



Interagency Interoperability Oversight Group Summer 2009 Meeting Summary – July 27-31, 2009



Attendance: Jim Douglas (BLM F&AM), Kolleen Shelley (FS CIO's Office), Mike VanDermyden (BIA CIO Office), Vaughn Stokes (FS CIO), Sanjeev (Sonny) Bhagowalia (DOI CIO), Kirk Rowdabaugh (DOI OWFC), Kendall Jones (FWS CIO's Office), Rick Prausa (FS F&AM), Mike Field (FS CTO), Simon Strickland (FS CIO's Office), Tim Quinn (DOI)

A list of those who gave presentations, provided logistics support, participated in our discussions is included as the last page of this summary for reference.

Copies of presentations are available in the IIOG Quickr Teamroom. A complete list of presentations is included at the end of these summary notes.

Monday, July 27

Northwest Coordination Center (NWCC) - Portland, OR

IIOG Members toured the NWCC, attended the NWCG Briefing (Fire Weather, Situation Reporting, Google Flight, etc.) and were shown the Portland Fire Bureau Command Vehicle. In the afternoon, the group gathered for additional presentations regarding the dispatch and predictive services organizations, the Oregon Tower/Facility Mapping project; and a discussion on Migration to Digital Narrowband.

Additional Discussion Topics Included:

- **Security Training Requirements** specific to the DOI and USDA are not reciprocal and were identified as a barrier to interoperability. In an interagency setting, it would streamline efforts to rapidly staff the all dispatch tiers with qualified dispatchers regardless of agency affiliation if USDA recognized DOI security training as meeting the requirement and vice versa.
- **Network speed** is an issue in various locations. The system performance can be affected from a variety of factors including local routers and switches as well as the enterprise infrastructure. Past examination has shown that usually there is enough enterprise bandwidth; usually the problem of slow response has to do with a local router or switch, etc. It is essential that agencies take the comprehensive approach, examine the entire path from a performance management standpoint.
- **Interagency Dispatch Management Efficiency Assessment** – Mike Dudley presented an overview of this assessment. He specifically pointed out the recommendations that came from the assessment that tie closely to Interoperability of IT and Radio communications.
- **Predictive Services** – Sonny suggested that the outstanding work being done in Predictive Services should be showcased. A place to do that is data.gov. He feels we should be marketing the innovation.
- **Social Networking Sites (Facebook, Twitter, etc.)** – Currently these are blocked for use by DOI and USDA policy. Gerry stated that the USGS has found that monitoring such sites can provide faster information on earthquake events for example. Twitter has been used as a backup in the PNW when phones, cell phones and other traditional methods of communication were entirely choked by emergency traffic.
- **Security and LINKPASS** and the affect it will have on our ability to hire temporary employees and Administratively Determined (AD) personnel in support of incident management. If LINKPASS is going to be the only tool available to allow access to agency/bureau computers, a method must be developed to quickly allow access (within a few hours) for these employees in support of incident management.
- **Access to Helpdesk** - Some employees need access to several computers at one time and **trusted users need to be recognized across agency boundaries** (helpdesk).
- **Interagency Radio Coverage Analysis** – Carl Gossard and Dale Gunther shared the project developed and used in the PNW. The project was conducted using the Terrain Analysis Package (TAP) Radio Propagation Software. Using various input parameters such as repeater height, watt, antenna type, receiver height, watt, etc., along with location information, the team has been able to analyze the radio coverage for the area. Outputs include places where up to 15 towers cover one area and other areas of the land have no coverage at all. These outputs have been validated in talking with the field. The tool allows for analyzing the opportunity to include other towers on adjoining jurisdictions and the impact that might be

gained by sharing towers accordingly. Through field verification, they have found that the product is within 5% accuracy of actual conditions.

