

ASEC

YANKEE ATOMIC ELECTRIC COMPANY

EMERGENCY PUBLIC
NOTIFICATION SYSTEM
YANKEE VERNON AND ROWE

OCTOBER 10, 1980

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EXECUTIVE SUMMARY

The publication of upgraded emergency planning regulations (10 CFR Parts 50 and 70) on August 19, 1980 by the Nuclear Regulatory Commission (NRC) makes final a protracted period of discussion regarding the steps required to be taken by nuclear power plants in the event of a radiological emergency.

Recognizing the importance of emergency planning and in anticipation of this action by the NRC, Yankee Atomic Electric Company engaged the services of Analytical Systems Engineering Corporation (ASEC) to assist in developing cost effective approaches to prompt notification of the public throughout the 10 mile emergency planning zones of their two plants in Rowe, MA and Vernon, VT.

These areas present both demographic and geographic limitations to uniform or standardized systems for emergency warning. Terrain has a dramatic impact, for example, on the viability of sirens.

What is proposed is a community-by-community upgrade based upon the unique needs of each. The primary notification method for all thirty-six towns will be through the procurement and installation of National Weather Service receivers and selected installation of new sirens in some of the more densely populated centers. This will be backed up by increased mobile public address capabilities on local emergency vehicles.

The total cost for procurement and installation of all equipment for both plants is estimated at slightly more than \$250,000.

This report and supporting documentation should provide a basis for further discussions internal to Yankee Atomic Electric Company, between Yankee and Federal, State and local emergency preparedness officials and with the NRC. The results of those discussions will hopefully meet the spirit and intent of the NRC requirement and lead to implementation of improved public notification capabilities.

1.0 INTRODUCTION

1.1 BACKGROUND OF PROJECT

In late 1979, the Nuclear Regulatory Commission proposed a series of changes to 10 CFR Part 50, Appendix E which were then released for public comment in January 1980 under NUREG-0654/FEMA-REP-1. Among these changes was a requirement for a system capable of promptly notifying the public in the 10-mile Emergency Planning Zone (EPZ) around each nuclear generating plant in the event of a significant accident at the nuclear facility.

After receipt and consideration of all comments, the proposed changes were published in the Federal Register of 19 August, 1980. However, in May 1980 Yankee Atomic Electric Company decided to pursue a course of ascertaining the present capabilities of communities within the Emergency Planning Zone around two of their plants, Yankee Vernon and Yankee Rowe. To implement this course of action, Yankee Atomic employed consultants in communication and public administration from Analytical Systems Engineering Corp (ASEC), Burlington, Mass.

1.2 OBJECTIVES OF THE PROJECT

The objectives of the project were contained in a scope of work submitted by Yankee Atomic in a letter dated 31 March, 1980, namely:

1. Evaluate existing community warning devices which:
 - a. have a capability to produce a distinctive signal
 - b. how many can hear the signal
2. Prepare maps showing impact of existing systems and
 - a. show void areas
 - b. show where no warning devices exist
3. Determine availability of warning devices for void areas and:

- a. identify primary and alternative systems with associated costs
 - b. identify devices for urban and rural populations
 - c. identify recreational areas with seasonal populations together with effective warning devices.
4. Identify communities with and without 24-hour warning capability.
 5. Provide for operation of warning systems in the event of commercial power failure.

1.3 PROJECT METHODOLOGY

The first and most important part of this work was the conduct of a survey in each of the 36 communities lying wholly or partly within the 10 mile Emergency Planning Zone. To accomplish this, forms were designed to gather information on demographics and the major governmental departments pertinent to the survey in each community. These forms addressed the personnel, equipment, standby reserve and other emergency capabilities and facilities primarily available to the police, fire and civil defense organizations in each community involved.

Following this, arrangements were made through the State Civil Defense organization or through direct contact to identify the individuals involved, arrange appropriate meeting times for interviews, inspect facilities available, ascertain appropriateness of available equipment for a notification process and note lack of equipment vital to an effective notification process. This included visits to outside sources of mutual aid and a determination of outside aid in the time frame required by the NRC. Visits and conferences were also held with representatives of alternative communication systems and determinations made of their applicability to the notification process.

It was also considered pertinent to analyze the capability of certain Federal Systems of communications to contribute to the notification process such as NAWAS.

In addition, proposals and costs were solicited in related fields of communications media such as audible alarm devices, telephone and computer networks to automate notification procedures, existing radio warning networks and mobile P.A. systems.

All of this information was considered with regard to the geographic areas involved; terrain, population density, personnel availability, equipment condition and cost effectiveness of new or enhanced warning systems.

The results of this analysis are contained in this report.

2.0 FINDINGS

2.1 EXISTING RESOURCES FOR NOTIFICATION - YANKEE ROWE

Each of the eighteen communities within a ten mile radius of Yankee Rowe were visited. The Police Chief, Fire Chief and Civil Defense Director in each town was interviewed. The information provided by them indicating their existing resources including manpower, equipment, and systems are shown on the survey forms completed for each Town in Appendix A.

2.2 EXISTING RESOURCES FOR NOTIFICATION - YANKEE VERNON

The existing resources in each of the eighteen communities within a ten mile radius of Yankee Vernon are shown on the completed survey forms for each Town in Appendix B.

A compilation of the data for each of the thirty six Towns in both Yankee Row and Yankee Vernon are shown Table 2-1.

2.3 OPTIONS AVAILABLE FOR EXPANDED WARNING CAPABILITY

2.3.1 Siren Systems

The ability to hear a siren, even those of great power (over 100 db), is affected by a number of factors, such as:

- wind velocity and direction
- humidity and air pressure,
- terrain,
- obstructions.

TABLE 2-1
YANKEE VERNON - 10 MILE RADIUS

Municipal- ity State in & Co. DM	Public Officials	Population	Area	Police Radio Freq. Pages	Police Vehicles	Fire Radio Equip.	Fire Vehicles	CD Radio Given	Aut. P.M.	Emerg. Plan Available	Street Maintenance Condition	Notes
Bromfield, MI	Fire Chief 100 Chief CD Director	1000 100 summer collaps	86/17	155.07 19.10 44.02 Main LUL	2 sedans 2 P.A.	33.54	7 1 P.A.	1 station (total)	None	Yes	Good (tested daily)	
Chrysler- Field, MI	Police Chief CD Chief CD Chief Squad Agent Police Rep.	2000 2500 Trans. 2500	40 sq. mi.	1 P.A. VEH. 1 Paper	1 Town 2 Private	Chrs. 2 M. Chrs. 1 Spof. 1 All 33.70mi 1 Paper	Total 0	1 station each area	Portable 1 each area	Yes	Workable limited sample	
Swansea, MI	Pol. Ch. 1440 Ch. CD Dir. Emergency Center	5000 Secondary Lab 1000 Chrysler Parts 10,000	92.5 sq. mi.	155.07 Comm. 156.02 St. Pol. 154.04 Emer. 155.475 St. Pol.	1 Town 12 P.A. 12 P.A. Veh.	33.70 33.54	12 0 P.A. Veh.	1 station	1 Portable	Yes	Good	
Ann Arbor, MI	Pol. Ch. Fire Ch. CD Dir. Emergency Center	15000 1500 1500 Summer 200	55 sq. mi.	155.070 P.A. 121	2 Sedans 2 P.A.	33.54 mi. 33.70 mi.	7 2 P.A.	55.34 800, 155.070 P.M. 154.04 10000 155.250158.	2 Portable 1 Alarm 2 mi.	Yes Not Current	Good	
Richmond, MI	Fire & Pol. Ch. CD Dir.	500 Summer add 200	20/30	155.070	4 personal all radio equipped	154.43 2 P.A.	5	600sqm Station	10 KM open Inoperable	Yes Not prepared	Good	Approx 6 houses (13 people) in 10 MI.
Marshall, MI	Pol. Ch. Fire Ch. CD Dir.	575 Summer 1000 1000 1000 1000 1000 1000	35	155.16 19.22	4 sedans 3 P.A.	33.54 33.70 10 papers	2	Fire Station 1 station F.S. 1 Alarm 7 mi. radio 1000 M	10 KM open Inoperable	Yes	Good	12 homes 1100 people in 10 MI. CD has all phone numbers

POOR ORIGINAL

TABLE 2-1
YANKEE VERNON - 10 MILE RADIUS (CONT.)

