manager is Janis Reimers.

GTG Inventory Form

USGS is hosting the GTG Inventory Form. The results of the inventory will be given to GAO.

USGS Handouts

USGS handed out information on LandFire, Integrated Fire in the Rocky Mountains, Burn Severity, Fire Ecology in the Southeast. Information on these projects can be found at:

- http://edc2.usgs.gov/fsp/burn_severity_assess.asp
- <http://www.landfire.gov/>
- http://www.fcsc.usgs.gov/Fact_Sheets/snyderflier.pdf

RMACC (Rocky Mountain Area Coordination Center) Project

USGS is working with RMACC to pre-stage GIS data. Handed out a list of data individuals can order. A web site is being developed which will display data layers identified by the GACC and will contain a data ordering form. Expected release of the site is late May.

Fire Potential Index

Jacki Klaver is the business contact for Fire Potential Index. The site is located at: http://firescience.cr.usgs.gov/html/Klaver_abs.html. The Fire Potential Index is posted daily. The audience of this site is predictive services.

Burn Severity Mapping (EROS Data Center (EDC))

Discussed Park Service/EDC website. Focus of this website is more on monitoring and long-term fire effects after the fire. RSAC (Remote Sensing Applications Center) creates products for BAER teams and RSAC's focus has been to produce products in a timely manner. Both EDC and RSAC products were received well last year. RSAC and EDC have set up an agreement the RSAC will covers USDA Forest Service requests and EDC will cover DOI agency request. One stop shopping for all Federal agencies has been set up at: www.fs.fed.us/eng/rsac/baer/#.

NPS

Geospatial Data Standards

NPS has been working on data standards. The following are standards that NPS is in the process of completing:

1. Condition Class
2. Fire History
3. Fire Regime
- 4.

It was noted that USDA Forest Service Missoula Fire Lab would be creating methodology for determining condition class and fire regime.

National Geographic TOPO! DRGs

NPS is contracting with National Geographic to provide TOPO! DRGS for incident support in states not supported by the BLM FTP site and USGS data ordering process. There will be no value added updates for roads, etc. GIST (GIS Technician) could order this. The cost will probably be \$10.00 per quad.

FirePak Update

Daily fire perimeters can now be attributed in ArcGIS via NPS Firepak (http://www.nps.gov/gis/applications/new_apps.html) and ArcPAD via ESRI's Mobile Fire Mapper Applet (<http://arcscripts.esri.com/details.asp?dbid=12747>). . ArcGIS version can be customized and comes with a help document and installation instruction.

BLM

Resource Tools Conference

Resource tools conference is formally known as BLM's GIS conference. The name was changed to broaden the scope to get more resource personnel to the conference. There will be a Fire GIS Tract at the conference. Presentation topics are located at www.blm.gov/conf2003. There were more individuals that wanted to present than there was space.

FTP site

Dave Wilson has created a ftp site at: <ftp://ftp.nifc.gov>. The site contains data that can be downloaded by GIST to be used on fires in the Western U.S. and Alaska. Also GIST

can upload individual fire data to the site. Information on how the site maybe used is on the ftp site.

Burn Severity

BLM has provided USGS' EDC with funding for the burn severity program. Information about requesting products is listed under NPS's Update.

State Contacts

All BLM state offices now have a Fire GIS contract.

Predictive Service Website

Katy Hipke has been working on an ArcIMS Predictive Service application for NICC (National Interagency Coordination Center). It is anticipated that the GACCs (Geographic Area Coordination Centers) will be able to use this application too.

GeoMAC

Nancy Lull is business lead and Janis Reimers is the project manager. Funding for GeoMAC came out of Interior's Office of Wildland Fire Coordination.

Fire History Site

NSTC (National Science and Technology Center) tasked a contractor to build an ArcIMS interface for the Federal fire occurrence data. The site is located at:

<http://www.firehistory.blm.gov/firehistory/index.html>

FWS

Listserv

Developed a listserv. The listserv is intended for the discussion of FWS Fire-GIS issues and related topics at the field, Regional, and National level. There are 100 people currently on the list. The addresses to the FWS Fire-GIS listserv are:

To Subscribe: email fws-fire-gis-request@lists.fws.gov with "subscribe" in the subject line.

