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ABSTRACT

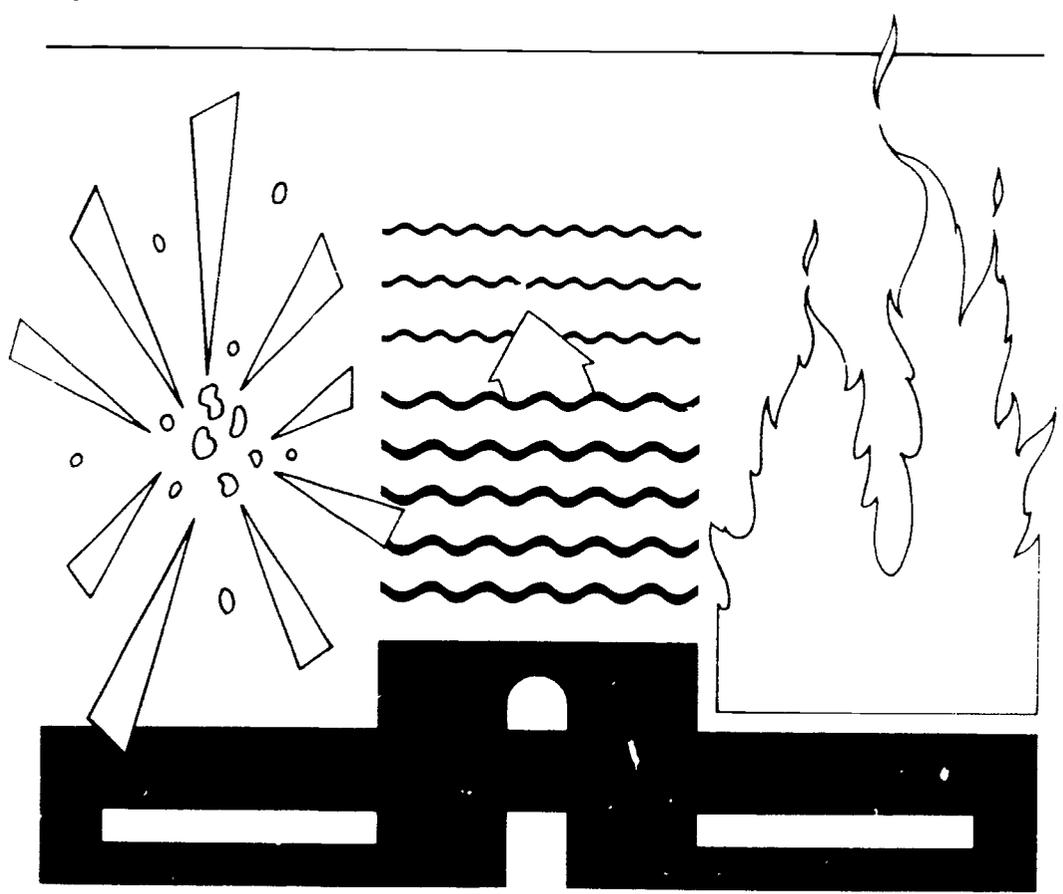
This document is designed to provide civil leaders and school administrators with a resource that will enable them to develop comprehensive contingency plans for specific emergency situations. A discussion of disaster and emergency management planning includes an outline of the objectives of emergency planning that were established for this guide. Appendices, which make up the bulk of the document, provide: (1) definitions and general measures of the four elements of emergency management (mitigation, preparedness, response, and recovery); (2) a list of resource documents available from the Federal Emergency Management Agency; (3) a list of special considerations essential to school emergency planning; and (4) a list of special factors that should be considered in order to enhance plan implementation throughout schools in the United States. The final appendix is a comprehensive disaster plan designed for a hypothetical high school somewhere in the United States. The plan outlines step by step procedures for administration, faculty, and students to follow when a disaster occurs during school hours as well as related educational objectives to be integrated into the grade 7-9 curriculum. (JD)

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PLANNING FOR SCHOOL EMERGENCIES

By Dr. Daniel E. Della-Giustina



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PLANNING FOR SCHOOL EMERGENCIES

(Planning for All Emergency Situations)

**Daniel E. Della-Giustina, Ph.D.
West Virginia University**

Prepared for:
Association For Research, Administration,
Professional Councils, and Societies
(The Safety Society)

An Association of the
American Alliance For Health, Physical
Education, Recreation, and Dance

Planning for School Emergencies

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About the Alliance

The American Alliance for Health, Physical Education, Recreation and Dance is an educational organization, structured for the purposes of supporting, encouraging, and providing assistance to member groups and their personnel throughout the nation as they seek to initiate, develop, and conduct programs in health, leisure, and movement-related activities for the enrichment of human life.

Alliance objectives include:

1. Professional Growth and development—to support, encourage, and provide guidance in the development and conduct of programs in health, leisure, and movement-related activities which are based on the needs, interests, and inherent capacities of the individual in today's society.

2. Communication—to facilitate public and professional understanding and appreciation of the importance and value of health, leisure, and movement-related activities as they contribute toward human well-being.

3. Research—to encourage and facilitate research which will enrich the depth and scope of health, leisure, and movement-related activities; and to disseminate the findings to the profession and other interested and concerned publics.

4. Standards and guidelines—to further the continuous development and evaluation of standards within the profession for personnel and programs in health, leisure, and movement-related activities.

5. Public affairs—to coordinate and administer a planned program of professional, public, and governmental relations that will improve education in areas of health, leisure, and movement-related activities.

6. To conduct other such activities as shall be approved by the Board of Governors and the Alliance Assembly, provided that the Alliance shall not engage in any activity which would be inconsistent with the status of an educational and charitable organization as defined in Section 501(c)(3) of the Internal Revenue Code of 1954 or any successor provision thereto, and none of the said purposes shall at any time be deemed or construed to be purposes other than the public benefits purposes and objectives consistent with such education and charitable status.

Bylaws, Article III

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Daniel E. Della-Giustina, Ph.D.

School Emergency Planning

Almost daily a school in the United States is involved in a disaster. These disasters vary according to severity, with only the most significant ones being reported by national television and the wire services. Furthermore, many schools are used to shelter displaced persons from their own or adjacent communities when a large-scale disaster strikes the immediate vicinity.

The protection of every school student is the primary responsibility resting upon all officials involved in administering educational programs. The school principal or other pre-designated official should take the leadership role during all emergency situations. Not only should officials be concerned with school safety as it relates to the traditional school environment, but they should also take every reasonable precaution to protect students from possible disaster.

Tornado, hurricane, earthquake, flood, blizzard, fire, explosion, riot and enemy attack are all threats to be reckoned with in one region or another through planning, and planning starts with basic state and local policy translated into administrative action.

Such preparedness for emergency situations falls into two broad classifications: physical and mental. On the physical side are shelter facilities, warning devices, lines of communication, fire extinguishers, safety devices, first aid equipment, and survival supplies. Equally important are those mental preparations developed through in-service disaster education for all school personnel: careful planning to meet emergency situations, assignment of responsibilities, pupil instruction, organized teacher-pupil action for each type of disaster, and habits formed through appropriate drills.

In fulfilling their responsibilities for disaster planning, all school districts, in cooperation with other appropriate agencies, should promote legislation or develop regulations requiring school emergency precautions, provide information relating to all types of disasters, conduct workshops for safety planning, and provide consultative services to school districts for making surveys of local needs and developing comprehensive plans for disaster protection.

This emergency plan has been revised after being implemented during the early seventies in school districts in Pittsfield and Adams, Massachusetts, where the author served as director of safety and health. The document has been designed to give all persons affiliated with schools an updated plan for dealing with potential disasters. It is not intended to be the final word. Rather, this planning aid will provide the guidance, direction, and resources necessary for coping with disasters of various types. Information presented will be consistent with the Federal Emergency Management Administration's (FEMA) terminology and phraseology.

Overview

Planning for school emergencies is a comprehensive management planning resource document of Contingency Disaster Plans. These plans are based on contemporary resource and situational capabilities. Their objective is to use available resources and capabilities in order to effectively deal with natural, civil or war-caused emergencies or disorders.

It should be realized that a well-coordinated emergency plan that fully capitalizes on currently available assets to combat the effects of any emergency is a very desirable resource. In addition, a perfect paper plan would appear to be of little value, if it has not been properly coordinated and tested by the persons and organizations involved in plan implementation during the course of an actual emergency.

A key component of any disaster plan is an emergency coordinator (usually the principal). This coordinator's functional effectiveness will serve to make or break the typical disaster plan. Consequently, the coordinator (principal) should rehearse the plan and its implementation with key personnel in their schools.

In the appendices, the publication provides: definitions and general measures of the four elements of emergency management (mitigation, preparedness, response, and recovery); a list of resource documents available from the Federal Emergency Management Agency; a list of special considerations essential to school emergency planning; and a list of special factors that should be considered in order to enhance plan implementation throughout schools in the United States. The last part contains educational objectives to be integrated into the plan of any school to be followed when a disaster occurs during school hours.

Disaster/Emergency Management Planning Goal

A goal of disaster/emergency management planning is to develop comprehensive contingency plans based on currently existing resources and operational capabilities that will enable managers to effectively deal with natural, civil, or war-caused emergencies/disasters.

The purpose of this document is to provide civil leaders with a resource that will enable them to develop comprehensive contingency plans for specific emergency situations.

