DOCUMENT RESUME

ED 150 304

CE 014 276

ABSTRACT
        This study guide was developed to assist students
enrolled in a training course for emergency medical technician (EMT)
dispatchers. The guide includes unit objectives, key points, notes,
and questions related to the content, and review exercises for each
of the eleven units included in the course. The course is divided
into two parts. Part 1 covers the skills and knowledge needed to
perform the basic duties required of any dispatcher; part 2 covers
the specific skills and knowledge required for allocating appropriate
emergency medical resources to the scene of each emergency. Two other
documents accompany this study guide: a course guide to aid
administrators in setting up an EMT dispatcher course and a set of
lesson plans for the instructor. (BM)

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Training Program For
Emergency Medical Technician:

3 DISPATCHER

Student Study Guide

November, 1976 Washington, D.C.

HELP IS NEAR
National Emergency Aid Radio

Preface

The goal of the National Highway Traffic Safety Administration (NHTSA), Department of Transportation, pursuant to the Highway Safety Act of 1966 and the Emergency Medical Services Standard 11, has been to develop, upgrade and professionalize the pre-hospital emergency medical care system, enhance its life-sustaining quality, encourage its establishment where it does not now exist, and achieve complete system development. This required giving attention to the four major components or objectives of this system, namely administration, personnel, equipment and communications. Communications is the means by which the system becomes a cohesive, efficiently functioning entity providing prompt response and optimum care to the emergency victim. To be fully complete and contributive, it must also enhance the entry of the victim into the system. For this reason the dispatcher functions are being emphasized and enhanced through training to add an additional dimension to the communications

need for emergency identification, reporting and response. Consequently, the Administration has devoted special effort to plan, develop, and provide the communications component or sub-system structure necessary to achieve the above objectives. This dispatcher training course is a part of the total planned program of emergency service communications development. It is the recommendation of the Administration that it receive extensive use and further enhance the care of the emergency victim as well as aid the communications needs of Highway Safety Standards 15, "Police Traffic Services" (PTS), and 16, "Debris Hazard Control and Cleanup" (DHC&C). This course is also being identified with the National Emergency Aid Radio (NEAR) system of the total DOT EMS communications effort.

4

Foreword

The Highway Safety Act of 1966 recognized the importance of emergency services and required that a standard be developed to cover this aspect of highway safety. As a result, Highway Safety Program Standard No. 11—Emergency Medical Services, was promulgated on 27 June 1967. The standard identified eight specific requirements of a minimal program, the first of which states: "There are training, licensing, and related requirements (as appropriate) for ambulance and rescue vehicle operators, attendants, drivers, and dispatchers."

In response to this requirement the National Highway Traffic Safety Administration (NHTSA) has supported the development of training materials for Emergency Medical Services (EMS) functions. Already prepared are a Basic and an Advanced Training Program for Emergency Medical Technicians—Ambulance. In response to the requirement for the training of dispatchers, NHTSA published a brief Instructor's Guide for dispatcher training in 1972. Experience resulting from that 1972 publication demonstrated the need to expand and amplify the original guide. Thus, further development of training materials and the preparation of a job-related, standardized curriculum package for the training of dispatchers was undertaken.

The dispatcher occupies a critical position within Emergency Medical Services. He serves as the primary point of contact with the public being served. He provides a channel for communications among elements of the EMS system and between EMS elements and other public safety units. As noted in The Associated Public-Safety Communications Officers, Inc. Standard Operating Procedure Manual,[1] the adoption of standardized methods and signals ". . . would mean a substantial increase in Public Safety departmental efficiency and interdepartmental cooperation." By communicating effectively the dispatcher can significantly reduce the frequency of death and the severity of residual disabilities resulting from accidents.

Considering the importance of the dispatcher's functions, one would expect him to be well trained—in the fashion of the air-traffic controller. Comprehensive training programs have been developed for several important elements of the EMS, including Crash Injury Management and Ambulance Emergency Medical Technicians. Yet the dispatcher, a necessary interface between these and other elements of the system, is still often trained on the job by the "buddy system" or by listening to a supervisor overview the job. Undoubtedly this situation degrades the performance of the entire EMS system.

Several unfortunate consequences result from the prevalent informal nature of dispatcher training:

1. The dispatcher is slow in reaching the accepted level of job mastery.

2. The dispatcher does not reach as high a level of job mastery as would be possible with more structured training.

3. The procedures that are learned on the job may be far from optimal. Their quality depends upon the talents of the models being emulated.

4. The range of situations the dispatcher has encountered or has been told about may be too small to enable him to cope with the less frequent and more complex types of emergencies.

This EMT training course was developed in response to the urgent need for a job-related, standardized package of instruction for the emergency medical dispatcher.

---

[1] The Associated Public-Safety Communications Officers, Inc. *Public Safety Communications Standard Operating Procedure Manual.* New Smyrna Beach, Florida: Author, November 1974 (Revised Edition)

Contents

Introduction

As a dispatcher you occupy a critical position within the emergency medical system of your community. You serve as the primary point of contact with the public being served. You provide a channel for communications among elements of the system and between EMS elements and other public-safety units. You must notify the units that need to respond to each emergency incident. When you take on the job of dispatcher, you have peoples' lives and well being in your hands. You certainly want to do the best job possible.

This course is designed to help you become a good dispatcher. It will give you a good start toward mastering the job. Of course, how good you become depends on you to a great extent. You will have to work hard in class and continue looking for ways to improve after you get on the job.

The course has been developed in two parts. Part I gives you a background in the basic dispatching functions as they are performed by various public-safety agencies (fire, police, etc.). Part II zeros in on what you need to know to be able to allocate adequate medical resources to the scene of each emergency.

This Student Study Guide should be treated as a working document. In addition to using it in class, you will want to have it with you at your console when you start working as a dispatcher. Therefore, you should write in this book any information you learn that is not already in it. Most pages are set up with two columns. In general, the left column contains the main content information and the right column has been reserved for any

notes you care to make about that content. However, space has also been reserved in the left column for you to answer questions and to enter information that applies to the local situation. There are many things that dispatchers across the country do in common. There are also many ways that the job differs from one location to another. How you do your job depends on local laws and policies. It depends upon the kind of equipment you have and the kind of network of communications that has been set up in your state. It depends also on what type of organization you work for (whether you work in a police station, a hospital, a 911 center, a fire hall, etc.). And, of course, you have to learn the local geography and what medical and paramedical resources are available to victims of emergencies in your area. Your instructor will give you the locally applicable information. Be sure to enter it neatly in the content column of your book. It will then serve as a valuable reference for the future. Make supplemental, explanatory notes in the right column, as necessary.

This Student Study Guide contains a lot of valuable information. It will contain even more when you are through adding your local information and notes.

It isn't easy to be a good dispatcher. You'll have to work hard in this course, and you'll learn some new things when you start working as a dispatcher. But one thing is certain: When you are making decisions that can affect life and death, you want to be as good a dispatcher as you can be.

Contents
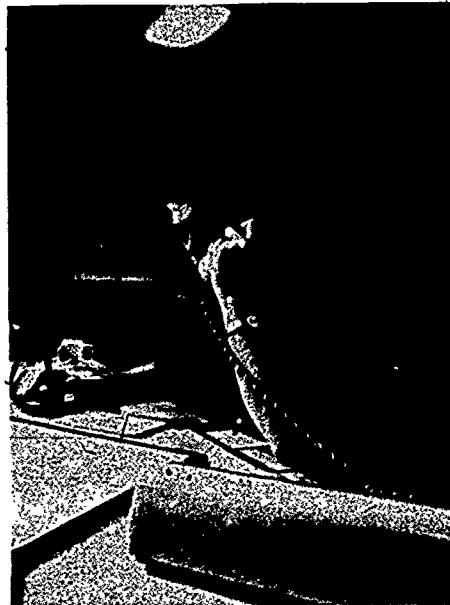
Unit Objectives

By the end of this unit, the trainee, given a list of roles and responsibilities, will be able to distinguish between those which are *and are not* appropriate for public safety dispatchers.

Key Points

This unit tells you what the job of dispatcher is all about. It tell you what you will be doing. It also tells you some things you should try hard not to do. For example, you shouldn't kibbitz or second-guess the actions of emergency workers at the scene; you should avoid seeming to order around the units you dispatch; and you should avoid diagnosing the symptoms reported to you, even if you have had EMT training. Physicians don't jump to conclusions, and you shouldn't either.

Content	Notes & Questions

INTRODUCTION

Sometimes spaces have been left for you to write in your Study Guide. Use the spaces to jot down important local information your instructor gives to you. Whenever you might have special or local material to write down, the space in this column will be preceded by an italicized heading.

NOTES: Administrative matters.

_____

_____

_____

_____

_____

_____

Purposes of the Course:

1.   To teach you the roles and responsibilities of the Emergency Medical Dispatcher.

2.   To develop telecommunications skills which will enable you to handle message traffic in a prompt, accurate, courteous, and professional manner, so as to provide the utmost assistance to trauma victims and the emergency services that aid them.

3.   To teach you the operation of the equipment you will be handling as a dispatcher.

4.   To develop your awareness of the emergency services that are available, their capabilities and limitations, and their geographical location.

5.   To teach you how to make the decisions concerning allocation of resources in the dispatching of emergency medical units.

6.   To teach you the local policies, forms, and standard operating procedures.

Ground Rules for Your Participation in the Course

1.   You are encouraged to ask questions.

2.   You will have an opportunity to practice some of the things you learn.

Content	Notes & Questions

Training Approach

This course will tell you a lot about what it takes to be a good dispatcher. However, we believe that this job is better learned with relatively little class-room work and a lot of practice. So don't expect to know everything about the job when you finish. For example, you will probably need to learn a lot more about where local streets and buildings are. But this course will give you a good foundation of knowledge and attitudes that will foster continuing professional growth. If you keep learning after you get on the job, you will have no trouble becoming an excellent dispatcher in a short time.

What kinds of things will you be learning on the job?

_____

_____

_____

_____

_____

ROLE OF DISPATCHER

The dictionary tells us a dispatcher is one who sends out vehicles to a particular destination. The essence of the job of EMT dispatcher is to:

1.   Receive requests for help.

2.   Arrange for getting the kind of people and equipment that the situation requires to where they are needed.

This sounds very simple, but the dispatcher does many more things:

—He maintains records.

—He receives notification of emergencies and calls for assistance from individual citizens and from public safety units.

—He scopes the problem by requesting additional information from the caller.

—He decides upon and dispatches the appropriate emergency vehicles.