To Post: email to fws-fire-gis@lists.fws.gov

Work Assignments

Ken Bottle will be working for Andrea Olson for fire 25% of his time. The focus will be to have a National lead and planning where FWS wants to take GIS in fire.

GIST Training

Ten FWS personnel went to the GIST training in Florida.

BIA

New positions

Luther Arizana has accepted a new position at NIFC. Richard Moore will be taking over as the BIA representative to the GTG. Ted Tower will be doing information technology

and working with NFPORS. FPA (Fire Program Analysis System) has been assigned to Steve Harbor.

Fire IT purchase

BIA received an emergency waver for laptop in order to upgrade laptops to BIA standard of XP.

BIA Fire GIS Meeting

Held a BIA GIS fire meeting in January 2003. BIA is trying to get the word out about fire and GIS.

DOI BAER Team Meeting

DOI is having their BAER (Burned Area Emergency Rehabilitation) meeting last week in April in Cortez, CO. The BAER website that is located at BIA NIFC website is: <http://bianifc.org/BAER/baer.htm>

BIA GIS Website

BIA has their GIS personnel on the following website: http://bianifc.org/gis_gps/GIS/gis.htm

BIA DI-1202 input

Creating a map extent for entering latitude and longitudes in DI-1202 to help improve mapping accuracy of fire occurrence data.

Western States

Western States Meeting

Skip Edel met with the Western States Fire Directors at their spring meeting and discussed with them the GTG, the IRMWT, and also asked each State for a GIS fire contact.

Eastern States

GPS Course

The GPS course was successful and the State of Florida wants to continue to support this course.

Florida's new Fire Management Information System

Testing of the new Florida Fire Management Information System is moving forward. The new database will be in Oracle and use Map Object and ARCIMS technology. The system will go live July 1, 2003.

Florida Fire Risk Assessment

The Florida Fire Risk Assessment has been implemented at the field units. The ARCVIEW application and the Published Results can be used as mitigation and a planning tool. Florida is looking at updating the fuels database every couple years. The fuels data is already three years out of date. Florida currently has no dedicated remote sensing staff.

Southeastern Fire Risk Assessment

The contract to develop a Southeastern Fire Risk Assessment was awarded to Space Imaging. The State of Texas is the lead on this effort and will be in communication with the states involved in this project. If interested in obtaining more information about the Southeastern Fire Risk Assessment, please forward inquiries to Tom Spencer at the Texas Forest Service (979.458.6540, tspencer@tfs.tamu.edu).

Communities at Risk

Florida is updating their Communities at risk list based on GIS and grid analysis using inputs developed from the Fire Risk System.

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Farsite Training

Sue McLellan went to the Farsite course and thought it was an excellent course. The Southeast States are planning to host another Farsite course in the next couple of years.

Western Governors Association

Liz Lile gave GTG an email that stated that WGA is sponsoring the Forest Health Summit, June 17-19 in Missoula to be followed by the Wildland Fire Leadership Council meeting. Lisa Warnecke mentioned that Stu Kirkpatrick, Montana GIS Coordinator is an active member of WGA's GI Council, and he is helping organize the meeting's field trip that will be showcasing some GIS applications for fire. More information can be found at: <http://www.westgov.org/> about the summit, and Stu can be reached at 406.444.9013 or Skirkpatrick@state.mt.us.

Interagency Geospatial Data Standards Discussion

Judy Crosby gave an introductory presentation to initiate the afternoon interagency geospatial data standards discussion. Judy Crosby is the NWCG Data Stewardship/Custodianship. She is the Chairperson of the DAWG, the Data Administration Work Group. The DAWG is a "sister" organization to the GTG within the NWCG.

The current situation is that there are many applications within wildland fire community and most of the applications do not work with each other. Most of the systems are stand-alone. In 1996, IRMWT published a strategy report. This report was created because users wanted systems that worked, that were user friendly, and that integrated with each other. The Federal Fire Directors continue to want to reduce stovepipe products. Since the National Fire Plan in August of 2000, a lot of requirements have been coming from Congress. Office of Management and Budget (OMB) and Wildland Fire Leadership

Council (WFLC) have been created and have put a lot of pressure to application working together well.

In 1998, IRMWT created the Program Management Office (PMO) that consists of project manager, application architecture manager, repository manager (library).

