Cupertino Amateur Radio Emergency Service

Topic: Nets and Message Handling
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Date: Thursday, 3 March 2011, 19:30
Event: Cupertino ARES meeting, Orientation Training

Nets and Message Handling

Cupertino
ARES/RACES

Topics

- Types of Nets
- Operating in Nets
- Types of Messages

Definitions of a Net

Open Net

1. The incident has little incident-related traffic, or there is little need to direct individual stations with a Net Control Station.
2. An Net Control Station (NCS) may or may not be required.
3. Stations do not need to contact the NCS before making a directed call to another station.
4. Incident-related traffic may be handled on a point-to-point basis.
5. Most any type of traffic and communications is permitted.
6. Conversations are permitted on the frequency, provided that they break every so often to allow incident-related traffic to pass.

Recent Examples of Open Nets

1. Croy Fire Activation, 26-Sep-02, XSC-02-08
   - County EOC Operated a ***Resource Net*** on 146.115+ soliciting volunteers
   - Red Cross operated the ***Red Cross Net*** on 146.760- to coordinate between HQ, Base Camp, and 2-3 ERVs
   - Traffic was light, informal; H&W checks, responded to inquiries from ERVs to help survivors
   - County EOC monitored; SVECS staffed the Red Cross Net

2. Cupertino Decon Drill, 28-Sep-02, CUP-2002-06T
   - Only three stations were required to exchange traffic
   - Traffic was light; unofficial observations were made, some formal messages were sent.

3. Cupertino Art & Wine Festival, 13-July-02, Cup-2002-05E
   - Call for Member check-ins, radio and channel checks
   - Very informal

Definition of a Net

Directed Net

1. Established when the amount of traffic to be handled cannot be accomplished on a first come-first served basis.
2. NCS determines who will use the frequency at a given time.
3. NCS acknowledges those stations first that may have incident related traffic in priority order.
4. Conversations between stations are kept at a minimum.
5. Tactical call signs are assigned to support efficient traffic handling.
6. This net is considered formal in nature, and stations having non-incident related traffic may be asked to stand by or move to another frequency.

Typical Directed Nets

1. Montebello Fire Activation
   - CARES operated on TAC-1

2. Cupertino Fireworks event
   - CARES operates on TAC-1

3. Activation on an earthquake
   - CARES brings up the emergency net on TAC-1

4. Weekly CARES Net, County Net
   - CARES operates on TAC-1
   - County RACES operates on County Resource Net

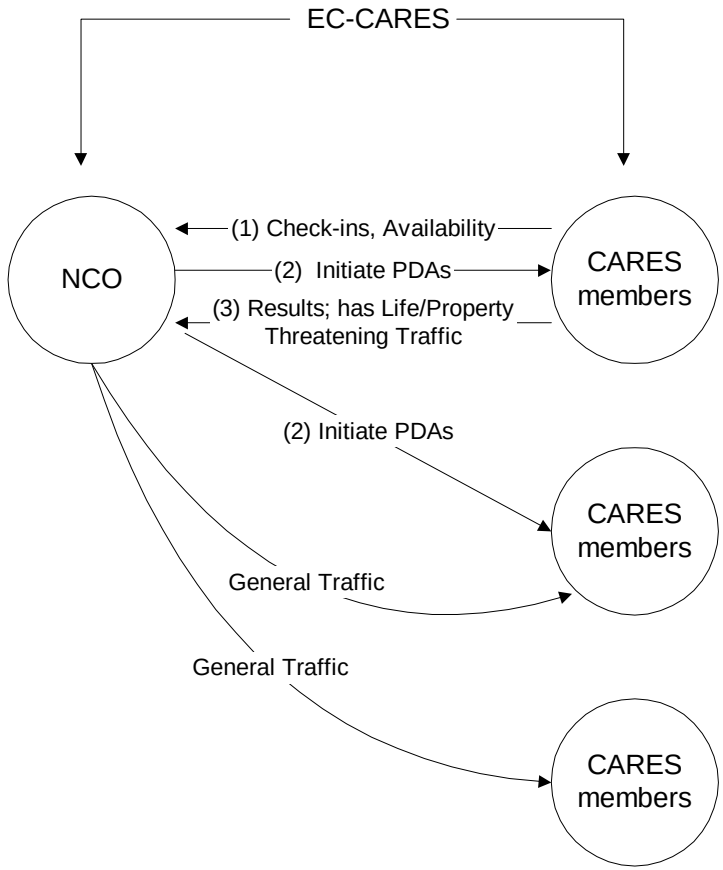
Message Handling

Initial Response Operations – From where we stand

NCO
-Check-ins
-Establish frequency guard
-Direct PSAs
-Queue Life-threatening traffic
-Queue Property-threatening traffic
-Queue PSA Traffic
-Check for FR availability