—In rare instances, he may instruct the caller to take measures that are intended to save a life or alleviate suffering.

Content	Notes & Questions

—He conveys information to the responding units which enables them to cope with the situation upon arrival.

—He guides vehicles to the scene of an emergency and helps them avoid traffic problems.

—He sometimes relays information among various agencies or mobile units, or he patches together mobile public safety units to enable them to communicate with each other directly.

NOTE: Additional local duties.

_____

_____

_____

_____

_____

_____

In performing the above duties, as well as others, you must assume responsibilities and use your own initiative. Not all precedures can be written down. You do not merely serve as a conduit for information. A dispatcher must be a controller and manager of the community resources which are available for any emergency incident. You must be aware of the current availability of the various components of the emergency medical system. You must understand the capabilities and limitations of the communications system you are authorized to operate.

Just as important as what you will do as a dispatcher is what you do not do.

NOTE: What kinds of things do you think a dispatcher should not do?

_____

_____

_____

_____

_____

_____

_____

13

Content	Notes & Questions

1. A dispatcher does not tell public safety personnel what to do. He does not order them around. He does not command them. When you inform a policeman that an accident with multiple injuries has occurred at Second and Main, and when that policeman responds with all deliberate speed, it is easy to think you have ordered him to go there. You have not. You have merely enabled the policeman to perform one of his major duties, which is to render assistance as required. You have passed on the information that his presence is required at Second and Main, and you have told him what to expect when he gets there.

2. A dispatcher does not diagnose the cause of medical problems that are reported. Physicians know how hard it is to diagnose reliably, without examining a patient, just on the basis of what people say over the phone. Dispatchers, who have far less medical training and experience, would be much more prone to make an inaccurate diagnosis.

3. A dispatcher does not kibbitz. When a dispatcher receives a call for assistance, he gathers considerable information about the nature of the problem. He does all he can to bring assistance to the caller. He often hears, by monitoring his radio, what measures are being taken to alleviate the problem. However, he should avoid second-guessing the actions of workers at the scene, who have a broader and more direct knowledge of the situation and a better feeling for what measures are appropriate or even possible.

Your primary concern as a dispatcher is the well-being of the individual requiring assistance. You must exercise ingenuity and initiative to assure prompt and appropriate assistance for the victim. However, you should recognize your responsibility to the caller, which is to instill confidence and calmness. You do this by such actions as recognizing the possible emotional agitation of the caller, assuring the caller that help is on the way, remaining calm yourself, and by expressing no hostility, even if the caller becomes hostile.

14

I-A-6

The following list of duties may contain some things a dispatcher should *not* do as well as some things he should do. Write "yes" or "no" next to each statement.

A dispatcher should:

1. Diagnose each medical problem reported.

2. Decide what kind of emergency medical vehicle should be dispatched to the scene.

3. Help the vehicles he has dispatched to avoid traffic problems.

4. Monitor the transmissions that pertain to the vehicles he has dispatched in order to make sure that ambulance attendants or law enforcement officers on the scene take the correct measures.

5. Convey information to units enroute to the scene, so that they may be better prepared to handle the situation on arrival.

6. Give the proper orders concerning what police should do when they arrive at the scene of an emergency.

15

Content
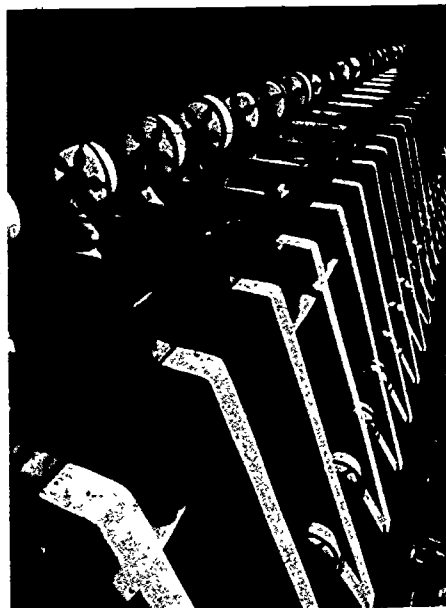
Unit Objectives

By the end of this unit, the trainee:

1. Given photographs or drawings of telecommunications consoles, will be able to identify correctly all major controls and displays.

2. Given the actual telecommunications equipment, will correctly be able to reach other base stations by radio communications and by land-line communications.

3. Given the actual telecommunications equipment, will correctly demonstrate the procedure for patching together a telephone caller with a hospital emergency room (if equipment permits), and patching together an incoming call from an ambulance with a hospital emergency room (if equipment permits).

4. Given several statements describing apparent equipment malfunctions, will be able to state:

   a. Whether the source of the problem lies in the transmitter or receiver.
   b. Who should be notified.
   c. What information should be provided.

Key Points

This unit tells you about the telecommunications equipment you will be operating. Try to learn the names of the switches and knobs and meters and buttons that are part of your console. Your instructor may ask you to point to the "mute bar," for example, and many of the other parts of the console. You will also learn how to operate the equipment. Pay special attention to the procedure for patching together two or more parties, to let them talk to each other directly. Also make sure you learn what to do when your equipment breaks down.

17

THE BASIC CONSOLE

After you finish this course, you will be part of a telecommunications system
which enables people to communicate their needs for assistance and guar-
antees that those needs will be quickly met. You are the vital link in this
system. You will have to operate equipment. You will be furnished with
equipment that lets you receive calls, lets you make calls, and gives you the
information that you need in order to perform your job of coordinating and
managing equipment, personnel, and facilities.
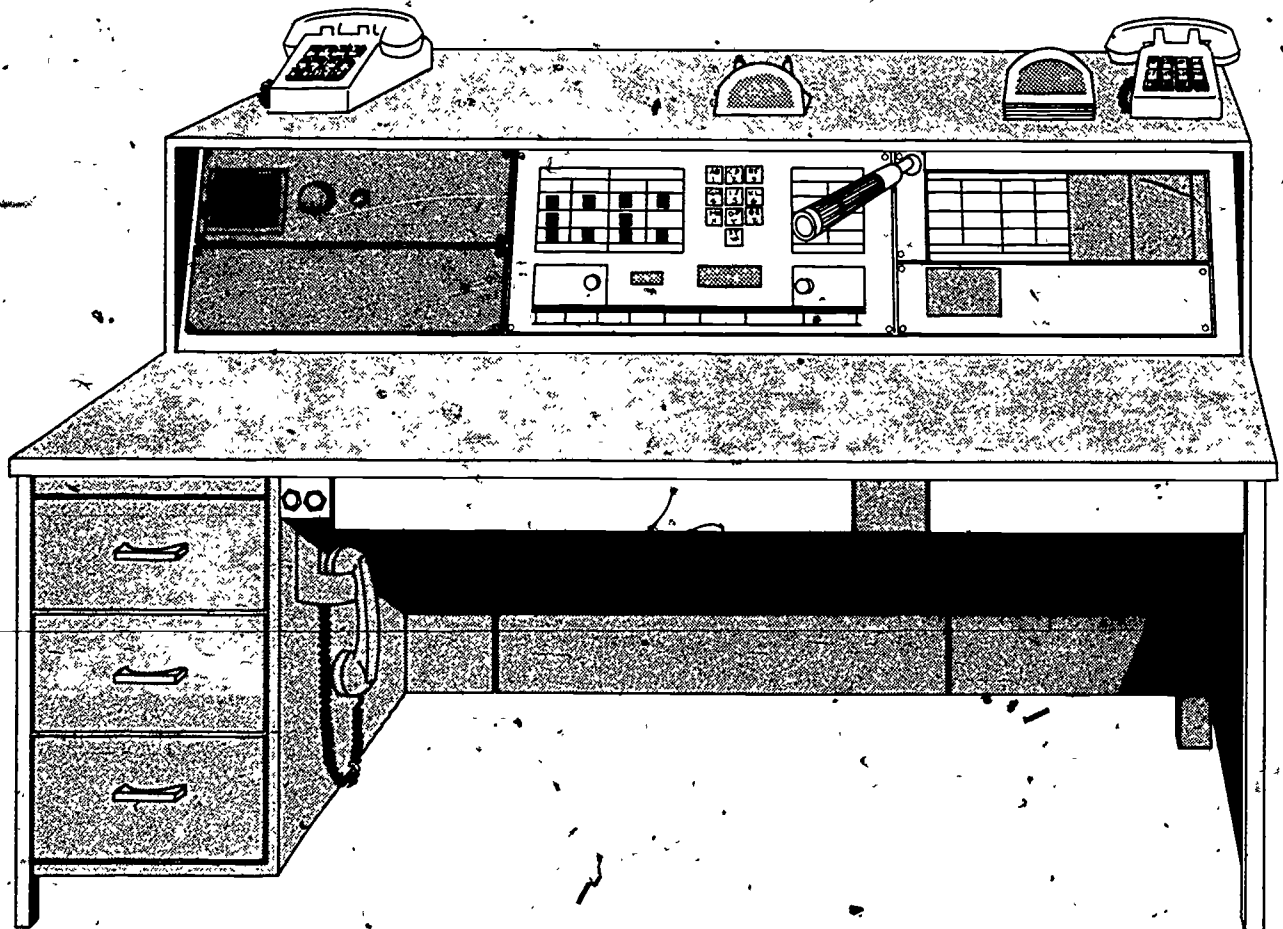
FIGURE I-B-1
Example Console.   18

Content	Notes & Questions

NOTES: Using your radio transceiver console:

1.   How do you know when a radio call is coming in for you?

_____

_____

2.   How can you control the volume of an incoming call?

_____

_____

3.   What do you do when you hear a call for you?

_____

_____

4.   Will you hear the call through a handset or a speaker?

_____

_____

5.   In order to respond to a call, how do you select the proper transmission
       channel (frequency)?

_____

_____

6.   How are channels assigned to establish communications links
       between or among EMS providers?

_____

_____

7.   How do you activate the transmitter so that your voice is sent out?
       Do you press a transmit bar on the handset? Do you press a button
       on the panel, or a bar on the microphone stand? Do you throw a
       switch?

_____

_____

8.   How do you keep from interrupting other transmissions on the same
       channel?

_____

_____

I-B-4

NOTES: Using your telephone consoles:

1.   How is an incoming call announced? Sound and light?

_____

_____

_____

2.   How do you know which line has a call?

_____

_____

_____

3.   How do you establish the connection? Plug in a cord? Press a button?

_____

_____

_____

4.   How do you patch together two phone lines?

_____

_____

_____

5.   Can you patch together a party on your radio with a party on your phone line? How? Can you monitor the conversation? Can you control the volume of what you hear? How?

