U.S. Fire Administration/Technical Report Series

Major Propane Gas Explosion and Fire

Perryville, Maryland

USFA-TR-053/July 1991

FEMA

U.S. Fire Administration Fire Investigations Program

The U.S. Fire Administration develops reports on selected major fires throughout the country. The fires usually involve multiple deaths or a large loss of property. But the primary criterion for deciding to do a report is whether it will result in significant "lessons learned." In some cases these lessons bring to light new knowledge about fire--the effect of building construction or contents, human behavior in fire, etc. In other cases, the lessons are not new but are serious enough to highlight once again, with yet another fire tragedy report. In some cases, special reports are developed to discuss events, drills, or new technologies which are of interest to the fire service.

The reports are sent to fire magazines and are distributed at National and Regional fire meetings. The International Association of Fire Chiefs assists the USFA in disseminating the findings throughout the fire service. On a continuing basis the reports are available on request from the USFA; announcements of their availability are published widely in fire journals and newsletters.

This body of work provides detailed information on the nature of the fire problem for policymakers who must decide on allocations of resources between fire and other pressing problems, and within the fire service to improve codes and code enforcement, training, public fire education, building technology, and other related areas.

The Fire Administration, which has no regulatory authority, sends an experienced fire investigator into a community after a major incident only after having conferred with the local fire authorities to insure that the assistance and presence of the USFA would be supportive and would in no way interfere with any review of the incident they are themselves conducting. The intent is not to arrive during the event or even immediately after, but rather after the dust settles, so that a complete and objective review of all the important aspects of the incident can be made. Local authorities review the USFA's report while it is in draft. The USFA investigator or team is available to local authorities should they wish to request technical assistance for their own investigation.

This report and its recommendations were developed by USFA staff and by TriData Corporation, Arlington, Virginia, its staff and consultants, who are under contract to assist the Fire Administration in carrying out the Fire Reports Program.

The U.S. Fire Administration greatly appreciates the cooperation received from Assistant Chief Fire Marshal Allen Ward, Maryland State Fire Marshal's Office, and Assistant Chief Charles Gardner and Assistant Chief Norman Bannon, both of the Perryville, Maryland Fire Department.

For additional copies of this report write to the U.S. Fire Administration, 16825 South Seton Avenue, Emmitsburg, Maryland 21727. The report is available on the Administration's Web site at http://www.usfa.dhs.gov/

Major Propane Gas Explosion and Fire Perryville, Maryland

Investigated by: Randolph E. Kirby

This is Report 053 of the Major Fires Investigation Project conducted by TriData Corporation under contract EMW-90-C-3338 to the United States Fire Administration, Federal Emergency Management Agency.

Revised: March 2011

FEMA

Department of Homeland Security
United States Fire Administration
National Fire Data Center

U.S. Fire Administration

Mission Statement

As an entity of the Department of Homeland Security, the mission of the USFA is to reduce life and economic losses due to fire and related emergencies, through leadership, advocacy, coordination, and support. We serve the Nation independently, in coordination with other Federal agencies, and in partnership with fire protection and emergency service communities. With a commitment to excellence, we provide public education, training, technology, and data initiatives.

FEMA

TABLE OF CONTENTS

OVERVIEW 1
SUMMARY OF KEY ISSUES 2
BUILDING STRUCTURES 2
CODES 3
FIRE DEPARTMENT UNITS INVOLVED 3
ORIGIN AND SPREAD OF FIRE 3
THE FIRE 4
FATALITY 6
INJURIES 6
EVACUATION OF RESIDENTS 7
BUILDING DAMAGE ASSESSMENT 7
EMERGENCY MANAGEMENT 8
LESSONS LEARNED 8
APPENDIX A: Diagram of Building Locations, Area of Origin of Explosion and Location of Fatality 10
APPENDIX B: Vicinity Map and Diagram of Buildings 11
APPENDIX C: Equipment Used at Fire and Agencies and Jurisdictions Involved 12
APPENDIX D: Fire Scene Diagram Showing Units' Positions at Fire 13
APPENDIX E: Fire Department Run Sheet 14
APPENDIX F: Cecil County Emergency Operations Plan 15
APPENDIX G: Photographs 43

Major Propane Gas Explosion and Fire
Perryville, Maryland
July 1991

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OVERVIEW

On July 6, 1991 at 0850 an explosion and fire were reported at the 300 block of Broad Street in the town of Perryville, Maryland. This block contained a church, bank, sandwich shop, retirement home, three 2-story apartment buildings, and eight 2-story houses. (See Appendix A for diagram of building locations and the chart on the following page for key issues of the incident.)

The first arriving firefighting unit discovered that the front of some buildings on the north side of the street had been demolished as a result of a propane gas explosion. Building debris had been propelled through numerous nearby structures and filled streets over a 2-block square area with various building components. Blast concussion had blown out windows and doors, and parts of roofs and chimneys in several nearby houses and retail shops. Several people, seemingly dazed and panic-stricken, were wandering along Broad Street.

SUMMARY OF KEY ISSUES

Issues	Comments
Cause	Leaking propane gas in the sandwich shop ignited and caused a tremendous explosion and fire. Source of ignition is unknown and is under investigation.
Detection and Reporting	Approximately 15 calls to the 9-1-1 center were received in a two minute period. Various residents of the block have stated that they detected the propane odor the day before the explosion but did not report it to the authorities.
Building Structures	Most were 2-story frame; some bricking frame. Four were predominantly of masonry construction and were the only structures that reasonably withstood the blast concussion. Most of the frame structures were 60 to 75 years old.
City Water System	Generally good water supply; however, power was accidentally interrupted to city pumping facility which made a continuing reliable supply questionable. Drafting operations began.
Incident Command	Excellent size-up and strong leadership by Perryville Assistant Chiefs minimized further casualties and building damage.
Firefighting	Collapsed buildings made search, rescue, and fire extinguishment difficult. Blast damage to surrounding buildings made them vulnerable to fire exposure.
Resident Profile	The area was described as low-income. Many residents were senior citizens; some were furloughed hospital patients who required minimal supervision.
Citizen Panic	Dazed and panic-stricken residents wandered about the scene presenting problems for firefighting personnel.
Local Disaster Plan	Cecil County Emergency Management Officer took immediate and decisive action – assembling all necessary resources to care for large numbers of displaced residents, i.e., housing, clothing, food.
Weather Conditions	Extremely hot and humid conditions required frequent staffing rotation, hampering the overall search and rescue effort.

Second and third alarms were sounded immediately for assistance in the rescue, evacuation, and firefighting efforts. Approximately 100 people from 45 families were affected and had to be evacuated and housed.

The explosion and fire claimed the life of one resident and injured 16 others. In addition, 16 fire service personnel were injured. Overall, 386 fire, rescue, and police personnel from 26 fire companies located in a three State area were used to bring the scene under control, officially declared at 1606. Initial estimates put property loss at 10 million dollars.

BUILDING STRUCTURES

A description of buildings located in the 300 block of Broad Street (Appendix B) that were damaged or destroyed in the explosion/fire is as follows:

- Two-story stone church, approximately 130 years old.
- Two-story stone church hall, approximately 130 years old.
- Two-story masonry retirement home containing 20 units, approximately 12 years old.
- One-story masonry bank building, approximately 20 years old.

- One-story frame-front sandwich shop with brick walls, age unknown.
- Two-story frame and masonry apartment building with two retail shops on the first floor and two apartment units on the second floor, approximately 60-70 years old.
- Two-story frame apartment building with five units – two on the first floor and three on the second floor – approximately 60-70 years old.
- Two-story frame apartment building with 17 units, approximately 60-70 years old.
- Eight 2-story frame houses, approximately 60-70 years old.

CODES

The town of Perryville utilizes the 1990 edition of the Building Officials and Code Administrators (BOCA) building code, as well as the Life Safety Code, National Fire Protection Association (NFPA) 101. The buildings that contributed to the explosion and fire were built long before the adoption of the building code. Therefore, they do not fall within the purview of existing requirements. Little or no routine fire safety inspections are conducted unless there has been a change in building use, which would subject the structure to existing code requirements.

In the case of the building which houses the sandwich shop where the explosion and fire started, there apparently were no fire prevention inspections in recent years. There is no evidence to suggest that the lack of inspections in this facility contributed to this incident, i.e., there was no trouble with exits and the apartments did have smoke detectors. Existing structures which are not covered when a code is adopted continually pose fire safety concerns, and the lack of code elements or other ordinances to address these concerns is an ongoing National problem.

It is difficult to determine if inspection in this particular case would have made a difference. The exact location and cause of the propane leak could not be determined. It is an accepted fact, however, that regularly scheduled fire safety inspections do identify hazardous situations that ordinarily are overlooked.

FIRE DEPARTMENT UNITS INVOLVED

The town of Perryville has one fire station, operated by approximately 50 volunteer members. The town is located in Cecil County, which has an additional eight volunteer companies located in Chesapeake City, Charles Town, Cecilton, Elkton, Hack's Point, North East, Rising Sun and Port Deposit, and one paid company located at the Perry Point Veterans Hospital. All were used in fighting the fire or for search and rescue or body recovery.

The immediate fire suppression activities were conducted by Perryville, Perry Point, and other Cecil County and Harford County fire companies. Other jurisdictions were involved for staffing needs and station fill-ins.

This incident required additional companies from surrounding counties and adjoining States. See Appendix C for the agencies and jurisdictions involved.

ORIGIN AND SPREAD OF FIRE

Explosion and fire are believed to have started in a one-story sandwich shop located in the middle of the 300 block of Broad Street. Propane gas was used for its cooking equipment as natural gas is not

available. The two tanks were located in the rear of the building. There is information that residents of the area detected the odor of propane gas as much as 12 hours prior to the actual explosion, **but did not report it to the proper authorities**.

When the gas was ignited from a source, unknown at the time this report was prepared, the subsequent blast completely destroyed the sandwich shop building and partially collapsed the 2-story apartment buildings located on its east and west sides. Blast concussion propelled heavy roof timbers and other building materials through roofs and sides of nearby buildings. In addition, it blew out windows and doors and caused heavy damage to surrounding buildings.

A subsequent fire developed in the area of the sandwich shop which quickly spread through collapsed material and threatened adjoining buildings. Because the fire was being fed by propane gas and lumber from collapsed buildings and was covered with tons of debris, extinguishment and containment were difficult. Firefighting units were able to overcome the obstacles confronting them and successfully contained the fire from spreading in approximately 50 minutes after arrival.