Shift Supervisor
-Assess need for field deployment
-Direct RRO to the EOC

EOC
Radio Room



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County ARES/ RACES NCO

Message Handling

What's happening on the message net?

Cupertino Amateur Radio Emergency Service
PART 6 Forms

Standard Operating Procedures

0200F NCS LOG	1. INCIDENT NAME SET			2. DATE 11/13/04	
(3) Msg ID	(4) Priority	(5) Time in	(6) Originating Station	(7) Receiving Station	(8) Time Ack
01	E	9 40	KG6 PHO	EOC	
02	U	10:10	KG6 PHO	EOC	
03	U	10: 11	4	EOC	
04	U	10: 13	KG ODK	EOC	
05	U	10: 25	KG TWF	EOC	
06	U	10:27	KG ODK	EOC	
07	E	10:32	KG TWF	EOC	
08	E	10:36	W2 KDX	EOC	
09	E	10:45	KC 6 PJJ	EOC	
10	E	10:47	5ZD	EO	
11	E	10:48	W2 KDX	EOC	
12	E	10.50	W6TWF	EOC	
13	E	10:5	KG FUZ	EOC	
14	E	10:56	KG TWF	EOC	
15	E	10:58	W2 KDX	EOC	
16	E	11:03	KG 6 QPT	EOC	
17	E	11:08	KG TWF	EOC	

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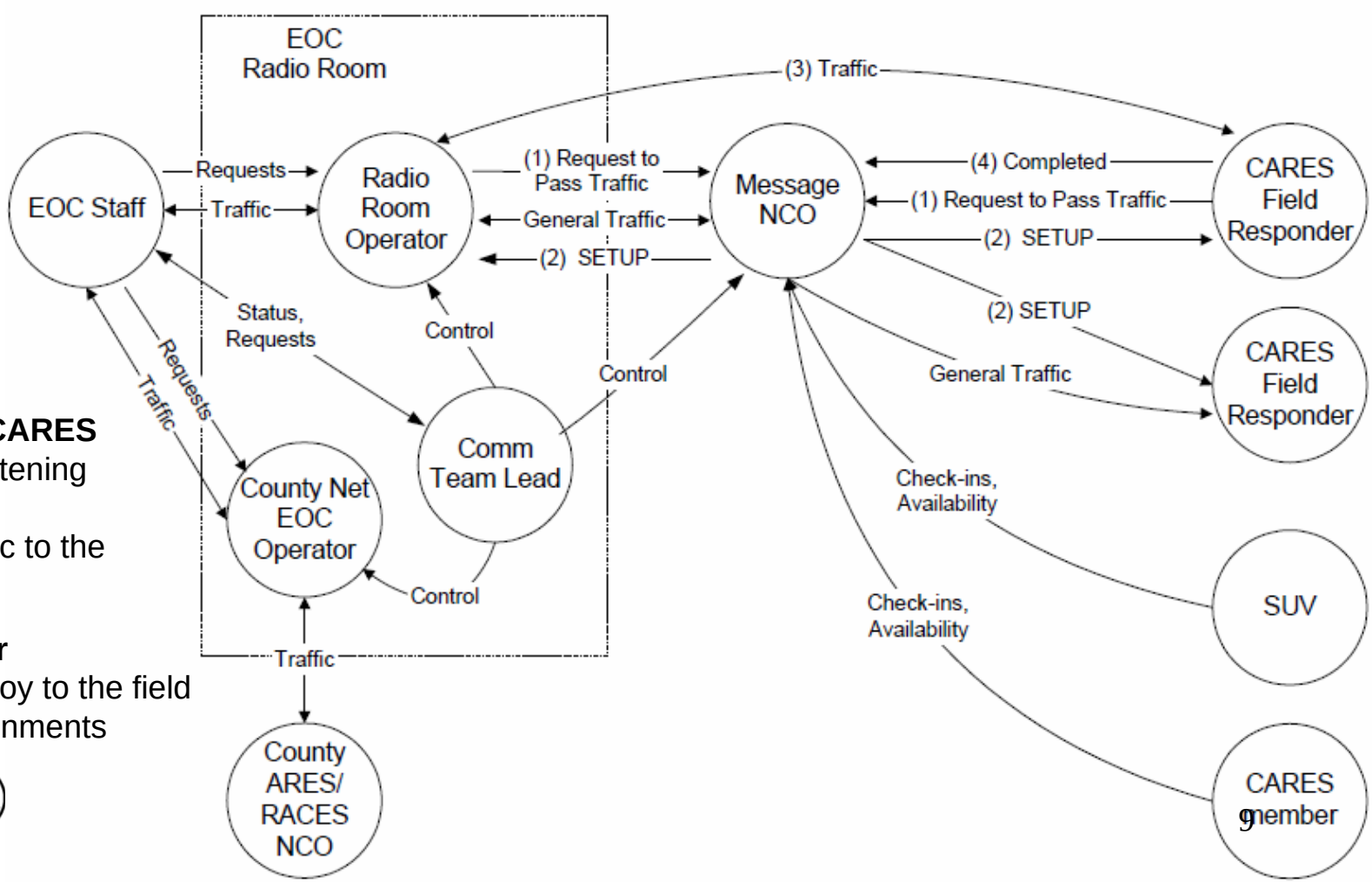
Message Handling