IRM-PMO has developed a Strategic Plan to address the problem of system not be able to exchange data because data values do not match and there is no process to fix the problem data exchange. One key to fixing the data exchange issue is data standards and the key to data standards is involving the business community. In addition to developing data standards, a change process needs to be developed. The DAWG coordinates the standardization process for NWCG data standards. The DAWG defines a data standard as a “specification for a data item that has been established by authority or general consent.” According to the DAWG any data standard has three parts:

- 1) Meta-data Definition – description of the length and format of the data item
- 2) Standardized Data – list of valid data values; domain
- 3) Change Management Procedures

The DAWG doesn’t look at a fire history GIS standard as one standard. They see each attribute or field name within the fire history layer as a separate standard. So, in a sense, an interagency fire history GIS standard is just a collection of 8-10 standards for the individual items.

The GTG can only sponsor and maintain data standards for items that are exclusively geospatial (Latitude, Longitude, Collection Method, Map Scale, etc). Other groups have responsibility for many of the items that we think of as being a part of a fire history standard: fire name, fire number, etc. The DAWG is currently working on standards for Agency, Fire Name, and Fire Number data items. The DAWG has already adopted a standard for Unit ID. The GTG can submit recommendations for non-geospatial fields like General Cause and Specific Cause as part of a fire history standard. However, the final standard for General Cause and Specific Cause data items (and their appearance in an interagency fire history standard) could look different based on what the DAWG and the business groups responsible for those items finally agree on. This has the potential to slow things down in the short term but will likely payoff in the end, as the data items definitions in fire history layers will be the same as those in other fire applications.

Joe Frost currently is the GTG representative on DAWG. GTG will review all of NWCG data standard proposal from a geospatial viewpoint.

The process of creating data standards starts with identifying what data standards is needed in the business wildland fire. Create the standard and publish the standard.

NWCG – Glossary of Wildland fire Terminology managed by IOS Working Team. Data standards and the glossary need to work together. - Glossary needs to manage change same as data standards (NWCG stewardship) Glossary is at:
(<http://www.nwcg.gov>)

Tuesday Afternoon Data Standards Discussion

The objectives for the afternoon session were identified as:

1. Identify what data standards GTG will work on immediately.
2. Identify what data standards are needed in the future.

The first geospatial standards that the group will work on with the DAWG are: (1) Daily Fire Perimeter and (2) Final fire Area (perimeter) standard. Within each of these Geospatial standards, each item is considered an individual data standard. Essentially a geospatial data standard is bundle of many individual data standards.

Future Geospatial Standards that will be worked are:

1. Fuel Model - new models being developed by the Missoula Fire Lab - 40 new models. 2
2. Condition Class – no definition of what a GIS layer should look like.
3. Canopy cover
4. Planning data – FMU, FMZ, RL Resource location, vegetation
5. Dispatch Zones
6. Geographic Boundaries
7. Communication Towers
8. Lookouts
9. Engine location
10. Air Support location
11. Aerial Hazards
12. Flight Hazards – agency of record
13. Safety zones
14. Fire lines
15. Helispots

The following was a theoretical discussion how ROSS fits into a world with data standards: ROSS could be a good data collection system. ROSS would then be the data steward for which data that is collected using ROSS system. ROSS would then be the data custodian to ensure data accuracy and integrity. GTG would ensure standards so that all application would be able to export data into other applications.

Other Standards that GTG needs to work on are:

1. Standard Operating Procedure for a GIST
2. Standard Geospatial Symbology
3. File Structures on wildland fires

Action: GTG needs a liaison to the FPA for phase II

Action: GTG needs a liaison to Incident Automation Group

Data Exchange Standards (Expectation of how it looks if it goes to another agencies)

- 1 – Daily fire perimeter standard
- 2 – Final fire Area (perimeter) standard

Suggested Final Fire Area Items

1. Unit_id - tie back to the unit that has other info about a particular fire
2. Fire name
3. Fire number
4. Fire_type
5. Start_date
6. Control date
7. Acres (Area)
8. Collection Method
9. Collection Date
10. Cause General
11. Specific Cause
12. Collection Scale
13. Responsible Agency