Objectives of Disaster/Emergency Management Planning

A number of objectives were established for this guide. They are:

1. Develop Emergency Operations Plans (EOP's) for disaster responses based on hazards which may confront schools. These plans should demonstrate currently available resource and operations capabilities.
2. Provide for increased readiness during periods of heightened risk or international crises.
3. Consider the nature and severity of specific emergencies that threaten a school. One or more contingency plans for the following disasters should be available.
 - a. hurricane
 - b. earthquake
 - c. tornado
 - d. severe weather
 - e. flood
 - f. evacuation
 - g. sheltering
 - h. feeding
 - i. transportation
 - j. fire
 - k. utilities failure
 - l. chemical spills

1

4. Rank planning based on the most probable occurrences
5. Assign the responsibility for coordinating the development of the schools EOP's to single school emergency management individuals.
6. Design school plans that include a basic plan and supporting appendices (i.e., appendices which include implementing procedures and special contingency plans).
7. Provide for the schools EOP's to include:
 - a. An overall mission statement (purpose of the plan)
 - b. The situations in terms of potential threats, for which planning is needed.
 - c. Assumptions necessary to bridge the gap between known facts and probabilities.
 - d. Concepts for the overall operation which communicate what will occur, where, when and who is responsible to do what, etc.
 - e. Operational time frames (before the emergency, during the emergency and after the emergency).
8. Specify the functions and responsibilities for functional elements and key individuals by title or service (coordinator of the emergency response).
9. Provide exercises to test procedures; obtain a critique of the exercises. (Each emergency-specific exercise should be randomly scheduled at least twice during each school year.)
10. Identify specific individuals by title who will be responsible for the implementation of emergency operation plans and the direction and control of the emergency responses. (See Appendix E—Special Factors for Consideration in Coordination.)
11. Provide for an annual review of the emergency plan(s) and for its updating. A preliminary review should take place as soon as enrollment figures are firm (before the first day of class for the school year). The preliminary review should be followed by a

comprehensive review during the first week of the school year. This should occur as soon as possible after the students have made final shifts in schedules and classes. The review should consider contents of Appendix D and Appendix E.

12. Provide for the school board to approve and promulgate the emergency plan after review and concurrence by all elements and individuals with responsibility for implementation. The approval date of the plan should be included. The school board should similarly review and approve the plan as revised.
13. Distribute the plan to all departments, organizations, elements, staff, faculty and other individuals who have been assigned emergency responsibilities.
14. Assure that school plans are consistent with federal, state and local plans, as well as the plans of local business and industry.
15. Conduct rehearsals or exercises of the actions required by each disaster response plan at least once each school year (as early in the school year as practical). This rehearsal should use the recently revised and approved plan.
16. Ensure the special considerations of Appendix D and the special factors for consideration in coordination of Appendix E.

Discussion of Disaster/Emergency Management Planning

Conducting coordinated operations during the times of emergencies is done basically by executing school emergency/contingency plans. The payoff of lives saved and property preserved results from persons performing essential tasks properly before, during, and following an emergency. Experience in peacetime disasters has shown repeatedly that when emergency plans and procedures are known and followed by those

persons who are responsible to perform essential tasks before, during and following an emergency, reaction times are reduced, coordination is improved, and overall response and recovery measures are considerably enhanced.

The development of written plans is not an end in itself. A written emergency plan does not guarantee that an actual operation will be effective; however, the process of planning itself is extremely valuable. Consequently, it should involve all persons who will participate in the execution of the plan. This may include school board members, faculty and staff members, school employees, the parents of students, the students themselves, the local government director/coordinator of emergency services and relevant others who will respond to the school's call and/or be supported by the school in case of an emergency. The goal of this involvement is that when an emergency occurs, school officials and their emergency operating forces can immediately begin to implement pre-established plans. This implementation should occur in a timely, orderly and purposeful fashion, due to the fact that the plans are tailored to the needs and circumstances of a particular disaster. In addition, a cadre of trained individuals already exists to implement the plan.

A focal point for the planning effort is the school coordinator. The coordinator must lead the process with the full support of the school superintendent and the school board. Appendices should be developed for those emergency services which have been assigned an emergency responsibility under the general guidance of the school coordinator. Plans written in a vacuum solely by a school coordinator and/or school coordinator's staff (i.e., without input from or coordination with other agencies or services who will participate in the execution of the plan) are 'paper plans' and may be relatively useless if and when an actual emergency occurs.

Emergency plans do not need to be in a standardized format, as long as the essential functions are adequately addressed within the plans. However, in order to aid in clarity, ensure completeness, and enhance the prospect of coordination between all disaster managers, the use of broad formats recommended by FEMA and/or the state (e.g., West Virginia Office of Emergency Services), is encouraged. The term 'plans' is used in this guide to refer to single overall plans encompassing all emergency situations, several individual stand-alone plans, and/or combinations thereof. Schools are

encouraged to integrate their plans as much as possible in order to avoid unnecessary duplication and to ensure comprehensive coverage within their areas of responsibility.

Regardless of the format, planning normally includes the following elements: a basic plan; supporting appendices; implementation procedures, such as standard operating procedures (SOP's) or a checklist; and any needed special contingency plans. The basic plan is a relatively brief 'overview' or 'umbrella' for the actual implementation of the emergency plan. It will normally specify what or who authorizes the plan, the purpose of the plan, potential situations and assumptions (including what triggers the implementation of the plan), how the school should organize in event of emergency, the overall concept of emergency operations, emergency responsibilities, how the plans are to be maintained and how frequently the plan is to be practiced. This component is sometimes referred to as the 'emergency operations plan.'

Appendices are essential, integral parts of a plan. They provide specific information and direction during periods of emergency. Their purpose is to describe a particular management function and enable individuals or elements charged with the execution of that function to do so in an efficient and timely manner. Appendices contain information on specific actions, tasks and responsibilities. As a minimum, the following information should be treated in appendices: direction and control; alert and warning; emergency communications; emergency public information; radiation protection; damage assessment; fire; search and rescue; health and medical; shelter/mass care; required and available resources; risk; physical security; medical evacuation and feeding. Other functions that should be considered are: transportation, mortuary services; resource management; crisis counseling; and administrative support.

Implementation procedures may be in the form of appendices or standard operating procedures (SOP's). They support efforts and contain technical and detailed operational information such as an alert list and specific techniques or 'how to' instructions that enable operating elements to efficiently carry out assigned responsibilities. Emergency plans need not necessarily have detailed implementation procedures physically attached. Because the appendices are more likely to be subject to frequent changes

(e.g., names and telephone numbers), they should be developed and maintained by responsible individuals and elements. The school coordinator should assure that these essential procedures, as well as the resource information, are kept up-to-date by each responsible individual and/or element.

It may be necessary to develop hazard-specific contingency plans because a particular hazard occurs frequently, or because the anticipated situation exceeds the limits of treatment in the comprehensive plan. Although an adjunct to a basic plan, a contingency plan should be self-contained for use by operating elements during a specific emergency. Therefore, it would have its own components supported by appendices with implementation procedures unique to a particular hazard.

The remainder of this document consists of six appendices. Those appendices are intended to serve as resources for the development of specific emergency disaster plans.

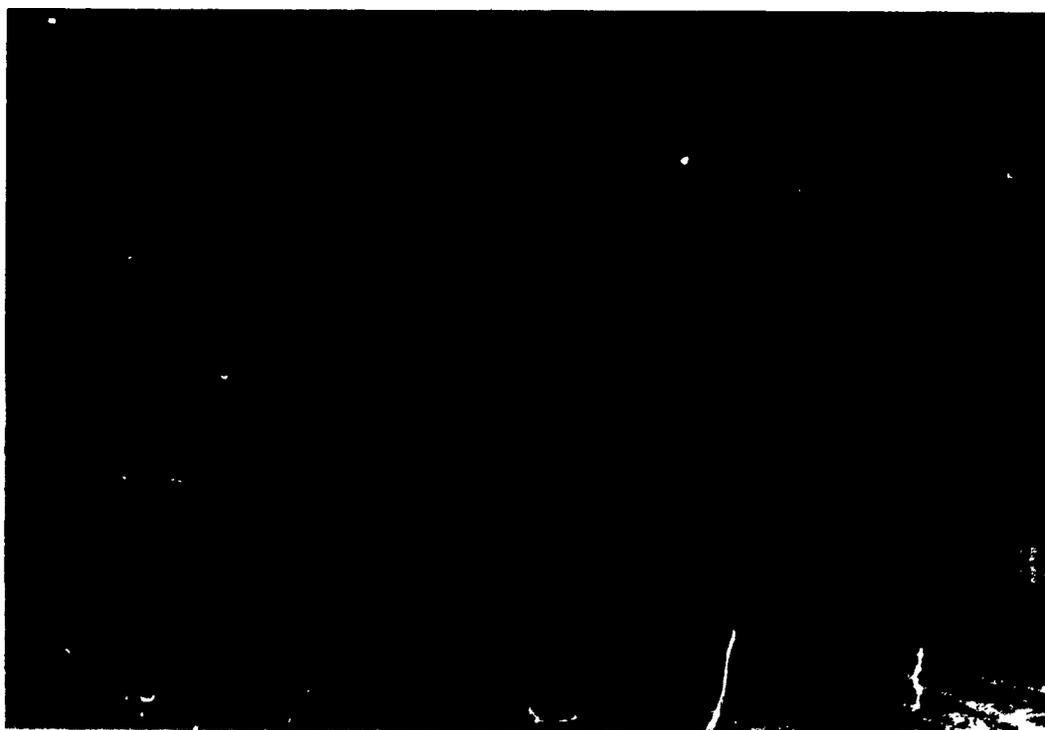


Figure 1. Flood—Cheat River, Albright, West Virginia (1985).

Appendix A

Four Elements of Emergency Management

Mitigation

Definition: Mitigation is any activity which actually eliminates or reduces the probability of occurrence of a disaster. It also includes long-term activities which reduce the effects of unavoidable disaster.

General measures: Building codes, zoning and land-use management, building use regulations, safety codes, compliance and enforcement, tax incentives/disincentives, resource allocations, preventative health care, public education, hazard analysis and disaster insurance.

Preparedness

Definition: Preparedness involves activities that seek to facilitate the disaster response to save lives and minimize damage to property in the event of an emergency.