THE FIRE

On Saturday, July 6, 1991, at 0850 an alarm of fire was received for the 300 block of Broad Street in the town of Perryville, Maryland. At 0853 equipment was dispatched. Perryville's Second Assistant Chief was the first to arrive on the scene at approximately 0854. He immediately reported that a large explosion had occurred and that debris was scattered over an area covering several blocks. Several people who seemed to be in a state of confusion and panic were wandering around aimlessly in the general area. At this time, a moderate fire was observed and appeared to be located in the collapsed portion of a 2-story structure located on the north side of Broad Street. Smoke could be seen coming from some of the structures still standing which were believed to be occupied.

The first fire apparatus to arrive on the scene at approximately 0855 was Perry Point's Unit 1111 with a captain, a lieutenant, and three firefighters. The lieutenant of this unit is also the First Assistant Chief of the Perryville Fire Department. Upon their arrival, the second assistant chief directed the unit to lay two 3-inch supply lines from a hydrant located at Front and Broad Streets to the front of the retirement home on Broad Street. Two 1-3/4-inch handlines were put in service – one was advanced to the doorway of the dry cleaner's and the other to an apartment entrance located on the second floor of the dry cleaner's building believed to be occupied. (For fireground diagram see Appendix D.)

The Second Assistant Chief of Perryville, assuming the role of fireground commander, established a command post on Broad Street in the general area of collapsed buildings. After observing existing conditions, he determined that more personnel and equipment would be needed. He immediately requested four medical units and a truck unit in addition to the normal equipment for this box zone.

At 0856, Engine 612 from Perryville arrived, with five firefighters, and was directed to connect to the hydrant in front of the church located at Broad and Susquehanna Streets. One 1-3/4-inch handline was deployed between the partially collapsed and now burning apartment building and the church for the purpose of protecting the west wall of the church building. Two firefighters were sent to the retirement home on Broad Street to assist with rescue and evacuation.

At approximately 0857, Perryville Engine 611 and 613, with six firefighters each, and Medic Unit 691, with two firefighters, arrived. Engine 611 was directed to lay a 5-inch supply line from the hydrant located at Elm Street and Susquehanna Avenue to the rear parking lot behind the col-

lapsed and now burning structures. Engine 613 pumped the hydrant at Elm Street and Susquehanna Avenue. Firefighters from this unit observed a Maryland State Police Officer rescuing two occupants from the second story roof of this building. Shortly after the rescue, the building completely collapsed. Engine 611 placed a deck nozzle and two handlines into service to protect the church's main building and the church hall in the rear. The handlines were used for direct application on the fire and exposures.

Medic Unit 691 was designated as Emergency Management Services (EMS) Coordinator and established a triage site on the south side of Broad Street across from the church. At this time, Medic Unit 692 arrived, with two people, and was positioned between the bank and the retirement home to assist residents in evacuating. At about this time, the fire began to increase rapidly.

The Incident Commander requested a second alarm. An additional three engines, one truck, and four medic units were dispatched. Truck 531, with 10 firefighters, arrived from Havre de Grace and was positioned on Broad Street in front of the church. The firefighters were directed to place ladder pipes in service, one on the fire in the vicinity of the sandwich shop and the other stream between the apartment building and the south side of the church for exposure protection. In addition, this unit put into service one 3-inch handline and two 1-3/4-inch handlines, all of which were used to protect the main church structure.

During this period, a noticeable drop in city water pressure was experienced as the city hydrants were not gravity-feed only. This drop in pressure was a result of the power company cutting power in the area and inadvertently cutting power to the city's pumping facility.

The Incident Commander, fully aware that the area of involvement was most likely much greater than could be seen from his vantage point, along with his concern that there could be large numbers of people trapped in debris in the sandwich shop, dry cleaners, and apartment buildings, knew additional staffing would be needed for search and rescue operations. At 0904 a third alarm was requested. Four engine companies, one rescue unit, and one air unit were dispatched. The Incident Commander established two equipment staging areas – one in the church parking lot on Susquehanna Avenue and the second at Aiken and Broad Streets, some four blocks away. The selection of these locations was based on his concern for vehicle access to the fire scene because of debris from the explosion scattered on the streets.

Engines 512 and 511 from Charles Town arrived on the scene and were positioned at Front and Broad Streets to cover the front and rear of a boarding house. Engine 713 from Port Deposit arrived and was positioned in the rear of the bank building to assist in search and rescue operations.

Because city water pressure had not been established beyond gravity-feed, the Incident Commander, as a precautionary measure, made a decision to lay two 5-inch supply lines from the scene to the Susquehanna River, approximately 1,500 feet away, to ensure a continuous water supply. Harford County's Engine 513 was positioned at the river and pumped to Harford County's Engine 514 in relay. Harford County's Engine 216 pumped from the river to Perry Point's Engine 1111 in relay.

Truck Company 461 arrived from North East and was deployed on the west side of the retirement home to protect building exposure. Truck Company 231 from Aberdeen arrived and was positioned on Susquehanna Avenue to protect the church roof.

The temperature was 97 degrees Fahrenheit with heavy humidity. The adverse weather conditions began taking their toll on personnel. The fire, at this point, was well-contained, but the need for

search and rescue in the debris remained. At 0947, a fourth alarm was sounded. Additional companies were dispatched to the staging areas and were used primarily for staffing rotation and station fill-in.

Search and rescue continued, and, at this point, was increased as no casualties were being found. Weather conditions and the extra heavy work that had to be performed in searching for possible victims required personnel rotation every 15-20 minutes, as fire personnel began suffering from heat exhaustion, dehydration, and related effects.

The EMS coordinator, recognizing a potentially large triage problem, requested nurses from Perry Point's Veterans Hospital to render assistance. This is in accordance with an understanding between all county hospitals and local fire departments to render assistance as needed at emergency scenes.

When nurses from Perry Point arrived at the scene, they assisted at the Medic Triage Site. The injured were transported to the Harford Memorial Hospital at Havre de Grace and Union Hospital at Elkton, Maryland.

Information was obtained from a man that his wife was trapped in their apartment in one of the collapsed buildings. She apparently was trapped under tons of debris and her exact location was unknown. Special cadaver search dogs from the Baltimore County fire service were brought to the scene. After several hours of strenuous searching by fire and rescue personnel, the exact location was pinpointed by the dogs, and her body was recovered.

It was evident that the total operation would be quite lengthy. As a result, fifth and sixth alarms were requested to satisfy staffing needs.

The scene was declared under control at 1606. It required the services of 386 fire, police and rescue personnel, representing 25 volunteer fire companies and one paid company. This incident claimed the life of one person and caused injuries to 16 firefighters and 16 civilians.

FATALITY

The body of the woman, age 43, was recovered from under the debris of the apartment building on the west side of the sandwich shop. It was later learned that she lived in a first floor apartment and, when the explosion occurred, was trapped in the kitchen area by the collapsing building. She was able to communicate her situation to her husband who immediately sought help. Unfortunately, she was trapped under tons of building debris, and it required several hours of difficult work to reach her. Her body was located at approximately 10:00 p.m. She was pronounced dead on the scene by the county medical examiner.

INJURIES

Citizens--Sixteen area residents were treated for cuts and bruises after being struck by flying debris. Some were treated for mild smoke inhalation. Most injuries were minor. All victims were transported by medic units to the Harford Memorial Hospital in Havre de Grace. Fourteen were treated and released that day; two were admitted for observation and released the following morning.

Firefighters--Sixteen fire service personnel were transported to Harford Memorial Hospital and treated for cuts, bruises, nail punctures, and heat exhaustion. All injuries were minor and all fire personnel were released after a few hours.

EVACUATION OF RESIDENTS

At the time of the explosion and fire, the retail shops were not open for business. A considerable number of people residing in apartments in the 300 block of Broad Street were not in their residences. Fifteen retirement residents were in the building and had to be evacuated. These people were immediately taken to Perry Point Medical Center located a short distance away, where they received food, clothing, and counseling. A couple of residents required treatment for minor cuts and bruises from flying debris.

There were three families residing in the apartment building west of the sandwich shop. One couple was rescued from the roof by a Maryland State Police Officer. A second couple was able to walk out of their bedroom through a collapsed wall. Another person left by the front door. This was the building in which the fatality occurred.

Approximately six furloughed patients from the Perry Point Veteran's Hospital occupied a frame dwelling structure located on the south side of Broad Street in the vicinity of the retirement home. These residents required no special assistance when they were evacuated from their home, but were later provided the food and clothing each required after being taken to a safe area.

Other residents from other structures in the immediate vicinity were able to leave on their own or were already outside when the explosion occurred. Several received medical attention for cuts and bruises resulting from flying debris.

Other displaced people were taken immediately to a safe area. Those requiring treatment received it and were later given food, clothing, and housing.

BUILDING DAMAGE ASSESSMENT

The initial explosion totally destroyed the sandwich shop and partially collapsed the two apartment structures on the east and west sides. The subsequent fire destroyed the remaining portions of those buildings.

The force of the blast sent building timbers and other debris over a 2-block area, causing moderate to heavy damage to surrounding structures. In some cases, the force that these buildings (some as far as a block away) were subjected to, moved them off their foundations as much as 12 inches. As a result of direct blast damage and as part of the ongoing fire suppression effort, it was necessary to knock down portions of the partially collapsed structures for rescue and fire containment.

The structures below are all located in the block where the explosion occurred and damage is as follows:

- One-story sandwich shop: completely destroyed.
- Two-story frame 5-unit apartment building adjacent to east side of sandwich shop: completely destroyed.
- Two-story brick and frame building containing retail shops and three apartment units: completely destroyed.
- Two-story stone church: west wall subjected to heavy blast damage; windows blown out; heavy timbers propelled through roof assembly.
- Two-story stone church hall: heavy blast damage to north wall, roof, and windows.

- Two-story brick 20-unit retirement home: heavy damage to west wall, roof assembly, and windows. This structure was somewhat protected by masonry wall in 2-story apartment building located between it and the sandwich shop.
- One-story brick bank building: west wall suffered light to moderate damage.
- Two-story frame 17-unit apartment building: subjected to blast forces that shifted the entire structure on foundation; condemned by building officials.
- Eight 2-story structures primarily used as dwellings, located on the south side of Broad Street: suffered heavy blast damage and, in some cases, were shifted on foundation. Four were condemned by building officials.