Action: Brian Sorbel, Joe Frost, Janis Reimers, and Sue McLellan will work on developing data standards in association with the DAWG for daily fire perimeters. Brian Sorbel and Joe Frost will lead this effort. This group will work with Howard Roose from (FPA). By July, this subgroup will have a draft of the data standards. Group will use white paper as the beginning point for the daily fire perimeter data standard. The following is a list tasks that the group will need to accomplish:

1. Fill out DAWG Forms
2. Validate Values
3. Change Initiation Process
4. GIS standards like collection method is a business area
5. Draft something up for the FPA project.
6. Non-GTG items and GTG items

Wednesday Discussions:

GTG Website

USGS is hosting the GTG website. It will be located at: <http://gis.nwcg.gov>. Liz and Joe posed the question on whether the GTG website should still have zip program capability. The GTG decided not to continue have this functionality. The goal of the website was to have searchable GIS fire database of applications and scripts. GTG will review site prior to putting applications and tools on the site.

USFS Fire GIS site maintained by Joe Frost will go away when GTG site is up and running. GTG site should be up by May.

USGS and BLM Data for GISTs

For fires you can order DRGs and DOQs for your area of interest and download vector data. ArcIMS does not have raster data extract capabilities. Vector extract capabilities will be prototyped for Rocky Mountain Area (RMA) this summer. If it works well, it will be expanded. Also you can call Liz Lile (303) 202-4326, Jeff Sloan (303) 202-4118, Stan Wilds (303) 202-4072 or Mike Hutt (303) 202-4296 for data requests. You can get a CD of the data if you have an incident number.

Dave Wilson is posting data on a BLM ftp site.

The site is located at: <ftp.nifc.gov>. There is base data for the 11 western states.

Contact Joan Nadeau or Dave Wilson if you want to post data on the BLM ftp site.

For both USGS website and BLM site you can call the contacts and they can mail CDs to you if you have no Internet access.

National Geographic Contract - Curtis Day is coordinating this effort. One of the issues with the National Geographic DRGs is that you cannot turn off the green.

Action: Joe Frost will coordinate a conference call about National Geographic Data with the following individuals:

Ed Delaney

Janis Reimers

Katy Hipke

Steve Gregonis

Joe will report back to the GTG regarding the results of the conference call.

GTG Inventory Website

If you have comments, provide them to Susan Goodman or to Liz Lile by May 9, 2003. Al Borrup's Inventory is not the same as the GTG Inventory. His inventory focuses on how data is being used.

Action: USGS will change the following on the form

1. Change Function drop down menu to check boxes.
2. Change survey to inventory

Action: Sue McLellan will draft letter to States regarding the Inventory.

Action: Andrea Olson will check with Shari Shetler about formal letter going out regarding GTG Inventory.

NFPORS (National Fire Plan Reporting System)

NFPORS requires that a geographic coordinate be entered for all fuels treatments. NFPORS allows users to determine a coordinate for a treatment area using an IMS 'Get Map' tool. The GTG has the following concerns about this tool:

- The 'Get Map' tool returns geographic, decimal-degree coordinates to a precision of only 2 decimal places. The program should report project coordinates to five decimal places. If a latitude and longitude is only precise to 2 decimal places that coordinate is only accurate to 1100 meters.
- The base maps that are provided in the 'Get Map' tool are not adequate to allow users to accurately determine the location of their fuels project. Users should be able to zoom down and view 1:24k DRGs as a backdrop.
- The 'Get Map' tool is returning the data in NAD27, but NFPORS now requests coordinates in NAD83.

An application that addresses many of these concerns can be found at test.topozone.com.

Action: (Liz Lile) Let project manager of NFPORS, Russ Berry, know that the GTG has the following recommendations:

1. Ability to store down 1:24K level
2. Need to output coordinates to 5 decimal places.
3. Need to return coordinates in the datum requested by NFPORS.
4. Data needs to be available for any wildland fire system that need it.

Action: GTG Data Standards subgroup will work on Latitude and Longitude so that the standard will be 5 decimal places.

(ISUITES) and Cost/Benefit Analysis Presentation by Tom Sadowski

Tom Sadowski is the Budget officer for BLM's NIRMC (National Information Resource Management Center). GTG invited Tom to speak to the group about ISUITES and Cost/Benefit analysis. The GTG goal is to produce a cost/benefit analysis for the GIST position on fires.