General measures: Emergency operations plans, warning procedures, emergency communications systems, emergency operations centers, resource management plans, mutual aid agreements, emergency public information materials, training of response personnel, emergency exercises, shelter/evacuation plans and vital records protection.

Response

Definition: Response activities occur immediately before, during and directly after an emergency or disaster. Generally, they are designed to provide warning, population protection, emergency assistance and to speed recovery operations.

General measures: Warn the public, alert public officials, mobilize response personnel and equipment, place emergency operating centers in operation, activate emergency plans, provide search and rescue, provide shelter protection, provide mass care, activate emergency broadcast system and provide emergency medical assistance.

Recovery

Definition: Recovery activity involves short-term assistance to return vital life-support systems to minimum operating standards, and long-term activities designed to return life to normal or improved levels.

General measures: Damage insurance, disaster loans and grants, temporary housing, disaster unemployment insurance, crisis counseling, debris clearance, public information, economic impact studies, disaster assistance centers, reconstruction, reassessment of emergency plans and damage assessment.

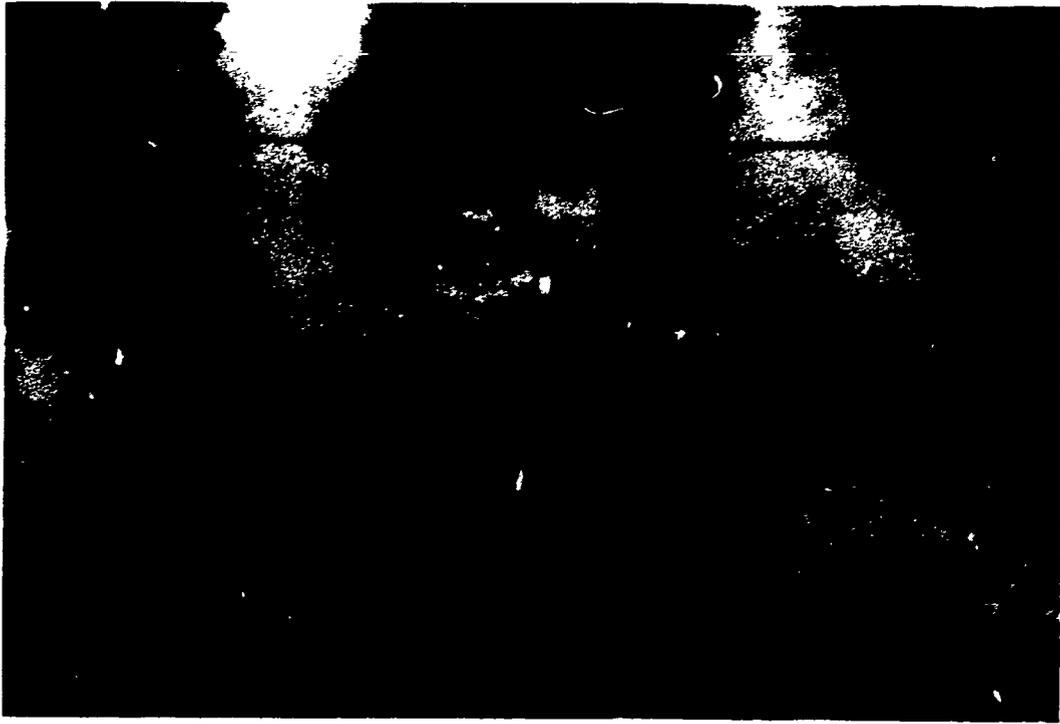


Figure 2. Fire—Loss of buildings, homes and business establishment, Adams, Massachusetts.

Appendix B

Types of Emergencies

Natural Disasters

Drought

Epidemics

Extreme Cold / Freezing Temperatures

Fire

 Structural (e.g., buildings)

 Non-structural (e.g., farmlands, crops, wildlands)

Flood and Other Water-Related

 Erosion

 Flash Floods

 Mud Slides

 Sea Surges (e.g., coastal flooding)

Hail

Hurricane

Landshift

 Avalanche

 Earthquake

 Erosion

 Landslide

 Sedimentation

 Subsidence

 Volcano

Resource Shortages

Severe Storm (wind, rain, hail)

Tornado

Tsunami

Wind

Winter Storm (ice, snow, blizzard)

Dam/ Embankment Collapse

Erosion

Civil Disasters

Crime-Related

Diseases/Epidemics

Energy-Related Crises

Nuclear

Resource Shortages

Utilities Failure

Explosions

Fires

Structural

Non-Structural

Hazardous Materials

Air Pollutants

Chemical Substance

Explosive Devices/Bombs

Land/Soil Pollutants

Microbiological

Oil Spills

Pesticides

Radiological

Toxic Substance

Waste Materials

Water Pollutants

Domestic Disturbance

Civil Disorder

Riot

Terrorism

Mine-Related Hazards/Accidents

Subsidence

Explosion

Occupational/Industrial Accidents

Pollution

Air

Land/Soil

Water

Radiation

Transportation Crises

Air

Terminal

Enroute

Maritime

Ocean

Terminal

Enroute

Inland Waterway

Terminal

Enroute

Pipelines

Terminal/Pumping Stations

Between Terminals and/or

Pumping Stations

Railroad

Terminal

Enroute

Highway

Type

Location

Accessibility

Maintenance

War-Related Disasters

Nuclear Warfare

Biological Warfare

Chemical Warfare

Conventional Warfare

Unconventional Warfare



Figure 3. Flood—Fellowsville, West Virginia (1985).

Appendix C

FEMA Resource Documents

The following Federal Emergency Management Agency (FEMA) publications provide detailed guidance related to goals and objectives presented in this guide.

- Introduction to Civil Preparedness, CPG 1-1, July 1975
- Federal Assistance Handbook, CPG 1-3, May 1982
- Objectives for Local Emergency Management—Summary for Public Officials, CPG 1-4, (Under Development)
- Disaster Operations—A Handbook for Local Governments, CPG 1-6, July 1981
- Guide for Increasing Local Government Civil Defense Readiness During Periods of International Crisis, CPG 1-7, May 1981
- Local Government Emergency Planning, CPB 1-8, April 1982
- The FEMA Individual Mobilization Augmentee (IMA) Program, CPG 1-11, (Under revision)
- Principles of Warning and Criteria Governing Eligibility of National Warning Systems (NAWAS) Terminals, CPG 1-14, November 1981
- National Warning Systems (NAWAS) Operations Manual, CPG 1-16, November 1980
- Outdoor Warning Systems Guide, CPG 1-17, March 1980
- Emergency Communications, CPG 1-18, January 1977

- **Guidance for Development of an Emergency Fallout Shelter Stocking Plan, CPG 1-19, July 1978**
- **Civil Preparedness Posting Fallout Shelter Signs, CPG 1-19A, November 1977**
- **Emergency Operating Center (EOC) Handbook, CPG 1-20, (Under Development)**
- **Guide for Design and Development of a Local Radiological Defense Support System, CPG 1-30, June 1981**
- **Objectives for State Emergency Management, CPG 1-31, (Under Development)**
- **FEMA Attack Environmental Manuals, CPG 2-1A1 to CPG 2-1A9, 1973-1982**
- **Industry/ Business Emergency Planning Seminars, CPG 2-3, July 1978**
- **Disaster Planning Guide for Business and Industry, CPG 2-5, July 1978**
- **Radiological Defense Manual, CPG 2-6.2, June 1977**
- **Guide for Crisis Relocation Contingency Planning—Overview of Nuclear Civil Protection Planning for Crisis Relocation, CPG 2-8A, January 1979**
- **Guide for Crisis Relocation Contingency Planning—Operations Planning for Risk and Host Areas, CPG 2-8C, January 1979**
- **Civil Defense Emergency Operations Reporting System, CPG 1-10 series, June 1978**
- **EMP Protection for Emergency Operations Centers, TR-61A, July 1972**
- **EMP Protective Systems, TR-61B, July 1976**

- **High Risk Areas for Nuclear Civil Defense Planning Purposes, TR-82, April 1975**
- **Speed and Reliability of Inter- and Intra-EOC Emergency Communications, TR-76, October 1972**
- **Materials for Presentation on Nuclear Civil Protection, P&P-2, September 1980**
- **U.S. Crisis Relocation Planning P&P-7, February 1981**
- **Shelter Management Handbook, P&P-8, September 1981**
- **Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, FEMA REP-1, January 1980**
- **Guidance on Offsite Emergency Radiation Measurement Systems, FEMA REP-2, September 1980**
- **Digest of Federal Disaster Assistance Programs, ECS-2, June 1982**
- **Handbook for Applicants, DR-R-1, March 1981**
- **Eligibility Handbook, DR&R-2, July 1981**
- **Insurance Handbook for Public Assistance, DR&R-3, March 1981**
- **Community Disaster Loan Handbook, DR&R-5, January 1981**
- **Documenting Disaster Damage, DR&R-7, August 1981**
- **Floodplain Management Handbook, DR&R-11, February 1981**
- **Arson Task Force Assistance Program, FA-1, April 1980**
- **State and Local Ordinances for Sprinkler Systems, A-50, March 1982**
- **Questions and Answers on the National Flood Insurance Program, FIA-2, June 1980**

- Coastal Environmental Management, FIA-4, June 1980
- National Flood Insurance Programs ACT, FIA-11, 1982
- FEMA Motion Picture Catalog, FEMA-2, June 1980
- Ideas for Conducting Awareness Campaigns, FEMA-6, November 1981
- Planning Guide and Checklist for Hazardous Materials Contingency Plans, FEMA-10, July 1981
- Natural Disaster Recovery Planning for Local Public Officials, MP-85, August 1979
- Program Guide, MP-91, February 1980
- Master Planning for Fire Protection, MP-94, March 1980
- Emergency Management, USA, SS-2, October 1981
- Radiological Monitoring, SS-3, February 1982

These documents may be obtained from the local Emergency Management Agency/Office of Emergency Services that services the area for which one is planning.