_____

_____

_____

20

Content	Notes & Questions

SPECIAL CAPABILITIES AND EQUIPMENT

Capabilities

Depending on your particular equipment, you may have special capabilities such as:

1. Called party hold—which makes it possible for a call to be traced.

2. Ring back—which enables you to hold a line open and ring a phone that has been hung up.

3. Automatic number identification.

List special capabilities. Below each capability write in the operating procedure.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Special Equipment

Depending upon your local setup, you may be called upon to operate other types of communications equipment (e.g., teletype, computer terminal, intercom).

List special equipment. Under each item of equipment, make notes on how it is operated.

_____

_____

_____

_____

_____

I-B-6

Content	Notes & Questions

MAINTENANCE

If your equipment is not working as it should, it is important to fix it as soon as possible, even though, in most cases, there will be back-up modes of operation to enable you to continue to perform your dispatcher duties. Usually you will call a service man and report the symptoms you are encountering.

NOTE: Local procedures for getting service.

_____

_____

_____

_____

NOTE: Using back-up equipment.

_____

_____

_____

_____

When your equipment has a malfunction, it is important for you to stay out of the electronics. You should not replace or adjust any parts of your transceiver. This should be done only by a licensed service man. The only adjustments you are authorized to make can be made from the front panel (e.g., volume).

NOTE: What would you do when you have a malfunction.

_____

_____

_____

_____

_____

_____

22

Content	Notes & Questions

REVIEW

NOTE: *How would you do the following?*

1. Call another base station by radio and by telephone.

_____

_____

_____

_____

_____

2. Call a mobile unit.

_____

_____

_____

_____

_____

3. Given an incoming call, patch the caller to a hospital emergency room.

_____

_____

_____

_____

4. Patch an incoming call from a mobile unit (e.g., ambulance) to another base station (e.g., hospital).

_____

_____

_____

_____

_____

23

I-B-8

1.   Some of the following controls and displays are not at your console.
Point to all of the ones that are.

Monitor switch	Base mute switch
Transmit bar	Continuous-monitor switch
Mobile/base selector switch	Intercom switch
Intercom patch bar	VU meter
Alert switch	MOB light
Frequency selector	XMIT switch
All mute bar	Call indicator light
Headset volume control	Frequency volume controls
Patch phone speaker	Mobile relay tone selector
Patch phone indicator light	Patch phone volume control

2.   Transmit a test message to a nearby dispatcher:

By radio.
By telephone.

3.   Establish a patch connection between:

A telephone caller and a hospital emergency room.
A mobile radio and a hospital emergency room.

4.   For each of the following situations, state (a) whether the source of the
problem lies in your receiver/transmitter, (b) who should be notified,
and (c) what information should be provided.

—While communicating with a local hospital you were suddenly un-
able to hear their transmission. It cut out completely. You reached
the hospital by land-line and asked them to check their transmit
capability by calling a different base station on that same frequency.
They reported back that their transmitter was working.

Your instructor will supply additional test situations.

24

Contents

Course Objectives

By the end of this unit, the trainee:

1. Given five telephone numbers, will be able to point out the location of the telephones on a map of the area.

2. Given five addresses, will be able to point out their locations on a map of the area.

3. Given a set of reports that different emergency vehicles in this area are in service, out of service, responding to an emergency, and have completed an assignment, will indicate the appropriate action to keep track of their availability status.

4. Will be able to state three provisions of FCC regulations that apply to the operation of a transmitter; three things the FCC prohibits.

5. Given The Associated Public-Safety Communications Officers, Inc. list of ten "telephone techniques," will be able to state the consequences of failing to use each technique.

6. Given an opportunity to practice good telephone techniques, will demonstrate mastery of the techniques.

7. Given a list of messages to read over the telephone, will read the messages in such a way that the party at the other end of the line can copy them without error.

8. Given the International Phonetic Alphabet will be able to transmit five difficult names over the telephone in such a way that the other party can copy them without error.

9. Given a list of locally used 10-codes and their meanings, and transmissions employing each of the 10-codes, will be able to write a correct translation of each transmission.

10. Given a list of the locally used 10-codes and their meanings, and a list of statements to be transmitted, will be able to construct a correctly phrased transmission for each of the statements to be transmitted, using 10-codes.

11. Given a list of abbreviations and jargon words and phrases in common local telecommunications usage, will be able to translate each one (for example, D.A.V. = disabled vehicle).

12. Given the opportunity of receiving several incoming calls simultaneously, will demonstrate correct procedures.

13. Given problems describing instances in which two or more callers provide conflicting information, will be able to state an appropriate course of action for each problem.

I-C-2

Key Points

This is the longest unit in the course; there is a lot to learn about operating procedures and techniques. You will learn how to use directories and maps to find the location of unfamiliar addresses and telephones. You will gain familiarity with the language of dispatching, so you can transmit effectively and efficiently, and understand what other dispatchers are saying. You will learn how to respond to callers in a courteous and considerate way. You will learn how to handle several calls at once and how to cope with conflicting information. Pay special attention to the three actions that FCC regulations tell you to avoid when using radio channels.

27

Content	Notes & Questions

PERFORMANCE AIDS

In the previous Unit (I-B) you learned how to operate your telephone and transceiver. You may have noticed some other things at your work station—things called performance aids—that help you with your job.

Local Performance Aids:

1.   Time-keeping aid

_____

_____

_____

2.   Maps

_____

_____

_____

3.   Directories

_____

_____

_____

4.   Frequently called numbers

_____

_____

_____

5.   Indication of availability status of emergency units in the area

_____

_____

_____

NOTES: *Key points about use of local performance aids.*

_____

_____

_____

_____

_____

_____

Content	Notes & Questions

Procedures for Locating Emergencies

In order to direct emergency vehicles to the site of an emergency you have to get a clear fix on its location. But sometimes your caller will be a stranger to the area and won't be able to tell you where he is. The only thing he will be able to tell you for certain is the number of the telephone from which he is calling. In such cases you have ways of determining the location of the telephone. For example, you may have a book that lists the address of each telephone in the area. If you are not familiar with the address you find, you can look it up in an alphabetical listing of street names in the area. With each street name there will be map/grid coordinates to help you find the street on one of the maps you have available.

NOTES: *What are your local procedures—*

1.   Given only a telephone number?

_____

_____

2.   Given an unfamiliar street address?

_____

_____

One of the most important things a dispatcher must do is to keep track of the disposition or status of the emergency medical resources in the area. Only in this way will you know which ones are busy and which ones may be sent out on the next call. There are many ways to keep track of the availability status of emergency medical units. Most of these ways involve the use of cards or tickets. A few are more sophisticated.

NOTES: *How do you keep track of the status of emergency units?*

1.   Out-of-service units.

_____

_____

_____

2.   How to indicate change of availability status.

_____

_____

29

Content	Notes & Questions

RULES AND REGULATIONS

There is only a limited number of radio frequencies allocated for use by public safety agencies and emergency medical systems. Therefore, to make certain that channels are properly used, strict discipline must be maintained and efficient procedures of use must be adopted. The dispatcher is subject to policies set by the Federal Communications Commission (FCC), the State, and the regional system within which he operates.

NOTES: *Why do you think there are strict rules in this area?*

_____

_____

_____

_____

_____

FCC rules prohibit all deceptive or unnecessary messages as well as profane and indecent language. FCC further prohibits the use or dissemination of confidential information which was transmitted over the radio. No person shall reveal, discuss, or make use of information heard on the radio system except with persons to whom it was directed or on express permission of the originator of the message. Penalties for violations of FCC rules and regulations vary from $100 to $10,000 and up to one year in prison.

Extract from the above text what the FCC prohibits:

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

A good summary of FCC rules is found in Section 8 of your APCO Standard Operating Procedure Manual.

I-C-6

AURAL BREVITY CODES

The professional society of public-safety communicators (APCO) has developed a standard set of 10-codes, recommended for use throughout the United States. The most frequently used of these 10-codes is 10-4, which means affirmative, O.K., or Roger.

Whether you use 10-codes in your own transmissions depends upon (a) local policy (b) the party with whom you are talking. You should *never* use 10-codes with parties who would not understand them (e.g., nurses, physicians, volunteer firemen).

However, whether or not you use 10-codes yourself, you should be able to understand them. You should memorize a few and be able to quickly look up the rest. This will help you understand police, fire, and ambulance personnel who may use 10-codes in communicating with you and with each other.

Advantages of using an aural brevity code such as 10-signals.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

5. _____

_____

6. _____

_____

31

Content	Notes & Questions

Brevity code developed by APCO under contract with the Office of Tele-
communications Policy is as follows:

10-1	Signal Weak
10-2	Signal Good
10-3	Stop Transmitting
10-4	Affirmative (O.K.)
10-5	Relay (To)
10-6	Busy
10-7	Out of Service
10-8	In Service
10-9	Say Again (Repeat)
10-10	Negative
10-11	_____ On Duty
10-12	Stand By (Stop)
10-13	Existing Conditions
10-14	Message/Information
10-15	Message Delivered
10-16	Reply to Message
10-17	Enroute
10-18	Urgent (Quickly)
10-19	(In) Contact
10-20	Location
10-21	Call _____ By Phone
10-22	Disregard
10-23	Arrived at Scene
10-24	Assignment Completed
10-25	Report To (Meet)
10-26	Estimated Arrival Time
10-27	License/Permit Information
10-28	Ownership Information
10-29	Records Check
10-30	Danger/Caution
10-31	Pick Up
10-32	_____ Units Needed Specify
10-33	Help Me Quick (Emergency)
10-34	Time
10-35	—Reserved—
10-36	—Reserved—
10-37	—Reserved—
10-38	—Reserved—
10-39	—Reserved—

The numbering, sequence, words, or word phrasing of the above signals may
not be altered, nor may the reserved signals be otherwise implemented
except by APCO. Any user may employ signal numbers upward beginning
with 10-40 as may best suit his own needs.

I-C-8

It is highly desirable for public-safety agencies who use 10-codes to adopt and use a standard set of codes. This will permit public-safety workers from different parts of the country to understand each other without having to learn new meanings for the 10-codes. In other words, there will be a common language. However, you should recognize that these standard 10-codes are presently not universally adopted. Therefore, you must use them in a way that corresponds with local practice; otherwise you may not be understood. For example, 10-34 means "Time" in the revised Aural Brevity Code. In some parts of the country it means "Riot" and in other parts of the country it means "Dead Animal." Thus, you must be sure of their local meanings before you use the 10-signals.