ISUITES consists of the following modules:

- ITS - Incident Time System
- IRSS – Incident Resource Status System
- ICARS – Incident Cost Accounting Reporting System

ISUITES was designed for all risk teams and built in visual basic with Microsoft Access as the database. Tom demonstrated the software for the Newcastle incident near Las Vegas.

For a Cost/Benefit Analysis, one needs to have two alternatives and know the tangible and intangible benefits of the product. Cost/benefit analyses are used mostly for long-term projections. GTG will need to describe the advantages and disadvantages of Cost/Benefit Analysis for GIST:

Benefits of GIST

Improve safety and locations of fire lines, etc.

Focus or direct resources to exact areas (e.g. hotspots, etc.)

Some of the questions the GTG will need to ask in order to do a cost/benefit analysis are: How are geospatial technologies optimized on incidents. Is there a difference between complex and simple incidents? Is there an anticipated end date to the incident? How do the contracts with the mobile office trailers fit into the picture? How close are we to the government office? What are the mobilization and demobilization costs? What is the cost of training and getting a GIST to a fire?

Look at historic National contracts for GIS and see how much they are compared to sending a GIST out on a fire.

Tom gave us some name to contact:

Liz Keeney - IBA

Wayne Cook –

Dennis Johnson –

Angela Parker – she can let us know who the BAER

[Action: GTG will work with Tom this summer to get actual fire cost.](#)

GIST Discussion

What should the skill set be for the GIST position? First a list of skills needs to be created. Currently (??? I thought they weren't going to look at until 2004/2005...not sure though), the NWCG's Operations Working Team is reviewing Display Processor. GIST needs to be added to the mix when discussing Display Processor. GTG will propose an ICS GIST position to the NWCG's Operations Working Team so it can be reviewed.

Planning section chief needs to ask the right questions regarding GIS skills when they are ordering them. Fire use teams are a little different and thus the expectation for GIST is different. There needs to be more included more about the Fire Use team when writing up position. GIS people often bring benefits to the fire because it is a visual source to educate the public.

Brian Sorbel has written up a draft document addressing the knowledge and skills for GIST. Sue McLellan has taken this document and expanded it. Sue has written a white paper about the skills and knowledge for GIST.

The KSAs need to be posted on the GTG website. Communication skills are necessary for GIST

[Action: Sue McLellan, Susan Goodman, Brian Sorbel, and Dorothy Albright will have a draft ICS package by July's meeting. Doug Stephens brought up the concern about the](#)

local people not being able to make a map for a small fire if the GIST position is approved. Susan Goodman will contact operation team about what is included in the ICS package.

GIST Pocket Guide

Action: Katy Madrid, Skip Edel, and Ken Bottle will work with Victoria Smith on consolidating her GIST Handbook in to a pocket guide. This pocket guide should take the GIST from being dispatched through the demobilization process. Both the handbook and the pocket guide should be available on the GTG website.

GTG Budget

Next Year Budget

GTG should request \$25 - \$50K for FY2004

Some items that GTG could request dollars for are the following:

1. Website
2. State Issue
3. Cost Benefit Analysis

Budget for FY2003 should be spent on:

1. ASP Programmer to support GTG website
2. Create new Brochures
3. Investigation of GIS Incident Support – travel money
4. Printing final report for GIS Incident Support

Action: GTG members send budget suggestions to Susan Goodman by May 23.

Action: Susan Goodman will provide Andrea Olson with GTG next year budget by end of May.

Action: Andrea Olson will find out how much money is left in GTGs current budget.

Action: Sue McLellan and Dorothy Albright will work on brochure text.

Action: USGS will change GTG website URL to: gtg.nwcg.gov

State Involvement in Group

State forestry organizations (SFOs) do not have a mechanism to communicate with each other concerning GIS and remote sensing matters, both in general and concerning fire. As a result, it is difficult for Skip Edel and Sue McLellan to represent all states on GTG. However, the National Association of State Foresters (NASF) has a Fire Committee, and

the issues and needs associated with GIS have been raised with the committee. In addition, NASF has a full time representative located at NIFC. This position is currently held by Don Artley (208.867.0908, Don_Artley@nifc.blm.gov) who might be helpful. Perhaps a conference call could be held with Don and state representatives to help. Another helpful development is that 14 states were represented at the Forest Service Geospatial '03 Conference April 7-10 in Colorado Springs (primarily SFO GIS managers), and discussions are underway to help increase coordination among SFOs. Another possible linkage is through the National States Geographic Information Council (NSGIC), whose members are statewide GIS managers in the states where they exist (<http://www.nsgic.org/>). (Colorado and Florida are two states without a statewide coordinator, but most states do have a coordinator or coordination office.)