Additional Resources:

Brouillete, John R. *The Department of Public Works: A Community Emergency Organization*, 1968.

Healy, *Emergency & Disaster Planning*, R.E. Krieger Publishing Co., Huntington, N.Y., 1978.

Krikorian, Michael, *Disaster and Emergency Planning*, Atlanta, 1987.

Mitchell, Michael W., "Handling Public Relations in a Disaster," *Professional Safety*, Vol. 32, No. 1, 1987.

Quarantelli, E.L., *Studies in Disaster Response and Planning*: Disaster Research Center, Columbus, Ohio, 1979.

System, Inc. *Guide for Emergency Evacuation Management and Operations*, Los Altos, California, 1981.

Appendix D

Special Considerations

1. Time disaster strikes

School open

Classes are in session

Classes on a break/recess

Classes are assembled for a special program

Teachers and students are arriving for school

Students are departing from school

One or more classes or groups are participating in an activity
away from the school

A mixture or combination of the above

School out/closed (students are not attending class)

School is vacant

Only maintenance personnel are present

A special activity is occurring at the school

Students are enroute to school

Students are enroute from school

2. School's part in community disaster plan

3. The grades and ages of the students

4. Handicapped faculty, staff and students

5. Handicapped members of families dependent upon member of
faculty, staff or student body.

6. Faculty, staff and students requiring special medication and/or
medical care.

7. Does the school have some designated function as part of the community plan (e.g., designated community shelter, designated to provide mass transportation, designated to provide mass feeding, etc.)?
8. Members of the faculty, staff or student body or their family members who present special vulnerabilities or present an unusual risk (e.g., public figures and their families).

Appendix E

Special Factors for Consideration in Coordination

School Board

Local government emergency management
coordinator

Other schools in and around the community

Local business and industry

Parents and families of students

Parents, children and families
of faculty and staff

Agreements

Medical

Evacuation

Emergency medical treatment

Non-emergency medical treatment

Medication for

Chronic conditions, e.g., insulin

Acute conditions

Shelter

Food

Clothing

Water

Heating

Ventilation

Electrical power

Sanitation

Waste disposal

Solid

Liquid

Communications
Telephone
Radio
Receivers for
Commercial/emergency
broadcast system
Two-way
Television
Messenger
Visual
Sound
Police
Fire Department
Military

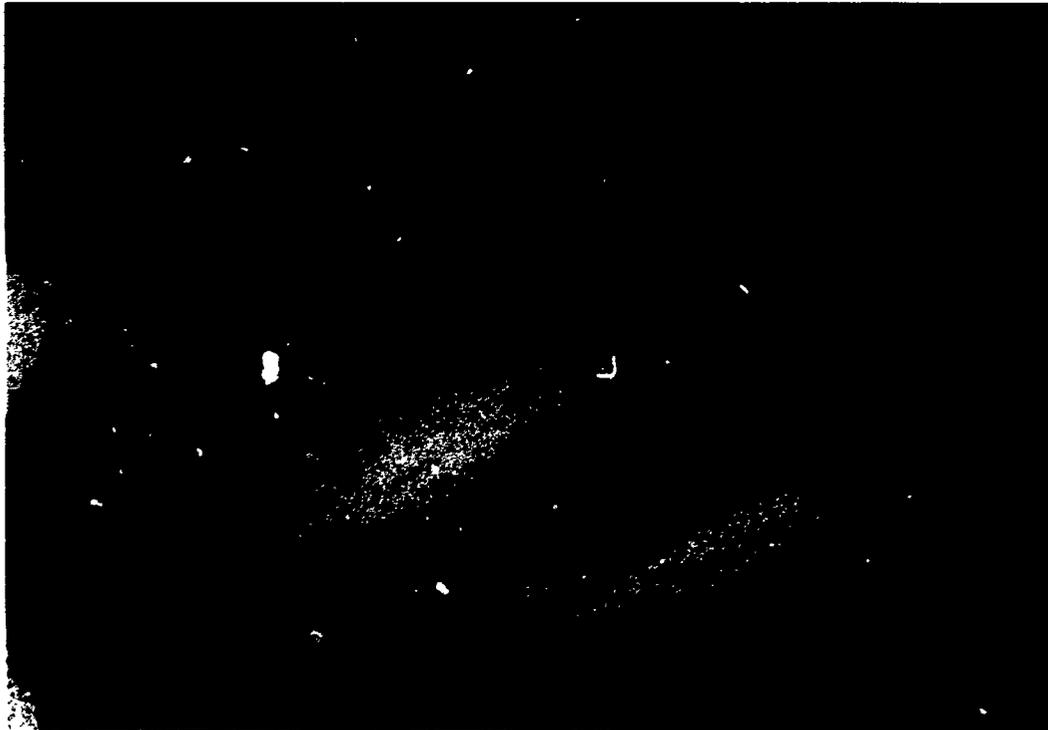


Figure 4. Fire—Morgantown, West Virginia (1986).

Appendix F

Recommended Planning Guide

The planning guide should:

- provide adequate information to enable developers to get disaster planning started in the schools
- provide guidance consistent with federal, state, county, local, and other agency guidance
- provide for periodic review and revision
- provide for appropriate implementation practice
- emphasize that a less-than-perfect plan that is current, fully-coordinated and understood by users is superior to a perfect plan that is unknown to users or implementers
- encourage group participation in planning
- encourage plan reproduction.
- encourage the widest possible dissemination of the plan
- encourage coordination throughout its development and implementation
- encourage timely ongoing/continuing coordination
- encourage school plans to be congruent with federal, state, county, local and other disaster plans
- encourage other entities responsible for disaster plans to perform appropriate planning and coordination

- **encourage school plans to be integrated into appropriate local plans**
- **encourage each school principal, regardless of district emergency planning efforts and/ or geography, to have both an emergency plan coordinator and a recent emergency plan**
- **be simple (must not overwhelm the users)**
- **be readily available to all concerned**
- **attract attention to the guide**
- **not reinvent the wheel**
- **discourage the use/adoption of uncoordinated efforts.**

Appendix G

Classical Junior High School Disaster Preparedness Emergency Evacuation Plan

Somewhere U.S.A.

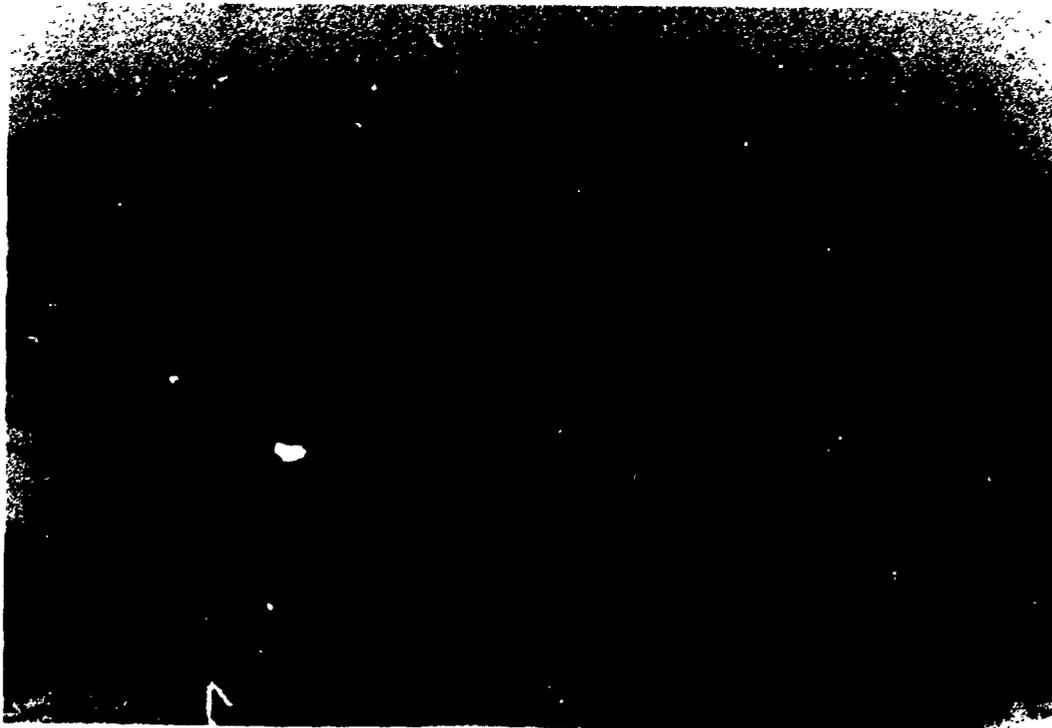


Figure 5. Hurricane Juan—This was followed by a tornado, Okaloosa Island, Florida (1985).

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introduction

A disaster is a sudden, calamitous event bringing great damage, loss or destruction and often gives no forewarning before occurring. Therefore, it is essential to predesign plans of action to insure the safety of individuals and property if an emergency were to occur. This disaster plan has been designed for the Classical Junior High School, Somewhere, U.S.A. The plan outlines step-by-step procedures for the administration, faculty, and students to follow when a disaster occurs during school hours.