- **GIS for Decision Support** - Demonstrated a **GIS** product used in the PNW that contains information such as aviation hazard maps, fuel treatment records, fire history, and retardant drops in threatened and endangered species (T&E) sensitive areas and cultural areas under protection. This information can be shared with air tanker pilots, incident command teams and others who must be considerate of these concerns when managing the land.
- **Resource Tracking Prototype** was demonstrated. This system is similar to Automatic Flight Following (AFF). In this project, the system provides real-time tracking for equipment, crews using Google Earth. The proposal is to purchase enough tracking devices to provide real-time information to dispatch offices in resource tracking. Along with the obvious safety value, this tool would also provide additional decision support in assigning closest forces resources to an incident.
- **Data Stewardship and Governance** - The discussion continued in that there is a need for data stewardship and governance, i.e., who is responsible, who owns the data, who sets the requirements. This needs to be determined.
- **Migration to Digital Narrowband** – Shannon Tippett described history and the current situation. It is important to determine what value migration to digital really brings. The original design of systems was the “spoke and wheel”. BLM recently replaced many systems one for one with no consideration for design using digital or adjusting frequency allocation. Redesign for digital requires more frequencies. Need to look for opportunity to share mountain top sites, funding. We need to remember that past frequency coverage studies were all based on analog technology. In digital you do lose some coverage, but gain in delivery. Other considerations include:
 - With analog technology a garbled message is still delivered and can be interpreted. With digital the signal drops completely.
 - Heavy timbered areas can cause a “picket fence” type interference with signals in digital.
 - Digital sites require AC power, unlike the ability to use solar power at analog sites
 - Just because we have digital equipment does not mean that we are ready to go digital.

Yet, there are compelling reasons to move forward. It is important to determine what value migration to digital really brings.

- Digital allows for encryption of the frequency. This is important to Law Enforcement; while fire is less interested in this feature.
- The FS is ready to start talking about migration to digital. But it goes back to system design. Perhaps it is time to run some limited non-harmful testing.
- **FTP Capability** – The need to for FTP file transfer or something similar is paramount to continuing to produce a variety of products currently in use by the wildland fire community. For example, FTP is used to transfer files for Infrared Flight maps, Predictive Services inputs and products, BAER information, WFDIS, NFDRS and NMAC. If FTP is not an approved method there needs to be a workable, secure substitute which allows data transfer between Federal (FS, BLM, BIA, NPS, FWS) and the local county/state partners. Vaughn stated that much of the problem with FTP comes with the management of the data. Unfortunately people made mistakes and posted information which was available to the outside world which should not have been. So the data must be managed comprehensively; guidelines in place which do not permit transfer of PII or anything related to national security. Currently the organizations are using 5 terabytes of the 9 available. To read access is anonymous, to write you must have a password. There needs to be a secure solution that will continue to facilitate this need. It must be easy to use, secure and have approximately 9 terabytes of space available.

Tuesday, July 28

The group visited the Redmond Air Center including the Tanker Base, Central Oregon Interagency Dispatch Center (COIDC) and the Ochoco/Prineville District Office.

Redmond Air Center

We were present during the morning briefing which included the fire weather forecast and the situation report (National/Regional/Local). The group enjoyed the opportunity to watch the smokejumpers suit up and load the aircraft in response to a fire. We were also able to see the inside of a smokejumper aircraft and visited with the pilot regarding communications issues. A trip to the Air Tanker based afforded us the opportunity to watch the heavy airtanker respond to a fire order.

