Managing the Cultural change when a Common Operational Picture Program is implemented

The Paradigm Shift for those with a COPP and those planning a COPP

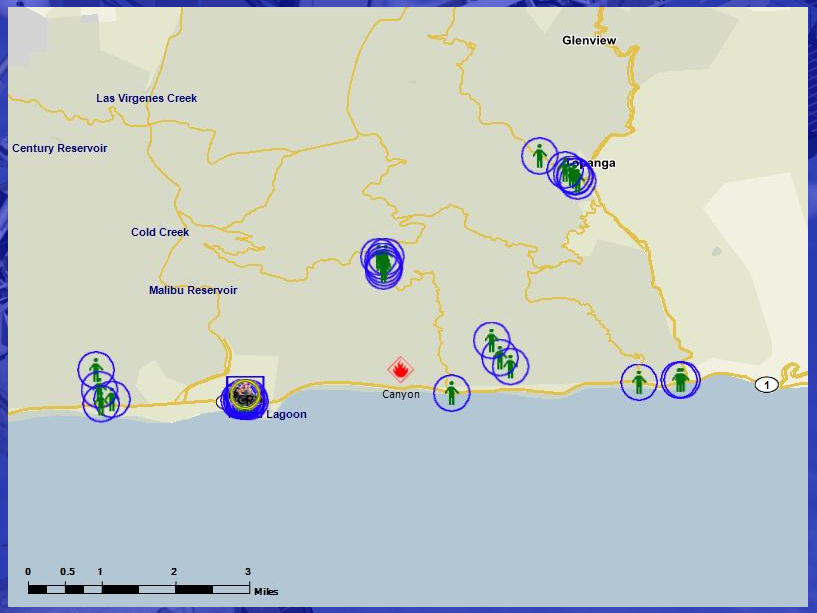
By Wayne Tolosa, President/CEO

My Background

- Jet Propulsion Laboratory
- Aerospace – Military Satellites
- Instruction – Electronics
- Reserve Captain 25 years Sheriff's
- SAR 10 years
- DHS, Dmort, Swift Water, Fire – Training
- Incident Commander
- EMT
- Special Environmental Task force agent
- Voluntary Firefighter BLFD
- Antares Architect and System Designer

What is a Common Operational Picture Program?

- Maps, GIS etc.
- Communications
- Sharing
- Public Info System
- MOU
- Flexibility
- Working together in a dynamic environment and adapting to it rapidly



COPP continued

- Do we need it at incidents?
- Does it help us?
- Technology's strengths are in managing data.
- It can change on the fly.
- Data can travel long distances in seconds
- It can transmit large amounts of data simultaneously to many.
- "Technology liaison"
- Radio technology - what are the limitations?
- Security must be reviewed for data transfer.

Why You Need One

- What people in the Super Dome?
- True interoperability
- Rapid effectiveness - don’t just outlive the problem.

How do you Implement a COPP or Deal with a existing one?

Plan, Design, Plan, Design

Flexibility

- Ability to handle all hazards
- The when, where, how, who, what,…
- Flexibility - different incident types, sizes and personnel .
- Plan for failure - internet, system crashes, infrastructure?
- Work with what you have, this is what we do, 90, 80, 70….

What issues are there and how does it drive new SOPs

- Tactics, Response, Operations, Sitstat…
- Working across multiple agencies
- Working across multiple disciplines
- Dealing with tradition
- Rapid info, mass amounts
- Force multiplier
- Current SOPs were written for today's processes
- Companies look for new processes - Dell
- Recent Big Bear fires, check in at Fawnskin
- Bring aboard the believers
- Situational Awareness
- Sitstat
- Restat

What are the Major Complications?

- Implementation Issues
- Elements of an incident
- Users and Traditions
- Interagency Issues
- Technology Challenges- right technology at the right place and time
- Understanding limits and possibilities of technology
- By design making the technology fit the situation/Incident and personnel limitations.
- Don’t over complicate – continuously reassess and modify, no different than an incident
- Not letting the “powers that be” remotely manage your incident.

Psychology of people and incidents

- Agencies will group together
- Technology encourages unity

Training

- Safety and technology - don’t walk in front of antennas!
- What are the new problems?
- Communications - Importance of Liaisons
- What is technology? Its different to everyone
- How can you use it ?

