## CHAPTER III

### INFORMATION HANDLING PROCEDURES

#### A. Information Handling Principles

In developing information handling procedures for the EOC SOP, the following information requirements should be observed.

1. <u>Speed.</u> The EOC, its system, and procedures should be designed so that information can be promptly assessed and relayed to interested parties. Rapid dissemination contributes to quick response and effective decisionmaking during the emergency.

2. <u>Appropriate Distribution</u>. Those who need specific information to dispatch or coordinate a response, adjust personnel or resources or inform others should receive that information. Conversely, those who do not need information should not receive it. Decisions on who gets what information are generally made at the message center; therefore, it is important that experienced personnel (preferably from the emergency management office) perform this initial assessment and distribution function.

3. <u>Permanent Record.</u> A permanent record of all messages to and from the EOC should be kept for analysis and review. The master chronological file at the message center should include written messages sent or received during the emergency.

### B. Information Handling Procedures

From the message center, messages are distributed to appropriate EOC services and outgoing messages are retrieved for subsequent transmission. The EOC SOP should specify the distribution procedure. Multiform message forms can reinforce the procedure by clearly indicating where each copy goes. The message center should retain a copy and forward another to the situation analysis desk. One clear copy should go to the action agency in charge of the problem and other copies to coordinating agencies for information. Messages should indicate the time and date information was received.

To deliver the message, secretarial staff, scout groups, or volunteers can assist. Information fiow more smoothly if these groups have been trained during an EOC exercise. Signs over desks identifying the department or agency will help ensure that messages reach their recipients.

Information handling procedures outlined in the SOP should also accommodate needs of outside agencies.



# CHAPTER IV

## COMMUNICATIONS PROCEDURES

This chapter reviews recommended EOC procedures for internal and external communications.

### A. Purpose of an SOP

It is necessary to understand the purpose of an SOP so that appropriate material is included in the local SOP and inappropriate information reserved for other components of the jurisdiction's emergency plan. An SOP should be designed with the following objectives in mind.

- <u>Training Document</u>. Before an emergency, the SOP should be useful as a training document for new members of the emergency organization and as a reference document for more experienced members of the team. Thus, the SOP should briefly explain EOC systems and their emergency use. As a reference document, it should be organized to permit rapid access to needed information.
- <u>Emergency Reference</u>. During an emergency's response and recovery phaseswhen there is seldom time to read through large amounts of text-an SOP will usually refer to vital information, such as communications set placement and installation instructions, codes, message priorities, frequencies, and report formats. One of the best ways to present this information is by combining checklists and tabs. To improve accessibility, sections of the SOP with information likely to be needed during the emergency can be color coded (as they are in the sample EOC SOP in Appendix G) or set off some other way (by tabs, margin cuts, or other techniques).

In a major emergency, there is much information needed by the EOC and many media channels through which this information reaches the EOC. Communications procedures can cover information to and from the EOC only over channels such as radio and teletype and not information brought to the EOC by messengers, citizens, or other means.

The EOC SOP should include a listing of potential communications systems available to the jurisdiction and their primary and secondary task assignments. It is preferable that systems where agreements exist be listed to ensure reliability. Frequencies should also be listed, particularly where privately owned systems are to be used. The SOP should specify alerting and callup procedures for communicators and information on repair and resupply sources (batteries, crystals, replacement parts, and blank forms) in the community.

EOC emergency management personnel who may use communications systems in an emergency should understand the context, protocol, and procedures for doing so. In major emergencies, communications systems are usually strained past their limits. In major emergencies, the more vulnerable communications systems are susceptible to damage or destruction. Consequently, as demand increases and capacity decreases, communications systems are usually strained beyond limit. Frequency crowding by lengthy transmissions, increased reports, users, and transmission difficulties wrought by physical damage (which necessitate repetition of transmissions) further degrade surviving systems.

In addition to destruction, damage, or degradation of critical systems, communications problems arise from unnecessary transmissions, inaccurate or unauthenticated information, and incomplete reports requiring further clarification over the air.

An EOC SOP cannot resolve all major problems, but properly designed procedures, strengthened by frequent testing, can lessen their severity.

Therefore, communications procedures are a key to a well organized EOC SOP.

#### B. Physical Issues

Physical issues that the SOP should discuss and resolve include communications equipment inventories and location, installation instructions for main and alternate EOCs, sources of repair or replacement assistance, callup procedures for community-based volunteer communications groups, and other resource and inventory information.

Setup and installation procedures should be chronologically outlined in the SOP setup checklist. In large jurisdictions where individual SOPS are preferred for each department or service, a separate checklist for the communications section or department can be developed. Whichever approach is chosen, the SOP and associated checklists should include instructions on relocating to alternate EOCs, and information on repair and replacement resources in the community and government unit involved.

It is best to present data on inventories, locations, volunteer groups, and other resource information as tabs to either the SOP or checklists.