Some of the more commonly used 10-codes are almost universally understood. To minimize unlearning we will use a restricted set of 10-codes for practice in this course. The 10-codes we will use are the following:

10-1   Signal weak, receiving poorly, unable to copy
10-2   Signal good, receiving well
10-3   Stop transmitting
10-4   Affirmative (O.K.), acknowledgment
10-5   Relay (to), relay message
10-6   Busy—Standby unless urgent
10-7   Out of service, not available for call.
10-8   In service, available for call
10-9   Say again (repeat message)
10-20   Location
10-21   Call _____ by phone
10-22   Disregard
10-28   Vehicle registration (ownership information)

NOTES: *Universal 10-codes and special locally used 10-codes.*

33

Content	Notes & Questions

When you use 10-codes, remember that one of the goals of using them is to speed up communications. Therefore, you should not use a 10-code to stand for a single word in a long sentence. You may recall that 10-20 means "location" and 10-6 means "standby."

You should say: "Unit 51. 10-20?"
              Not: "Unit 51. Please advise as to your 10-20."

You should say: "Unit 51. 10-6."
              Not: "Unit 51. 10-6 just a minute."

Use the locally used 10-codes to translate the 10 statements your instructor will give you. Write your messages below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Content	Notes & Questions

TELEPHONE TECHNIQUES

As a dispatcher, many of your calls for assistance will come over the telephone. The telephone is the most commonly used means a citizen has for obtaining the services of a public-safety department. Many of the techniques listed hereout are largely taken from Section 2 of your text, the Public Safety Communications Standard Operating Procedure Manual.

Remember, when you lift the receiver of your telephone you are about to meet someone, to engage in a conversation as important as a face-to-face visit, and YOU are the sole representative of your department.

Ten Techniques to Apply DURING the Call

1. *Answer promptly.* Treat each call as an emergency. Put yourself in the place of one who may be ill or suffering from fear or panic. Every ring for that person lasts an eternity. Try to answer *within three rings*.

2. *Identify yourself and your department.* This insures the caller that he has placed his call properly and thus has a calming influence upon him.

3. *Speak directly into the mouthpiece.* This insures that you will be properly understood and will not have to waste time repeating information. Speak up! Don't swallow your words.

4. *Observe telephone courtesy.* A calm, competent, decisive voice that is courteous will reduce chances that the caller will be antagonistic. Explain to the caller what action you intend to take and how soon assistance may be expected to arrive at the scene.

5. *Take charge of the conversation.* After the initial exchange, and you sense the needs of the calling party, cut off superfluous wordage by leading the caller into questions to which you need answers; questions as to who, what, where, when. Be courteous but firm.

6. *Take down all information. Write it.* Never leave anything to memory.

7. *Explain waits.* Explain why it will take time to check for information and that you will call back. A party waiting on a "dead phone" may become irritable and uncooperative.

8. *Avoid jargon or slang.* Use precise English. Some terms you may use frequently, such as 10-4, E.R. (Emergency Room), etc, will not be meaningful to most callers.

Content	Notes & Questions

9. *Show interest in the person's call*. The person calling has or needs information, and to him it is important. Use the caller's name when possible; it makes him feel you have a personal interest in his call. Do not, however, call strangers by their first name.

10. *Try to visualize the caller*. The telephone is an impersonal thing and we may tend to be curt and less courteous, or we may lose our temper more easily than if we were meeting the party in person. Remember, the caller may be under tremendous strain. Try to reassure and calm him.

Other Useful Telephone Techniques

1. Make sure that information from the caller gets to the proper person; never give the caller misinformation, never guess, but refer them to the proper party even if it means transferring the call. If the caller requests information that is not immediately available, obtain his name and number, and return the call.

2. Let your co-workers know of your whereabouts when leaving your position.

3. Place and receive your own calls; this provides far better harmony with the citizen than letting someone else do the calling for you.

4. Post a list of frequently called numbers. Place such numbers, as well as other important numbers, within view of the operating position.

5. Transfer calls when necessary, and when necessary tell the caller that you are transferring him.

6. Terminate all calls positively and courteously.

36

I-C-12

Think about: *What would happen if you:*

—Fail to identify yourself?

_____

_____

_____

—Fail to write down information?

_____

_____

_____

—Let the caller ramble on and don't get the essential information?

_____

_____

_____

—Have the caller wait without telling him you're putting him on "hold?"

_____

_____

_____

—Display boredom or irritation with the caller?

_____

_____

_____

37

Content	Notes & Questions

CLARITY AND BREVITY

As a dispatcher, when you use telecommunications equipment you must be both clear and concise. But sometimes clarity and brevity can interfere with each other. You can use many words to get your message across or you can be so brief that people will misunderstand or fail to catch your message. Repeating things or elaborating upon them makes your message easier to understand. On the other hand, FCC regulations do not permit you to be wordy on radio. It cuts into emergency response time and consumes air time.

Public-safety dispatchers have arrived at an optimal blend of clarity and brevity in the transmission techniques they have developed over the years. They speak in a very structured way. After people learn to expect their messages to have a certain specific structure, they find it easier to understand messages that have that predictable structure. Section 3-A of your text, the Public Safety Communications Standard Operating Procedure Manual, contains some of these transmission techniques.

What can be done to help you be both clear and concise?

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

4. _____

_____

5. _____

_____

Content	Notes & Questions

The Proper Rate of Speaking

People will understand you better if you pronounce your words clearly and somewhat slowly; a rate of about 60 words per minute is proper. Some people have trained themselves to speak as fast as 220 words per minute. However, the normal rate of speaking is about 125 words per minute. When you speak at a rate of 60 words per minute, you have a better chance of being understood through static conditions, and there is a better chance that the other party will follow your meaning.

*Is 60 words per minute slower than **you** thought?*

Formulate Your Message BEFORE You Transmit

1. Think before you transmit. Know what you want to say. Press the button. Hesitate an instant. Speak. Speak distinctly. Be brief. Be concise. Be impersonal. Do not mumble. Do not shout. Do not talk too fast. Do not become excited. Do not try to transmit while someone else is transmitting.

2. While you are still learning to become a good dispatcher, study the construction of your messages before transmitting them, unless you have an emergency situation. If necessary, write it down on scratch paper and then cut down your message to telegraphic brevity. Don't be brusque; just be direct.

Content	Notes & Questions

Following a Standard Structure for Messages

1. The current practice in public-safety radio services is to give the name of the station being called first—then the name of the calling station. For example, "2 ALPHA 12" (station called)—"Butler Control" (station calling).

2. At the end of a transmission when a reply is expected, the words "go ahead" should be used. The term "over" is being used less frequently than before. The phrase "come in" at the end of a transmission has been almost totally abandoned in public-safety radio because of the possible misinterpretation.

3. Use the call sign of your station at the end of each message (not at the end of each *transmission*) but only when you do not intend to transmit further. This procedure not only complies with an FCC regulation but also indicates to other waiting stations that you have completed this particular bit of your business and that you have signed your station off the air so that other stations waiting may use the channel. In some parts of the country, dispatchers typically follow their call sign with the word "clear." For example, "10-4, Butler Control, KJG29, clear."

Correct this message:

—Hamilton 47KG, calling Mobile 2, come in,

—Mobile 2.

—What is your 10-20?

—My 10-20 is proceeding north on Oak at Main.

—10-4.

Content	Notes & Questions

Clear Presentation of Numbers, Names, and Dates

Numbers

Numbers are an important part of your messages. They must not be mis-understood. Their confusion and miscopying can lead to much trouble, both for your unit and the others to whom your messages are addressed. The following is the correct pronunciation of numbers:

1   "WUN" . . . with a strong W and N
2   "TOO" . . . with a strong and long OO
3   "TH-R-EE" . . . with a slightly rolling R and long EE
4   "FO-WER" . . . with a long O and strong W and final R
5   "FIE-YIV" . . . with a long I changing to short and strong Y and V
6   "SIKS" . . . with a strong S and KS
7   "SEV-VEN" . . . with a strong S and V and well sounded VEN
8   "ATE" . . . with a long A and strong T
9   "NI-YEN" . . . with a strong N at the beginning, a long I and a well sounded YEN
0   "ZERO" . . . with a strong Z and a short RO

Numbers should be repeated first individually as integers, and then as the whole number. For example, 1,527,617 is transmitted:

> "One, five, two, seven, six, one, seven (pause)—one million, five hundred twenty-seven thousand, six hundred seventeen."

Names

It's important to transmit names clearly—names of people and names of locations. The International Phonetic Alphabet should be used for unusual or difficult spellings, and when radio transmission is poor. Dispatching can be accomplished accurately by:

a.   Pronouncing the complete name.

b.   Spelling the first name, giving the first letter of the name phonetically.

c.   Pronouncing the last name.

d.   Spelling the last name phonetically.

41

Content	Notes & Questions

The International Phonetic Alphabet is as follows:

(A) ALPHA	(N) NOVEMBER
(B) BRAVO	(O) OSCAR
(C) CHARLIE	(P) PAPA
(D) DELTA	(Q) QUEBEC
(E) ECHO	(R) ROMEO
(F) FOXTROT	(S) SIERRA
(G) GOLF	(T) TANGO
(H) HOTEL	(U) UNIFORM
(I) INDIA	(V) VICTOR
(J) JULIETTE	(W) WHISKEY
(K) KILO	(X) X-RAY
(L) LIMA	(Y) YANKEE
(M) MIKE	(Z) ZULU

Example:

> "John Phares"
> "I spell"
> "First name"
> "J-Juliette-O-H-N"
> "Last name"
> "Phares"
> "P-Papa"
> "H-Hotel"
> "A-Alpha"
> "R-Romeo"
> "E-Echo"
> "S-Sierra"
> Then pronounce the whole name:
> "John Phares"

It is better to spend the extra time required in spelling names clearly, since, for example, this name could easily have been copied "Fares," "Farres," or "Ferris," depending upon local pronunciation.

Content   Notes & Questions

Now that you have learned how to transmit names, you should be cautioned not to overuse the phonetic alphabet. When the name has a common spelling, such as Smith or Jones, when transmission conditions are good, and when you have no reason to suspect that a name will be misunderstood, you should say the name and spell it in the usual way. For example, "John Smith, S-M-I-T-H." When receiving a name, you should question the spelling of any name about which you have a doubt.

Dates and Times

Definite time and date should be specified instead of being indefinite. "Today." Also, do not say "This date," "Yesterday," or "Tomorrow." Say "September 10" instead of "Today."