Initial Response Operations
– First EOC Responders, Initial Field Assignments



NCO, RRO, all CARES
-Direct Life-threatening traffic to EOC
-Direct PSA traffic to the EOC

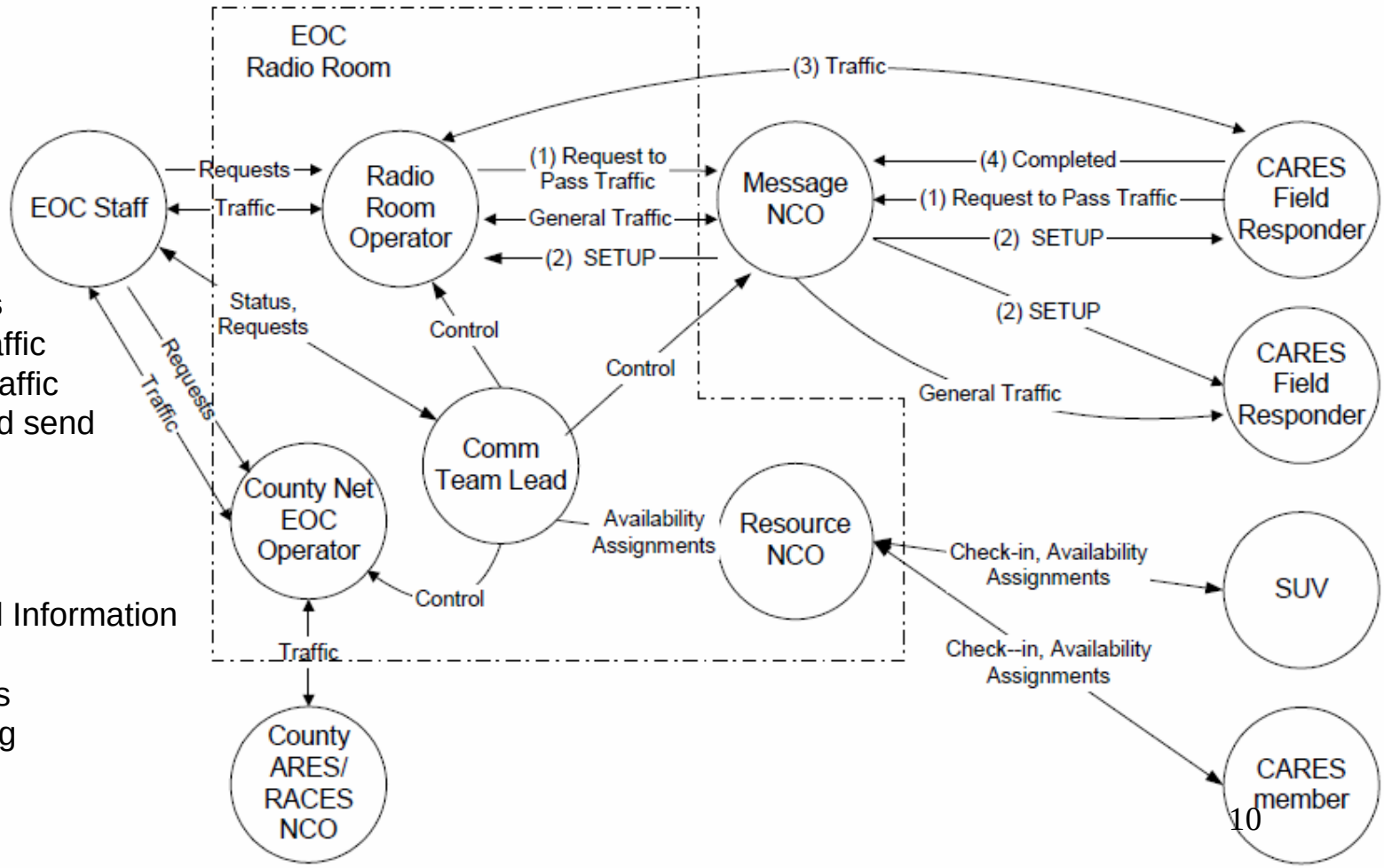
Shift Supervisor
-Decision to deploy to the field
-Make field assignments