Municipality State	Public Officials	Population	Area	Police Radio Freq. Pages	Police Vehicles	Fire Radio Freq. Pages	Fire Vehicles	CD Radio Siren	Aux. Per.	Emerg-Plan Available	Siren Maintenance Condition	Notes
Brattleboro VT	Pol. Ch. Fire Ch. CD Dir.	1000		39.16 39.24 P.A.	1 sedan	33.54 MHz 33.46 MHz 1.2 papers	5	1 siren	2 portable	Yes	Good	
Garfield, VT	Substation Fire Ch. CD Dir.	1475	36	VT St. Pol.	1 personal	33.54 MHz 2 P.A.	5	1 siren	2 portables		Good	
Ballfax, VT				SEE HALIFA (HOME)								
Brattleboro VT	Fire Ch. Pol. Ch. Town Mgr. Dir. Pub. Works	12,000 (15,000 on business day)	30 sq. mi.	39.10 460.200 460.500	5 sedans 5 P.A.	33.54 39.68	12 5 P.A.	CB Radio 2 sirens	Available. 10 RM 2 portable	Yes	Down 1/2 covered	P. M. D. 19 Vehicles all radio equipped 155.87
W. Brattleboro VT	Fire Ch. Pol. Ch. CD Director	600	36 sq. mi.	154.400 154.115 154.010	2 (Para)	154.43 154.01 1 Red Phone	3	No audible devices	2 portables No		None	
Dunstockton VT	CD Dir. Fire Ch. Police Off	100		39.10	1 sedan 1 P.A. 8 Pub. Works on 39.10	154.13	7 6 P.A.	45.57 2 sirens	1 portable Yes	Yes	?	

POOR ORIGINAL

TABLE 2-1
YANKEE VERNON - 10 MILE RADIUS (CONT.)

Municipality State	Public Officials	Population	Area	Police Radio Freq. Range	Police Vehicles	Fire Radio Freq. Range	Fire Vehicles	CD Radio Siren	Aux. Perf.	Emerg. Plan Available	Siren Maintenance Condition	Notes
Vernon, VT	Schools Pol. Ch. Fire Ch. CD Dir.	1,200		150-73 155-97 400-500 400-500	1 and 2 P.A.	11.54 MHz 10 papers	6 1 P.A.		1 fixed 1 portable	Yes	new	
Northfield, NH	CD Dir. Fire Ch.	2,400 1,200-1,500 summer sum. camp 100	40-42 0.7 miles of road	19-16	2 1 personal Radio Equipped	11.54 2 P.A. 1.7 papers	4 3 personal Radio Equipped	1 siren	1 portable	Yes	Fair	
Gall, NH	Pol. Ch. Fire Ch. CD Dir.	1,276 MC. Brennan Sch. 550	14 miles road	19-16 MHz 19-24 MHz	9 personal 2 P.A.	11.54 MHz	4 4 P.A.	1 siren	1 fixed 1 portable	Yes	good	
Greenfield, NH	Fire Ch. CD Dir. Pol. Ch.	10,500	2.1 sq. mi.	156-33 5 AM gen.	7 4 P.A.	11.70 11.54 10-STATE 20 papers	9 5 P.A.	Fire Sta. 1 radio 240 meter CB chs Air (Road 2)	1 Fixed 100% 1 Fixed Fire 3 portable 1 Fixed in Shelburne Mountain	Yes	Fair	dispatcher for TRI-STATE Brookside Fire Sta. has horn but no aux. perf.
Loyden, MA	Fire Ch. Police Ch. Dir.	550 Camp Leon 25 kids summer		19-16	1 personal 2 P.A.	11.54	4 2 P.A.	1 siren (old) covers 5A of town	1 small portable gen.	Yes	best	
Colrain, MA	CD Dir. Fire Ch. Police	1,500	10	19-16	1 Town 3 Private	11.54	4 4 P.A. 1 paper 2 sirens	at Fire Station	Fire station open. 1 portable		good	Approx 100 people in each 10 sq. miles Vernon

POOR ORIGINAL

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TABLE 2-1
YANKEE ROWE - 10 MILE RADIUS (CONT.)

Municipal- ity State M. S. or U.S.	Public Officials	Population	Area	Police Radio Freq. Pages	Police Vehicles	Fire Radio Freq. Pages	Fire Vehicles	CD Radio Stations	Bus. Pat.	Emergency Plan Available	Street Maintenance Condition	Notes
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	1 personal	154-010	1 P.A.	1 station	2 Portable	No	Good	
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	2 personal	154-010 Also Inter- City	1 P.A.	no available stations	None	No	None	no habitation in 10 mile zone
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	1 personal	154-010 (InterCity)	1 P.A.	2 stations	2 Portable	No	Good	
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	1 sedan 61 4 sedans 41 4 sed. drive 1 P.A. (Inter)	154-01 45-46 2 P pages	1 P.A.	1 station (40 yrs old)	2 Portable 4500 M 3750 M	No	Good	
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	1 personal	154-01	1 P.A.	1 station acquired from 5 fire houses	1 Portable	No	Good	411 InterCity
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	1 sedan 1 P.A.	154-01 Also Inter- City	1 P.A.	1 station sub 111	2-4500 1-15 800	Yes	Good	response time 10-15 min InterCity Police
Manchester, NH	Police Chief S. C. Hill	663	40 sq. mi.	400-475 400-500 155-070 Communication Co. InterCity	SEE VERMONT POLICE							

POOR ORIGINAL

TABLE 2-1
YANKEE ROWE - 10 MILE RADIUS (CONT.)