Definite hour and minute time should be used, and not "A few minutes ago." Twenty-four hour time is preferred over the usual twelve-hour time. The letters a.m. and p.m. are often misunderstood over the air. Also, the use of twenty-four hour time will eliminate the necessity of entering a.m. or p.m. on the log forms. When giving time do not say "O'clock," say instead "Hours." For example, "Seven hundred hours."

Using Easy to Copy Phrases and Words

Avoid phrases and words that are difficult to transmit clearly. Some examples of poor and preferred words are listed below:

Poor	Preferred
Want	Desire
Can't	Unable
Buy	Purchase
Get	Obtain
Send	Forward
Do you want	Advise if
Find out	Advise if
Call and see	Check

Others?

_____

_____

_____   43

_____

_____

Content	Notes & Questions

Practice: Correct the following transmissions.

—Tag Number A, one hundred twenty-five (pause) 1-2-5.

_____

_____

—I'll call Wednesday, over.

_____

_____

_____

—The accident occurred in front of fifteen five (meaning 1505) Duncan Avenue.

_____

_____

—I can't call and see whether they have beds right now. Their transceiver is out. Do you want me to call and see whether Memorial in Mayfair has any?

_____

_____

_____

—They request an ambulance to pick up the patient at seven o'clock tomorrow.

_____

_____

_____

—An officer will arrive your location in 20 minutes to pick up the plasma.

_____

_____

—1 KILO 25, Richland Police. Do you want me to send a copy of your accident report to St. Johns Hospital? They asked for it.

_____

_____

44

PRIORITY CONSIDERATIONS

The word "emergency" is used in many localities as a top-priority trans-
mission. It should not be abused by frequent use. Normally, the word "emer-
gency" is used when a patient needs help fast. The dispatcher should
also be familiar with other signals which indicate emergency. Among these
are "10-33," "10-18," the spoken word "urgent" repeated several times, or
simply the word "help." When assistance is needed in minor emergencies,
such a word as "assistance" will indicate the lesser degree of urgency.

The International Distress Signal is the spoken word "MAY-DAY," from the
French term "M'aidez," which is a request for help. This signal is in regular
use, particularly in the aeronautical and maritime fields, and should be im-
mediately recognized by any operator as an urgent call for aid. Its reception
and all pertinent traffic and/or action should be logged. This signal should
not be used for any other than a situation of extreme gravity and its false or
fradulent use is prohibited. You might hear MAY-DAY if an ambulance at-
tendent is being shot at, for example. The closest station to the person
calling MAY-DAY is required to answer first. As long as one station is fully
giving aid, the others need not answer. Until an Emergency or MAY-DAY
has been handled, you should ask all other traffic to wait.

45

RELAYING MESSAGES

Occasionally you may be asked to relay a formal message. *Never change a single word of such a message*. Record and retransmit it exactly as given. You should not retransmit until you are sure you have it correctly.

If fill-ins are required, the following form should be used: "Go ahead from (the last word received) to (the first word received after the blank)."

If completed except for the beginning or ending, say "Repeat up to" (the first word received), or "Repeat all after" (the last word received).

A station originating a formal message which is to be relayed on the air by the receiving station should monitor the receiving station so as to certify that the message is retransmitted correctly. Long messages should be broken into phrases and each phrase should be repeated once before going to the next phrase of the message. At the end of two or three phrases of a long message the operator should inquire "so far?" of the station or vehicle to which he is transmitting. This is done to reduce the number of repeats, because if the receiving operator misses any part of a message, he has missed all the meaning of the message.

Take two relay messages from your instructor. Write below.

1. _____

_____

_____

_____

_____

2. _____

_____

_____

_____

Content   Notes & Questions

MULTIPLE INCOMING CALLS

A serious problem you will encounter is one of coping with a high level of
traffic. If a call comes in on a telephone line while you are speaking on the
radio, you should finish your message quickly (or say "10-6" or "stand by")
and answer the telephone call. Determine as quickly as possible the priority
of the telephone message and decide which communication should be
continued. If you can dispatch an emergency vehicle before returning to the
party standing by on radio, you should do so and tell the calling party that
help is on the way.

With only two callers, the procedure is fairly straightforward. But occasionally
"the board lights up" with many calls reporting the same emergency. If you
can dispose of these callers quickly by telling them that help is on the way,
you should do so.

—Should you ever fail to answer a call?

_____

_____

—What is the longest time you should let a call ring?

_____

_____

—Should you ask another dispatcher to monitor your channels?

_____

_____

47

Content	Notes & Questions

CONFLICTING INFORMATION

Different persons often will submit different versions of the same happening. Do not accept any statement or report as necessarily true. Try to obtain independent support for one version or another. If you cannot determine the true circumstances, assume the worst and adopt the safest, most conservative course of action.

LOCAL JARGON AND ABBREVIATIONS

Just as there are local 10-codes that other communities do not use, there are probably words and abbreviations which will not be understood by dispatchers in other states or communities.

NOTES: Please copy and learn the terms and abbreviations your
           instructor will write on the chalkboard.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

| Review Exercises | Answers |

1. Point out the location of each of the following telephones on a map of the area. (Instructor will supply a list of numbers.)

2. On a map of the area, point out the location of each of the following addresses (to be supplied by the instructor).

3. Given a set of reports that different emergency vehicles are in service, out of service, responding to an emergency, and have completed an assignment, indicate what you should do to keep track of their availability status.

4. Name three things that the FCC prohibits in connection with operating a receiver.

5. What are some of the things that might happen if you do *not*:

—Answer promptly?
—Identify yourself and your department?
—Speak directly into the mouthpiece?
—Observe telephone courtesy by using a courteous voice and by explaining what you intend to do?
—Take charge of the conversation?
—Take down all necessary information in writing?
—Explain waits?
—Avoid jargon or slang?
—Show interest in the person's call?
—Try to visualize the caller and allow for the strain he or she is probably under?

49

Review Exercises	Answers

6. With a copy of the International Phonetic Alphabet in front of you, spell the following difficult names in such a way that another party copying them will make no error.

> Hinterleiter   Zworykin
> Colteryahn   Rashaad
> Srinivasan

7. Using the list of 10-codes your instructor has given you, write a translation of the transmissions your instructor has written on the board. (The transmissions will include the important 10-codes and all 10-codes that have unique local meanings.)

8. Using the list of 10-codes your instructor has given you, prepare a coded message based on each of the common-language messages your instructor has written on the board.

9. Using the list of abbreviations and jargon words your instructor has provided, translate the words and abbreviations your instructor has written on the board. Try to write more than the direct translation to show that you completely understand each one.

10. What should you do if a call comes in while you are handling a previous emergency? What should you do if there are more calls than you can handle?

11. What should you do if one caller tells you there are injuries associated with a traffic accident and the next caller tells you there are no injuries associated with the same accident?

Contents

51

Course Objectives

By the end of this unit, the trainee:

1. Given simulated calls reporting emergencies, will be able to elicit the information necessary to be able to allocate appropriate resources to to the scene. The information will be elicited in order of importance.

2. Will be able to describe several (two or three) practices which betray excitement and, therefore, should be avoided in speaking to callers.

Key Points

The focus in this unit is on getting information from the caller who reports an emergency. How you elicit this information, and in what sequence, depends upon what you have to do with the information. Four things you may have to accomplish are listed on pages I-D-3 and I-D-4. This unit also gives some hints about calming the caller. Notice especially the three ways of speaking that should be avoided because they show the caller you have "lost your cool."

52

I-D-2

PRIMARY RESPONSIBILITIES

When a request for assistance comes to you, whether by telephone or by radio, you have four things to accomplish:

1. You must make sure that you do not lose contact with the caller until you have all of the information you need.

How can you insure this?

_____

_____

2. You must start the appropriate vehicles to the appropriate place with the appropriate staff and equipment aboard.

What does this involve for you?

_____

_____

3. You must calm the caller and stay cool yourself. If you don't calm the caller you may receive no further information or cooperation.

How do you do it?

_____

_____

_____

_____

_____

_____

_____

4. In some localities, under certain conditions, you will determine whether the caller needs to, and is competent to, carry out any immediate first-aid measures before the emergency vehicle arrives.

Does this apply locally?

53

_____

_____

Content	Notes & Questions

SEQUENCE FOR ELICITING INFORMATION FROM CALLERS

In obtaining and recording information about the call, you have to get and record the information in a sequence of some sort. You can't ask everything at once, and you have to ask important things first. However, "experts" differ on priorities for obtaining information. One recommended sequence is:

1. Caller's perception of the nature of the problem.

2. Time that the call was received (simultaneously with No. 1 above).

3. Phone number of caller.

4. Specific location of patient, including directions for guiding vehicles to the scene.

5. Name of caller.

6. Specifics of the patient's medical condition (i.e., How is patient's breathing? Is the airway clear? Is patient conscious? Bleeding severely? In severe pain?)

7. Are other services needed?

NOTES: Is there a better sequence?

I-D-4

GETTING ADDITIONAL INFORMATION

After a vehicle has been dispatched and the caller is notified that help is on the way, you may want to obtain additional information as follows:

1.   Name of patient.

2,   Name of patient's doctor.

3.   Time and date for which ambulance is requested.

4.   Time that the incident occurred (ETI).

5.   Is caller alone?

NOTES: Locally recommended sequence.

55

Content	Notes & Questions

CALMING THE CALLER

The people calling a dispatcher will sometimes be greatly agitated. Sometimes they will be in pain; sometimes they will have witnessed a violent accident or have seen a gruesome sight. You can detect the excitement in their voices. They will speak quickly or loudly. They may be out of breath. The voice may be higher pitched than normal. They may make irrational demands. They may not listen to reason.

One of the first things you need to do is to calm down the caller. You don't want him to have a heart attack. However, you should *not* tell him to "calm down." This will only make him think you don't appreciate the seriousness of the situation. The most effective way to calm a caller is to let him know, by your actions and your tone of voice, that he has reached a calm and competent person who will do the right thing to help.

Here are some things you can do to calm a caller or keep a caller calm.

1. When you answer a call, you should identify yourself and your department. Use a department name that the caller will instantly identify as one which deals with emergencies. It does not much matter how your mail is addressed. Instant recognition is the important thing.

2. Let the caller state the problem in his own words, but don't let him ramble. Control the conversation to get all the information you will need in order to decide what sort of assistance is required and where help is needed. Be courteous but firm.

3. Get the vehicles on their way as soon as you can. If this requires asking the party to wait, explain the wait. Letting the phone go dead with no explanation can only make the caller anxious, irritable, and uncooperative. Get back to the caller as soon as you can and briefly explain the measures you have taken. Let him know that help is on the way. Only then should you ask for any additional information you may need.