The plan contains educational objectives to be integrated into the grade 7-9 curriculum of Classical Junior High School. It also contains plans of action to be put into effect during the occurrence of the following natural and manmade disasters possible in this area:

1. Fires
2. Explosions and bomb threats
3. Snow/Ice
4. Thunderstorms/electrical storms
5. Floods
6. High winds
7. Chemical spills
8. Missing persons
9. Air disasters
10. Nuclear accidents

The contents of this plan were compiled under the auspices of Mr. John Smith, Principal of Classical Junior High School, with the cooperation of Fredrick County Board of Education. It is designed to provide guidelines for:

1. Orderly transition from normal to emergency operations.
2. Delegation of emergency authority.
3. Development of committees to handle emergency responsibilities.
4. Protection of lives and property.
5. Basic safety education in handling emergency situations.
6. Evacuation procedures.
7. Evacuation procedures for the handicapped.
 - a. mobility impaired
 - b. visual impaired
 - c. hearing impaired

- d. mental impaired
- e. combination of two or more of the above

Description of Faculty and School

Classical Junior High School is a suburban public school located on Somerset Street, Somewhere, U.S.A. Built in 1939, this triple-brick, two-story structure houses approximately thirty-five faculty and service personnel and three hundred seventy-five students in seventh through ninth grade.

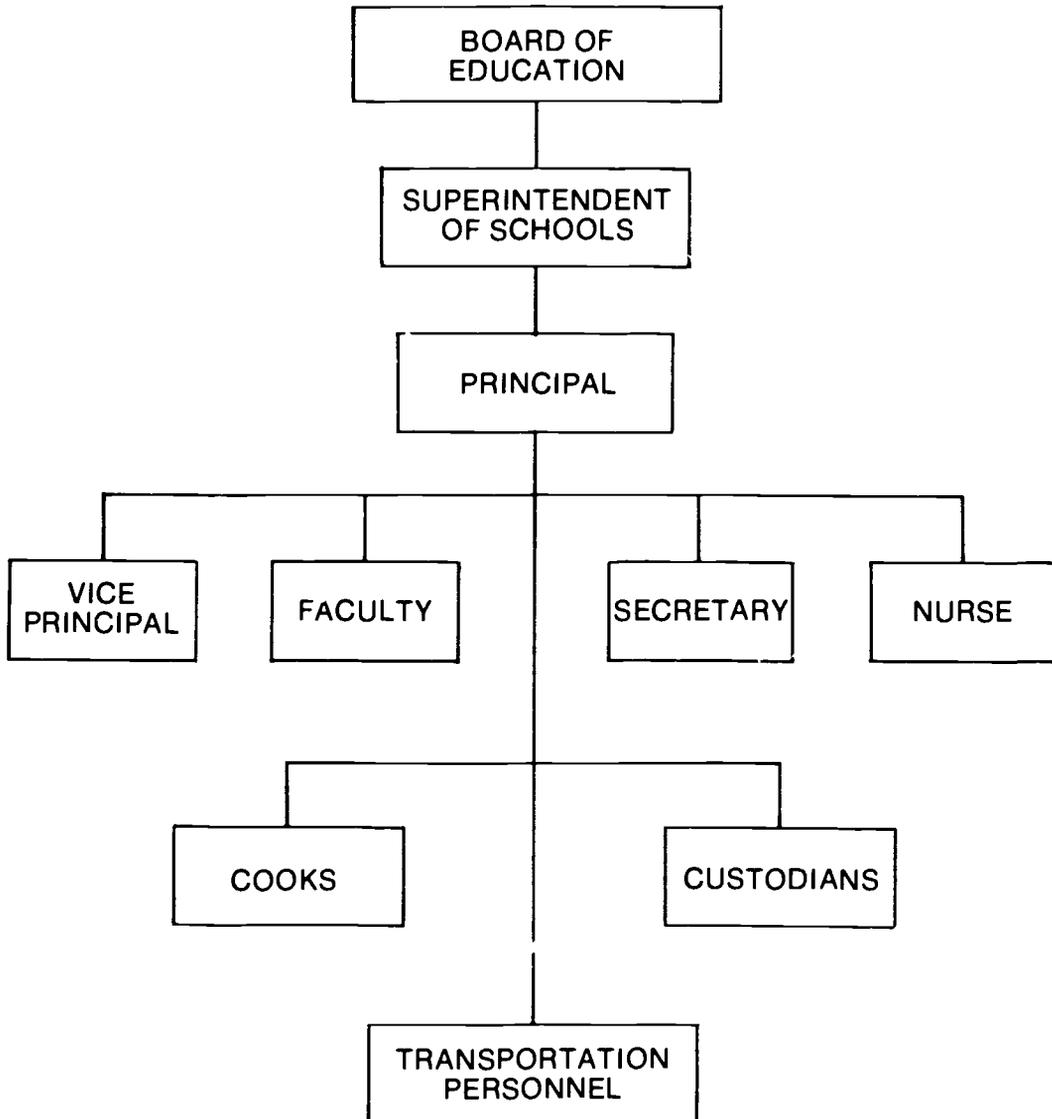
The facility contains sixteen classrooms and six administrative areas, (main office, faculty lounge, restrooms, and counseling office). Also, the school has seven support areas (gym, dressing rooms, restrooms, library, cafeteria, kitchen, and maintenance room).

The school term is in session from September to June (197 days), and the hours of operation are 7:45 a.m. to 3:30 p.m.



Figure 6. Flood—Monongahela River, Point Marion, Pennsylvania (1985).

Chain of Command



The chain of command outlined above shows the organizational structure of Classical Junior High School. The chart outlines the chain of communication and authority during the normal and everyday operations of the school. The same chains of command will be adhered to in the event of an emergency situation.

Curriculum/Education Unit

Safety Awareness Unit

To effectively establish an Emergency Preparedness Plan, it is essential that the administration and faculty implement safety awareness and procedures into various curricula. Student participation and student ability to function promptly and correctly in emergency situations are vital.

This unit provides the following principles which may be integrated into various classroom activities:

1. Safety At Home
2. Transportation Safety
3. Disaster Safety

The knowledge that the students gain from this unit can substantially reduce the frequency and severity of accidental events and injuries at home and away from home. After the successful completion of the Safety Awareness Unit, the students will be able to meet the following objectives:

1. *Safety At Home*
 - a. Students will be able to discuss the most frequent accidents that occur in the home.
 - b. Students will be able to write a report as to family members' responsibilities in preventing accidents.
 - c. Students will be able to demonstrate the proper procedure that should be followed in case of burns, abrasions, and bleeding.
 - d. Students will compile a list of emergency telephone numbers.
2. *Transportation Safety:*
 - a. Students will be able to list safety rules for operating skateboards, roller skates, bicycles, dirt bikes, etc.

- b. The students will obey the proper safety rules while boarding and leaving school buses.

3. *Disaster Safety:*

- a. Students will give an oral presentation describing a possible disaster in their geographic location.
- b. Students will be able to differentiate between natural and manmade disasters.
- c. Students will be able to discuss various building structures and explain which structures are the best emergency shelters.
- d. Students will make a list of items shelters should contain.

The following learning aids may be utilized to assist in meeting the objectives of the Safety Unit.

- guest speakers
- field trips
- group discussions
- bulletin board and poster contests
- public service announcements
(radio and public address system)
- new student orientation
- drills
- role playing
- films



Figure 7. Flood—Disaster Survey Team, Parsons, West Virginia (1985).

Organizational Structure and Committee Responsibility

I. Disaster Coordinator (School Principal)

- A. Must be able to organize and delegate authority.
- B. Must be able to give clear and concise orders.
- C. Must assign/ delegate authority to committee members.
- D. Will appoint committee chairperson.
- E. Will establish emergency communications.
- F. Will acquire and allocate all funds for disaster preparedness.

II. Communication Officer (Secretary)

- A. Must maintain and secure all logs of all communications and command decisions.
- B. Must be able to operate all communications equipment.
- C. Will insure evacuation of the building in an emergency.
- D. Will transmit orders to other committees.
- E. Will maintain files on all students.

III. Committee Groups

A. *First Aid Committee:*

- 1. Assesses injuries before EMS arrives.
- 2. Provides immediate first aid if CPR is needed.

B. Fire Service Committee:

1. Will make weekly checks of fire extinguishers and similar equipment.
2. Responsible for building evacuation (not firefighting).

C. Shelter and Supply Committee:

1. When evacuation occurs during inclement weather, shelter should be provided in primary shelter (local YMCA).
2. Chairperson is responsible for maintaining prescribed shelter supplies.
3. Will maintain order among students while in shelter.
4. Committee groups will distribute food, clothing, and water in the shelter area.

D. Transportation Committee:

1. This committee will administer permission from the superintendent or the principal authorizing departure of the students.
2. Committee members will supervise departure of those students who must return home.
3. Committee will supervise loading of buses for students who must be transported to their homes.

E. Security Committee:

1. Responsible for stopping traffic between Somerset St. and Baldwin Ave.

2. Committee chair will make sure that all students are out of the building by collecting attendance sheets from the teachers and taking them to the communication center.
3. Committee members will keep curiosity seekers away from the school area so that they do not impede emergency operations.

F. Radiological Committee:

1. In a nonnuclear situation, the chief of the committee will report to the disaster coordinator in the communication center for further instructions and assignments.

IV. Communication Center

The communication center will be set up at the football field to overlook the school grounds. Its primary functions will be to:

- A. Act as the central reporting point for all committee chairpersons.
- B. Relay information to all committees, faculty, and students.
- C. Operate as a general command post for all disaster-related activities. In the event of inclement weather, the communication center will be located within the YMCA.