Municipality State	Public Officials	Population	Area	Police Radio Freq. Pagers	Police Vehicles	Fire Radio Freq. Pagers	Fire Vehicles	CD Radio Siren	Emerg. Plan Available	Siren maintenance condition	Status
Worcester, MA	CD Dir., Pol. Chief Asst. Fire Chief	110 comp. - 50 residents		39, 45	4 personal 1 P.A.	33, 34 154, 110 on bank	2 FF 2 town with 2 personal	1 siren	Yes	good	
Dorchester, MA	Pol. Chief Fire Chief CD Dir.	600 80 people in 10 mile zone outside ward		44, 74	1 sedan 1 P.A.	33, 34 9014	1 1 P.A. 2 Fire trucks throughout zone	1 siren	Yes	cannot be heard in affected zone	
Charlottesville, MA	Dir. Chief Fire Chief CD Dir.	1050		44, 74	1 sedan 1 P.A.	33, 34 2 sirens	6 1 P.A.	2 sirens		fair	
Ware, MA	CD Dir. Police Chief Chief	100 50-100 weekends some activity		None	2 Trucks	None	None Sprinkled by Charles Smith	None	None		old of pop- ulation 10 92
Ware, MA	Pol. Chief Fire Chief & CD Dir.	500	36.11 sq. mi.	45, 42	6 personal	154, 110 10 pagers	1 1 P.A.		Yes	None	25% of popu- lation in 10 92
Ware, MA	Police Chief Fire Chief Pol. Chief CD Dir.	800 20,000 weekends	24.71 sq. mi.		Private car C.D. Radio	154, 110	4 1 P.A.	1 siren		Not siren	
Ware, MA	CD Dir. Fire Chief Police Chief	10, 700 80 people within 10 mile zone	23.02 sq. mi.	155, 130 156, 210 154, 740	3 1 P.A.	154, 110 15 pagers	6 1 P.A.	1 siren covers 100% 1 siren 54 zones in 10 92 100%	No	good	

POOR ORIGINAL

TABLE 2-1
YANKEE ROWE - 10 MILE RADIUS (CONT.)

Municipal- ity State # & sq. MI	Public Officials	Population	Area	Police Radio Freq Pages	Police Vehicles	Fire Radio Freq. Pages	Fire Vehicles	CD Radio Siren	Aux. Pat.	Emergency Plan Available	Siren Maintenance Condition	Notes
Proctor, MA	Fire Chief CD Director Police Rep	200 5 summer business		19, 16	4 personal	13, 54	2 P.A.	111 Whistle	None	Yes	Poor	40 homes in Town 22 of those in Warren Bridge
North Adams, MA	CD Director Fire Chief Sgt. Police	17,500 St. College 3,000 Oct 35,000 283 500-2000 Camp - 1000	20, 70	156, 21 154, 31 Aux 100	5 sedans 4 P.A.	153, 95 154, 31	1 P.A. Aux-2-2000 2 portable	1 All Whistles	both Police & Fire Available 1 PM	Yes	Good	
Clarksbury, MA	Fire Chief CD Director	2,000 State Park 47 sites 900 to 10 mile zone		154, 740 154, 310	1 sedan 1 P.A.	154, 110	1 siren	1 siren	None 1 Portable 2000 M	No	Siren approx 10K tone	
Stamford, VT	Salesman & CD Dir. Fire Chief	750	6	None	1 personal	154, 310 6 pages	2 1 P.A.	1 siren	4000 M and 1 portable 1500 M	Yes	10K of tone fair cond.	80% of Town in 10 MI

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On still days, wind velocity virtually zero, sirens which can be heard up to one mile (1.6 Km) can be heard only occasionally in very moderate winds of 12 mph (20 Km/hr) when the hearer is upwind. Maximum hearing distance would be less than one-half mile (0.8 Km). In stronger winds of 30 mph (48 Km/hr) hearing distance is cut to approximately 100 yards (90 meters) upwind.

Heavy air, barometric pressures above 30 inches (66 cm) and with humidity above 50% will affect hearing since sound is rapidly attenuated at approximately 6 db per 100 yards (90 meters).

Uneven terrain such as rolling hills, gullies, bodies of water, trees and brush tend to cut sound level by absorption of sound at approximately 9-12 db per 100 yards (90 meters) depending on amount and depth of the absorbing material.

Other obstructions, such as high buildings, large bodies of earth, etc., have a devastating effect on hearing since sound may not be able to go around large obstructions or is attenuated so as to be lost in background noise. In like manner, personnel inside large or small buildings with doors and windows shut (winter conditions) may not hear sirens, even those located 100 yards (90 meters) away due to a minimum attenuation of 20 db through standard construction materials.

Another factor under all conditions is ambient noise. It has been shown that even under low ambient noise levels (40 db or less) the siren sound arriving at the listener's area must be at least 10 db above ambient in order to attract the listener's attention.

In the years pre-dating WWII, the installation and usage of sirens was invariably to warn local residents of a fire in the area or (in many Eastern communities) to call volunteer fire fighters to a rallying point such as a local fire station. After WWII and during the 50's, multi-toned sirens came into limited use where a continuous tone indicated fire and a warbling tone indicated some sort of civil defense emergency (or threat of nuclear attack). This type of siren and its

usage in CD never received widespread recognition and its understanding by the present population is very limited or even forgotten in most areas of the country. Thus, the most prevalent thought today when a siren is heard by the general population is that there is a fire somewhere.

The acquisition and installation of multi-toned sirens would be a formidable and expensive task. But beyond that would be re-education of the general public to the meaning of the multi-toned siren. This educational process would be an even greater task and far more expensive in time and money. Since the areas around both Yankee Rowe and Yankee Vernon attract thousands of transients each year, the educational process could not be limited to only local residents. In effect, the process should be a national undertaking so that the population in all parts of the country would know that a certain tone from a siren would have the same meaning no matter where it is heard. This is underscored by the fact that the approximately 70 licensed reactors involve tens of millions of persons within the EPZs of this country.

2.3.1.1 Audible Device Coverage - Yankee Vernon Area

All of the 13 communities within the 10 mile zone of Yankee Vernon have an audible device (siren) with one exception (Marlboro).

Most of these sirens are manually operated by the first volunteer to reach the fire department garage or associated building with the TriState Mutual Aid (TSMA) have their sirens remotely operated after a call of fire into Southwest Mutual Aid (SWMA) or TSMA. These statistics are given in Table 2-2.

In some communities, the Fire Chief and other selected officials have "Red Phone" circuits with an additional button using the phone line to activate a relay at the siren location which in turn activates the siren. This feature is also indicated in Table 2-2.

Many of the communities have outlying population centers separated by several miles but still within town boundaries. Some of the larger communities, such as Chesterfield, have outlying population centers named West Chesterfield and

TABLE 2-2
SIRENS/AIR HORNS - YANKEE VERNON AREA

Community	Audible Device Location	Who Controls	Hours Available or Covered	Capability	% Population Reached	Notes
Hinsdale	Fire Station	Fire Department	Manual at Fire Station, Remote by SMMA	Single Tone	Est. less than 20%	Very old
Chesterfield West Chesterfield Spofford	Fire Station Fire Station Fire Station	Fire Department	Manual Each Station, Remote by SMMA	Single Tone	Est. less than 5%	Federal 5 HP Very old Very old
Swansey East Center West	One Each Fire Station	Fire Department	Manual Each Station, Remote by SMMA & Tri-State	Single Tone	Est. less than 20% less than 5% (250) within 10 mile zone	Old - will not cover within 10 mile zone
Winchester Central Fire Station Ashuelot Sub-Station	Fire Station Sub-station	Fire Department	Manual at Station, Remote by SMMA & Tri-State	Single Tone	Est. less than 20%	Old -
Richmond	Fire Station	Fire Department	Manual at Station, Remote by SMMA	Single Tone	Est. less than 20% only 2% population in 10 mile zone	Very old 2% inside 10 mile zone would not hear siren
Marwick	Fire Station	Fire Department	Red Phone can key on	Single Tone	Est. less than 20%	Old - 8% inside 10 mile zone would not hear siren

POOR ORIGINAL

TABLE 2-2
SIRENS/AIR HORNS - YANKEE VERNON AREA (CONT.)