- **Interconnectivity and Wireless Internet Access** at the Redmond Air Center / Training Center. Currently at RAC when guests (such as BIA or State partners) come to the training center or other parts of the base and bring their government furnished computer only to find that there is no way for them to connect to the internet, no access at all from the dorms or certain other areas. When she inquired about having the FS CIO bring in wireless access to a DSL, she was told that it would be well over \$10k for each site on the base. There is no money for that sort of cost and it seems inflated considering the price of descent open market wireless router. Vaughn stated that he had intended that wireless should be available and thought that it was running and secure but now knows that this is not the case. In addition there are situations where a BLM person cannot VPN to their home unit when connected to the FS network. This needs to be resolved. Sonny and Vaughn ensured that this situation will be resolved, and that they will work together to remove any barriers.
- **Communication** (written such as in the correspondence database). – Kerry Kerr discussed the information dissemination problem in the Forest Service. She says it is quite normal to not be given appropriate memos such as those that apply to policy or direction from various levels of the organization. She stated that in order to learn what is going on, she often just searches the correspondence database.
- **Video Teleconferencing** – It's great but there's a real problem with ordering and understanding the status of the request. The RAC ordered a system not long ago through the Service Request portal but the Customer Help Desk knows nothing of it. There is no place for Kerry to check the status of the order.
- **Automated Flight Following (AFF)** - If anyone is going to use the AFF portal to disseminate additional dispatch information, it should be noted that AFF is not a mandatory requirement in *all* FS and DOI aviation contracts. For example R2 and R4 do not require AFF capability in standard contracts.
- **Frequency Incompatibility** - 7.5 kHz channel spacing on State radio systems (ODF & DNR). Some FS aviation radios are not capable of advancing in 2.5 kHz increments (only 5 KHz). *See the document FCC 7.5 kHz Narrowband Issues.pdf included in the meeting summary attachments.*
- **P-25 (digital) Implementation** - Aviation contracts (for fire missions) have language mandating P-25 requirements by January 2010. This requirement was based on earlier Agency (FS & DOI) predictions for implementing a P-25 infrastructure. If the timeline for implementing the P-25 infrastructure has slipped, this needs to be communicated openly. Requiring P-25 radios under contract and then operating them in analog mode (because we're not ready) hurts our credibility. The average cost for a P25 compliant aviation radio is \$10,000. The timeline for implementation should be based on the actual needs and required use of the technology. *See the document p25_aviation_radio_memo.pdf included in the meeting summary attachments.*
- **Procurement of Aviation Radios (Technical Approval)** - There has been much confusion about wherein lies the oversight and responsibilities for acquisition of Aviation radios (both AM and FM). Processes vary with each new procurement effort. Can the IIOG determine the applicability of LMR oversight concerning aviation equipment? Clarification on this subject would help immensely.
- **Frequency Allocation** – The control of frequency allocation is under the NITC. There is a 3 month window in which we have the capability to move frequency assignments. We need to have the ability to make those changes ourselves. Tim Quinn knows the FAA network manager and Mike Field is committed to working with together so that we may have more control of the frequency allocation for those frequencies assigned to us.

Central Oregon Interagency Dispatch Center

The group toured the COIDC, and shared a discussion on multiple issues affecting the dispatch center with hosts Grant Kemp, Center Manager and Chris Hoff the Fire Management Officer for the area. The dispatchers in the center also shared concerns.

Following are some key points of the discussion:

- **Radio System Funding** – Grant suggested that perhaps radio systems should be funded out of some sort of "Working Capital Fund (WCF)" type program. He suggested that with a program like WCF in place it would allow us to take advantage of updated technology on a scheduled basis.
- **Data Entry** – The current systems used by the dispatch community do not "talk" to each other. As things operate now, the same data must be entered into several systems individually. Due to normal human error, often information does not match between systems (such as frequency and location information). It would save the dispatch community untold hours labor and increase accuracy if these systems were set up so that data was entered once and used concurrently between these systems.
- **Computer Log-in** – There are challenges to allowing access to computer systems when dispatchers are brought on from other areas / other agencies on a temporary fire assignment. Access for Administratively

Determined (AD) dispatchers is especially challenging. This situation delays the effectiveness of dispatchers to immediately be able to support initial attack and large fires.

- **Interagency Funding to Upgrade Facilities** – Grant described a situation where the Forest Service was willing to pay for new carpet in the center. However, the process stopped when procurement realized that the FS was funding improvements to a BLM owned facility. The COIDC facility is owned by the BLM but used by three agencies. These barriers need to be removed.
- **Radio Systems for Interagency Centers** – The standard radio design usually meets the DOI/FS needs, but we need to ensure that somehow we include the local (state/private/county) component to our systems so that we can communicate with our stakeholder partners.
- **Cat 3 Wiring** – This has been a problem in that one agency owns the facility and the wiring, yet all agencies use. When requests for repair are called in, the technician (regardless of agency affiliation) who responds should be able to work on the system (which is not now the case). Please make sure that agency technicians are able to cross agency boundaries.