The total damage is estimated at between 10 and 12 million dollars.

EMERGENCY MANAGEMENT

Cecil County has an Emergency Operations Plan in-place. (A complete copy of the January 1990 edition of Cecil County's Plan is presented in Appendix F.) As soon as the County Emergency Management Coordinator arrived on the scene, she recognized that several jurisdictional boundaries would have to be crossed in order to immediately render necessary aid. She did not implement the entire plan but used portions that were applicable. She established a command post in the Perryville Town Hall and immediately began assembling other county and State resources to deal with large numbers of displaced people who would be requiring assistance.

A one-stop procedure to receive housing, clothing, food stamps, and other necessities, was established. This eliminated any conflict between local and State regulations regarding application procedures for food stamps, etc.

Some 45 families, representing approximately 100 people, were in need of some type of immediate assistance. All received the necessary care within a matter of hours.

Because of the number of structures destroyed, condemned, or otherwise made uninhabitable, Cecil County authorities assembled public works department personnel and equipment for the purpose of moving personal belongings out of these structures into adequate storage facilities, which they also provided. The agencies that were involved were: Commissioner's Office, Licensing and Inspection Office, Roads Department, County Building Maintenance Department, Department of Aging, House Rehabilitation Department, Public Works, Sheriff's Office, Purchasing Office, Health Department, Social Services, Emergency Medical Services, Society for the Prevention of Cruelty to Animals, American Red Cross, Salvation Army, Veterans Administration, C&P Telephone Company, State Director of Emergency Management, and Perryville Town Administration.

LESSONS LEARNED

1. **Fireground leadership and a practiced Incident Command System (ICS) can keep a bad situation from turning disastrous.**

   The incident vividly demonstrates strong, competent ground leadership. This is further evidenced by actions of the two Perryville Fire Department Assistant Chiefs. The first assistant chief, who is a paid lieutenant with the Perry Point Fire Department through an existing agreement, was released from his responsibilities with the Perry Point Unit to assume a fireground com-

mand position at this scene. This assistant chief became the ground operations commander and the second assistant chief remained the Incident Commander. Their excellent size-up of the situation and implementation of an effective ICS undoubtedly prevented further injury and property damage. The coordination and utilization of large numbers of equipment from adjoining counties, and in this case, adjoining States, are further testimony of the value of a well-designed and practiced ICS.

2. Effective mutual aid and pre-fire planning are essential in major incidences such as this one.

Most communities, especially those in rural areas, must necessarily depend on interjurisdictional support. Mutual aid plans must be well thought out, understood, and practiced by all parties concerned. Equipment and firefighting tactics must be compatible between fire companies if such aid is to be of value. The system used by Cecil County is a planned box zone procedure whereby equipment is automatically dispatched in accordance with the type of alarm situation. The agreement that Cecil County has with its neighbors and its implementation in the Perryville emergency verify the value of such cooperation.

3. Successful disaster planning addresses citizen distress and immediate needs.

One of the most important needs during a major emergency is the ability to immediately and effectively care for citizens who have been adversely affected by the situation. Emergency disaster plans are probably one of the most difficult procedures to implement. The Perryville incident is an excellent example of the value of a well-designed and competently administered plan.

Cecil County has a comprehensive emergency operation plan that apparently is reviewed and understood by necessary key personnel. Even though this plan was not fully implemented because of special immediate needs, it still served as a basis for the implementation of a very effective response to a serious situation. For example, displaced persons were collected at Town Hall and transported to a nearby motel where they were housed. Elderly residents from the retirement home were transported to the Perry Point Veterans Hospital, located two minutes away, where they were cared for.

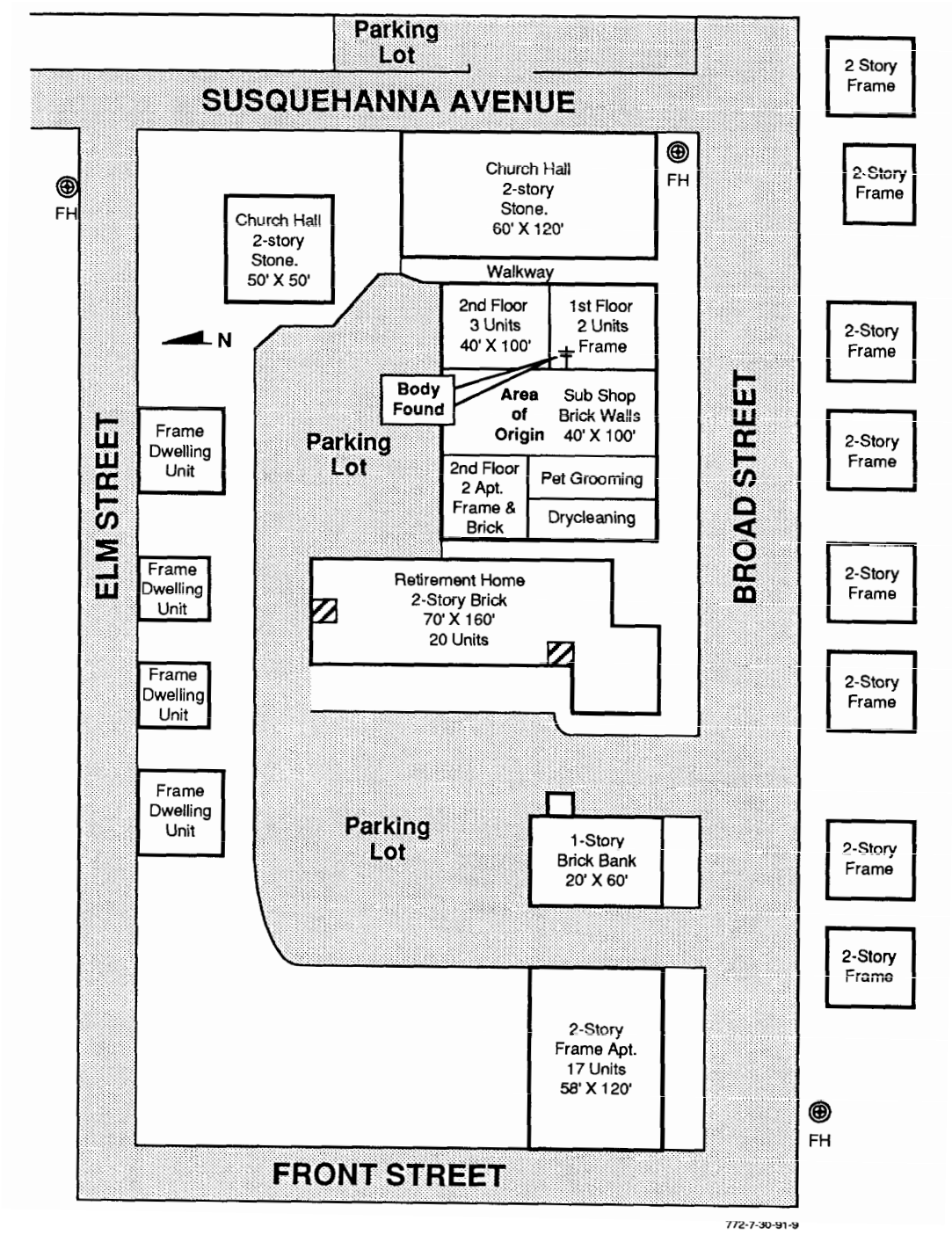
The implementation of a one-stop procedure, such as the one established, maximized interagency cooperation whereby essential services could be delivered to those in need in the shortest possible time.

4. The need for communities to implement effective fire prevention and public education programs continues.

Greater public education efforts are needed to raise people's awareness of the serious threat situations such as leaking gas represents. Following the Perryville explosion, the Maryland State Fire Marshal's Public Information Office obtained safety information from the National Propane Gas Association regarding hazards of propane gas. A State-wide news campaign was launched through television and major newspapers in an effort to alert citizens of the dangers of leaking propane gas. Maryland residents were informed about how to obtain safety information from the State Fire Marshal's Office on all types of propane gas appliances. Approximately thirty requests were received by this office from across the State regarding a variety of propane fueled appliances.