Message Handling

Initial Response Operations – High Traffic Volume

Field Responders
-Receive CERT traffic
-Receive walk-in traffic
-Sort, prioritize, and send traffic to the EOC

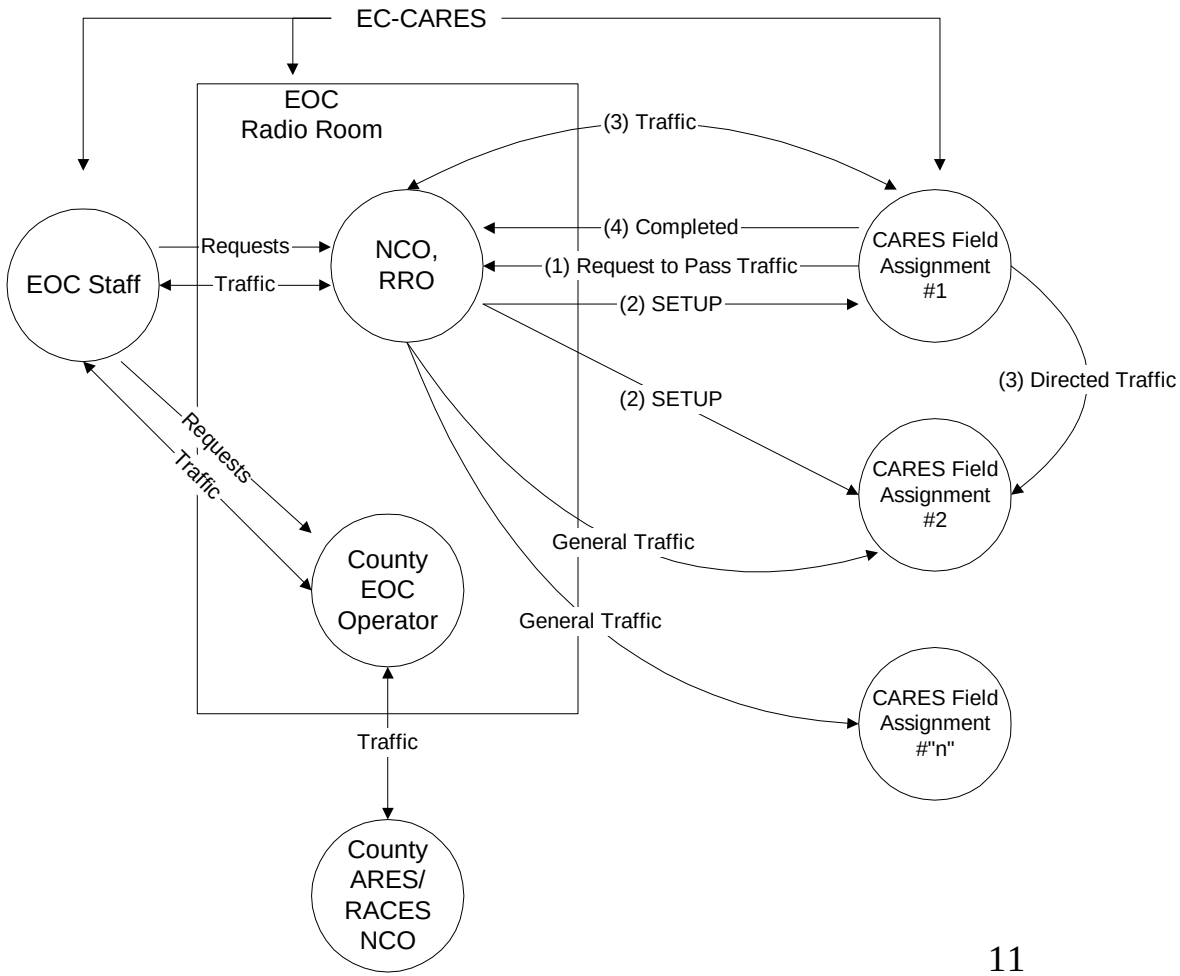
Shift Supervisor
-Confirm additional Information requirements
-Direct Responders
-Resource Planning