Communications

- I. **External:** External communications should be established with outside agencies in a disaster situation.
 - A. Telephones (private)
 - B. Telephones (pay phones)
 - C. C.B. radios

D. Police band radios

E. Walkie-talkie

F. Messenger

II. Internal: Internal communications with all school personnel should be established in a disaster situation by the following means:

A. Intercom

B. Bull horn

C. Messenger

D. Daily announcements (oral and written)

E. Verbal communications

F. Hand air horn

G. Warning systems (bells, horns, lights)

III. Communication Efficiency Checks

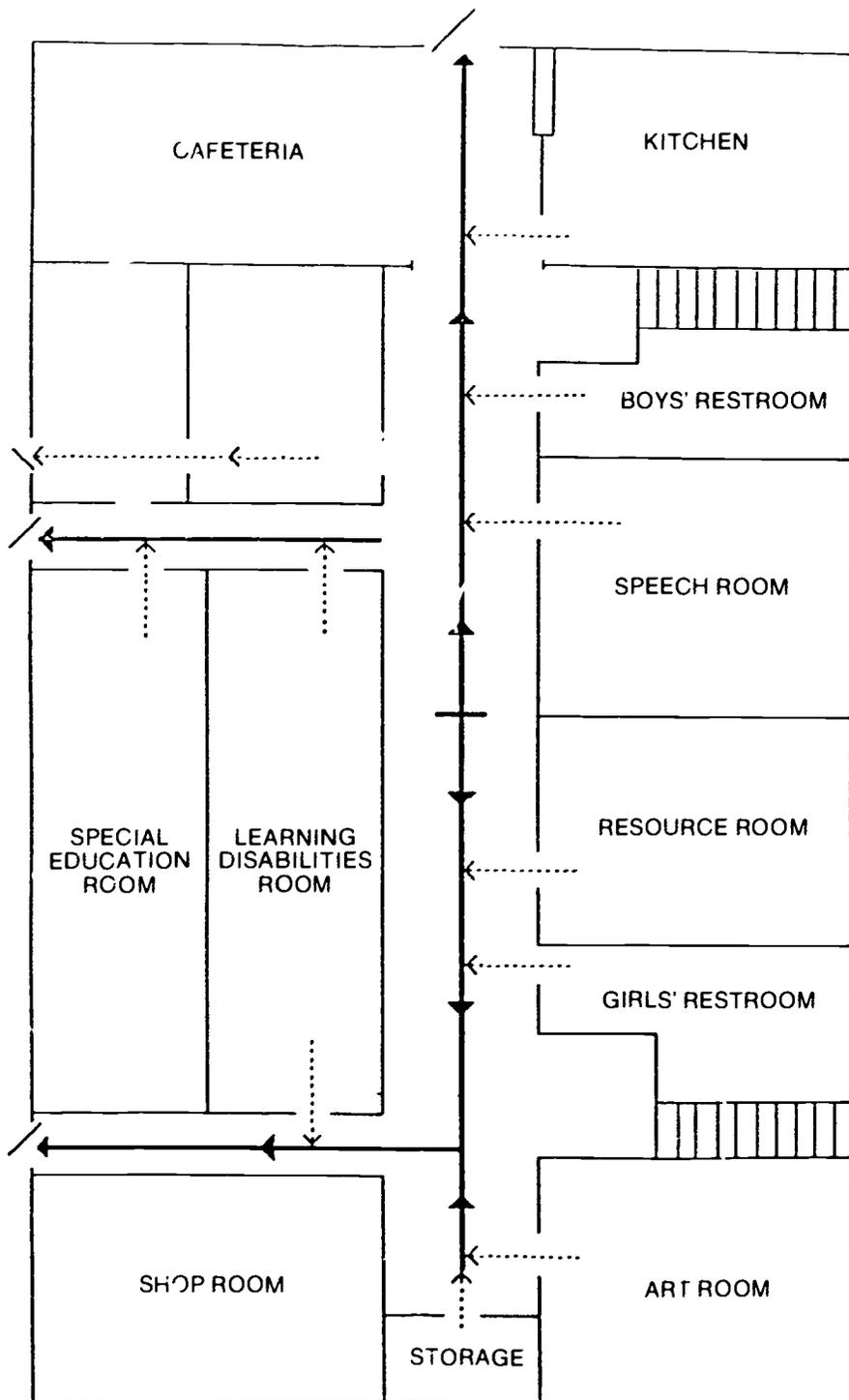
Both internal and external communication systems are checked periodically to assure their efficiency. Checks are made as follows:

A. Telephone numbers and radio frequencies of outside agencies are reviewed and updated every three months.

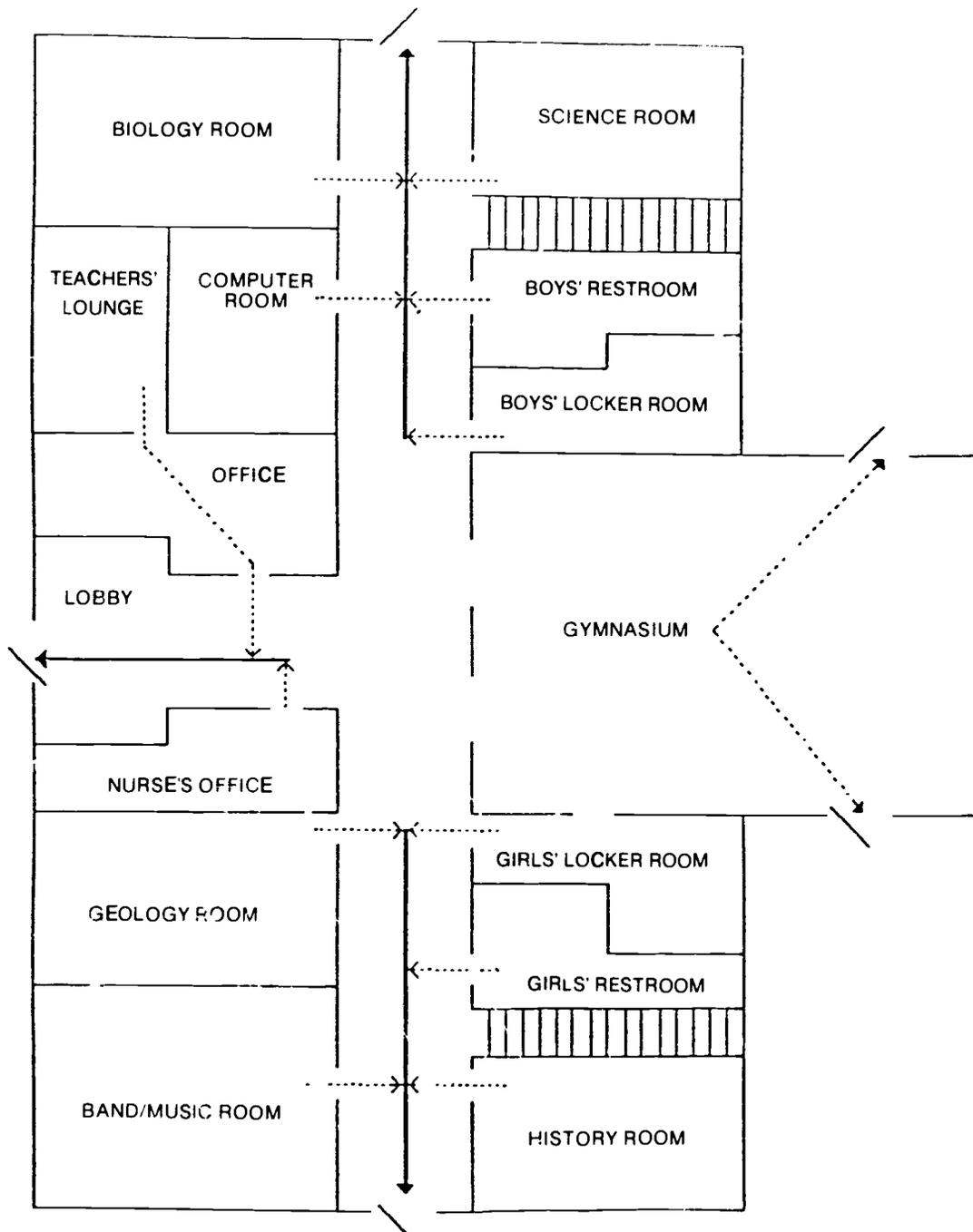
B. Radio, telephone, and emergency power facilities are checked every three months.

C. Emergency communication procedures are reviewed with school personnel every six months in a half-hour in-service meeting.