Community	Audible Device Location	Who Controls	Hours Available or Covered	Capability	% Population Reached	Notes
Vernon	Fire Station Old School House	Avenue Answering Service - Brattle boro	24 Hours	Steady Single Tone Wailing Single Tone, Undulating High/Low	Est. 70%	New - School Siren Old, Will be installed Fall 1980.
Northfield	Fire Station	Fire Department	After Red Phone calls, first person to Fire Station	Single Tone	Est. less than 20%	Old - Sterling make
Gill	Fire Station	Fire Department and any Red Phone location. Also Turners Falls Fire Dept.	By Red Phones	Single Tone	Est. 20% popula- tion in 10 mile zone.	Siren good condi- tion
Bernardston	Fire Station (Town Hall)	Fire Station & Streets Store	On Call Red Phones will have activation of siren in future	Single Tone	Est. 20% popula- tion in 10 mile zone	Siren good condition
Greenfield	Fire Station (Air Horn) Brookside (Siren)	Fire Station	24 hours	Single Tone 3 minutes for Fire 2 minutes for incident at Vernon	Covers area within 10 mile zone	Siren fair condition
Leyden	Fire Station	Fire Department	On Call Red Phone and three pyramid system to call fire fighters	Single Tone	Less than 5%	Siren very old.

POOR ORIGINAL

TABLE 2-2
SIRENS/AIR HORNS - YANKEE VERNON AREA (CONT.)

Community	Audible Device Location	Who Controls	Hours Available or Covered	Capability	% Population Reached	Notes
Colrain	Fire Station Streeters Texaco Station	Fire Department Red phone plus tone system for receivers and sirens	On Call	Single Tone	Vernon 10 mile radius would not be heard in East Colrain or Stewartville	Sirens Old Kendall Mfg. Co. has internal fire department.
Guilford	Fire Station	Manuel at Fire Station, remote by Brattleboro Fire Department	On Call	Single Tone	Less than 5% - will not cover West Guilford or Green River	Siren Old.
Halifax	Fire Station	5 Red Phones	On Call	Single Tone	Would not hear in 10 mile zone	Siren Old
Brattleboro	Fire Station (Brattleboro Cen- ter) Substation (West Brattleboro)	Fire Department	24 hours	Single Tone	Est. less than 20%	Siren and Air Horn good
Marlboro	None	-	Answering Service 3 Red Phones	None	None	Red Phone Service POOR
Dummerston West Dummerston	Fire Station Fire Station	SMMA SMMA	On Call	Wailing Single Tone	Est. 20% popula- tion	None of popula- tion inside 10 mile zone can hear either siren - Black Mountain and forested terrain interfere

POOR ORIGINAL

TABLE 2-2
SIRENS/AIR HORNS - YANKEE ROWE AREA (CONT.)

Community	Audible Device Location	Who Controls	Hours Available or Covered	Capability	Population Reached	Notes
Headboro Includes Headboro Village	Fire Station (Headboro Village)	From Station on 4 Red Phones	On Call	Three Single Tones (Fire-Alert-Take Cover)	Est. less than 5%	Actual test shows siren useless
Searsbury	None	-	-	None	None	Wilmington Fire Department covers fires -
Whittingham Village of Jacksonville	Fire Station Building in Jacksonville	Manual Only	On Call	Malling Single Tone	Est. less than 20%	Sirens very old
Wilmington	Center of Wilmington	Red Phones (8)	On Call	Single Tone	Est. less than 20%	Does not cover Scarborough within 10 mile zone
Halifax	See Halifax under Yankee Vernon					Siren will not cover West Hallifax, Whitteville and Barrisville
Colrain	See Yankee Vernon Area					Will not cover Dwight Road, Heath Road or Adamsville
None	Fire Station	Manual Only	On Call	Single Tone	Est. less than 20%	Will not cover North side of Pkhamy Lake or Rose School

POOR ORIGINAL

TABLE 2-2
SIRENS/AIR HORNS - YANKEE ROWE AREA (CONT.)

Community	Audible Device Location	Who Controls	Hours Available or Covered	Capability	Population Reached	Notes
Buckland	Fire Station	Turn on at any of 57 pull alarms in town or from 3 officers' homes	On Call	Air Horn	Est. less than 20%	Cannot be heard inside 10 mile zone. Galow (Charlemont) Road - Approx. 60 people
Charlemont	Town Hall Fire Station	Manually and at 5 pull stations	On Call	Mailing Single Tone	Est. less than 20%	Would not be heard in 5 mile zone
Hawley	No audible devices	-	Fire service covered by Charlemont	None	0%	Charlemont sirens would not be heard in Hawley
Savoy	No audible devices	-	On Call	None	None	125-150 population inside 10 mile zone - Villages of Brian and Harwood
Florida	Route 2 Fire Station, Hoosac Tunnel, Central Shaft Road	Manually from Fire Station	On Call	Single Tone	Est. 20% on mountain tops - valleys poor	Sirens very old
Adams	Fire Station	Fire or Police Station or 54 pull boxes in town	On Call (Covered by Police Department 24 hours)	3 Cone Air Horn	Est. 70% population	Population mainly in Hoosac River Valley. No permanent people within 10 mile zone.

POOR ORIGINAL

TABLE 2-2
SIRENS/AIR HORNS - YANKEE ROWE AREA (CONT.)

Community	Audible Device Location	Who Controls	Hours Available or Covered	Capability	% Population Reached	Notes
Monte	No Audible Devices	-	On Call	None	None	Most of population in Monroe Bridge, Main Road and Davis Road - all within 5 mile zone.
North Adams	School - E. Main Street, Sprague Electric, Market Street, Pump Station, Mass. Avenue	Manually each site or from Fire Station	24 Hours	Single Tone	Est. 70%	90-95% population within 10 mile zone
Clarksbury	Houghton Street	Any Red Fire Phone (7)	On Call	Single Tone	Est. 30%	Siren Old.
Stamford	Fire Station	Any Red Phone (6) or Fire Station	On Call	Single Tone	Est. 50%	Most of population in North Bran, Hoosic River Valley.
Heath	Fire Station	Manually at Station and Red Phones (4)	On Call	Single Tone	Est. less than 20%	Siren very old - will not cover Papoose Lake or North Heath in 10 mile zone

POOR ORIGINAL

Spoffard which have their own fire station with appropriate vehicle and siren. In contrast, Northfield has one fire station with siren but no siren coverage for outlying population centers such as East and West Northfield.

All sirens are made by reputable manufacturers such as Federal or Sterling but most are very old ranging up to 30 years or more. One exception is a very new Federal "Thunderbolt" siren at Vernon. Siren maintenance is almost non-existent in all communities excepting the largest such as Brattleboro and Greenfield and spare parts are virtually unknown. Even the large communities usually have available only a spare diaphragm with no spare choppers, drive motors or plumbing.

With the exception of the siren at Vernon (Thunderbolt has three distinct signals available) all sirens are of the single tone variety. Present usage of these sirens is primarily to alert volunteer firemen if within hearing distance. Any other type of emergency, such as an environmental accident, would have to be spread throughout the community by telephone or in some cases by public address systems on police cruisers or fire vehicles.