Message Handling

Extended Response Operations – Low Traffic Volume

Shift Supervisor, RRO, FRs
-Maintain staffing levels
-Respond to new requests from EOC, Served Agencies
-Pass traffic as required
-Health & Welfare checks with field responders



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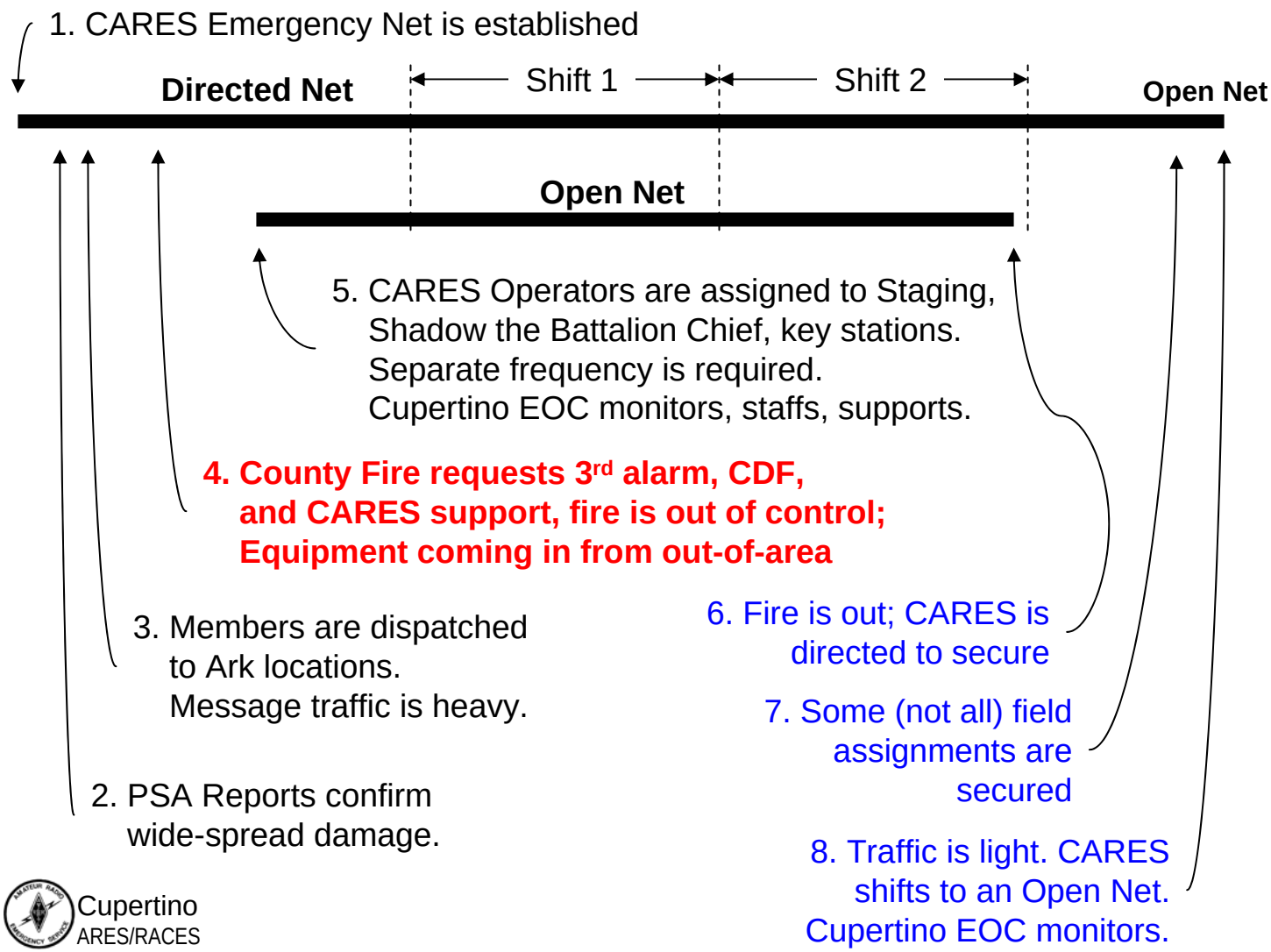
Resource Net specifics