### C. Communications Principles

While it is unlikely that a new communicator will have the time or inclination for a course in radio procedure principles during an emergency, the SOP should briefly review accepted principles and standard usages so that it may be used as a training or reference document in the pre-emergency period. If volunteers are relied on extensively, the SOP must include local and national code systems (particularly nonroutine Nuclear Civil Protection (NCP) reporting procedures).

Communications techniques are discussed in greater detail in publications available from the Federal Emergency Management Agency, Associated Public-Safety Communications Officers (APCO), and other communications groups and sources. For purposes of this handbook, and local EOC SOP, the following basic rules are restated.

1. All transmissions should be precise, concise, and clear. Precision refers to accuracy in sending and receiving all transmitted information. Numbers, in particular, should be carefully spoken (a tab in the sample SOP, in Appendix G, shows standard pronunciation for numbers, which helps reduce misunderstandings).

2. Communicators should be aware of and guard against transposing (changing the order of) numbers. Conciseness means all messages should use the minimum number of words, numbers, or codes necessary to successfully convey the message to the receiving party. The use of standard codes (which should be listed in tabs in the SOP and posted in

EOC communications sections and mobile communications units) will help keep messages short. Clarity involves preparing and sending messages so they will be readily understood by the receiver. The original query should be referenced so the receiver can match answer to question and route the message appropriately, particularly when responding to requests for information from other EOCs.

3. The receiver should acknowledge all messages. Due to the communications burden most emergency situations cause, this means the sender need only be assured the message has been received. Message forms should include a block that the sender can check indicating that a message has been acknowledged, as well as the date and time.

4. Senders should be authenticated in certain types of emergencies to guard against deliberate interference with emergency response efforts. Social disasters, such as riots or other forms of civil disturbance, and NCP operations require authentication procedures.

5. All messages sent and received should include date and time of transmission. Copies of all messages sent and received should be kept for record and for post-emergency analysis.

6. To the extent possible, communicators should work only the assigned frequencies and systems with which they are familiar. Although there is often an urge to allow interservice use of a frequency during emergencies (for instance, medical people sending and receiving on a fire frequency), this creates problems in network discipline and effectiveness due to increased frequency loading and longer transmissions. Typically, each radio network and service has its own codes, jargon, and shorthand; adding new parties to the systems during emergency response can cripple the system. In lieu of using frequency sharing, it is recommended that receive-only monitors, command posts, and other EOCs be used to keep abreast of what others are doing.

# D, <u>Communications Procedures</u>

The following are basic send and receive procedures that should be outlined in the EOC SOP.

# 1. Send Procedures

a. <u>Message Writing</u>. The principles discussed in section C above should be observed. The message should be precise, concise, and clear. Codes and coding systems (10 code, Q code, etc.) should be used where possible, but the sender should- consider whether the receiver is familiar with that coding system. All communications codes and reports that use coded formats should be included in the EOC SOP. When coded formats are used in message writing, an explanation of the code used must be included in the EOC SOP.

b. <u>Priorities</u>. The first step after drafting an outgoing message for transmission is assigning a priority. The message originator in the EOC should do this rather than asking the communicator to judge. The EOC SOP should outline message priorities and codes. The codes should be used in EOC exercises and communications to ensure familiarity. Unfamiliar priority code systems will seldom be used in a major emergency, which is when they are most needed.

The priority code used in the sample SOP (Appendix G) is simple and straightforward. The number one is highest priority and should be used only for those messages and reports requiring immediate attention or response. The lowest priority (number four) is for routine logistics and data reports that can be transmitted when there is a lull in communications traffic. Priorities should be clearly set forth in the SOP, both in the text and as a tab. In the text of the sample SOP, the list of priorities is accented by a box. A tab is also included. It is a good idea to post a copy of the priorities in the communications room. The priority number code is:

Priority 1: Lives endangered--immediate response required

Priority 2: Lives endangered-prompt response required

Priority 3: Timely operational response required

Priority 4: Routine data and logistics messages

c. Logging. All outgoing messages should be logged chronologically by date/time, sending party, and addressee.

d. <u>Date/Time</u>. The communicator is responsible for noting on the message form the date and time the message was sent. The 24-hour system should be used to indicate time. Standard date/time format should be used: 241300MAR80 means I PM, March 24, 1980.

Some reports essential for national analysis in a nuclear emergency are designed for sending by coordinated universal (z) time (Greenwich Mean Time). A conversion table for coordinated universal time should be included in the SOP as a tab and posted in the communications room. A coordinated universal time conversion table is shown in Appendix G-42.

e. <u>Transmission</u>. Experienced communicators know to wait for a clear frequency, then read the message at medium speed. Acknowledgement that the message has been received should be recorded by date, time, and initials of receiving communicator, if given.

f. File. Message forms should be designed so both originator and communicator can remove copies and file them. Chronological files of all radio communications sent and received serve important post-emergency legal and analytical needs in determining what occurred during the response period.