In most instances where sirens are not operated remotely by SWMA or TSMA, sirens are activated manually at the siren location. In those communities having "Red Phone" installations, some cannot trigger sirens. The two large communities in the area have 24 hour coverage (Brattleboro and Greenfield) and Vernon has a 24 hour capability through an answering service out of Brattleboro. Thus, availability of an audible device in each community, (excepting Marlboro which has none) is generally on a 24 hour basis, but startup of the device will vary by community from less than one minute (if Red Phone activation is available) to over 10 minutes where a volunteer must reach the siren location to activate. All of this time would count against the 15 minute notification time.

2.3.1.2 Audible Alarm Coverage by Geographic Area - Yankee Vernon

Warwick - See Mt. Grace Quadrangle N4237.5-W7215/7.5. Warwick siren is outside the 10 mile zone 1-1/4 miles and would not be heard by the population inside

the 10 mile zone. The two populated areas are along Mountain Brook Road and Old Winchester Road. It is estimated 22% (127 people) of Warwick are within the 10 mile zone. There is a third secondary road in the zone with a few habitations.

Northfield - See Northfield Quadrangle N4237.5-W7222.5/7.5. This community is several miles in length on the East bank of the Connecticut River. 96% (2304 people) are estimated to be within the 10 and 5 mile zones. Areas not covered by siren will be South of Maple Ave., North of the golf course, East Northfield, West Northfield and all of the area North of Wanamaker Lake.

Gill - See Bernardston Quadrangle N4237.5-W7230/7.5. Only the Northern portion of the community of Gill is within the 10 mile zone. However, it is estimated 75% of the population (957 people) are in this zone. Areas of concern outside siren coverage are Center Street West of Mason Hill, Bascon Road, Lampblack Road, South edge of Hales Crossing, the pumping stations and Doyle and Boyle Roads to the North.

Bernardston - See Bernardston Quadrangle N4237.5-W7230/7.5. The whole of Bernardston lies within the 5 and 10 mile zone with most of the population in the Fall River Valley between Interstate 91 and U.S. 5. However, siren coverage is only in Bernardston Center. There is no coverage East of Interstate 91 or the Turners Falls area in the Southeast. Also, all areas north of the old cemetery, including North Bernardston, are uncovered.

Greenfield - See Bernardston Quadrangle N4237.5-W7230/7.5. A very small area is included in the 10 mile zone and only Upper Barton Road is of concern. It is estimated less than 5% (925 people) are in this area.

Colrain - See Colrain Quadrangle N4237.5-W7237.5/7.5. The community of Colrain itself lies outside the 10 mile zone of Yankee Vernon and due to terrain, the siren would not be heard anywhere in the 10 mile zone. The small communities of East Colrain and Stewartville and the New County Road, Franklin Hill Road, West Leydon Road and Green River Road all lie within the zone. It is estimated 7% (105 people) live inside the zone.

Leyden - See Colrain Quadrangle N4237.5-W7237.5/7.5. Virtually all of Leyden's population lies within the 10 mile zone, (98% or 539 people). Due to terrain and population spread, less than 5% are covered by the present siren. Much of the population outside coverage are along Old County Road, West Leyden Road, River Road and West Leydon community.

Richmond - See Keene Quadrangle N4245-W7215/15. Only a very small part of Richmond lies within the 10 mile zone containing only 3% (15 people) of the population. Due primarily to the Franconia Mountain Range, this area is beyond siren coverage. There are no population centers but several roads are involved; Winchester/Richmond, Scott Mountain, Rabbit Hollow and two trails.

Swansey - See Keene Quadrangle N4245-W7215/15. Only 15% (750 people) are estimated to be in the 10 mile zone. This includes the community of Westport, Dartmouth College Road, the West Swansey/Highland Meadows road and unimproved roads. None of this area is covered by siren.

Chesterfield - See Keene Quadrangle N4245-W7215/15. A major portion of Chesterfield lies within the 10 mile zone. This includes the communities of West Chesterfield, Chesterfield and most of Spoffard. The Spoffard Lake summer home community is just outside the 10 mile zone. Due to terrain conditions none of the present sirens can be heard on the roads surrounding these communities and it is estimated that 85% (1955 people) are outside siren coverage.

Winchester - See Keen Quadrangle N4245-W7215/15. The whole of Winchester lies within the 5 and 10 mile zone. However, the Winchester and Ashuelot sirens are both located in the Ashuelot River Valley and have a very short range. It is estimated that less than 20% (700 people) are covered by present sirens. Areas not covered include populated areas along Hale Pond Road, and all roads going South toward Northfield.

Hinsdale - See Keene Quadrangle N4245-W7215/15 and Brattleboro Quadrangle N4245-W7230/15. Hinsdale is 100% within the 5 mile zone. It is estimated that less than 20% (740 people) are within siren coverage. Areas of population outside coverage include Dartmouth College Road, Kilburn Road as far North as Porter Hill, Cannon Hill Road and all of North Hinsdale, including State Route 119.

Vernon - See Brattleboro Quadrangle N4245-W7230/15. All of Vernon is within the 5 mile zone. The new "Thunderbolt" siren is not intended to cover South Vernon nor can it cover the North Vernon Calvin Coolidge Drive Road due to terrain interference. Likewise, North Vernon is not covered. It is estimated 30% of the population (385 people) is not presently covered by siren.

Guilford - See Brattleboro Quadrangle N4245-W7230/15. All of Guilford is within the 5 and 10 mile zones. Due to terrain and population spread, it is estimated only 5% (72 people) will hear the present siren. Population centers such as West Guilford, Green River, Weatherhead Hollow, Wilkens Hill Road, Governors Mountain Road, Pulpit Mountain Road and most of Calvin Coolidge Memorial Drive are out of coverage.

Halifax - See Brattleboro Quadrangle N4245-W7230/15. The portion of Halifax within the Yankee Vernon 10 mile zone contains no population centers but has a number of roads with several habitations. There are no audible warning devices in this area. The roads are Prospect Hill Road, Jolly Mountain Road, Green River Road, Hinesburg Brook Road and a number of unimproved roads from Deer Part and Reid Hollow. It is estimated 5% (23 people) of Halifax population live in the area.

Brattleboro - See Brattleboro Quadrangle N4245-W7230/15. 95% of Brattleboro township is in the 5 and 10 mile zone. Sirens are located in downtown Brattleboro and in West Brattleboro but coverage is estimated to be less than 20% of the population (2400 people). There are heavy concentrations throughout the 5 miles of Molly Stark Trail (State Route 9) and Ames Hill Road. Other heavy population centers are around the country club and Pleasant Valley Reservoir and along several roads leading South off Ames Hill into Guilford.

Marlboro - See Brattleboro Quadrangle N4245-W7230/15. Marlboro has no audible warning devices. Population centers are Marlboro Center, Ames Hill and Marlboro College. It is estimated only 5% (30 people) of the population is within the 10 mile zone. The chief area of interest will be Ames Hill and surrounding roads.

Dummerston - See Brattleboro Quadrangle N4245-W7230/15. Approximately 40% of Dummerston land area is within the 10 mile zone. The major population centers are outside this zone. However, two miles of State Route 30 are in the zone, Wickapee Hill Road and two miles of Calvin Coolidge Memorial Drive with local roads all with population clusters. It is estimated 50% of the population is within the zone.

2.3.1.3 Audible Alarm Coverage by Geographic Area - Yankee Rowe

Colrain - See Heath Quadrangle N4237.5-W7245/7.5 and Colrain Quadrangle N4237.5-W7237.5/7.5. That portion of Colrain lying within the Yankee Rowe 10 mile zone contains no large population centers nor any audible alarm devices. There are a number of roads in the area with habitations, i.e., Heath Road, Dwight Road, Adamsville Road, Hillman Road and Wilson Hill Road. Approximately 7% (105 people) of the population is in the area.