- Check into the Resource net (Tac-1, 147.570)
- State your availability
- If scheduled for a later shift, check out and come back 30 minutes prior to your shift.
- When given an assignment, STAY on the RESOURCE Net until you arrive. Then
  - Check out of the Resource Net
  - Check into the Message Net
- When done with your assignment…
  - Check out of the Message Net
  - Check into the Resource Net
  - Stay on the Resource Net until you return home, then check out of the Resource Net

How Nets support an Event



Message Handling

Three types of messages

1. Passing traffic on behalf of a served agency

- Pass the message from the served agency exactly as written.
- ***However***, if it is not clear to you, it may not be clear to the EOC. Ok to coach the originator and suggest clarity. But, it ultimately must be the originator's message.

2. Self-originated messages

- These messages may not be written and a written response may not be required. In this case, you control what the message text will be. Write it down anyway.

3. Administrative messages

- These messages are questions between you and the Net Control Operator or Shift Supervisor, such as requesting a relief, or information on the next shift, or other issues of your safety.

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Message Handling

Self-originated messages

- ***Informally originated*** -- These are messages based on your observations or information/inquiries you receive that you believe should be passed on for action.

  Example: Resident inquiring into the status of a clinic
  A person reporting a gas leak
  A report of flooding

- ***Situation Reports*** -- These are more structured messages that report on the situation that exists where you are assigned. They are based on your observations or information you receive.

  Example: Preliminary Safety Assessment Reports

Message Handling

What do Situation Reports cover?

- Fire Hazards
- Utility Hazards
- Access Hazards
- Injuries
- Other observed conditions or information that you believe someone would be interested in receiving in light of the emergency.

- Also, its ok to pass “all clear,” “no problems,” etc., if that is the case.

Message Handling

Anatomy of a Message

- ***Message ID*** -- Assigned by the NCS Operator
- ***Precedence*** -- determines the urgency of the message (Emergency, Urgent, Routine)
- ***Destination*** -- If omitted, deliver to EOC Planning or Ops Section
- **Date/Time** -- Time the message was created. If omitted, receiving station enters the Date/Time the message was received.
- ***Subject*** -- Short Title
- ***Message Text*** -- Description of the situation or request. Includes:
  - » ***Type*** -- (initial, follow-up, final, correction)
  - » ***Location*** -- Include the neighborhood or street name; Include major cross-street

Message Handling

Precedence (Urgency)

- ***EMERGENCY*** -- Life-threatening, Situations, reports, and updates that might directly result in deploying or prioritizing resources for an incident involving life-saving efforts. ***When in doubt, USE this designation.
- ***URGENT*** -- Property threatening, Situations and reports of new threats, revised flood projections, wind direction changes in a fire, and reports of additional damage from an earthquake aftershock suggesting additional rescue efforts or monitoring.
- ***ROUTINE*** -- Includes PSA and ISA reports, correspondence between agency representatives, material and logistics messages, routine resource requests, shift planning, relief requests, etc.

Message Handling

Report Type

- ***Initial*** -- This is the first message you send when making a situation report. If you have ***EMERGENCY*** traffic, then pass this traffic as your first message. If you only have other traffic, wait for all ***EMERGENCY*** traffic to be passed.
- ***Follow-up*** -- This is the second and subsequent messages you send. Pass your PRIORITY traffic when NCS calls for it. Reference the Message ID assigned to your *Initial* message.
- ***Final*** -- Let NCS know this is your final message because you are going off-line, being relieved, etc.
- ***Correction*** -- Use this status when you are amending a previously sent message. Reference the original by *Report ID.*

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Message Handling

Who does what?