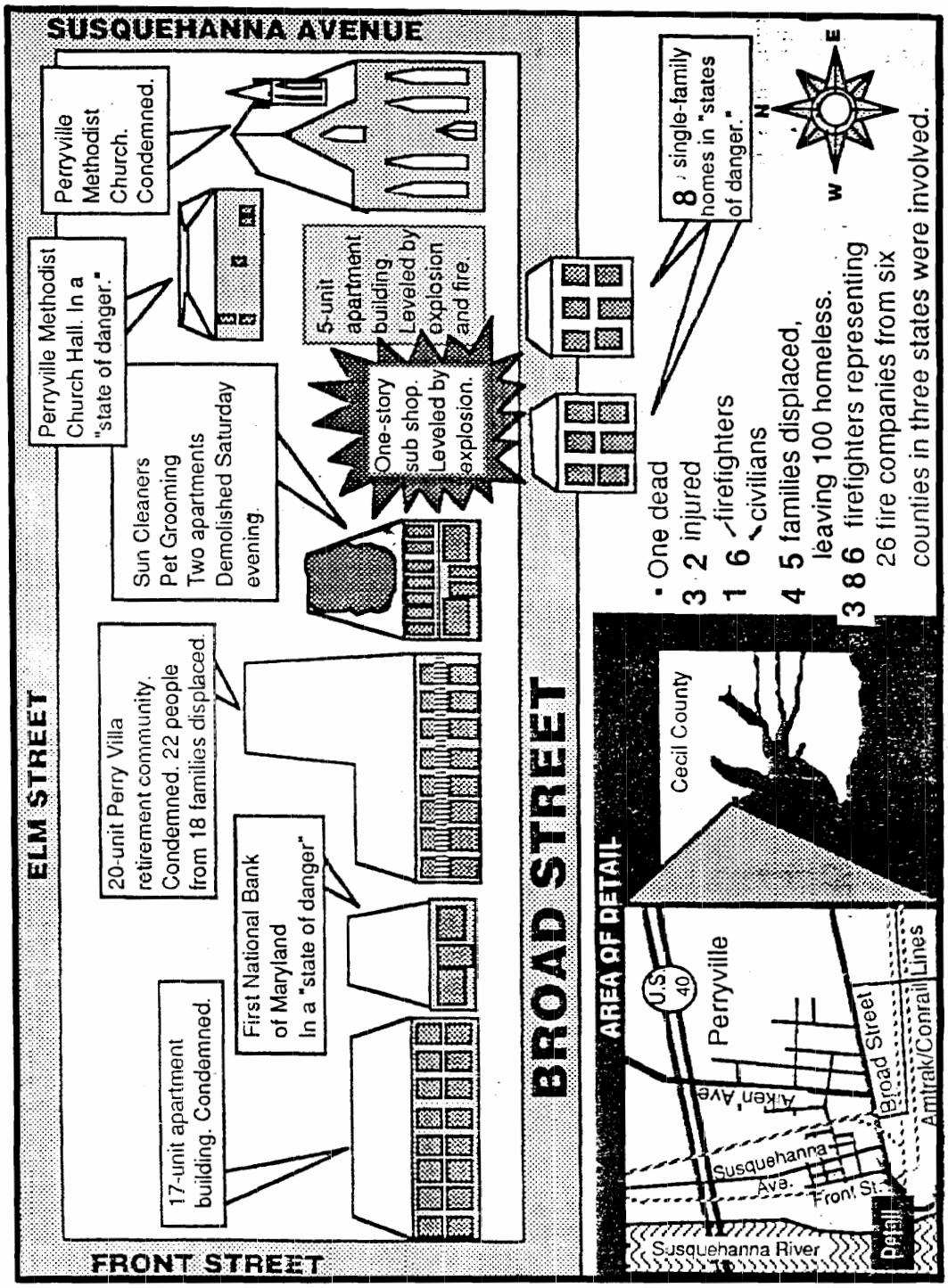
APPENDIX A

Diagram of Building Locations, Area of Origin of Explosion and Location of Fatality



APPENDIX B

Vicinity Map and Diagram of Buildings



APPENDIX C

Equipment Used at Fire and Agencies and Jurisdictions Involved

Equipment Used at Fire

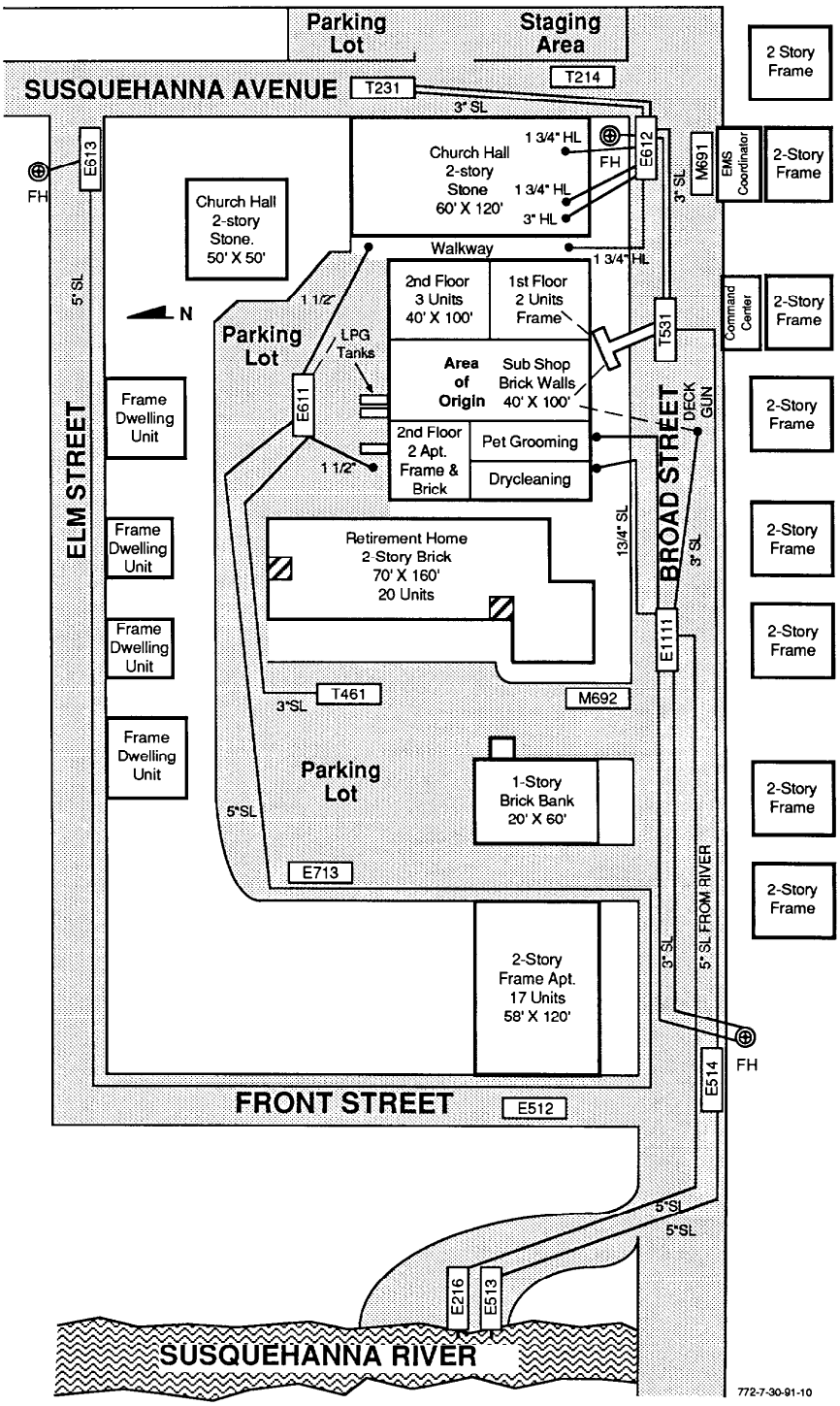
36 Engines
3 Trucks
2 Rescue Units
1 Utility Unit
1 Air Unit
1 Light Unit
1 Brush Unit (Dogs)
7 Medic Units
6 Ambulances
386 Fire, EMS, and Police Personnel Were Used

Agencies and Jurisdictions Involved

Cecil County Fire and Rescue Service
Harford County Fire and Rescue Service
Perry Point Fire and Rescue Service
Baltimore County Fire and Rescue Service
Kent County Fire and Rescue Service
New Castle County, Delaware Fire Department
Chester, Pennsylvania Fire Department
Lancaster County, Pennsylvania Fire Department
York, Pennsylvania (Delta/Cardiff) Fire Department
Cecil County Sheriff's Department
Veterans Administration Police
Cecil County Civil Defense
Maryland State Fire Marshal's Office
Maryland State Police

APPENDIX D

Fire Scene Diagram Showing Units' Positions at Fire



APPENDIX E

Fire Department Run Sheet

Note: Missing from Original Technical Report

CECIL COUNTY FIRE HEADQUARTERS
RUN SHEET

INCIDENT# 3622

X FIRE
__ MEDICAL
__ RESCUE

BOX # 600

COMPANIES DISPATCHED: Sta 6 + Sta 11

DATE: 7/04/91

TIME OF CALL: 0850 HOURS

TYPE OF EMERGENCY/INCIDENT: Explosion Undetermined Origin

CALLERS NAME: [redacted]

TIME OF DISPATCH 0851 HOURS

ADDRESS/DEVELOPMENT/LOCATION: [redacted]

PHONE NUMBER: [redacted]

10-8 0854

RESIDENCE: Unknown

CROSS STREET(S): —

10-2 0854

IF MEDICAL OR RESCUE BOX FILL IN THE FOLLOWING INFORMATION:
AGE OF PATIENT(S): _____ IF INFO. KNOWN
PATIENT(S): _____ MALE _____ FEMALE
CONSCIOUS: _____ YES _____ NO _____ UNKNOWN
BREATHING: _____ YES _____ NO _____ UNKNOWN
NOTE: AFTER FILLING OUT ABOVE PERTINENT INFORMATION, AND BEFORE INSTRUCTIONS ARE GIVEN TO CALLER--HAND FORM TO ANOTHER DISPATCHER SO THAT CALL MAY BE GIVEN OUT OVER THE AIR. IF INSTRUCTIONS GIVEN--WHICH CARD#(S)_____

10-8 HOSPITAL

10-7 HOSPITAL

10-19 2109

UNIT NUMBER(S) RESPONDING: 1111 - 611 - 612 - 613 M691 - 692, 683

INCIDENT 10-1 1606

10-7 2305

NOTIFICATIONS

AGENCIES	MESSAGE GIVEN TO	E.T.A. GIVEN
MD. STATE POLICE	PCO Upon Dispatch	Not Given
CECIL CO. SHERIFF	Chickmin - Morgan - Hargerty	20
ELKTON P.D.		
FIRE MARSHAL	Email notified at 0913	Travelling time
~~STATE~~/CO. ROADS	Portalatt Walls	Not Avail
HELICOPTER		
COPCO/PWR. CO.	to Scene 0902	15 to 20
OTHER Sharon Gas	to Scene at 1243	Not Provided
OTHER Medical Examiner	Union ER at 1142	
OTHER		

HOSPITAL: Harford & UEF

EMS NUMBER(S): 587925

CALL RECEIVED:
X 20 911
____ 2222/2223
2224
____ 658-5555
____ 3815
____ OTHER

ADDITIONAL INFORMATION/REMARKS:
Numerous Calls - Advising Some type of Explosion on Broad St or Elm Street.

DISPATCHER(S): Jackson - Warch - Wheatley

COMM-2
Davis - Morgan
S.R. Ciatelli

APPENDIX F

Cecil County Emergency Operations Plan

(January 1990)

Revised January, 1990

C E C I L C O U N T Y

E M E R G E N C Y O P E R A T I O N S P L A N

Prepared by:

Cecil County Emergency Management
& Civil Defense Agency

EOP-1

Appendix F (continued)

Revised January, 1990

CECIL COUNTY
EMERGENCY OPERATIONS PLAN

FOREWARD

Cecil County is confronted with a wide range of natural and technological hazards which threaten its citizens and government with personal injury, property destruction, economic hardship, and privation.

To minimize the effects such hazards can impose, the County must be prepared with plans and procedures for marshalling as many of its own resources as possible, and to coordinate these resources with those available elsewhere, in a concerted response to all emergency conditions.