Charlemont - See Heath Quadrangle N4237.5-W7245/7.5, Ashfield Quadrangle N4230-W7245/7.5 and Rowe Quadrangle N4237.5-W7252.5/7.5. Most of Charlemont is in the 10 mile zone including East Charlemont. The Northwest corner is in the five mile zone. Siren coverage is less than 20% (210 people) of the population. Population is scattered (all along the Northside of the Deerfield River and particularly along the Rowe/Zoar Road.

Heath - See Heath Quadrangle N4237.5-W7245/7.5. All of Heath lies in the 5 and 10 mile zones. Of the three population centers, Dell, North Heath and Heath, only Heath is covered by siren. This coverage is less than 20% (97 people) of the population. The rest of the population is along various local roads both North and South.

Buckland - See Ashfield Quadrangle N4230-W7245/7.5. Only a small portion of Buckland is within the 10 mile zone. There is a very small population along Charlemont Road, Shepard Road and Avery Road estimated to be 2% (60 people). None of this area is covered by siren.

Rowe - See Rowe Quadrangle N4237.5-W7252.5/7.5. Estimated less than 20% (60 people) covered by siren. Entire community within 5 mile zone. Almost all the population scattered throughout area on light duty or unimproved roads.

Florida - See Rowe Quadrangle N4237.5-W7252.5/7.5 and North Adams Quadrangle N4237.5-W7300/7.5. All of Florida within 5 and 10 mile zones. Three sirens in community will cover 10% (80 people) on mountain tops. Valleys not covered. Most of population on top or sides of mountains. Terrain very mountainous with heavy forests. Population scattered throughout area.

Savoy - See Rowe Quadrangle N4237.5-W7252.5, Plainfield Quadrangle N4230-W7252.5/7.5 and Windsor Quadrangle N4230-W7300/7.5. Savoy has no audible alarm devices. Approximately 40% of Savoy land area is within the 10 mile zone. This area is thinly populated (5% or 25 people). The entire area is heavily forested with few roads, mostly unimproved.

Adams - See Windsor Quadrangle N4230-W7300/7.5 and North Adams Quadrangle N4237.5-W7300/7.5. That portion of Adams within the 10 mile zone is approximately 3.25 square miles in the Northeast quadrant of the corporate boundaries. This area has one unimproved road (Old Florida) and has part of the 345 KV Western Massachusetts grid along the Northern slope. There are no permanent inhabitants.

North Adams - See North Adams Quadrangle N4237.5-W7300/7.5. 90% of the land area of North Adams is within the 10 mile zone. It is estimated that 95% of the population (15,750 people) are in this area. Two sirens (Main Street and Marshall Street) overlap to some extent in the town center. The pumping station siren is three miles West of town center and of no use for environmental emergencies. Night usage of the downtown sirens would be of little use in environmental emergencies. An additional siren Northwest of Route 2 near the reservoir could be effective for the bedroom communities. Another siren could be effective in the area of Drury High School.

Clarksburg - See North Adams Quadrangle N4237.5-W7300/7.5. At least 90% of the population is within the 10 mile area (1300+ people). It is estimated that 30% (600 people) can hear the siren. There are heavy population centers along River Road, Middle Road, East Road and at Briggsville.

Monroe - See North Adams Quadrangle N4237.5-W7300/7.5 and Rowe Quadrangle N4237.5-W7252.5/7.5. Monroe lies entirely within the 5 mile zone. Monroe has no audible alarm devices. The population center is Monroe Bridge, one mile from the power plant. The rest of the population is scattered throughout the community, mainly along Davis Road and Main Road.

Stamford - See Stamford Quadrangle N4245-W7300/7.5. That portion of Stamford within the 10 mile zone also contains 90% (675 people) of the population. The siren may cover 50% of those living in the Hoosic River Valley (North Branch). Due to terrain those along Roaring Brook Road and Route 100 up the valley cannot be covered.

Readsboro - See Stamford Quadrangle N4245-W7300/7.5 and Wilmington Quadrangle N4245-W7245/15. Readsboro is entirely within the 5 and 10 mile zones. The siren is spotted on the map for location only - actual tests have shown the siren to be useless. It is considered to cover less than 5% (33 people) of the population. Other population centers are Readsboro Falls and Heartwellville. There is scattered population around North Hill.

Searsburg - See Wilmington Quadrangle N4245-W7245/15. Only a very small portion in the Southeast quadrant lies within the 10 mile zone. There are two roads in the area (South Road and Sleepy Hollow Road) and a portion of the community of Medburyville. It is estimated that 10% of Searsburg population is included in this area (8 people). Searsburg has no warning devices.

Whitingham - See Wilmington Quadrangle N4245-W7245/15. Whitingham lies entirely within the 5 and 10 mile zones. Each of the two population centers have a

siren (Whitingham and Jacksonville) but both are very old and largely ineffective. Estimated population coverage is maximum 20% (240 people). There are many habitations along Routes 100 and 112 and scattered inhabitants around the several bodies of water in the town limits.

Wilmington - See Wilmington Quadrangle N4245-W7245/15. The 10 mile zone extends to the upper reaches of the Harriman reservoir and through the center of the Wilmington community. This zone also covers Routes 3 and most of 9 where the bulk of the Wilmington population is found. Siren coverage is estimated at less than 20% (360 people).

Halifax - See Wilmington Quadrangle N4245-W7245/15. Approximately 25 square miles of Halifax community lies inside the 10 mile zone of Yankee Rowe. This area contains approximately 50% of Halifax population including West Halifax. The rest of the population is scattered throughout the area mainly on local roads.

2.3.1.4 Conclusions

The case for sirens in either Yankee Vernon or Yankee Rowe is very dubious. They are mitigated against for three major reasons:

- Widely scattered population,
- Terrain,
- Cost effectiveness.

Widely Scattered Population - we estimate there are 54,973 people in the 628.3 square miles of the two 10 mile zones around Yankee Vernon and Yankee Rowe. This averages out to 87 people per square mile. This includes the heavily populated centers of North Adams and Brattleboro. If those population centers are excluded from the calculation, then there are only 47 people per square miles or nearly 13 acres between each person in the square mile. Clearly both these areas are very sparsely settled.

Terrain - the terrain in general is a typical Appalachian setting - heavily forested with hills and valleys ranging from over 1,000 feet to over 2,400 feet in

altitude. There are only two divided highway primary roads in the two areas, Routes 2 and 91, with Route 2 having more than 22 miles of highway in the 10 mile zone of Yankee Rowe. All other roads are 2-lane light duty roads or unimproved roads with many switchbacks and "S" curves. Winter conditions will aggravate or make nearly impossible the use of power amplifier equipped vehicles as a warning notification to the public.

Cost Effectiveness - In view of the above facts, it is difficult to assess the cost effectiveness of sirens for the two 10 mile zones since terrain alone would make it necessary to install many more sirens than if the areas were flat and without masking obstructions. Also, considering the distance between habitations indicates that a very large number of sirens would be necessary. Another consideration is availability of power, remote control equipment and installation costs. Prices quoted by a leading manufacturer of sirens indicates that even the smaller and least expensive siren will run well over \$1,500 plus installation costs which would have to include getting power to the siren location. Clearly the expense would not be cost effective for the number of people and the square miles involved.