2. Receive Procedures

a. <u>Acknowledge/Authenticate</u>. All messages received should be acknowledged and, if requested, the receiving station should provide appropriate authentication where available.

b. <u>Date/Time</u>. As soon as the message is received and acknowledged, the operator should record date and time as discussed above.

c. Log. All messages received should be logged chronologically. The log should indicate date/time of receipt, sender, and addressee.

d. <u>Disseminate</u>. After receipt, acknowledgement, and logging procedures are completed, the message should be forwarded to the message center desk for analysis and distribution. Main features of the internal EOC information routing system are presented in paragraph F below.

e. <u>File</u>. A file should be maintained of all messages received for postemergency **analysis** and audit.

### E. Communications Training and Testing

The communications principles and procedures outlined above and reflected in the sample EOC SOP in Appendix G are of little value if communications training and testing activities are not included in the jurisdiction's ongoing preparedness program. Training and testing of operators, equipment, and critical support systems (such as emergency power) will improve their effectiveness in major emergencies. Communications procedures, codes, and forms that are not used and tested frequently are not likely to be employed during an emergency.

## F . Internal Communications

This paragraph outlines basic internal communications principles and procedures within the EOC. External and internal procedures should be set forth in the EOC SOP for training and reference purposes.

1. Face-to-face contact is a principal benefit of drawing together key public and private emergency managers in the EOC. The ability to send and receive directly helps ensure that information is clearly understood and available when needed. The EOC should be configured to promote and facilitate face-to-face communication with managers who must frequently share and act on information.

While face-to-face information exchange is preferred in the EOC, it has some risks that can be avoided by proper planning and procedures. First, unrecorded information can easily be lost if sender and receiver neglect to note the substance of their conversation. The experienced emergency management coordinator will always have a notebook or dictaphone at hand, on which he or she can record significant events, conversations, decisions, data (phone numbers, as an example) and results. The more desk-bound EOC staff members should always maintain a date/time log of events and responses.

A second potential problem of face-to-face communication is that one of the parties may neglect to pass on the information to other EOC staff members. A central principle of EOC operations is to ensure that all who need to know are kept informed of major developments. Two-party conversations can sometimes lead to serious interruptions in information flow to subordinates who must analyze the emergency situation, organize responses, and implement decisions.

The remedy for these potential sources of information loss lies in a simple and orderly procedure to record and maintain all important data flowing into and out of the EOC. If used consistently, message forms can ensure that vital information is not lost and is appropriately shared with the appropriate EOC managers. A sample message form is reproduced in Figure 4 to assist managers in developing their own forms.

# FIGURE 4

1 1	SAMPLE MESSAGE FO CITY-COUNTY NAME	ORM #
MERGENCY MESSAGE NO.	DATE/TIME	PRIORITY
°O:	FROM:	VIA
(MARK (A) FOR ACTION. (C) FOR COORDINATION)	<u>]</u>	
N ROUTING OUT		
Director		
Fire	4	
Police		
Pub Wks.	4	
Transp.		
	4	
Commun.		
RADEF	4	
Shelter	1	
Red Cr. 1		
Welfare		
Medical	4	
Schools		
FROM: (use coordination agency me	_ To: ssage as appropriate)	DATE/TIME

DISTRIBUTION					
IN	OUT	-	ACTION AGENCY	COORD. AGENCY	COORD. AGENCY
GREEN ACT AGENCY	DISPATCH	DIRECTED			
WHITE ACT. AGENCY	DATA (RESPONSE)	(SIGNATURE)			
GOLD ACT. AGENCY	COORD. AGENCY	DISPATCHED			
YELLOW DATE (PROS)		BY (INITIALS)			
PINK RECEIVER FILE		DISPATCHED			
		DATE/TIME			

ACI'ION/DISPATCH ACTION/COORD. DATA BOARD

Forms are shown only as examples. FEMA does not stock or distribute these forms.

2. Consistently used message forms can also aid in recording and acting on reports brought to the EOC through nonconventional communications modes. A report from a citizen brought directly to the EOC, for example, could bypass the communications distribution procedures of the EOC and be lost, misrouted, or not added to important displays. The same situation can occur if EOC staffers reporting for work observe a major problem on the way and neglect to put it in writing so it can be analyzed and disseminated. A standard policy of writing down every major problem received from a nonstandard source (telephone, personal contact, or observation) on a message form and forwarding it to the message control desk should be included in the EOC SOP and tested in exercises. This is particularly important in large-scale emergencies when communications systems are damaged or degraded and information, especially from the center of the impact area, is fragmentary or nonexistent. In an emergency of this scope, messengers and word-of-mouth reports carry more information to the EOC.

'This procedure lead to duplicating reports already received through conventional channels, but duplication of problem and incident reports will occur in any case and can be weeded out best or combined best at the message center or situation analysis desk.