4. When people speak to us in an agitated manner, we tend to reply in the same way; to speak quickly, to speak loudly, to speak in a higher pitch. When people tell us about serious injuries, we may be shocked or get emotionally involved. Try to keep the excitement out of your own voice. Listen to yourself. Don't sound apathetic or uncaring. But try to instill confidence and calmness by setting an example with your own tone of transmission.

5. If a caller becomes hostile or abusive, do not express hostility yourself. Make allowances for what the caller has been through. Stay cool. The two most important persons in the victim's life at that moment are you and the caller. It does no good for you to be mad at each other. It can only make things worse. Similarly, if the caller starts to argue, don't argue back. It takes time to argue—time you may not have. In addition, your caller may be too excited to listen to reason.

I-D-6

1. Name at least two of the three ways you, as a dispatcher, might betray excitement in speaking to a caller.

Contents

Course Objectives

By the end of this unit, the trainee:

1. Given a list of information to be recorded, will correctly make the entries for each form or log to be mastered.

2. Will be able to demonstrate achievement of all basic objectives.

Key Points

This unit gives you a chance to use some of the knowledge and skills you have gained. You will practice operating a console if one can be made available. You will learn to speak slowly and distinctly. You will learn how to fill out the forms used on the job. You will get practice in eliciting information from the caller. Of course, this practice session is only the beginning. You will be expected to get a lot better as you get more practice on the job.

Content	Notes & Questions

INTRODUCTION

This practice session will have two parts. In the first part you will get more practice in operating the dispatcher console. In the second part you will pair off and transmit messages to each other. You will learn to speak slowly and clearly, and to copy accurately.

CONSOLE PRACTICE

The sequence of events in console practice will be as follows:

1. Review of console controls and displays. You will be asked to explain what each control and display does and how it works, as best you can remember from the second unit (I-B).

2. You will receive a radio call from an ambulance.

3. You will transmit a message to a local base station.

4. You will contact an ambulance and transmit a message.

5. You will be asked to perform some additional tasks involving steps that were not part of the above transmitting and receiving. Some examples might be:

   —Adjust the volume on frequency X.

   —Place a telephone call.

   —Select a new transmit channel.

   —Take the appropriate action to indicate that the status of unit Y has changed.

   —Place a call on the intercom.

Content	Notes & Questions

TAPE RECORDER PRACTICE

NOTE: My partner's name is:

_____

_____

NOTES: How to operate the tape recorder:

_____

_____

_____

_____

_____

_____

_____

Speed Practice

You should read to your partner the selections on page 115 of your text, the
Public Safety Communications Standard Operating Procedure Manual.
Read one paragraph at a time. Read the paragraph first at 125 words per
minute (the normal rate); then at 60 words per minute (the preferred rate for
maximum understandability). Have your partner time you. Record below
how many seconds each paragraph took. Try to come closer to your target
each time.

	125 WPM		60 WPM	
Paragraph 1:	Target 26	Actual	Target 54	Actual
Paragraph 2:	Target 29	Actual	Target 61	Actual
Paragraph 3:	Target 44	Actual	Target 91	Actual
Paragraph 4:	Target 41	Actual	Target 86	Actual
Paragraph 5:	Target 47	Actual	Target 97	Actual

Content	Notes & Questions

Clarity Practice

The instructor will give you and your partner each 20 messages. You will take turns transmitting these messages to each other. While one of you is transmitting, the other should be copying the message. When the message is over, the one who was copying will read back what he took down and the one who transmitted will check that it was correctly copied. You may use any abbreviations you want in copying, just so long as you get the message right. For the first 10 messages, the copier may ask the sender to repeat any unclear portion of the message or any part that is read faster than 60 words per minute. When you are the reader, try to avoid being asked to repeat; say it clearly the first time. For the last 10 messages, the copier may not ask for repeats. You will be working as a team to achieve perfect copying of the messages.

FORMS PRACTICE

Forms are an extremely important element of any emergency medical system. Especially important is the operator log. It preserves messages which often convey vital and highly perishable information. The log is not only a time-sequenced record of what messages were received. It also reflects the response that was made by assigned operating personnel and the cooperation they received from other elements of the system.

Your instructor will explain each form and how each is to be completed.
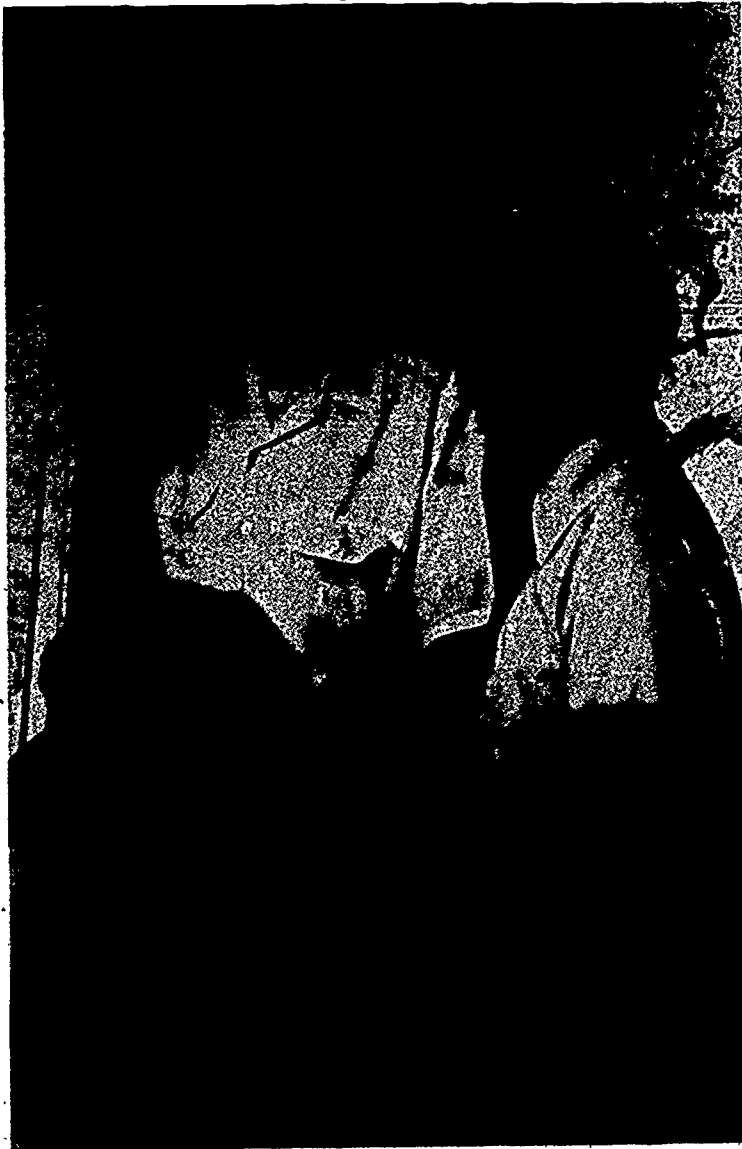
Contents

Course Objectives

By the end of this unit, the trainee:

1.   Will be able to state correctly three primary functions accomplished by the EMT dispatcher.

2.   Given a list of responsibilities, will be able to identify items that are *and are not* responsibilities of the EMT dispatcher.

Key Points

Dispatchers are found in many kinds of organizations. This unit describes the work of dispatchers who send out emergency medical vehicles to the scene of an emergency. It talks especially about things your EMT training will help you do better. Concentrate on the major functions and responsibilities of the EMT dispatcher.

INTRODUCTION

In the first part of this course (Part I), you learned many of the general skills
needed by any public-safety dispatcher. In this part of the course (Part II),
you will develop some of the specialized dispatching skills that let you apply
your EMT training to this job. As an EMT dispatcher you will establish the
performance level of the emergency response system. This portion of the
training integrates what you already know as an Emergency Medical Tech-
nician with what you learned in Part I of this course.

How you take advantage of your combined EMT and dispatcher preparation
depends upon how your job will be structured and the local procedures that
apply. This has two implications:

1.   Your instructor will ask you to write in a lot of locally applicable
      information.

2.   Even after you have completed this training you will need to practice
      what you have learned on the job before you can be a fully competent
      EMT dispatcher.

Content   Notes & Questions

FUNCTIONS OF EMT DISPATCHER

The functions of the EMT dispatcher represent those duties of any public-safety dispatcher that cause him to interact with the emergency medical system in this area.

The primary functions of an EMT dispatcher are the following:

1. To receive calls for medical assistance from citizens and from public-safety units.

2. To decide which resources of the emergency medical system should be brought to bear on each emergency that is handled.

3. To dispatch emergency medical vehicles to the scene of the emergency.

4. To establish telecommunications links between citizens and medical authorities, among elements of the emergency medical system, and among public-safety agencies involved in responding to medical emergencies.

Other aspects of your functions as an EMT dispatcher will depend upon the emergency medical system that has been set up in your state and upon the type of unit within which you will work. If you were working in a regional EMS resource management unit (if you have such a unit) your duties and responsibilities would be quite different from those of a dispatcher in a small town police station.

My local dispatching situation is:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

6.

Content	Notes & Questions

EMT DISPATCHER ROLES AND RESPONSIBILITIES

To satisfy the functions of an EMT dispatcher, you will have responsibilities
which go beyond those of the basic dispatcher. These responsibilities may
require you to make critical judgments based on your training as an
Emergency Medical Technician and as an EMT dispatcher.

The six major responsibilities you will have are:

1.   Eliciting from callers the information which enables you to assess the
      severity and criticality of injuries.

*What kinds of information are useful for determining the severity and
criticality of injuries?*

_____

_____

_____

_____

_____

_____

2.   Allocating medical resources.

What factors should be considered?

_____

_____

_____

_____

_____

3.   Identifying when it is appropriate and necessary for you to convey
      "first-aid" information.

What is local policy?

_____

_____

_____

_____

63

_____

Content	Notes & Questions

4. Identifying the situations when persons at the scene should be patched to medical resource personnel.

How do you know when?

_____

_____

_____

_____

_____

_____

5. Advising and directing the response of other agencies (i.e., fire, wrecker service, etc.), when they are required in response to a medical emergency.

What is local policy?

_____

_____

_____

_____

_____

_____

6. Directing the ambulance to the hospital most appropriate to the condition of the patient and establishing the communication link between the ambulance and the hospital. This could include a dedicated link for telemetry.

How do you know when the channel is free again?