Ochoco/Prineville District Office

The group shared a discussion of Service First and the impacts that interoperability (or lack of) have on this program. We were joined by Jeff Walter (Forest Supervisor), Mike Johnson (Administrative Officer) and Steve Robertson (Associate District Manager).

Following is Jeff's list of applications that are of primary concern. He included that for fire management issues, the primary contact is Chris Hoff, Fire Staff Officer for the Central Oregon Fire Management Services (COFMS) which includes the Ochoco and Deschutes National Forests and the Prineville District BLM.

- **Timesheets:** Ability to review and approve timesheets. Currently BLM employees cannot access FS Paycheck 8 and FS employees cannot access BLM time program Quicktime. This prohibits supervisors in different agencies from approving their employees' time.
- **AVUE:** Ability of BLM Supervisors to easily access AVUE to advertise vacancies that they supervise.
- **Gov.Trip:** Ability for both BLM and FS supervisors to access Gov.Trip for approval of travel for their employees.
- **Lotus Notes Calendars:** Ability for both BLM and FS supervisors to access calendars within Lotus Notes to review their employees' schedules.
- **Primary areas that are challenging the Service First model in COFMS:**
 - We all support **the public**, provide information and so we need to learn how to **facilitate discussions** with them. They do not want or understand the reason for multiple places to look for information. They need one on-line interface to the COFMS (**one stop shopping**) for example.
 - How can we **enable transaction capability** and a new delivery method to sell maps and permits, for example?
 - Other government agencies in the area (county, city, etc.) provides information on the web as detailed as council meeting minutes. **We are not that current nor open in our information sharing.**
 - **Social networking** (YouTube, Facebook) is providing a new medium for communicating with the public and for receiving such information. Yet these are prohibited by agency policy. We need two networks (one secure, internal, etc.) and one that is external and would not leave the primary, internal network exposed to hackers, etc. Yet, the use of two networks is specifically prohibited by Federal Government policy. If we can't use two networks, then how can we address the "outward facing part of ourselves" without compromising security concerns. We need both.
 - The use of on-line information is generational. In the rural areas especially we have some who don't touch a computer; others who regularly use a computer for commerce, banking, and information access. **We need to provide both the face-to-face customer support at our offices and the on-line presence** widely used when available and expected by the on-line generation of customers.
- The IIOG described the new **Interagency Radio Re-Engineering Pilot Project** to our hosts. This pilot will include:
 - Analysis/statements of benefits,
 - Create a template/example for use in other parts of the countries,
 - Remind teams to ensure that all stakeholders are included as this model is used.
 - In this particular case, the team will reach out to partners such as the Warm Springs reservation.

- As part of the business analysis the technicians will need to spend appropriate amounts of time on the ground to “learn about the business” in order to design a system that will meet the business needs.

Wednesday, July 29

The group visited **Awbrey Butte**, the control site for the Deschutes NF Radio system in the morning. This site is located in west Bend and is the location of a number of Television broadcasters, FM radio stations and a number of cell sites along with a number of two communication sites. The 200 foot tower is shared with the Deschutes County sheriff and Air Link and 911 services.

In a short meeting the (the IIOG discussed what they had seen at Awbrey Butte.

- This is a FS site where there are 14 repeaters controlling 4 bases controlling 8 mountain tops.
- It would be beneficial if Vaughn and Sonny could **come back in the fall and include the Oregon Department of Forestry (ODF)** in some discussions.
- **Measure Success / Savings** – It would be beneficial if we had a method to show savings realized by working together to combine repeater sites/towers, etc., and how much time might be saved by dispatch with a better communication system to use.
- **Central Oregon Pilot for Integrated Radio Services** – The IIOG discussed this effort further and provided guidance on the project. This information is captured in a separate document for use in the charter development.

There was also a summary of items brought to our attention during our visits this week. These are included in the Green/Orange Flipchart Summary.