Action for state reps: Eastern and Western State representatives need to have better contacts within each state so that they can better represent all states. Skip Edel and Sue McLellan will work on an issue paper to address this concern.

Feedback from Las Vegas

GTG had a discussion on geospatial concerns that were brought up in Las Vegas at the Wildland Fire System Workshop. The following were the concerns that came up in the breakout session:

Recommendations

- Perform a cost analysis of GIS services on fires (*GTG will begin working on this in summer of 2003*)
- Setup an interagency FTP site to facilitate sharing of data (*Dave Wilson of BLM and USGS have taken the initiative to solve this issue*)
- Ensure reliable Internet access on scene (*Will recommend this action to IRMWT*)
- More IRIN and GIST cooperation
- Develop data standards (*GTG is currently working on two standards*)

Vegetation Mapping Issues

- Identified as a critical need
- Seamless vegetation mapping to support fire management efforts
- Consistent ground information
- Create a list of standard processes for vegetation mapping

Fire Information Management Recommendations

- Keep GTG informed
- Projects discussed in this venue need to be shared with Fire Management Officers
- Develop a strategy for fire planning including data elements such as fire occurrence history
- Support the development of a single point of entry for data collection for all fire data including prescribed and wildland fire information

Fire GIS Mentorship Proposal

Miranda Miller wrote a white paper about GIST mentorship program. Because GIST is a technical position, any person that knows some GIS can go out in the position and thus not all individuals are qualified when they go out. Red Card system does not have trainee designation for GIST. There is no easy way to get out as a trainee as a GIST. This issue is responsibility of the new group GTAG (Geospatial Training Advisory Group) once they get sanction by NWCG. Paper is voice of one of the customers.

Action: Susan Goodman will check with ROSS and the Red Card systems to see if we can get a GIST trainee designation.

Action: GTG is requesting Miranda and Ken Bottle to rewrite the paper. Please have comments to Ken Bottle by May 23rd.

Fire Congress

This conference will be held the week of November 16, 2003 in Orlando, FL. Details on the conference can be found at:

<http://www.ametsoc.org/AMS/meet/FAINST/5fire2fireeco.html>.

There will be three-day tracts on Fire and Forest Meteorology, Fire Ecology and History, Fire and ecosystem restoration, Fire and Ecosystem Management, Wildfire Management and Suppression, Social and Economic Aspects of Fire and Fire Technology and Fire Behavior Modeling. The GTG will be organizing the Fire Technology and Fire Behavior Modeling tract. This is starting to look like a fairly major event that you will likely hear much more about in the coming months.

Sue McLellan and Dorothy Albright will review proposals for the Fire Technology and Fire Behavior Modeling track. If you know of a presenter that you think would be a good presenter, please forward names to Sue or Dorothy. It could be in planning, remote sensing, WUI, Case Studies, etc. A daylong training is possible too. Papers are due June 2.

GTG will help facilitate the session and give a presentation on GTG. GTG proposes to do this formally because GTG should recommend back to the IRMWT what emerging technologies that might be useful to the wildland fire community. GTG will have formal meeting, at the Fire Congress on Monday, October 17, 2003 morning.

Action: Susan Goodman will write a proposals regarding what GTG is currently working on for the Fire History session and a presentation about the GTG.

Interagency user support for fire applications

The wildland fire geospatial community will have a national GIS application by next year. User support is fairly important with this effort including primary and secondary support.

Action: Joe will write a white paper about interagency user support for geospatial fire applications.

ArcGis Incident Tools

John Varner gave demonstration of ArcGIS ICS Tools. There is a built in incident directory and a history directory for each fire. Currently program requires that you have magnetic declination.

OAS Aviation Data Standards

The GTG is in favor of the OAS proposal to set WGS84 as the standard datum for aviation GPS.

Action: Dorothy will email GIST that WGS-84 will standard for aircraft contracted by OAS.

Action: Brian will draft a letter to OAS saying that it the projection should be geographic and WGS-84.