NCS Operator

- Acknowledges stations with traffic and prioritizes by precedence.
- Ensures both sending and receiving station are ready to exchange traffic.
- Assigns the Message ID.

Sending Station

- Creates the message with minimally the (i) Message number, (ii) Precedence, (iii) Subject, and (iv) Text.
- Delivers the message slowly, with breaks.
- Makes the ICS 309 Log Entry

Receiving Station

- Records the message as sent.
- Acknowledges receipt of the message. May ask for fills or repeats.
- Keeps related messages together.
- Routes the message as directed.
- Makes the ICS 309 Log Entry

Message Handling

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Message Handling

The flow of sending a Message

***KN6PE*: "Net Control, this is KN6PE with EMERGENCY Traffic for EOC"**

NCS: ***KN6PE, acknowledged. EOC, are you ready to copy traffic?***

***EOC*: "EOC is ready"**

NCS: ***KN6PE, your message number is 29. Send your traffic to the EOC.***

***KN6PE*: "EOC, This is Message 29.**
Subject is: House Fire. Break"

***EOC*: "OK, Continue"**

"Messages is: House fire at 12345 Woodhill Court. Break"

***EOC*: "OK, Continue"**

Cross-street is Prospect and Stelling. Break."

***EOC*: "OK, Continue (with the message)"**

***KN6PE*: "Area water pressure appears to be low.**
End of Message. This is KN6PE"

***EOC*: "Acknowledged. This is WA2KDX, back to net."**

NCS: ***Other stations with emergency traffic, please identify now.***

Message Handling

Guidelines

As the Sender…

- During an emergency, say as little as possible, yet convey all of the meaning
- Send as fast as you can write it
- Insert “Breaks” to confirm the message is getting through

As the Receiver...

- Its OK to ask for a “repeat” if you miss any part of a message
- Its OK to ask the sender to slow down
- Reply with “OK, Continue”, or something else to acknowledge that message block

Field Message Handling

The Field Message Handling Reality

1. Ideally, we carry lots of pads of pre-printed Message Forms
2. Or, the minimum things we need to have:
   - Pencils, Clipboard or folder, and any one of these…
     - Spiral note pad
     - Index Cards
     - Pad of Paper
     - Post-its
   - ICS 214 Unit Log, ICS 309 Communications Log
3. Creating a message
   - MESSAGE NUMBER
   - FROM: Know who is giving you the message
   - TO: Know who needs to get it
   - MESSAGE: If detailed or technical, verify you have it correct
4. Create your own message forms:
   - One message per page / card / sheet / etc.
   - Quick format each form (next page)

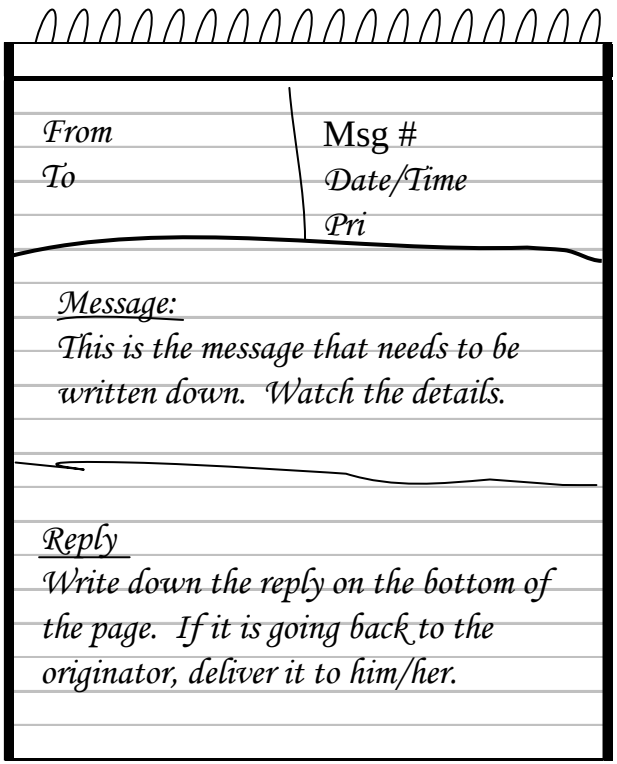
ICS-213 Message Form

Ad-hoc Field "Message Forms"