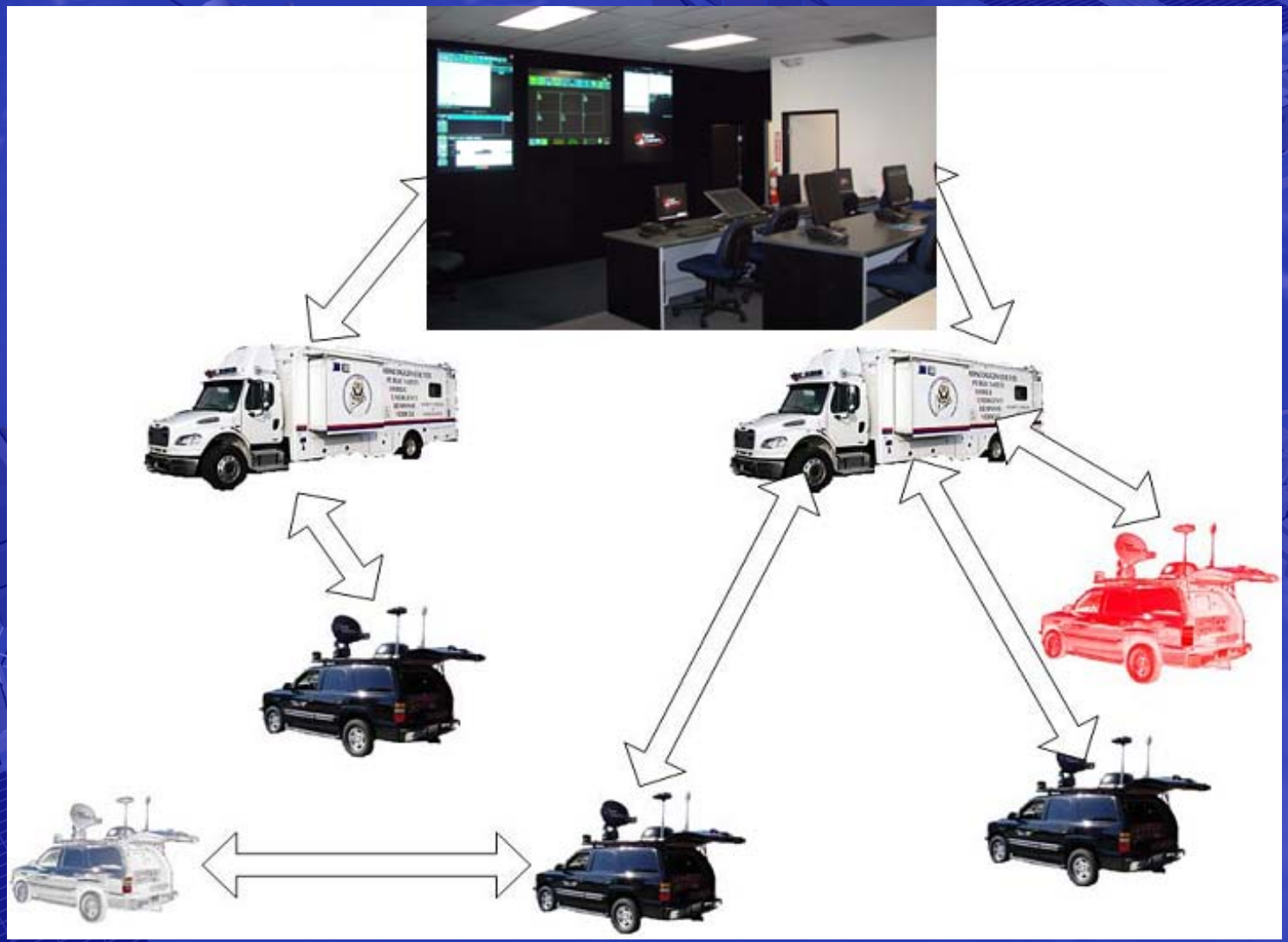
Teach others to change the current mind set.

- Don’t force systems on the non-believers
- Educate others that technology is here to stay
- Use it
- Don’t be afraid to walk into another agency trailer
- Train for failure – real life situations
- Use other technologies – and show the importance. Its only as good as the data you get to it.

Handhelds in COPP

Working Together – Law, Fire & Military

Common Operating Picture Overview



First Responder Model

- Designed for field personnel
- Limited personnel
- Limited Training
- Infrastructure not available (unlike military)
- Don’t turn field personnel into GIS analysts

Designed for many uses.

- All Hazards Approach
- Provides Real-Time situational awareness
- Designed for all types of incidents & disasters.
- Natural – Earthquakes, floods, fires, hurricanes, etc.
- Man Made – WMD, Terrorist attacks
- Tactical – Barricaded suspect, pursuits
- Solution for Katrina

Situational awareness and scene mitigation during an incident.