The County Emergency Operations Plan contains procedures, organizations, and responsibilities which will be involved in the response and recovery phases of major emergencies and disasters. It is an overall plan which requires the participation and cooperation of a great number of groups and individuals.

Familiarization with the plan beforehand will ensure prompt and effective efforts when a major emergency actually strikes. Task assignments for organizations are based upon past performances and known capabilities.

This plan addresses major hazards, but its flexability is sufficient for combating any type of disaster which should occur.

Appendix F (continued)

Revised January, 1990

CECIL COUNTY

EMERGENCY OPERATIONS PLAN

HOW TO USE THE PLAN

The Basic Plan (Sections I through XI) is intended for the executive use by elected officials, heads of county departments, and certain private organizations.

The Annexes to the Basic Plan are for the use of departments, organizations, and individuals with operations responsibilities. Annexes are supported as necessary by department or organization Standard Operating Procedures (SOP's). Each Department and organization named in the Emergency Operations Plan should have its own plan which includes SOP's covering its own task assignments.

Appendixes to the annexes of the Basic Plan contain detailed information of various kinds intended for the response to certain specified hazards and situations.

Appendix F (continued)

Revised January, 1990

CECIL COUNTY

EMERGENCY OPERATIONS PLAN

TABLE OF CONTENTS

INTRODUCTION		EOP-1
	Promulgation Statement	EOP-2
	Foreward	EOP-3
	How to Use the Plan	EOP-4
	Table of Contents	EOP-5,6
	Distribution List	EOP-7
	Record of Changes	EOP-8
I.	PURPOSE	EOP-9
II.	SITUATION ANS ASSUMPTIONS	EOP-9
	A. Situation	EOP-9
	B. Assumptions	EOP-9
III.	CONCEPT OF OPERATIONS	EOP-10
	A. Response	EOP-10
	B. Recovery	EOP-11
	c. Direction and Control	EOP-11,12
	D. Continuity of Government	EOP-12,13
IV.	ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES	EOP-13
	A. General	EOP-13
	B. Emergency Organization	EOP-13
	c. Task Assignments	EOP-14
	1) Emergency Management and Civil Defense Agency	EOP-14
	2) Fire and Rescue Communications	EOP-14
	3) Fire Services	EOP-14
	4) EMS Services	EOP-15
	5) Cecil County Sheriff's Department	EOP-15
	6) Maryland State Police	EOP-16
	Health Services	EOP-16
	8) Social Services	EOP-17
	9) Board of Education	EOP-17
	10) Red Cross	EOP-17
	11) Public Works Department	EOP-17
	12) Cecil County Assessment Office	EOP-18
	13) Utilities	EOP-18
v.	CONSIDERATION OF SPECIAL NEEDS	EOP-19

Appendix F (continued)

Revised January, 1990

CECIL COUNTY

EMERGENCY OPERATIONS PLAN

TABLE OF CONTENTS (con't)

VI.	ADMINISTRATION AND LOGISTICS	EOP-19
	A. Financial Administration	EOP-19
	B. Reports and Records	EOP-20
	c. Agreements and Understandings	EOP-20
	D. Administrative Policies	EOP-20
	E. Logistics	EOP-21
	F. Use of County Employees During Emergencies	EOP-21
VII.	PLAN DEVELOPMENT AND MAINTENANCE	EOP-21,22
VIII.	AUTHORITIES AND REFERENCES	EOP-22
	A. Authority	EOP-22
	B. References	EOP-22
IX.	DEFINITIONS AND GLOSSARY OF ABBREVIATIONS	EOP-23
	A. Abbreviations	EOP-23
	B. Definitions	EOP-24-26
X.	BLOCK DIAGRAM OF CECIL COUNTY GOVERNMENT ORGANIZATION	TAB 1
XI.	EMERGENCY TELEPHONE CALL-DOWN LIST	TAB 2

Appendix F (continued)

Revised January, 1990

CECIL COUNTY

EMERGENCY OPERATIONS PLAN

DISTRIBUTION LIST

Board of County Commissioners

County Administrative Assistant

Emergency Management & Civil Defense

Emergency Communications - "911"

Sheriff

Maryland State Police

Public Works Department

Roads Department

Health Department

Social Services

Board of Education

Red Cross

EOP-7

Appendix F (continued)

Revised January, 1990

CECIL COUNTY

EMERGENCY OPERATIONS PLAN

RECORD of CHANGES

CHANGE NUMBER	DATE OF CHANGE	DATE CHANGE ENTERED	CHANGE MADE BY (SIGNATURE)

Appendix F (continued)

Revised January, 1990

CECIL COUNTY

EMERGENCY OPERATIONS PLAN

BASIC PLAN

I. PURPOSE:

A. To identify the roles and responsibilities of County and local agencies for emergencies or major disasters, either natural or man-made.

B. To describe the policies and procedures for the response and recovery phases of all emergency activities.

C. To assign functional responsibilities to County and local agencies.

II. SITUATION AND ASSUMPTIONS:

A. Situation

Cecil County is exposed to many hazards, all of which have the potential for disrupting the community, causing damage, and creating casualties. Possible natural hazards include hurricanes, floods, tornadoes, winter storms and even earthquakes. There is also a threat of a war-related incident, such as nuclear, bio-chemical or conventional attack. Other disaster situations could develop from a hazardous materials accident, major transportation accident, terrorism or civil disorder.

B. Assumptions

In ordinary emergencies, local response agencies will be capable of effective action to protect lives and property. To carry out response actions, mutual aid agreements have been established. Additional technical and financial assistance will be sought from the State and Federal Governments.

Appendix F (continued)

Revised January, 1990

III. CONCEPT OF OPERATIONS:

A. Response

1. Emergency functions of the various groups involved in emergency management will generally parallel their normal daily activities. The same personnel, equipment and materials will be employed to combat major disasters. Augmentation of these resources may be required because of the increased scope and additional demands.

2. If necessary, the President of the Cecil County Board of County Commissioners may declare a Local State of Emergency implementing the Cecil County Emergency Operations Plan which will be coordinated by the local Director of Emergency Management and Civil Defense.

3. If necessary, the Cecil County Emergency Operations Center will be activated and response activities directed from that facility. The Public Information Officer will prepare news releases and coordinate the release of information to the media and the public.

4. If the emergency is of such magnitude that all needs cannot be met at once, operations shall be directed to protect the largest number of citizens.

5. The coordination of a large number of organizations, public and private, will become of paramount importance.

6. It may be necessary to suspend routine functions during an emergency. The efforts which would normally be required for these functions will be re-directed to the accomplishment of emergency tasks by the agency concerned.

7. Local governments have the primary responsibility for emergency management activities. When the emergency exceeds the capability of the local government to respond adequately, assistance will be requested from other jurisdictions and also from the State government. The Federal government will provide assistance to the State and the local jurisdictions, when appropriate.

8. Every attempt will be made to utilize available resources from the private sector and volunteer organizations when possible and appropriate.

Appendix F (continued)

Revised January, 1990

III. CONCEPT OF OPERATIONS (con't)

B. Recovery

1. Recovery involves the restoration of all systems to a normal status. Immediate actions must be taken to assess the damages and determine what assistance is necessary to repair the damage and return vital life-support systems to at least minimal acceptable standards. Long-term recovery efforts may continue for an extended period, even years.

2. The local government has the primary responsibility for determining the extent of the damage and the impact of that damage. Initial damage assessment will be made by the County's Damage Assessment Teams during the first daylight period following the disaster and reported as soon as practical to the Maryland Emergency Management and Civil Defense Agency.

3. Local resources will be employed initially to return the affected areas to normal. When necessary, requests for further assistance will be forwarded to higher levels of government only when these local resources are depleted or become inadequate.

4. Recovery includes both short-term and long-term activities. Short-term operations seek to restore critical services to the community and provide for the basic needs of its citizens. Long-term recovery focuses on restoring the community to its normal, or improved state of affairs. Examples of recovery actions would be temporary housing, restoration of government services and reconstruction of damaged areas.

c. Direction and Control

1. The ultimate responsibility for the emergency management of any disaster rests with the Cecil County Board of County Commissioners. That body is responsible for all policy-level decisions which normally will be implemented through the Administrative Assistant.

Appendix F (continued)

Revised January, 1990

III. CONCEPT OF OPERATIONS (con't)

C. Direction and Control (con't)

2. The Director, Cecil County Emergency Management and Civil Defense Agency has the responsibility for coordinating the overall emergency management program. The Director makes all routine decisions and advises the Board of County Commissioners on courses of action available on major decisions. During emergency operations, the Director is responsible for the proper functioning of the Emergency Operations Center. The Director also acts as liaison with other local, state and Federal agencies as well as private and volunteer organizations.

3. Specific persons and agencies are responsible for fulfilling their obligations as presented in the Basic Plan and individual annexes. Department Heads will retain control over their respective employees and equipment. Each agency will be responsible for having its own standard operating procedures to be followed during response operations.

4. During some emergency situations, certain agencies may be required to relocate their center of control to the EOC. During large scale emergencies, the EOC will, in fact, become the seat of government for the duration of the emergency.

D. Continuity Of Government:

1. Succession of Command

a. The line of succession of the Cecil County Board of County Commissioners is from the President through the other members of the Board of Commissioners, in the order of their seniority.

b. The line of succession for the Emergency Management and Civil Defense Director is from the Director to the County Administrative Assistant.

C. The line of succession for each county agency or department will be established in the SOP's developed by each agency or department.

Appendix F (continued)

Revised January, 1990

D. Continuity of Government (con't)

2. Preservation of Records

The preservation of essential records and documents and the safeguarding of county resources, facilities and personnel must be considered key factors in providing for the continuation of local government processes following catastrophic disasters or national security emergencies. It shall be the repsonsibility of each department or agency head to provide for the safekeeping of important documents and the safeguarding of such resources, facilities and personnel.

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES:

A. General

Many departments within the local government have emergency functions in addition to their normal duties. Each department is responsible for developing and maintaining its own emergency management procedures. Specific responsibilities are outlined under Section C, "Task Assignments", as well as in individual annexes. Responsibilities for non-governmental organizations are also presented.

B. Emergency Organization

Cecil County's emergency organization consists of various departments within the County Government charged with assigned responsibilities during emergency situations, departments of those municipalities which do not have full-scale emergency management organizations, support services such as fire and rescue companies, as well as resources available through private sector organizations which have adopted emergency management responsibilities.