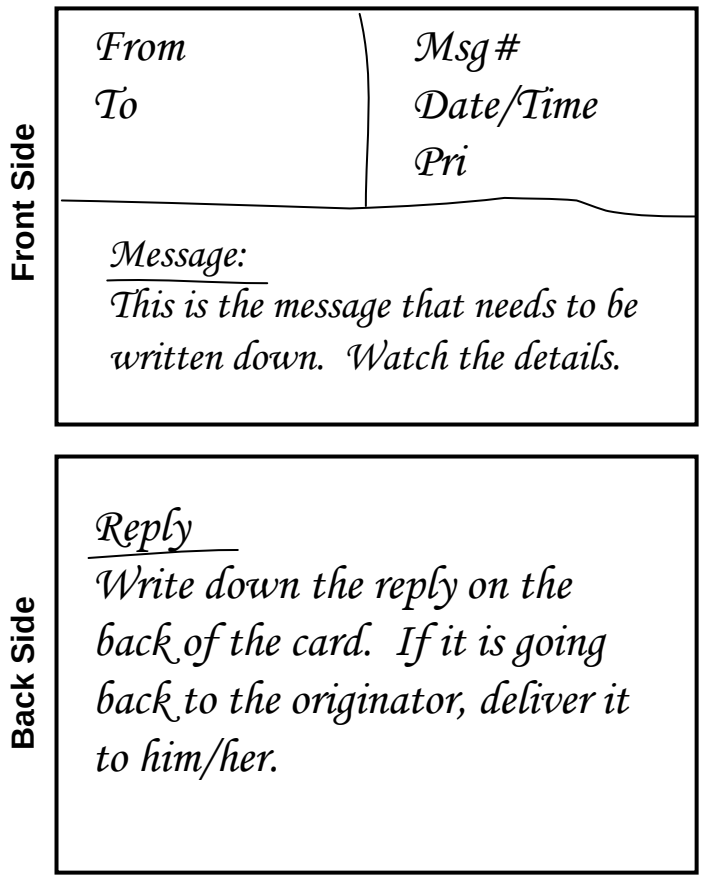
1. You should anticipate that field messaging will be extensive.

2 You are encouraged to "Keep it Simple" with a message form solution, for example …

Note Pad



Index Cards



ICS 309 Communications Log

1. *Activation #* - The number is assigned by the EOC for this event.
2. *Date/Time Prepared*
3. *Operational Period* - Identify the time period that is covered by your shift.
4. *Assignment/Location* - Assigned by the Incident Commander.
5. *Operator Name* – Your name, and call sign
6. *Station ID* - This may be your Tactical Call or your Physical Assignment.

COMMUNICATIONS LOG	Activation # CUP-10-27	DATE PREPARED: 12/4/10 TIME PREPARED: 0800
FOR OPERATIONAL PERIOD # 0800 - 1600	ASSIGNMENT/LOCATION: Seven Springs ARK	
RADIO OPERATOR NAME (LOGISTICS): Jim Oberhofer KN6PE	STATION I.D. Seven Springs ARK	

LOG

TIME	STATION I.D. FROM	STATION I.D. TO	SUBJECT

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ICS 309 Communications Log

7. *LOG* – The log consists of the Time that an event occurred.
8. *Time* – Use Military time… 24-Hour Clock.
9. *From* – The station originating the message.
10. *To* – The station receiving the message.
11. Subject – subject of the message. Include the message ID if assigned.

- At 24:00, your log will end, next log will start 00:00.

COMMUNICATIONS LOG	Activation # CUP-10-27	DATE PREPARED: 12/4/10 TIME PREPARED: 0800
FOR OPERATIONAL PERIOD # 0800 - 1600	ASSIGNMENT/LOCATION: Seven Springs ARK	
RADIO OPERATOR NAME (LOGISTICS): Jim Oberhofer KN6PE	STATION I.D. Seven Springs ARK	

LOG

TIME	STATION I.D. FROM	STATION I.D. TO	SUBJECT
0815	EOC	KN6PE	CUP045, request info on staffing
0824	KN6PE	EOC	CUP047, reply with staffing info
0831	EOC		Health & Welfare check

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