_____

_____

_____

_____

_____

_____

II-A-6

1. Name three primary functions of the EMT dispatcher.

2. The following list of duties may contain some things an EMT dispatcher should *not* do as well as some things he should do. Write "yes" or "no" next to each statement.

   An EMT dispatcher should:

   a. Establish communications links between ambulance and hospital.

   b. Help the vehicles he has dispatched to avoid traffic congestion.

   c. Assess how critical a reported injury is.

   d. Decide how many and what kind of vehicles should respond to a medical emergency.

   e. Diagnose any medical problems that may be reported.

70

Contents

71

Course Objectives

By the end of this unit, the trainee will be able to match a list of medical emergencies with the facility best prepared to cope with it, all things equal.

Key Points

A crucial part of the EMT dispatcher's job is deciding what to send in response to an emergency. This unit will give you a good idea of what you have to choose from. Your instructor will go over with you all the emergency mobile units and medical facilities and resources in your area. As a dispatcher it is vital that you keep track of what resources you can allocate and what they are capable of doing for the victims of medical emergencies.

II-B-2

LOCAL MEDICAL RESOURCES

To accomplish these responsibilities you must be fully aware of the location,
the capabilities, and the status of all medical resources in your area.

What resources are available? Use the table on the next page.

73

Resource Name	Special Capability	Telephone Nos./Radio Channels/Tone-Coded Squelch Assignment
Hospitals		
Medical Centers		
Mobile Intensive Care Units		
Rescue Squads/ Helicopters		
Specific Medical Resource Personnel		
Ambulances		
Hospital		
Private		
Police		
Fire		

II-B-4

RESOURCE DETAILS

Now that you have a listing of the medical resources that are locally available, the next step is to develop a closer acquaintance with each one. With your instructor's help you will now expand the resource information you have.

HOSPITALS

A dispatcher needs to know, or have available to him, the following kinds of information about hospitals:

    Hospital Name (Identifier)
    City/Community
    Map Coordinates
    Communication Facilities
    —Radio Channels
    —Telemetry Capability

    Emergency Room Description
    —Capacity (Treatment Cubicles)
    —Staffing (Day/Night)

    Specialized Treatment Facilities

Use Figure II-B-1. Your instructor will tell you how to fill in this form and what to enter.

75

Hospital Identifier (City/Community)	Map Coord.	Communication Facilities	Emerg. Rm. Description	Spec. Treat. Facilities

FIGURE II-B-1
Practice local hospital resource form.

MEDICAL CENTERS

Medical centers have different characteristics in different communities. As used here, the term "medical center" refers to a small treatment facility with no beds. Some medical centers will accept no trauma victims. Most are closed at night. However, some have excellent emergency treatment facilities and staff. Such centers can represent the best and closest medical facility available to some victims.

A dispatcher needs to know, or be able to refer to, the following information about medical centers:

    Name
    Community
    Map Coordinates
    Telephone Number/Hotline Links
    Do they routinely accept trauma victims?
    Hours of operation
    Channels available.

Use Figure II-B-2.

77

Medical Center City/Community	Map Coord.	Phone No.	Special Services	Hours

FIGURE II-B-2
Practice local medical center resource form.

II-B-8

MOBILE INTENSIVE CARE UNITS

Such units are fairly rare. However, when available, they provide an extremely valuable resource to the emergency medical system.

As an EMT dispatcher, you should know the following about any local mobile intensive care units:

        Identifier
        Base of Operations
        City/Community
        Map Coordinates
        Phone Number or Radio Channel
        Special Equipment
        Zone of Operation

Use Figure II-B-3.

73

Identifier Base of Operations	Map Coord.	Phone No. Radio Channel	Special Equipment	Zone of Operation

FIGURE II-B-3
Practice local mobile intensive care unit resource form.

RESCUE UNITS/HELICOPTERS

Although rescue units are typically associated with fire companies and helicopters with law enforcement departments, they are listed together here for convenience.

As an EMT dispatcher, you need to know:

> Identifier
> Base of Operations
> City/Community
> Map Coordinates
> Phone Number or Radio Channel
> Equipment
> Capabilities and Limitations

Use Figure II-B-4.

81

Identifier Base of Operations City/Community	Map Coord.	Phone No. Radio Channels	Equipment	Capabilities and Limitations

FIGURE II-B-4
Practice local rescue unit/helicopter resource form.

MEDICAL RESOURCE PERSONNEL

There may be individuals in your community who have unique medical or paramedical capabilities. Some examples are the following:

Coroner
Physician specializing in trauma victims
Citizens with advanced EMT training who can be relied upon to assist
    with difficult cases in this area
Disaster coordinator

You as an EMT dispatcher, need to have available the following information about each individual:

Name
Telephone Number or Radio Frequency
Map Coordinates
Unique Capabilities

Use Figure II-B-5.

Name	Phone No. Radio Frequency	Map Coord.	Unique Capabilities

FIGURE II-B-5
Practice local medical resource personnel resource form.

II-B-14

AMBULANCE UNITS

In most localities, ambulances operate under a wide variety of auspices.
Furthermore, the equipment they carry and the training of their attendants
may not be standardized. Thus the EMT dispatcher needs to know all he
can about the ambulances that could respond to an emergency before he
allocates that resource. You should know the following kinds of information
about any ambulances you dispatch:

     Identifier
     Base of Operations
     City/Community
     Map Coordinates
     Telephone Number or Radio Frequency
     Attendants On Duty vs. On call
     Training of Attendants
     Equipment On Board

Use Figure II-B-6.

85

Identifier Base of Operations City/Community	Map Coord.	Phone No. Radio Frequency	Attendants	Special Equipment

FIGURE II-B-6
Practice local hospital resource form.

II-B-16

1. Within your dispatch area, what facility (or facilities) is best prepared
    to handle the following kinds of medical emergencies, all things equal?

        Burn cases
        Cardiac cases (requiring intensive care)
        Victims of poisoning
        Pediatric emergencies
        Severe abdominal injuries

87

UNIT II-C

Contents

Course Objectives

By the end of this unit, the trainee:

1. Given a list of dispatch situations, will be able to determine the appropriate resources to be allocated by considering such factors as the following:

   a. The nature of the problem.
   b. The personnel and vehicles available.
   c. The proximity of vehicles to the patient.
   d. Ambulance zones of coverage.
   e. Type of trained personnel and type of equipment carried by various mobile units.
   f. Caller's assessment of needs.

2. Given a set of emergency situations, will be able to state for each situation whether lights and siren are advisable in traveling to the scene.

3. Given a set of patient conditions, will be able to assign appropriate priority level to each condition.

Key Points

The previous unit gave you a picture of the medical resources you can call on. This unit tells you how to decide which of your resources should be allocated to each individual emergency situation. Pay special attention to how priorities are assigned to classes of injuries.

Content	Notes & Questions

INTRODUCTION

Page II-A-4 of this guide tells you that a dispatcher:

—Receives requests for help.
—Scopes the problem (enough to choose a course of action).
—Decides upon and dispatcher the appropriate emergency vehicles
(resources).

When someone asks for help you have to determine what kind of help is
needed. The type of emergency determines the type of resource to be
allocated:

Emergency———▶ Resource-Requirement

You have learned in your previous EMT training the types of actions (and,
therefore, the types of personnel and equipment) that various emergency
medical problems call for. If a person is having a coronary attack, for example,
you know what equipment and what sort of trained personnel are needed.

The type of emergency also determines the urgency of the situation.

Emergency———▶ Resource Requirement
          ⬊ Urgency

The urgency is jointly determined by the life-threatening nature of the
incident and the benefit to be derived from medical or paramedical assis-
tance. The victim of an obvious mortal wound has maximum threat to life but
minimum benefit to be derived from assistance. As you will see, this is
classed as a low-priority injury. This is an extreme example to illustrate the
point that some life-threatening emergencies are less than top priority—
where five or ten additional minutes of response time will have no conse-
quences (e.g., spinal cord injuries).

Content	Notes & Questions

PRIORITIES

One way to express the urgency of a situation is to assign priorities to classes of injury.

Below is a common classification of injuries:

High Priority Injuries

Airway and breathing difficulties
Cardiac arrest
Uncontrolled bleeding
Severe head injuries
Open chest or abdominal wounds
Severe medical problems (e.g., coronary)
Severe shock.

Any others?

_____
_____
_____
_____
_____

Second Priority Injuries

Burns
Major multiple fractures
Back injuries with or without spinal cord damage

Any others?

_____
_____
_____
_____
_____

91

II-C-4

Low Priority Injuries

- Minor fractures
- Other minor injuries
- Obvious mortal wounds
- Obvious death

Any others?

_____

_____

_____

_____

_____

In addition to its importance for resource allocation, priority classification of injuries is also useful in deciding when to call for lights and siren. Local policy holds, but low-priority injuries usually call for a "silent run."

It is important to assign injuries to categories correctly. Do you think this alters the sequence (presented in Unit I-D) in which you should elicit information from callers?

_____

_____

_____

_____

_____

_____

_____

_____

92

Content	Notes & Questions

ALLOCATION

The inputs to the allocation process are the following facts:

—Capabilities and limitations of local resources. You learned about this in Unit II-B.

—Availability status of local resources. Part I of the course covered ways of keeping track of their status.

—Type of medical emergency. You elicit this information from the caller and classify the injury as to priority, as shown on page II-C-4.

—Location of local resources in relation to the site of the incident (proximity). You learned some things about resource location in the previous unit. You will learn more on the job.

—Reaction time. This is partly determined by proximity and partly by other factors, such as:

   —Accessibility of the emergency site.

   —Speed capabilities of vehicles.

   —Personnel availability.

A better feeling for reaction time capability of your resources come from experience.

—Accessibility of victims. The caller will usually mention lack of accessibility.

—Ambulance zones of coverage. You learned about this in Unit II-B.

How can you now use this information to decide what to do? You follow these nine principles:

1. Know the status of your resources. You can't dispatch from a place that is "empty." You can't send patients to a place that is "full."

NOTES:

_____

_____

_____

_____

_____

II-C-6

2. Send the closest available unit that "fits the bill." Even with second and low-priority injuries, time is important. No caller wants to wait long for help.

NOTES:

_____

_____

_____

_____

3. The other side of No. 2 above is: Make sure you send enough. To allocate resources that can't handle the job is worse than useless. It wastes precious time.

NOTES:

_____

_____

_____

_____

4. High-priority emergencies heighten the importance of proximity and reaction time.

NOTES:

_____

_____

_____

_____

5. For medical emergencies beyond the capabilities of ambulance attendants, place more emphasis on the total probable time to get the victim to a physician or hospital.