Appendix F (continued)

Revised January, 1990

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES (con't)

c. Task Assignments

1. Director, Emergency Management & Civil Defense

a. Coordinate all phases of emergency management.

b. Identify and analyze the effects of hazards which may threaten Cecil County or its citizens.

C. Keep the County Administrative Assistant completely informed during any emergency situation.

d. Establish and maintain an emergency communications system and train the personnel to operate the system in an emergency.

e. Establish and maintain a system to alert key officials, warn the public and provide public information to the public in any emergency or disaster.

2. Fire and Rescue Communications

a. In most instances, receive the initial report of any emergency either from the National Warning System, a citizen, or agency within the county.

b. Alert appropriate response personnel.

C. Notify emergency management and county officials as appropriate and required by department SOP's.

d. Maintain communications with responding fire and rescue units throughout the incident and notify the appropriate officials of any significant changes in the status of the situation.

3. Fire Service

a. Responsible for all fire suppression activities.

b. Provide incident scene command as appropriate.

c. Assist with search, rescue and evacuation activities as required.

d . Assist with radiological monitoring as required.

Appendix F (continued)

Revised January, 1990

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES: (con't)

c. Task Assignments (con't)

4. EMS Services

a. Provide medical care for the critically ill and injured as required.

b. In coordination with the Maryalnd Institute for Emergency Medical Services Systems (MIEMSS), coordinate the transport of critically ill or injured patients to local area hospitals and medical centers or to specialty referral centers operating within the Maryland EMS system.

C. Provide incident scene command as appropriate.

d. Assist with search, rescue and evacuation as necessary.

e. Assist with radiological monitoring as required.

5. Cecil County Sheriff's Department

a. Provide law enforcement requirements, coordinating with State and municipal police agencies as required.

b. Provide traffic control and security in all emergency areas as required.

C. Provide for control of restricted areas, protection of vital installations and security for critical resources and/or facilities as applicable.

d. Arrange for mutual police aid from neighboring jurisdictions as necessary.

e. Assist with search, rescue and evacuation as necessary.

f. Provide damage assessment support as required.

Appendix F (continued)

Revised January, 1990

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES: (con't)

c. Task Assignments (con't)

6. Maryland State Police

a. Coordinate state law enforcement actions in support of local law enforcement agencies.

b. Provide traffic control and security in emergency areas as applicable.

C. Provide air evacuation of casualties in support of the EMS services.

d. Assist local jurisdictions in search, rescue and evacuation operations as required.

e. Provide for control of restricted areas, protection of vital installations and security for critical resources and/or facilities as applicable.

7. Health Services

a. Under the direction of the County Commissioners, the County Health Officer is responsible for all emergency health services within the county.

b. The Health Officer and his/her staff will supervise all environmental activities to assure the safety of the population and the protection of the environment.

c. The Cecil County Medical Examiner, in conjunction with the State Medical Examiner, is responsible for supervising all county morgues and the identification and interment of the dead.

d. The Union Hospital of Elkton will coordinate with the Health Department in directing all emergency health service activities pertaining to the medical care and treatment of the population of the county.

Appendix F (continued)

Revised January, 1990

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES: (con't)

8. Social Services

   a. Establish eligibility criteria for temporary housing and any other assistance necessary.

   b. Delineate procedures for providing assistance and temporary housing to victims of emergencies or a major disaster.

   c. Provide for the orderly and effective assistance to State and/or Federal agencies in the event of the Governor's declaration of an emergency or a Presidential Declaration.

9. Board of Education

   a. Provide schools and board-operated facilities to be used as shelters.

   b. Assist in providing buses and drivers for emergency mass transportation as necessary.

10. Red Cross

   a. The Director of the local Red Cross Chapter, in cooperation with the representatives of the Board of Education and Social Services Department, man and equip all shelters necessary for the protection of citizens.

   b. Provide and train shelter officers to man such shelters in an emergency.

   C. Provide meals for both victims and workers in the disaster area.

11. Public Works Department

   a. Provide for, in conjunction with the Maryland State Highway Administration, the removal and disposal of debris from roadways as necessary following a disaster.

   b. Monitor status of, and advise emergency services of all major road damage and all road closings.

   c. Assist in the damage assessment of public property.

Appendix F (continued)

Revised January, 1990

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES: (con't)

c. Task Assignments (con't)

12. Cecil County Assesment Office

a. Provide trained personnel for damage assessment teams.

b. Provide support for Emergency Operations Center staff as applicable and available.

13. Utilities

a. Electric utilities, Conowingo Power Company and Choptank Electric Cooperative will, as necessary, provide emergency power in disaster areas, work to restore normal conditions as quickly as possible and provide representation to the Emergency Operations Center as required.

b. The natural gas distributor, Elkton Gas Service, as well as LP gas distributors, will respond to any emergency involving their transmission facilities, assist in the public education concerning how to deal with emergency situation involving their product or equipment, and provide representation to the Emergency Operations Center as required.

c. The Chesapeake and Potomac Telephone Company of Maryland will provide temporary lines and services as required to support the Emergency Operations Center, emergency care facilities, and emergency service providers, and will provide representation to the Emergency Operations Center when necessary.

Appendix F (continued)

Revised January, 1990

V. CONSIDERATION OF SPECIAL NEEDS:

A. The Cecil County Emergency Communications "911" Department has facilities to communicate with the deaf through TTY. They also keep a roster of a pool of interpreters to communicate with non-English speaking individuals.

B. Local Health Department has records of individuals with special needs, i.e. those incapacitated or those requiring special breathing apparatus.

C. Fortunately, the major nursing homes in the county are all well constructed and no evacuation of all of them would be likely. In the event of an emergency at one of them, the residents could be evacuated and moved with existing resources. All institutions have their own emergency operations plans which provide for such occurrences.

D. There is one prison in the county and, again, it is substantial and no wholesale evacuation is anticipated. Existing emergency operations plans at each facility would apply.

VI. ADMINISTRATION AND LOGISTICS:

A. Financial Administration

1. Expenditures necessitated by emergency will first be made by the use of funds regularly appropriated to local agencies. If the President of the Board of County Commissioners finds these funds are inadequate to cope with a particular emergency, the County Commissioners may make contingency funds available, as authorized in the budget.

2. All agencies participating in response and recovery operations shall maintain records of time, supplies and other resources expended in an emergency. The agencies will forward such records to the Cecil County Emergency Management and Civil Defense Agency if and when requested.

3. If any private property is used by the County under an officially-declared State of Emergency, the owner shall be compensated for its use and for any damage sustained.

Appendix F (continued)

Revised January, 1990

VI. ADMINISTRATION AND LOGISTICS: (con't)

B. Reports and Records

1. All required reports will be submitted to appropriate authorities in accordance with individual annexes.

2. Records of expenditures and obligations in the event of an emergency must be maintained by each agency participating, employing their own bookkeeping procedures.

3. All agencies will make reports to the County Emergency Operations Center by the most practical means, normally by telephone unless written copies are required.

4. Generally, financial records and reports shall be retained for a minimum of three years following audit. Retention times for certain other records and reports, if different, will be identified in individual annexes.

c. Agreements and Understandings

1. Should local government resources prove to be inadequate during an emergency operation, requests will be made for assistance from other local jurisdictions, higher levels of government, private sector volunteer organizations, and other organizations in accordance with existing or emergency negotiated mutual aid agreements and understandings.

2. Such assistance may take the form of equipment, supplies, personnel, or other available capabilities. All agreements and understanding will be entered into by duly authorized officials and will be formalized in writing whenever possible.

D. Administrative Policies

1. All emergency assistance available shall be provided without regard to race, religion, sex, color, age, economic status or national origin.

2. All emergency operations will be conducted utilizing all practical means to protect the environment.

Appendix F (continued)

Revised January, 1990

VI. ADMINISTRATION AND LOGISTICS: (con't)

E. Logistics

1. The County Emergency Management Agency shall develop and maintain resource information on supplies, equipment, facilities, and skilled personnel available for emergency response and recovery.

2. The resource information will indicate the procedure and contact information necessary to quickly obtain the resources needed to meet an emergency.

3. If necessary, emergency resources will be allocated by priority need.

F. Use of County Employees During Emergencies

1. An appointing authority may assign any employee to perform related work even though the assigned duties are not precisely within the scope of the normal employment.

2. An appointing authority may assign any employee to perform emergency work at any place in the county and for periods of time other than the usual employment time.

3. Employees assigned to emergency duties shall be reimbursed for reasonable and necessary expenses and shall receive appropriate overtime in accordance with existing regulations and procedures.

VII. PLAN DEVELOPMENT AND MAINTENANCE:

A. Although the primary responsibility for the development of the County Emergency Operations Plan and the overall coordination of the implementation of the plan will be carried out at the local level by the Cecil County Emergency Management and Civil Defense Agency, many governmental and public sector agencies have the responsibility for developing and maintaining their respective segments of the plan as set forth in the "Organization and Assignment of Responsibilities" section of this document.

Appendix F (continued)

Revised January, 1990

VII. PLAN DEVELOPMENT AND MAINTENANCE: (con't)

B. Revisiona and/or changes to the plan will be made as necessary by the Director of the Cecil County Emergency Management and Civil Defense Agency. It is expected that responsible officials in local agencies or organizations affected by this plan will suggest or recommend changes at any time and provide information periodically as to changes of personnel and available resources.

C. The Director of the Cecil County Emergency Management and Civil Defense Agency will ensure that an annual review of this plan is conducted by all officials involved and the Director will coordinate all review and revision efforts.

D. For training purposes and exercises, the Director of Cecil County Emergency Management and Civil Defense Agency may activate this plan as necessary to ensure the readiness of all agencies covered by the plan and will update the plan based on any deficiencies identified by the exercises.

E. This plan shall be effective upon approval and promulgation by the Cecil County Board of Commissioners.

VIII. AUTHORITIES AND REFERENCES:

A. Authority

This plan is developed under the provisions of the following authority:

1. Article 16A, Maryland Annotated Code, Maryland Emergency Management and Civil Defense Act.

2. Federal Civil Defense Act of 1950, Public Law #8l-920 as amended; Disaster Relief Act of 1974, Public Law #93-288 as amended; Emergency Management and Assistance, 44 U.S. Code 2.1, October 1, 1980.