However, we have identified a few areas where high power sirens would appear to be effective. These are relatively flat areas having considerably denser populations and relatively low ambient noise.

One such area is North Adams. We visualize three additional sirens located as follows:

1. Just North of Route 2 in the vicinity of the reservoir,
2. Between radio tower WMNB and the Hoosic River,
3. North of the Melann Technical School.

All sirens would be high power (125 db) and mounted 40-50 feet above ground either on poles or platforms. They should be dual toned for either fire or civil emergency. An educational program should be implemented by the local CD director as to the purpose of the dual tones. Control should be remote to the North Adams Fire Department.

Another area is in Brattleboro. Two sirens could be used here to supplement the siren near the center of town. One should be located near the high school at the South edge of town and a second in the Retreat Meadows area on the North. Both sirens should be dual toned and controlled by the Brattleboro Fire Department. The Brattleboro CD Director should institute an educational program toward understanding the purpose of the dual tones.

Another candidate for sirens could be Northfield. This community is several miles in length and for the most part is situated within the Connecticut River Valley just South of Vernon. Recommendations are for a dual tone high power siren in the vicinity (just East) of the Route 10 bridge across the river and another on Winchester Avenue near the consolidated school. Also, the present old Sterling siren at the fire station should be replaced with a dual tone high power siren. These sirens should be under control of the fire department and the "Red Phone" system should be expanded so that any "Red Phone" can activate the sirens. Since the dual tone feature can mean either "fire" or "civil emergency", the "Red Phone" should be able to start either tone.

An example of the direct measurement of cost effectiveness is given for the community of Florida. This community does have possibilities for effective siren alert by careful study of population distribution and terrain. Florida has three antique sirens located presently at:

- Siren #1 - East Entrance Hoosic Tunnel and Whitcomb Hill Road,
- Siren #2 - Route 2 Fire Station West of Olsen Road,
- Siren #3 - Shaft and Strykers Road.

Our recommendation would be the following:

- A. Leave siren #1 as is but remote it to BCMA for activation.
- B. Replace and relocate siren #2 on a tower or pole at the corner of Olsen Road, Route 2 and Tilda Hill Road and remote to BCMA for activation.

- C. Replace and relocate siren #3 on a pole (40-50 feet) at the corner of Shaft and Stryker Roads and remote to BCMA for activation.
- D. New siren on pole (40-50 feet) at corner Route 2 and Moore Road just West of Whitcomb Summit and remote to BCMA for activation.

Replacement and new sirens should be "Thunderbolt" model by Federal. BCMA should be able to activate "Fire" tone or "Civil Emergency" tone as needed. It is estimated these sirens will cover 95% (760 people) in Florida.

Cost:

$$3 \times \$8500 = \$25,500 \text{ or}$$

$$\$25,500/760 = \$33.55/\text{person}$$

In order to meet a requirement for standby power for each siren, it is necessary to mount motor generators at the base of each siren (weather protection required). These generators will be 10 KW, 240 V, 3 ph at an approximate cost of \$2,000 each. Thus the total cost will be (plus \$2000 for installation):

$$\$33,500/760 = \$44.07/\text{person}.$$

For siren usage having a dual purpose, i.e., Fire and Civil Emergency, this can be considered cost effective.

An example of cost not effective, we studied the community of Savoy. Approximately 14 square miles lies within the 10 mile zone. In this 10 mile zone are the following habitations:

- Black Brook Road - 3 houses
- Bernard Road - 3 houses
- Burnett Road - 6 houses
- Tannery Road - 1 house
- Adams Road - 1 house
- Harwood Road - 4 houses
- Brier Road - 3 houses
- New State Road - 3 houses
- Old Florida Road - Lookout tower Savoy Forest

All houses are from 1/4 to 1 mile apart and streets (roads) are isolated by hilly terrain in such manner that a minimum of 10 sirens would be needed to cover all habitations. Estimating 3 people per household, we have 75 people or 6% of the population in the 10 mile zone. Assuming a somewhat smaller powered siren will suffice, our costs will be:

10 x \$2,500 = \$25,000 plus installation costs
of \$10,000 including remoting to BCMA
\$35,000/75 people = \$466.66/person.

Clearly, this amount of money for so few people cannot be considered cost effective.

2.3.2 Telephone Systems

The thirty six towns within a ten mile radius of both Yankee plants in Rowe MA. and Vernon, VT. have their telephone service provided by the New England Telephone and Telegraph Company.

In an effort to learn if the facilities of the Telephone Company could be used in whole or in part in a notification system, a meeting was arranged and held in Northampton, MA on August 6, 1980.

Two representatives of NET&T, a representative of VT, NH, and MA, Civil Defense agencies and two ASEC representatives were in attendance.

Three proposals were presented to NET&T Co. for their engineering group to review and determine if the existing telephone system was capable of supporting any one of the three as a notification system.

A second meeting was held in White River Junction Vermont on August 28, 1980. This meeting was requested by the VT Civil Defense Agency. Again, the same representatives attended. A general discussion ensued about the capability of the New England Tel and Tel. No decisions were made.

As of the date of this report, we have not received a response from the telephone company as to whether any of the three systems proposed could be used in a notification system.

2.3.3 NOAA Weather Network as an Alerting and Information Media

2.3.3.1 NOAA Weather Radio

NOAA Weather Radio is a Service of the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce. It provides continuous broadcasts of the latest weather information directly from National Weather Service offices. Taped weather messages are repeated every four to six minutes and are routinely revised every one to three hours, or more frequently if needed. Most of the stations operate 24 hours daily.

The broadcasts are tailored to weather information needs of people within the receiving area. For example, stations along the sea coasts and Great Lakes provide specialized weather information for boaters, fishermen, and others engaged in marine activities, as well as general weather information.

During severe weather, National Weather Service forecasters can interrupt the routine weather broadcasts and substitute special warning messages. The forecasters can also activate specially designed warning receivers. Such receivers either sound an alarm indicating that an emergency exists, alerting the listener to turn the receiver up to an audible volume; or, when operated in a muted mode, are automatically turned on so that the warning message is heard. "Warning alarm" receivers are especially valuable for schools, hospitals, public-safety agencies, and news media offices.

Under a January 1975, White House policy statement, NOAA Weather Radio was designated the sole Government-operated radio system to provide direct warnings into private homes for both natural disasters and nuclear attack. This capability is to supplement warnings by sirens and by commercial radio and TV.

NOAA Weather Radio broadcasts are made on one of three high-band FM frequencies - 162.40, 162.475, or 162.55 megahertz (MHz). The 162.475 MHz frequency is used only in special cases where required to avoid channel interference. These frequencies are not found on the average home radio now in use. However, a number of radio manufacturers offer special weather radios to operate on these frequencies, with or without the emergency warning alarm. Also, there are now many radios on the market which offer standard AM/FM frequencies plus the so-called "weather band" as an added feature.

NOAA Weather Radio broadcasts can usually be heard as far as 40 miles from the antenna site, sometimes more. The effective range depends on many factors, particularly the height of the broadcasting antenna, terrain, quality of the receiver, and type of receiving antenna. As a general rule, listeners close to or perhaps beyond the 40 mile range should have a good quality receiver system if they expect reliable reception. Also, an outside antenna may be required in these fringe areas.