In the afternoon the group visited **Grizzly Mtn**, the control site for the Ochoco NF and Prineville District BLM. This site is north of Prineville on Prineville BLM land in a Forest Service owned and maintained facility. The site is shared with the FBI. There are multiple towers with a number of antennas mounted on each tower.

Thursday, July 30

Law Enforcement

The group met with Law Enforcement officers for the surrounding area. We were given a packet of briefing materials and those are included as attachments to this meeting summary. A summary of these documents is included at the end of this summary document. Topics included:

- **Programming Radios:** Mandates are to streamline, consolidate, and centralize. Our processes have not caught up to the mandates. Example: although the Central Oregon LEI organization has been zoned into four Forests and one Grassland, we can't program adjoining Forests into the LEO's radios without correct forms being signed by all affected Forest Supervisors, and routed through obscure processes which we can't seem to find. It shouldn't be hard to follow the rules. LEO's have top secret clearances, but are not trusted to program a radio. Example: recently, in order for Dan to communicate with COIDC, he had to go through a lookout on a car-to-car frequency, then relay Crook County police / fire dispatch info from the ambulance and medical helicopter through the lookout, to COIDC, then to the fire units on scene. He should have everything on one radio.
- **Processes:** Processes are so cumbersome, that cooperators are simply giving us their mobile and handheld radios so they can talk to us (*Deschutes*) rather than fight our processes. Some are donating dispatching services (*Crook*,) in the interest of safety and essential communications. In the interest of interoperability, we should be able to provide support to cooperators, not tell them that the onus is on them to go to a website and navigate around to find the rules and forms to correctly interact with us.
- **Central Oregon Pilot** – Please ensure that Law Enforcement is included in the business needs assessment. Activities to consider include standard patrol, tactical, operations, cleanup, mobility for special events.
 - A **cache of radios** available for these things with very tight parameters would be helpful. A pre-positioned cache of radios ready for use for special events to facilitate communication with Law Enforcement support coming from other areas to central Oregon would facilitate ease of communications.

- It was mentioned that while Law Enforcement agents all have Secret security clearances, they aren't trusted to **program their own radios**.
 - o Policy is that reprogramming is ok so long as only use authorized frequencies.
 - o Sonny stated that this must be more efficient. There should not be a requirement for a technician to facilitate this for Law Enforcement. Instead teach LEI officers how to help themselves.
 - o Law Enforcement is willing to provide one of their own to be trained to support other officers in programming radios, etc. Then there would be a list of identified LEI officers qualified / trained to provide this support.
- **Frequency Plans** were developed and managed locally. Instead there is a need to develop national frequency planning and make it available to all appropriate personnel (FS, BLM, etc.) but not the public.
 - o Ensure that counter measures are accounted for and methods to adjust accordingly are available.
- **Law Enforcement needs a communication system** to support them which is separate from Fire and Resource work.
- **Mobile Data Terminal (MDT)** is essential to LEI operations and is intended to take a lot of the workload off of the dispatch organization supporting LEI.
 - o LEI tough books. There is no need for a specialized (FS or DOI) image. These computers are not intended, nor never will be connected to FS networks. These are intended to support mobile data...
 - o MDT is an 800 mhz system. – Plain text on radio. MDT is needed for all information that could contain PII.
- **Communications with non-Federal partner agencies** (Deschuttes County Sheriff for example) – Jon Sholes, Communications Officer for Deschuttes County Sheriff's Office described the situation in that area. He has simply given FS LEI officers one of the county radios to facilitate communications. This doesn't happen everywhere but seems the best resolution in this area.
 - **Communications is missing.** The agencies really don't talk (leadership to leadership). The communication happens between the officers but not at the top organizational levels; nor do the technicians from the FS talk with him. While he would very much like to interface with Federal leadership but often no idea where to begin.
 - There is an increased trend to have to **pay locals for dispatch support** service for our Federal LEI.
 - The **tech approval** process stopped getting equipment to LEI folks. It doesn't work.
 - There needs to be a **consistency between DOI and USDA/FS in process and language.** This causes confusion for customers and needs to be fixed.
 - How much is Warm Springs Tribal involved in this mix? Not much, they are fairly proprietary in their activities.
- While LEI would be willing to stay within the fire dispatch arena, the **special needs of Law Enforcement** need to be addressed and supported. Regardless, they still need separate frequencies to operate. The key is **secure and trusted communications**.