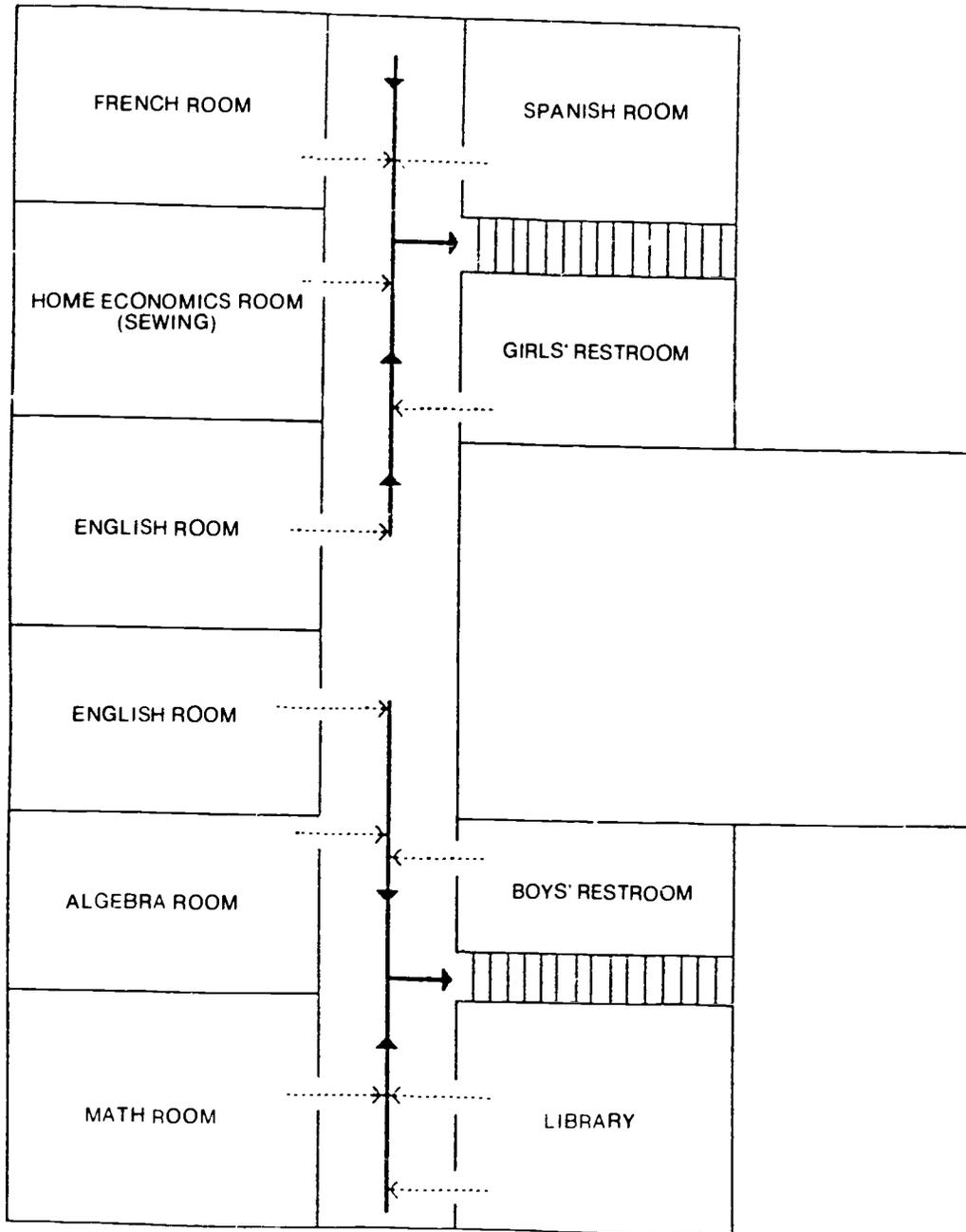
Ground Floor Plans



First-Level Floor Plans



Second-Level Floor Plans



NOTE: No provisions have been made for mobility of handicapped individuals.

Disaster and Evacuation Plans



Figure 8. Hurricane Juan followed by a tornado, Okaloosa Island, Florida (1985).

Evacuation Procedures in Case of Fire:

The school's alarm system is activated by pulling the lever on the fire pull box, which sets off a ringing bell throughout the entire school. This is the signal to evacuate the school.

Actions by School Authority:

1. The disaster committee should follow these steps in case of a fire:
 - a. Make sure evacuation has started.
 - b. Call fire department and give the following instruction: (1) type of fire, (2) location of fire, and (3) number and types of casualties.
 - c. Supervise the evacuation of the building.
 - d. The principal should notify the school superintendent.
 - e. If the principal is not in the building, notification of the superintendent is the responsibility of the secretary (the school has no vice principal).

Evacuation Procedures:

1. All classrooms will have a chart showing primary and secondary escape routes.
2. Students will walk out of the building quietly in a double line.
3. Teachers will appoint a student to shut off all lights and close all windows.
4. The principal will check all restrooms, as well as all other areas, to insure that all persons have evacuated. Teachers will take attendance at their designated areas.

Evacuation Procedures in Case of Explosions and Bomb Threats:

An explosion is a sudden, uncontrollable bursting of a substance with a loud noise and a shockwave. Many explosions are followed by fires or additional explosions. Three types of explosions could spell disaster at Classical Junior High School. The first and most probable explosion risk comes from the boiler room. This room is located in the basement, directly beneath the gymnasium floor. If left unattended, gas boilers can overheat and explode with an energy force sufficient to level a large building. Should one or more boilers explode, the students and faculty must evacuate as soon as possible due to the extreme heat and threat of fires.

The second type of explosion threat comes from potential natural gas leaks. Since the building was constructed in 1939, corrosion and disintegration of gas lines could cause a leak. Gas explosions are very dangerous and may be caused by the slightest spark. Immediately upon discovery of any gas fumes or leakage, all persons should evacuate the area until the leak is contained and all gas is vented.

The third type of explosion danger is the purposeful detonation of a bomb. These are usually preceded by a bomb warning/threat. Upon receiving a bomb threat all persons must evacuate the building.

Warning Systems: Any type of explosion, fire, gas leak, or bomb threat should be communicated through repeated blasts of the bells as in a fire alarm. In addition, flashing lights in the gymnasium should be activated. Students should be alerted over the intercom system to exercise extreme caution.

Actions by School Authorities: In all cases of explosion or bomb threat, the fire department should be notified immediately. The police should be notified next. In a bomb threat situation, all details of the phone call should be related to the police. In the event of a gas leak or resulting fire, the gas company should also be notified for their expertise in controlling this type of fire.

Bomb Threat Procedures:

1. All doors should be locked when building is not in use.
2. Any unusual events or damages should be immediately reported to the principal daily.

Actions by School Authority:

1. The principal should immediately call the police and fire officials in the event of a bomb threat.
2. Building should be evacuated using fire drill procedures.
3. Search high-risk areas:
 - a. Rooms suspected due to clues from caller.
 - b. Lockers.
 - c. All other areas.
4. Return to building when threat is over.

Recommendations: The person receiving the bomb threat should listen to the caller for information, immediately record information, ask questions, and notify the authorities. (See checklist on pp. 52-53)

Evacuation Procedures in Case of Snow, Ice Storms:

School cancellations are authorized by the superintendent of schools in the event that snow and ice conditions are such that transportation would jeopardize the safety of students, faculty, and other school personnel. School closings are determined at 6:00 a.m. and are periodically announced by the media as necessary. If a situation occurs where students are dismissed from school earlier than scheduled, transportation can be provided by the Fredrick County School System. The students will be supervised by the faculty bus duty person and will remain at the school facility until parents or guardians arrive.

Evacuation Procedures in Case of Thunderstorms/Electrical Storms

Purpose: In the event of an electrical storm, the students should be sent home if time and circumstances permit. The following instructions should be followed if dismissal of students cannot be safely accomplished:

Function of Committee Groups:

1. *Shelter and Supply Committee*
 - a. Maintains order in the shelter area during the time of the thunderstorm.
 - b. Will give instructions as to what preparatory actions are to be taken by the students.
2. *Fire Service Committee*
 - a. Will aid in evacuation of students if the building is damaged by lightning.
 - b. When the shelter is occupied, the committee will shut off all gas and electrical power during the thunderstorm.
3. *Security Committee*
 - a. Will guide children into the sheltered area. Will take the attendance sheet from the teachers and report this information to the communications officer.
 - b. Will see that all windows are closed in each room and will move children from the window areas (in severe storms) to a safer area such as the basement level or gymnasium.

When Time Permits:

1. *Disaster Coordinator*
 - a. Contacts the superintendent of schools to obtain authority to dismiss the students.

- b. Arranges (through the superintendent's office) the buses to transport the children to their homes.

2. *Transportation Committee*

- a. Supervises loading of buses.
- b. Supervises departure from the school grounds by those who must walk home.

3. *Communication Committee*

- a. Maintains contact with superintendent's office and local weather bureau for updates on the situation.

Evacuation Procedure in the Event of Flooding

Due to the location of Classical Junior High School, the probability of flooding to the school building and grounds is not likely. However, the possibility of flooding along the Peaceful Valley River must be taken into consideration when designing a disaster plan for the school. If flooding becomes a threat in the Fredrick County area, the students of Classical Junior High School would be dismissed and sent home at the earliest possible time.

Actions by School Authority:

1. The disaster coordinator will contact the superintendent of schools to obtain authority to dismiss the students.
2. The disaster coordinator will arrange (through the superintendent's office) the buses to transport the children to their homes or to designated locations.
3. The transportation committee will:
 - a. Supervise the loading of buses.
 - b. Supervise the departure of students walking home.

4. The communication committee will take the following actions:
 - a. Maintain contact with the superintendent's office and weather bureau for updates of the situation.

Recommendations:

In the event that school buses are unable to follow their scheduled routes, or reach the school, bus drivers will contact the communications office by radio and return the students to school. The disaster coordinator will contact the students' guardians to make appropriate transportation and housing arrangements.

Evacuation Procedures in Case of High Winds

In the event of high winds, students should be sent home if time and circumstances permit. The following instructions should be taken only if dismissal of students cannot be safely accomplished.

Warning System:

1. When an *alert* is received, faculty members may be quietly notified by personal visits to the room or by a note delivered unobtrusively to prevent students from becoming alarmed.
2. When the principal receives the official tornado/windstorm warning, he or she will then notify school personnel by the P.A. system that they are to begin evacuation to the shelter area.
 - a. Upon evacuation of the classroom, the teachers should open all doors and windows.
 - b. Each teacher should take his/her class to the evacuation area.
 - c. Attendance should be checked at evacuation area.
 - d. Students will remain quiet and move to the shelter area in an orderly fashion.

- e. If time doesn't permit going to the shelter area, students and teachers should move to the safest area of the room. This will normally be the inside wall of the room, furthest away from doors and windows. Students are to crawl under desks or other large pieces of furniture which will give some protection. Students should draw their knees toward their chest and bring their head toward their chest, remaining as still as possible. The safest area of the room would be the southwest corner of the room, unless windows and doors present hazards.

Actions by School Authority:

1. *First Aid Committee.* Will stand by to administer first aid in the event of injuries.
2. *Fire Service Committee.* Will be prepared to aid in the evacuation of building if it is damaged.
3. *Shelter and Supply Committee.* Will maintain order in the shelter area. The committee members will give the instructions as to what preparatory actions are to be taken by the students.
4. *Transportation Committee.* Will supervise loading of buses in the event students can be dismissed.
5. *Security Committee.* Will secure the school's perimeter in the event of physical damage to the premises.

Evacuation Procedure in Case of a Chemical Spill:

This type of emergency is important to include in a disaster plan, because it poses a hazard that may not be obvious. Some chemicals are odorless and are absorbed through the skin. Some examples include:

1. DMSO: sulfoxide (dimethylsulfoxide): penetrates the skin.
2. Methylisocyanate: poisonous when it reacts with air.
3. Dichlorodifluoromethane: odorless in the form of freon.