B. References

1. FEMA CPG l-a/October 1985 Guide for Development of State and Local Emergency Operations Plans.

2. FEMA CPG 1-5/July 1984 Objectives for Local Emergency Management.

Appendix F (continued)

Revised January, 1990

IX. DEFINITIONS AND GLOSSARY OF ABBREVIATIONS:

A. Abbreviations

ARC - American Red Cross

CAP - Civil Air Patrol

CCEMCCDA - Cecil County Emergency Management & Civil Defense Agency

CP - Command Post

CPG = Civil Preparedness Guide

DSR - Damage Survey Report

EM&CDA - Emergency Management & Civil Defense Agency

EMS- Emergency Medical Services

EOC - Emergency Operations Center

FEMA - Federal Emergency Management Agency

MEMA - Maryland Emergency Management & Civil Defense Agency

MIEMSS - Maryland Institute for Emergency Medical Services systems

MSP - Maryland State Police

PDA - Preliminary Damage Assessment

SOP - Standard Operating Procedures

TTY - Teletype

Appendix F (continued)

Revised January, 1990

IX. ABBREVIATIONS AND DEFINITIONS: (con't)

B. Definitions

Access Control - Restriction of the trespass of unauthorized persons in zones of exclusion.

Annex - An element of the Emergency Operations Plan devoted to a component part of emergency operations describing the jurisdiction's approach to functioning in that area of activity during emergencies and disasters.

Appendix - An element of the Emergency Operations Plan attached to an annex to provide information on special approaches or requirements for responding to the emergencies anticipated by the jurisdiction.

Basic Plan - The first and major element of the Emergency Operations Plan which provides an undetailed overview of the county's approach to emergency management.

Damage Assessment - An appraisal of the nature and extent of the damage sustained by the county during an emergency or disaster.

Decontamination - The removal or neutralization of hazardous chemicals or biological substances from bodies, clothing and equipment.

Declaration of Emergency - The formal announcement by the executive head of government that a situation exists which requires extraordinary effort or procedures to counteract and overcome. It may apply to an entire jurisdiction or to any part thereof. It may suspend or modify local law or procedures to the extent local law permits.

Direction and Control - The use of a centralized management center, the Emergency Operations Center, to facilitate policymaking, coordination and control of operating forces in a large scale emergency situation.

Disaster - Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, landslide, mudslide, snow storm, drought, fire, explosion, or other catastrophe such as riot, civil disturbance, air or nuclear attack which results in damage to property, hardship, suffering or possible loss of life.

Emergency - Any disaster which requires emergency governmental assistance to save lives and protect property, public health and safety to avert or lessen the threat of a major disaster.

Appendix F (continued)

Revised January, 1990

IX. ABBREVIATIONS AND DEFINITIONS: (con'tl

B. Definitions (con'tl

Emergency Broadcast System (EBS) - Commercial radio and television stations and interconnecting facilities which have been authorized by the Federal Communications Commission to operate-in a controlled manner during a war, state of public peril or disaster, or other national emergency; used to warn the public and inform the citizens of recommended protective actions.

Emergency Operations Plan - A document which identifies the available personnel, equipment, facilities, supplies and other resources in the county and states the method or scheme for coordinated actions to be taken by individuals and government services in the event of a natural, man-made or attack related disaster.

Emergency Operations Center (EOC) - The protected site from which civil government officials exercise direction and control during an emergency.

Evacuation - A protective action whereby citizens are moved from a place of danger to a place of relative safety.

Hazardous Material - A substance which, if released in an uncontrolled manner, can be harmful to people, animals, property or the environment.

Mitigation - Any measure taken to prevent or reduce the probability of an occurrence of a hazard and to avoid or reduce the adverse impacts of an occurrence.

Mutual Aid Agreement - Agreement between two or more organizations or jurisdictions to provide reciprocal assistance to one another in time of emergency.

Presidential Declaration of Disaster - A proclamation by the President of the United States that a locality has sustained destruction and privation with which it cannot cope and for which reason the locality has become eligible for certain types of federal aid and assistance.

Promulgation Statement - An executive order issued by a jurisdiction's chief executive officer, which, in the case of an Emergency Operations Plan, awards legal authority to the document.

Appendix F (continued)

Revised January, 1990

IX. ABBREVIATIONS AND DEFINITIONS: (con't)

B. Definitions (con't)

Protective Actions - Any actions recommended by competent authority to the population at risk to prevent or reduce the possibility of injury resulting from the effects of a hazard.

Reception Center - A site designated by Emergency Management officials to receive persons displaced by emergency events and where these persons will obtain emergency assistance, advice, or instructions.

Recovery - The phase of emergency management activities during which actions, both short-term and long-term, are taken to return conditions to normal or to an improved level.

Response. - The phase of emergency management activities involving the provision of emergency assistance for casualties and actions to reduce further damage or expedite recovery operations.

Search and Rescue - Any actions taken to find, assist, and remove persons injured or placed at risk by emergency events.

Standard Operating Procedures (SOP'S) - A body of instructions having the force of a directive, covering those features of an operation which lend themselves to a definite or standardized procedure without loss of effectiveness.

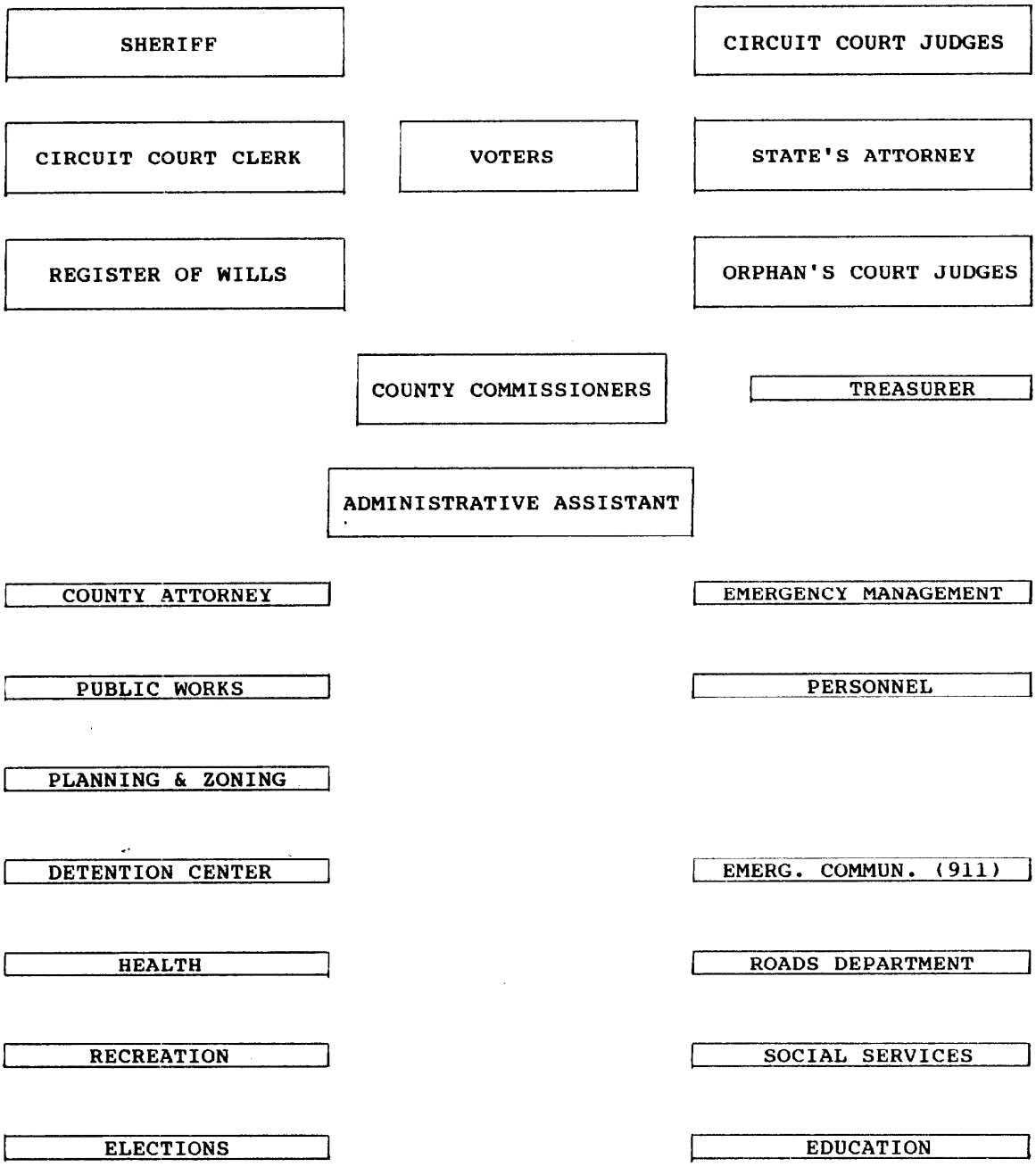
State of Emergency - A formal announcement by the executive head of government that a situation exists which requires extraordinary effort or procedures to counteract or overcome. It may suspend or modify local law or procedures to the extent local law permits. It has the force and effect of law.

"9-l-1" - A simplified dialing method for obtaining prompt emergency assistance by telephone and sometimes used to indicate an emergency communications center. The "9-1-l" system is now operative in all Maryland jurisdictions.

Appendix F (continued)

Revised January, 1990

CECIL COUNTY GOVERNMENT ORGANIZATION



TAB 1

Appendix F (continued)

Revised January, 1991

EMERGENCY TELEPHONE CALL-DOWN LIST

1. Verification - (Peach Bottom) .....
2. Director, E. Rosemary Culley .....
3. Assistant Directors: Larry Storke, Fire & CD .....
   Frank Muller, Communications ....
4. Health Department .....
   (a) Dr. Virginia Bailey .....
   (b) William Sumner .....
5. County Commissioners .....
   (a) W. Edwin Cole, Jr. .....
   (b) A. Marie Cleek .....
   (c) Grayson L. Abbott .....
6. Maryland State Police .....
   (a) Cpl. Dan Benham .....
   (b) 1st. Sgt. Roger Thibaudeau .....
7. Sheriff's Department .....
   (a) Sheriff Kennedy .....
   (b) George Haggerty .....
8. Fire Coordinator, Hershel Armour .....
   Terry Deamond .....
9. Board of Education .....
   (a) Jerry Kunkle .....
   (b) Frank Slaughter .....
10. Social Services .....
    (a) Ellis Scott .....
    (b) John Koch .....
11. Red Cross .....
    (a) James Eder .....
    (b) James Prigel .....
12. PIO .....
    (a) Michael Dixon .....
    (b) Don Herring .....
13. Maintenance .....
    (a) Tom Dotson .....
    (b) Earl Bradford .....
    (c) James Mullen .....
14. Public Works .....
    (a) Barry Beiford .....
    (b) Ed Walls .....
15. Extension Services .....
    (a) Ted Haas .....
16. ASCS .....
    (a) Barbara Clugston .....
17. Radiological Officers (RADEF)
    (a) Larry Peterson .....
    (b) Herbert Hoover .....
18. Rising Sun Mayor, Catherine Lane .....
19. Port Deposit Mayor, Erma Keetley .....
20. Perryville President, Randolph Fadeley .....