There are five common themes we've heard during this discussion:

1. Organizational Interface Issues
2. Communications Issues – customers do not know the vision or how to work in it.
3. Process Issue – How do I?
4. Technical Interoperability Awareness Issue – Jon (from County). Are we using the technical knowledge available around us and sharing it?
5. Special Interface Needs for LEI – Support covert, specialized needs, understanding those needs.

IIOG General Meeting

Following the discussions with LEI, the IIOG held a general business meeting.

- **The Radio over Internet Protocol (RoIP)** Charter was reviewed, slight changes made and returned to the team to be finalized for signature.
- **The Interoperability Radio Systems Study (IRSS) Charter** was reviewed and modified slightly.
- **Migration to Digital Narrowband** - The team reviewed the situation with the migration to digital narrowband and the comments we have heard during this week's visits. These are the key points captured in the brainstorming/discussion session of the meeting.

Migration to Digital Narrowband – Discussion 7/30/09

- Process with no plan
- Moratorium until plan is done
- Plan – policy – arch
- Expedite
- Problems with performance w/ digital
 - Performance issues
 - Interoperability with non federal partners
- Examples of successful / unsuccessful implementation
- Folklore
- Issues that need to be addressed?
- Not an all or nothing thing
- What is the problem does digital solve?
- What are the risks?
- Consequences of back pedaling?
- We all agree that we need a plan to migration
- What do we need to know before a moratorium?
- Does digital cost more?
 - Lifecycle?
 - Maintenance costs
- Does digital -> analog cost more?
- Can Radios be updated
- Does digital work as well as analog?
- Far more feature capability on the digital set vs the analog set
 - Apples : Apples comparison in Digital to Analog
- Inventory
- Benefits of digital – backward / forward compatible

MUST HAVE PLAN / POLICY and ARCHITECTURE

As-Is /(Inventory), features, relative to the rest of the country current ops.

But while we develop this plan, how can we take a risk mitigation approach to this? In other words, not continue to purchase if in the lifecycle not ever to be used in digital.

WE NEED:

1. Inventory / Dashboard of current
 - Fed
 - Non-Fed
 - performance analysis
 - Independent assessment
2. Address initial issues / concerns
 - technical
 - business
 - price
 - fill the gap plan (architecture)
 - a. when / how
 - b. risk management
4. policy / implementation

Friday, July 31

National Interagency Fire Center (NIFC) – Boise, Idaho

IIOG members traveling to Boise: Jim Douglas, Kirk Rowdabaugh, Michael Williams, Vaughn Stokes, Sonny Bhagowalia, Mike Field, Kolleen Shelley

The group attended a tour of NIFC, NICC, a weather/situation briefing, met with the NWCG, NIFC Fire Directors and attended demonstrations various technologies “Technology Fair” used in support of the mission at NIFC.