4. Propane: (widely transported).

Recommendations:

1. Assess the problem.
2. Notify the local authorities.
3. Secure the area and begin evacuation to the YMCA.
4. Determine the substance involved and take steps to guard against the spread of the substance.
5. Brief the news media and community officials.
6. Contact the purchasing department of the corporation involved to arrange for disposal equipment.

Procedures in Case of Missing Persons:

A child is considered missing if he/she is:

1. Absent from school one half hour after school has begun.
2. His/her name isn't included on early dismissal list.

At this point the student's parents are notified. If the parents do not know the whereabouts of the child, the principal will begin a search for the student. If the child is not found, the principal will notify the parents, and then report the child as missing to the police.

Recommendations:

1. Parents decide if the child is missing.
2. Police are notified, and the following factors are considered before the police classify the child as missing.

- a. Unknown whereabouts for three or more hours (unless child is an infant).
- b. Past punctuality of the student.
- c. Time of day.

Evacuation Procedure in Case of an Air Disaster:

An air disaster would involve an aircraft crashing into or near the school. Any large crash or impact into the school would warrant evacuation. An alert should be broadcast using the usual fire alarm. The danger would involve explosion and/or fire.

Actions by School Authority:

1. Immediately contact fire department, police department and airport.
2. Evacuate the building; *keep away from the crash debris.*
3. Administer first aid to any injured students.
4. If a large fire occurs or the school building is damaged, escort children to the YMCA for transportation home.

Recommendations: Stay away from crash debris due to danger from explosions or metal fragments. Should an airplane hit the school directly, consult structural engineers for the stability of the school before re-entering the building.

Evacuation Procedure in Case of Radiological/Nuclear Disaster:

A radiological disaster would be the worst type of disaster possible because of the lack of appropriate support for the victims due to city or statewide damages. Appropriate evacuation measures must be taken. All persons must move to the nearest radiation fallout shelter.

Warning Systems: An alert should be broadcast using the Public Address System and alarms. The alarm should differ from the usual fire alarm.

Actions by School Authority:

1. Contact fire officials if there is a fire present in the school.
2. Evacuate all persons to the YMCA.
3. All gas and water valves and electrical power should be turned off.
4. First aid should be administered by whatever means possible until EMS services arrive.
5. Food, water and shelter supplies will be provided at the YMCA.
6. All contaminated materials should be set aside for proper disposal or decontamination.

Teacher's Checklist for School Bomb Threats

Room # _____

Teacher _____

Date _____

The following checklist has been designed to assist teachers in prechecking their rooms to see that they are free of explosives.

	Yes	No
1. Did I secure my room upon leaving?		
a. lock all windows	_____	_____
b. turn off lights	_____	_____
c. lock all doors	_____	_____
2. Did I check my room upon arrival?		
a. Did I have to use my key?	_____	_____
b. Did the lock turn normally?	_____	_____
c. Were the lights on?	_____	_____
d. Were the windows locked?	_____	_____
3. Did I check the contents of the room?		
a. packages	_____	_____
b. ticking sound	_____	_____
c. loose wiring	_____	_____
d. dynamite caps	_____	_____
e. dynamite sticks	_____	_____
f. exposed matchbooks	_____	_____
4. Did I look?		
a. on the floor	_____	_____
b. on the ceiling	_____	_____
c. on the walls	_____	_____
d. in the desks	_____	_____
e. in the cabinets	_____	_____
f. among the books	_____	_____
g. among packages	_____	_____
5. Was any foreign object present?	_____	_____
6. If so, where is it? (Note any useful information that could benefit the authorities):	_____	

Telephone Checklist for Bomb Threat

Listen to the caller. Do not interrupt!!

1. Caller's identity:
 1. Sex: Male _____ Female _____
 2. Approximate Age: _____ years
 3. Origin of call:
Local _____ Long distance _____
Booth _____ Internal (within building) _____
 4. Voice Characteristics:
Loud _____ High-pitched _____ Deep _____ Pleasant _____
Soft _____ Intoxicated _____ Raspy _____ Other _____
 5. Language:
Excellent _____ Good _____ Fair _____ Poor _____
Foul _____ Other _____
 6. Manner:
Calm _____ Incoherent _____ Laughing _____ Angry _____
Deliberate _____ Rational _____ Emotional _____
Irrational _____ Coherent _____
 7. Speech:
Fast _____ Distinct _____ Slurred _____ Slow _____
Distorted _____ Stutter _____
 8. Accent:
Local _____ Non-local _____ Foreign _____ Race _____
Caucasian _____ Region _____
 9. Background Noises:
Quiet _____ Loud _____ Animals _____ Trains _____
Music _____ Traffic _____ Airplanes _____ Mixed _____
Office machinery _____ Factory machines _____
Party atmosphere _____

Blizzards: Long, severe snowstorms with winds of 32 miles per hour and more. Low temperatures and wind-driven snow reduce visibility to less than 500 feet. Intense cold and exposure generally cause most injuries.

Earthquake: A shaking or trembling of the earth that is volcanic or tectonic in origin.

Fires: Fires are caused by the oxygenation process in which chemicals combine with oxygen to produce light. Man causes 97 percent of all fires.

Explosions: Explosions occur when matter bursts or expands violently and noisily as a result of the sudden production of or release of pressure. The release of energy is so rapid that it appears instantaneous.

Nuclear Accident/Nuclear Attack: Nuclear power and nuclear weapons are thousands of times more powerful than the conventional explosives. A detonated nuclear device or an accidental meltdown result in both massive property destruction and widespread radiation sickness and death.

Terrorism: To coerce by threat or violence; to fill with terror or anxiety, usually through use of weapons.

Principal's Role as Coordinator:

1. Become proficient in the area of school emergency planning.
2. Give commands that carry authority.
3. Select faculty and staff to develop the school plan.
4. Review the plan with the state office of emergency preparedness.
5. Assign emergency responsibilities to faculty and staff relative to their competencies and normal service functions.

6. Provide inservice programs and training in school emergencies for all school personnel (custodians, secretaries, bus drivers, cooks, etc.).
7. Develop curriculum and materials for classroom instruction in emergency preparedness.
8. Obtain equipment and supplies needed for emergency situations.
9. Convey to parents the importance of the school emergency plan.
10. Provide for the care of handicapped individuals during emergencies.
11. Provide for communication and transportation systems during emergencies.
12. Advise and lead during simulated drills of the school's emergency plan.
13. Periodically evaluate and revise the school emergency plan.

Faculty and Staff Responsibilities:

1. During all drills the faculty should take attendance at a predesignated area away from the building.
2. A complete check of those students that are absent should be reported to the principal (coordinator) at a point designated by him.
3. If possible, the secretary (or other office employee) should secure school records prior to leaving the building.
4. School personnel should check vacant rooms, restrooms, and other areas before leaving the building. Specific members of the faculty and staff are given this responsibility as part of the emergency plan.

5. Custodians and other maintenance personnel should be assigned the task of turning off various electrical, gas and other mechanical devices during any emergency.

6. Selected faculty and staff will be responsible for assisting handicapped individuals.



Figure 9. Fire—Star City, West Virginia (1984).

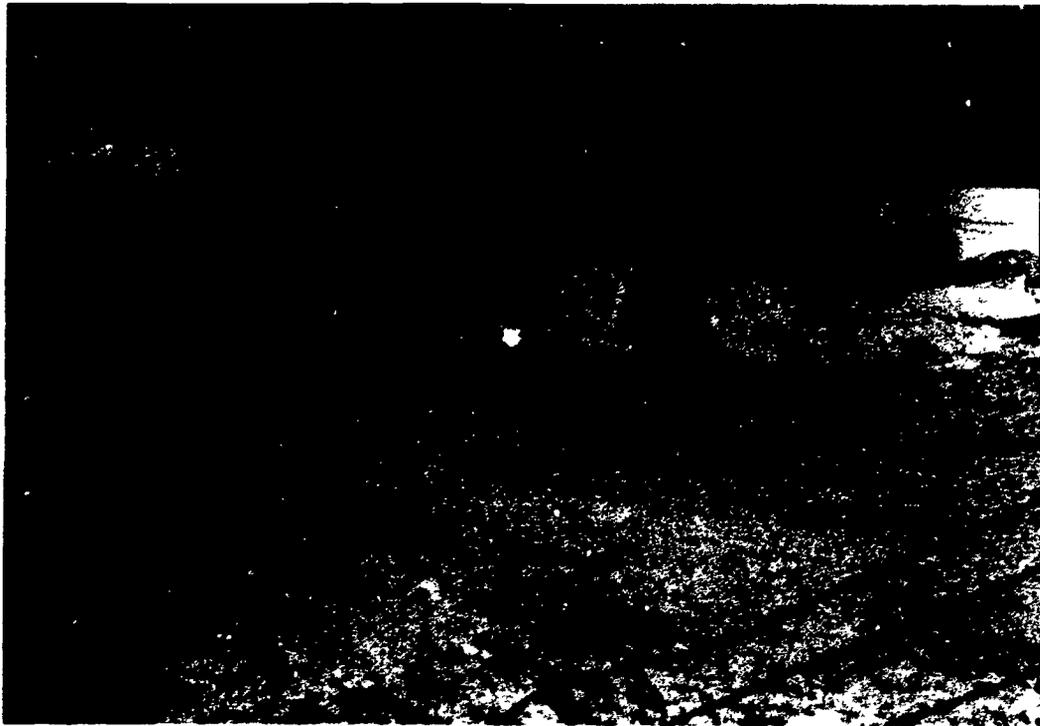


Figure 10. Ashland Oil Company storage tank collapses south of Pittsburgh. One million gallons of oil into Monongahela and Ohio Rivers, January (1988).