- Will you have adequate resources on scene?
- When will the next event happen?
- How fast do you want situational awareness?
- Does it help you to know timely information?
- Sit aware starts from the simple person using sneaker net.
- Bringing back information from the field via radio
- Carrying cameras in the field
- Cell phones, faxes, printers
- All of it depends on what technologies you have and how big the incident is.
- How old do you want the IAP to be? Minutes or hours (operational periods)
- What are the communications? Radio, email, messaging, how do we capture this?
- What is Intel?

First Responders are not engineers and engineers are not First Responders (usually)

- Engineers don’t think operations, tactics…
- The difficulty of bridging the gap between first responders, engineering and science.
- This is a huge challenge!

Big Picture, not one piece tells all

- Our job is to assess rapidly and accurately, and deploy assets in a timely manner to protect life, property and the environment.
- What is data?
- How much ?
- Reporting methods – check in
- Statistics for future trends
- What type of data is important to you?
- You will need the ability to sort information

- How to effectively and efficiently handle the increased amounts of data and technology that has become available to first responders.

- Implement a data management plan
- Use the data that is important at the time
- The incident shapes our dynamics (and needs). Initially, mapping may be the most important to show where troops are. Other incidents we need to know who to transport.
- Data will flow at a faster pace than we are ready for.
- If we don’t change, the world around us will move forward.
- The military is the best - not because they have more troops but the best technology.

Operations

- More personnel in the field communicating with cells phones.
- Manage the data with visualizations
- Think about how and where to disseminate it.
- Think of the Public information system
- Create multiple points of inputs
  - Logistic stations
  - Check-in-Out
  - Track resources

Change and a Common Operational Picture Program

- “We have been doing this for years and don’t need to do anything else.”
- Things will always need to be improved.
- Lessons learned from 9-11. Example of Hollywood shootout.
- The problem, where to park, who to contact, is there a liaison person
- Make it easy
- Complication causes people not to use it.
- 90-10 Rule

Too Much!

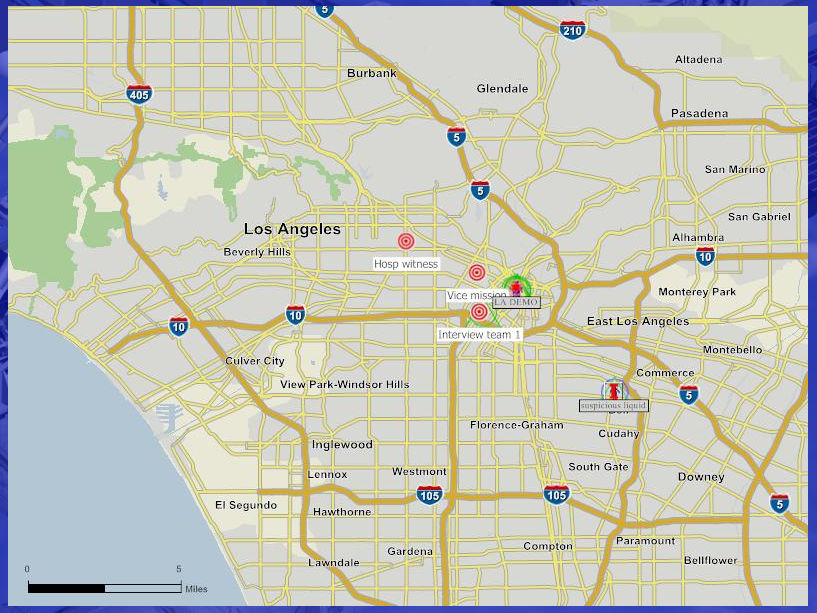
- Cant even program TV remotes, use phones
- Too much training
- Too much reading
- Computers are best for sorting the information.
- Personnel transfer and move often. Training issues of new personnel.
- Can’t depend on IT personnel for rapid response.
- Internet is useful for those not on your system.

Think Limitations

- Internet has many downfalls. If you can’t get to it, you have nothing. I don’t like to depend on it.
- Bandwidth will be the largest limiting factor. Standard videos will not be able to use the low bandwidths.
- Satellites will have a heavy load during disasters. The press will bring money to buy time so don’t depend on adding last minute. There are no guarantees.
- Automation is very important in the field.

Standards and Non-standards

- Protocols
- Software Languages
- Video
- Mapping
- Symbols
- Typing - new OES, FEMA



Working Together

- What type of agencies will be there - Police, Fire, Federal…
- We need access to information, who has the internet? Who has satellite? What are the priorities of the incident? What should be shared?
- How are we communicating? Radio, email, messaging, how do we capture this?

Final Thoughts

- Every agency will have its own unique hurdles. It's based on your individuals, the management and the direction of the leadership
- Design for the missions
- Apply technologies that have sharing capability. We have a common goal!