NOTES:

_____

_____

_____

_____

94

Content	Notes & Questions

6. Accessibility of the victims may determine the resource you allocate.

NOTES:

_____

_____

_____

_____

7. If in doubt, send it out.

NOTES:

_____

_____

_____

_____

8. Consider using multiple resources and citizen resources.

NOTES:

_____

_____

_____

_____

_____

_____

9. Respect ambulance zones of coverage, but not at the expense of the victims.

NOTES:

_____

_____

_____

_____

_____

Review Exercises   Answers

1.   Using the list of dispatch situations your instructor will provide, indicate
     for each situation the resources you would allocate (dispatch) to the
     scene.

2.   For each of the situations your instructor will give you, indicate
     whether lights and siren are advisable in traveling to the scene. (This
     question is applicable only if dispatchers are permitted by local policy
     to advise emergency vehicle operators about the use of lights and
     siren.)

3.   For each of the patient conditions listed below, indicate the appropriate
     priority level (high, second, low).

     Severe burns _____   Severe head injuries _____

     Obvious death _____   Open abdominal wound _____

     Back injuries _____   Major multiple fractures _____

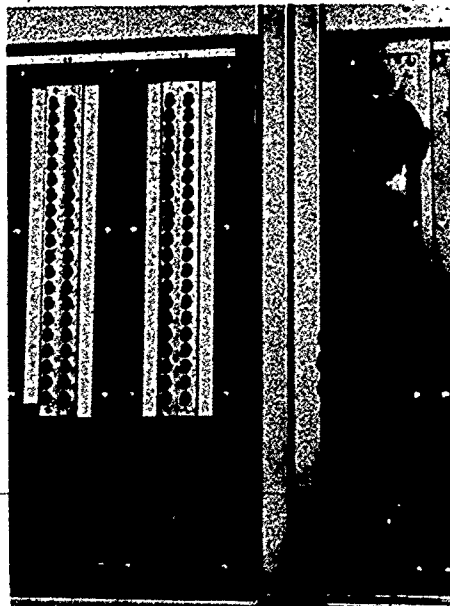## Contents

Course Objectives

By the end of this unit, the trainee, given a set of situations, will be able to decide for each situation what level of medical direction he should provide in a given situation. The factors to be considered will include:

a. How soon is an emergency vehicle likely to arrive?

b. Is the emergency a life-threatening one in which prompt action can alleviate the situation? What are the likely consequences if nothing is done before help arrives?

c. How competent is the caller to administer the needed care?

d. What possible ways could the victim's condition be aggravated?

Key Points

EMT dispatchers occasionally encounter a situation in which a life can be saved by instructing a caller to perform certain basic first aid steps. This unit discusses how much medical direction should be given in various situations and some of the risks associated with giving advice. Toward the end of the unit, you get to apply your EMT training and experience as you and your instructor develop checklists to be used when giving first aid advice. Remember, providing first aid instructions over a telephone is very different from administering first aid yourself, or even telling another person how to do it while you watch. The reason is that you have to anticipate what can go wrong and how the victim might react when you give instructions over the phone. You don't get the kind of immediate feedback you would if you were there. It can be as hard as telling a layman over the radio how to land an airplane.

II-D-2

SHOULD YOU PROVIDE EMERGENCY CARE INSTRUCTIONS?

Although this is a tough question, in discussing the kind of training that
nine-one-one answering center personnel should receive, the Office of
Telecommunications Policy has said:

> "In addition it may be desirable to train nine-one-one personnel in first
> aid or other survival techniques. It is not at all unusual for a person with
> a medical emergency to require help immediately. An operator who can
> instruct a caller to administer mouth-to-mouth resuscitation or remove
> an obstruction from the throat may be able to save a life that might have
> been lost by the time an ambulance could arrive." (Nine-One-One,
> The Emergency Telephone Number, Handbook for Community Plan-
> ing, p. 41.)

Different localities have different policies with respect to the question of
whether a dispatcher (even one with paramedical training) should be per-
mitted to give advice to callers about first aid or other survival techniques.
This policy often depends upon how easily and quickly a trauma specialist
can be reached. One aim of an emergency medical system is to bring the
victim of a true medical emergency under the care of a physician at the
earliest possible moment. Under *ideal* conditions, a dispatcher who detects
that a caller needs immediate medical advice can make a patch connection
with a physician experienced in handling trauma victims. At present, how-
ever, this ideal is far from a reality in most communities. This means that,
*if lives are to be saved that otherwise may be lost, you, a dispatcher with
EMT Ambulance training, will occasionally have to provide emergency care
instructions to callers.* When the situation arises, you must be prepared to
make the right decision and to provide the appropriate unambiguous
directions.

99

Content	Notes & Questions

When do you patch calls?

_____

_____

_____

_____

_____

What are the legal risks?

_____

_____

_____

_____

_____

"Good Samaritan" protection?

_____

_____

_____

_____

_____

Consider: Is it more important to get help on its way or to provide medical emergency care instructions?

_____

_____

_____

_____

_____

_____

_____

II-D-4

**QUESTIONS TO RESOLVE BEFORE PROVIDING EMERGENCY
CARE INSTRUCTIONS**

1.   How soon is an emergency vehicle likely to arrive?

NOTES:

_____

_____

_____

_____

_____

_____

2.   What are the likely consequences if nothing is done before help
      arrives?

NOTES:

_____

_____

_____

_____

_____

_____

3.   Is the caller willing and able to administer the necessary first aid?

NOTES:

_____

_____

_____

_____

_____

_____

101

Content	Notes & Questions

4. How likely is this caller to aggravate the victim's condition when attempting to carry out instructions?

NOTES:

_____

_____

_____

_____

_____

5. Is the condition such that first aid is possible *and* useful?

NOTES:

_____

_____

_____

_____

_____

_____

CONSIDER: What happens if a citizen asks for advice?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

II-D-6

MEDICAL INSTRUCTIONS CHECKLISTS

When you decide to provide medical instructions, it is important to cover the procedure clearly and completely. It is easy to forget the details of things you don't do very often. It is also easy to forget things when you are under stress and pressure. The best way to make sure you don't leave out part of a procedure is to make up and use a checklist. On the next few pages, your class and your instructor will develop a model checklist for each of several critical medical emergencies.

The emergencies are:

a.	Severe Shock

b.	Cardiac Arrest

c.	Airway Obstruction and Breathing Difficulty

d.	Uncontrolled Bleeding

e.	Other

103

Content	Notes & Questions

a.   Severe Shock

b.   Cardiac Arrest

Content	Notes & Questions.

c.   Airway Obstruction and Breathing Difficulty

d.   Uncontrolled Bleeding

Content

e.   Other

Review Exercises	Answers

1. Using the list of emergency situations your instructor will give you, indicate for each situation whether you would provide emergency care instructions and, if so, how much you would say. You may use the checklist developed in class when answering.

Contents

Unit Objectives

By the end of this unit, the trainee will be able to accomplish all of the objectives for the EMT specialist units A through D to an acceptable level of proficiency.

Key Points

This is your second unit of practice. You will practice choosing a resource on the basis of utilizing the closest adequate resource. You will practice classifying emergency situations into priority categories. You will practice providing emergency care instructions in the appropriate situations. Try to learn from each problem you handle and to do better on the next one.

Content	Notes & Questions

INTRODUCTION

This practice session will be in three parts. In the first part you will get practice in locating the closest adequate resources for various types and locations of emergencies. In the second part you will practice assigning a priority classification to various emergency incidents. The third part will give you practice in providing emergency first aid instructions.

RESOURCE LOCATION PRACTICE

Your instructor will provide all the reference materials you will need to enable you to pinpoint the location of an address or a telephone with a specific number. He will give you such things as maps, directories, and alphabetical street files. You should also have available the resource location information developed in Unit II-B.

For each problem your instructor will provide, you should indicate the specific resource(s) you would dispatch to the scene, if available. When you have responded to all the problems, you will get a chance to discuss your answers with the instructors.

PRIORITY ASSIGNMENT PRACTICE

Your instructor will provide a set of situations and you will be asked to classify each situation, using the scheme you learned about in Unit II-C. For each situation you should answer the following three questions:

a. Do you have enough information to assign priority?

b. If not, what more would you want to know?

c. How would you classify this situation if you could know nothing else?

PRACTICE IN PROVIDING EMERGENCY CARE INSTRUCTIONS

Your instructor will give you a set of sample situations and a set of questions to answer about each situation. The situations will describe a call you might receive as a dispatcher. You will be asked, essentially, whether you would give advice, what other information you would elicit, and what advice you would give if appropriate.
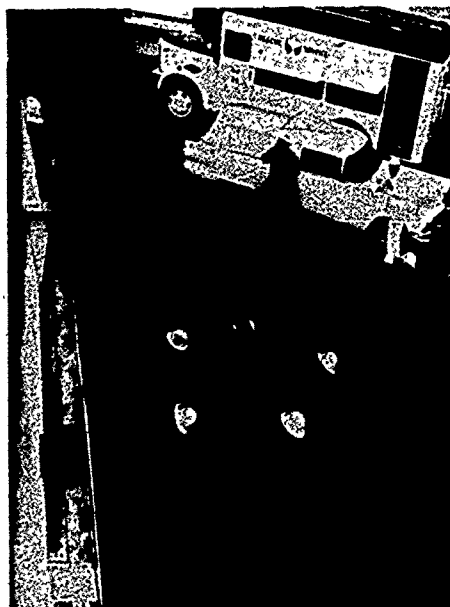
Contents

Course Objectives

By the end of this unit, the trainee will be able to describe the dispatcher's
Civil Defense role in the local community.

Key Points

This unit describes the state and local Civil Defense plan for your part of the
country. You will learn what your role will be in the event of a Civil Defense
emergency or disaster.

Content

THE NATIONAL CIVIL DEFENSE ORGANIZATION

The National Civil Defense Organization operates under the Secretary of the Army. The national Civil Defense structure is divided into regions, each of which serves a number of states. Each state has an Office or Department of Civil Defense established by state legislation or administrative order. The state Civil Defense offices have a master plan of survival that is complementary to the plan for the region on the national level, and to the state subdivision plans on the local level. Public-safety communications are a vital component of every state Civil Defense effort, especially to the extent that they furnish a back-up service to the normal means of communication. They are also a vital part of any plan for handling natural or man-made disasters.

Local disaster procedures:

Civil Defense Plan:

    Nature and scope?

_____

_____

_____

_____

    When does it go into effect?

_____

_____

_____

    General communications requirements?

_____

_____

_____

    EMS requirements?

_____

_____

113