EOP - TAB 2

APPENDIX G

Photographs

Slides and photographs are included with the master report at the USFA. A selection of photographs provided by the Perryville Fire Department and some taken several days after the fire by Randolph Kirby appear on the following pages.

Appendix G (continued)

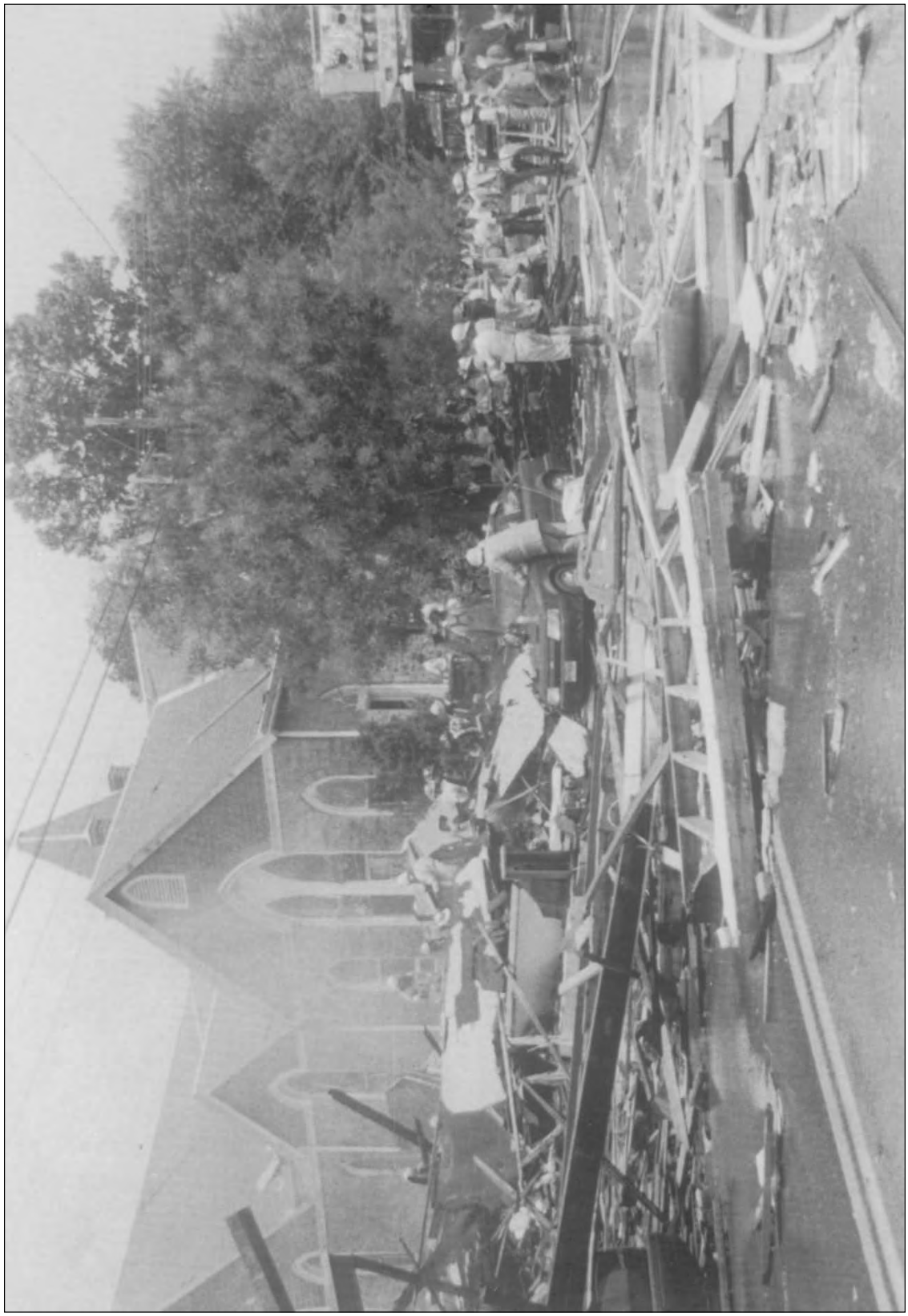


Photo by Perryville Fire Department

Explosion/fire scene during search and rescue operations. Photo shows Broad Street, church in background, and remains of apartment building (where fatality occurred) in foreground at left.

Appendix G (continued)

Photo by Perryville Fire Department

Photo taken from Broad Street showing destruction of entire sub shop and the apartment building to its east. Southwest corner of pet grooming shop and apartment above shown at left.

Appendix G (continued)

Photo by Perryville Fire Department

Pet grooming/dry cleaning building. Photo taken from Broad Street on day of incident.

Appendix G (continued)

Photo by Perryville Fire Department

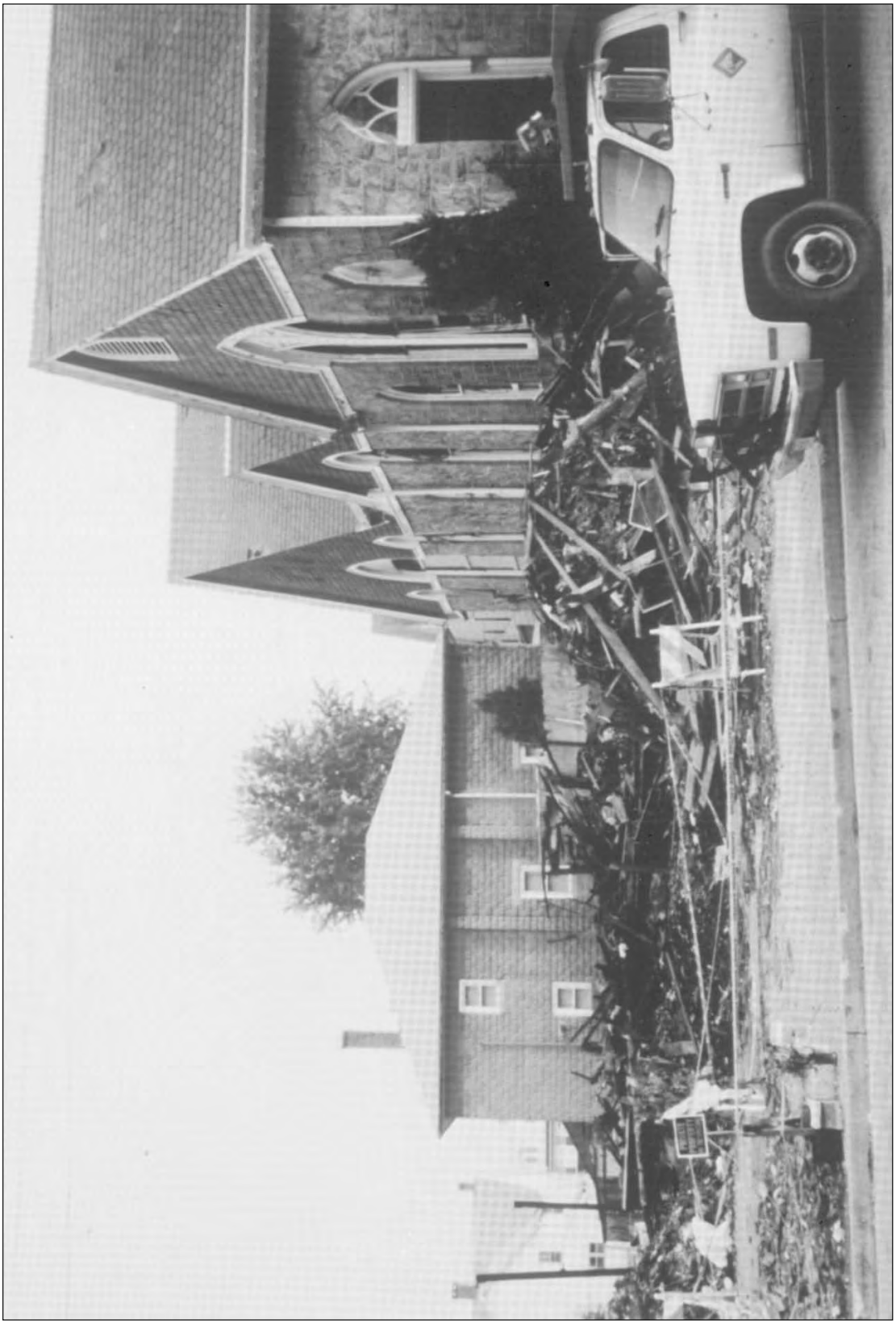
Area of sub shop and apartment building. Broad Street in foreground.

Appendix G (continued)

Photo by Perryville Fire Department

Search operations in debris of apartment building. Photo taken from Broad Street.

Appendix G (continued)



Remains of sub shop and apartment building to its east. Church hall is in background. Photo taken several days after the explosion.

Appendix G (continued)

Photo by Randolph Kirby

Remains of sub shop. Photo taken from Broad Street, several days after incident.

Appendix G (continued)

Photo by Randolph Kirby

Rear of sub shop showing damage to building to its west (pet grooming and dry cleaning on first floor, two apartments on second). Photo taken several days after the explosion.

Appendix G (continued)

Remains of sub shop. Photo taken from rear of shop several days after explosion. Damage to houses across Broad Street visible in background.

Appendix G (continued)

Photo by Randolph Kirby

Power of the explosion illustrated by this damage to the interior of the lobby area of the retirement home two buildings to the west of the sub shop.