- **NIFC is a PLACE, Not an Organization** – Matt Cnudde gave a presentation on NIFC, the history and the agencies represented. Matt’s power point presentations are available as attachments to this meeting summary document.
- **Meeting with NIFC Fire Directors and NWCG** – Discussed the Interagency Wildland Fire Governance Structure and how it relates to activities at NIFC and Nationally.
- Currently documents must be converted to .pdf format in order to be made available on the internet (such as the National Incident Management Situation Report). This has to do with
- **AD Hiring** – The Administratively Determined (AD) hiring process was described and the example was given where Phil Street (retired NPS director) is hired during high fire activities to support the NMAC and other appropriate decision making teams.
- **ROMAN** - Robyn Heffernan discussed the ROMAN project and that it is currently hosted at a University. The system is widely used and provides key real-time weather information to the predictive services organization and the field. The system was down the day of our visit which further highlighted the need for redundancy.
- Sonny stated that as a member of the **Federal CIO Council** he feels that perhaps wildland fire needs to be represented on the council.
 - There are six agencies represented plus the states and all of this ties back to the Federal CIO.
 - The group pointed out that NWCG feels that we can rely on Matt Cnudde to serve as the business spokesman for radio issues and Shari Shetler on IT issues.
- **Law Enforcement** needs to help us find a way to let the IIOG reach into their business community so that we can ensure that their needs are met as we move forward with various projects.
- **Communication and Governance Process between NWCG and IIOG** – There is confusion regarding the governance and communications process between NWCG and IIOG. Kirk Rowdabaugh (DOI) and Rick Prausa (FS) represent the fire business on the IIOG.
 - In addition, Matt and Shari (NWCG Committee Leads) are responsible for the regular interface with various task groups that the IIOG charters. They should answer back and report to NWCG on those efforts, and ensure that the concerns of the fire community are represented and addressed. In addition, IIOG Program Manager, Kolleen Shelley will create a series of briefing papers on IIOG activities and share them with NWCG Program Manager, Bonnie Wood. Bonnie will share with NWCG membership as appropriate.
- **Geospatial Data Standards** – All standards are different, there is no interagency standardization. It is important that fire not come up with their own standards without first ensuring that they are complimentary to the NTDC standard. Make sure that you are using an authoritative data source. It is imperative that all USDA and DOI bureaus (not just fire) work to comply with a national standard. Sonny stated that the Department of Homeland Security (DHS) recently released information on the standard for this.
- **Tours** – The IIOG toured the NICC (hosted by Kim Christensen) and Great Basin Radio Cache (hosted by Steve Jenkins).

- **Technology Fair** – NIFC residents and guests responsible for various fire related technology program areas teamed together to host a technology fair for IIOG members. The booths and presentations were excellent. These displays included:
 - Wildland Fire Decision Support System
 - Integrated Reporting of Wildland Fire Information (IRWIN)
 - Fire Program Analysis (FPA) System
 - Google Earth Enterprise for Fire Decision Support
 - Mobile Thin Client for Incidents (IIOG Pilot Project)
 - Remote Automated Weather Station (RAWS)
 - Automated Flight Following
 - NIFC Wireless Hotspot
 - Situation Awareness Firefighting Equipment (SAFE)
 - Weather Information Management System
 - FAMWeb Applications and Data Warehouse
 - ARS, FEPMIS, FIRESTAT, SIT/209
 - Fire Applications Support Helpdesk (<http://fam.nwcg.gov/fam-web/>)
 - Provides interagency support to FS, BLM, NPS, DNR, FWS, BIA, DOD, State and County agencies, private companies and individuals as well as international support to locations such as Puerto Rico, New Zealand, Australia, Macedonia and Antarctica.
 - Applications Supported include: AFF, AMIS, AWSR, Behave+, Dispatch Utilities, Farsite, FEPMIS, FPA, FireFamily+, FireStat, FIMT, Flammap, <ftp.nifc.gov>, GIS (fire support), ICBS, Inciweb, KCFast, KDL, Nexus, PCHA, Sit/209, WIMS, WFAS, WFDSS

Meeting Attachments List

Powerpoint presentations given at this location are available in the IIOG Quickr Teamroom

NWCC

- NWCC Overview.ppt
- Interagency Dispatch Management Efficiency Assessment.ppt
- Portland Fire Bureau Command Vehicle.ppt
- Interagency Radio Coverage Analysis.ppt

Redmond Air Center

- FCC 7.5 kHz Narrowband Issues
- p25_aviation_radio_memo.pdf

Law Enforcement & Investigations

- Law Enforcement Dispatch Assessment for FS Law Enforcement on the Coronado NF.doc
- IIOG and LEI Meeting Agenda.doc
- Dan Smith's 07.2009 Mtg. with CIO.doc
- LEIMARS_Mobile_Rugged_Environment_MDT_072209.doc
- NEW Customer Review of Services_Harris Co MDT.doc
- Radio Interoperability Talking Points.doc

NIFC

- Welcome to NIFC.ppt
- IIOG_NWCG Discussion.ppt

Available upon request:

Redmond Air Center – Short Video Segments

- Smokejumpers
- Air Tankers