2.3.3.2 Present Coverage

Yankee Vernon Area

NOAA weather radio stations heard most frequently in this area are Brattleboro (Mt. Ascutney) 162.475 MHz, Concord, NH, 162.4 MHz and in the southern area, Worcester, 162.55 MHz.

Yankee Rowe Area

At higher elevations, Albany, 162.55 MHz, and in southern sections, Hartford, Conn., 162.475 MHz.

Actual coverage was determined in both areas by means of a Bearcat Alert weather radio (sensitivity .6uv for 20 db signal to noise ratio) in mobile (battery) mode. From this it was determined that the Mt. Ascutney transmitter was reliable throughout the Connecticut River Valley but unreliable for communities to the East and West but within the 10 mile zone. Also to the South but within the 10 mile zone, reception was spotty.

NOTE: Mt. Ascutney transmitter is presently off-the-air and is being relocated. When again operating, power will be increased to 400 watts which may eliminate some of the void areas. However, this must be determined by additional measurements outside the Connecticut River Valley in areas where early reception was not clear.

In the Yankee Rowe areas, both Albany and Hartford could be received only above the 2000 foot altitude level. In addition, Hartford could be received only in the southern portions of the 10 mile zone of Yankee Rowe.

The 162 MHz weather band has a tendency to be line-of-sight, i.e., higher elevations can easily receive the transmitter signals whereas the valleys have difficulty.

2.3.3.3 Weather Radio Receiver Availability

In order to consider the NOAA weather network as a viable possibility as an alerting system meeting the requirements of NRC, it was necessary to determine two parameters with reasonable certainty. These are availability and price.

Also, certain criteria were decided to be mandatory for any model receiver recommended as an alerting mechanism. These are:

1. The receiver must remain mute but be triggered "on" by any one of the five alert tones transmitted by the NOAA station.
2. The receiver must be capable of being tuned to any one of the three NOAA frequencies (162.55, 162.4 and 162.475 MHz).
3. The receiver must normally operate on 120 VAC but be capable of switching to internal batteries if commercial power fails.

The results of our survey are given in Table 2-3.

2.3.3.4 NOAA Weather Band Receivers

As noted in the above survey, many manufacturers have stopped production of weather band receivers for various reasons but mainly because of competitive positions of a few high volume manufacturers and market saturation.

However, some manufacturers have large inventories, particularly of the commercial grade receivers, and they are easily obtainable. In the commercial category either the Regency Model C1WA or Radio Shack Model 12-154 appear to be the most cost effect and the most easily operated by a non-technical person.

Of the institutional grade receivers, either the Plectron or Gorman-Redlick weather receivers are considered the best.

2.3.3.5 Weather Receiver Acquisition

There are a number of ways in which individual households can acquire weather receivers.

1. Outright household purchase.
2. Volume purchase by power company and distribution to all households.

TABLE 2-3
RECEIVER MANUFACTURERS OF NOAA WEATHER RADIOS

Manufacturer and Address	Models Available	Cost	Notes
Federal Sign & Signal Blue Island, IL	No longer makes weather radios	-	Manufactures sirens, voice pagers, radio controlled remote activators.
Scientific Radio Systems Rochester, NY	Institutional grade weather channel receiver	Lots of 25 - \$441.00	Manufacturers all of NOAA transmitters. Only receiver available is a very high quality.
Motorola Communications Washington, D.C.	Several receivers available but multi-band	\$3,000 and up	These are Transceivers for mobile marine operation and are multi-band with weather band.
Regency Electronics Indianapolis, IN	Model CIWA	List at \$60.00 100 - \$26.97 ea. 1,000 - \$25.62 ea. over 1,000 - \$24.82 ea.	-
General Electric Lynchburg, VA	-	-	No longer make weather radios.
Weatheralert Chicago, IL	TA25	100 - \$33.60 ea. 5,000 - \$21.60 ea.	-
Lafayette Radio Syosset, NY	-	-	Out of business.
Windso Electronics Melville, NY	2110	\$8.00 1,000 or more - \$7.50	Battery operated only - must be manually turned on to operate - cannot be triggered on by NOAA Transmitter.

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SECURITY SYSTEMS DIVISION

RSEC

TABLE 2-3
 RECEIVER MANUFACTURERS OF NOAA WEATHER RADIOS (CONT.)

Manufacturer and Address	Models Available	Cost	Notes
Electra Cumberland, IN	Bearcat Electra Alert	100 - \$45.50 ea. 5,000 - \$40.00 ea.	Company will not deal direct on any sale, must go through local supplier.
Radio Shack Fort Worth, TX	12-154	List - \$39.95 100 and up - \$25.00 ea.	-
RCA Mobile Communications Arlington, VA	Various	\$2,000 and up	Manufactures only marine transceivers some of which cover the weather band.
Midland International North Kansas City, MO	-	-	Out of business.
Benmar Division Santa Ana, CA	-	-	No longer manufacture weather radios.
Plectron Corporation Averton, NE	-	100 - \$190.00 ea.	Manufacture only an institutional grade weather radio.
Heath Company Benton Harbor, MI	Radio kit	Kits start at \$70.00	Manufacture a kit with weather band included among other bands. Assembled radio would double the price.
Pearce-Simpson Miami, FL	-	-	Company out of business.

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SECURITY SYSTEMS DIVISION

RSEC

TABLE 2-3
RECEIVER MANUFACTURERS OF NOAA WEATHER RADIOS (CONT.)

Manufacturer and Address	Models Available	Cost	Notes
Viking Instruments Chester, CT	-	-	No longer manufacture.
Cobra Electronics San Antonio, TX	-	-	Out of business.
Sony Corporation Long Island, NY	-	-	No longer manufacture.
Sunair Electronics Fort Lauderdale, FL	-	-	No longer manufacture.
Kendall Technology Miami, FL	2025	100 - \$31.00 ea. 1,000 - \$29.45 ea. 5,000 - \$29.45 ea.	Can be triggered by NOAA transmitter. Does not have back-up batteries. Has all NOAA frequencies.
Gorman-Redlick Athens, OH	-	\$285.00 ea.	Manufacture institutional weather radio.

TABLE 2-3
RECEIVER MANUFACTURERS OF NOAA WEATHER RADIOS (CONT.)

Manufacturer and Address	Models Available	Cost	Notes
Watkins-Johnson Gaithersburg, MD	-	-	No longer manufacture weather radios.
Wells-Gardner Chicago, IL	-	-	No longer manufacture.
Collins Radio Richardson, TX	Marine Transceivers	\$3,500 and up	Manufacture marine radios with weather band
Singer Company New York, NY	-	-	No longer in business.
Hi-Gain Electronics Lincoln, NE	-	-	No longer manufacture.
Hitachi Sales Lyndhurst, NJ	-	-	Weather radios not made in Japan.
Sanyo Electric Compton, CA	-	-	No longer manufacture.
Panorama Radio New York, NY	-	-	No longer manufacture.
Sterling Hi-Fidelity Long Island City, NY	-	-	Do not manufacture.
Sonar Radio Hollywood, FL	-	Lots of 100 - \$189.00 ea.	Make a small pocket radio carrying only one frequency. Cannot be triggered on by NOAA transmitter. Battery operation only.

3. Volume purchase by power company and distribution to all households with power company billing in small increments along with monthly electric bills.

Outright purchase by the household would be the most desirable from the power company's viewpoint, since there is no question of ownership and no expense to the power company. However, this method would require a selling job on the part of the power company, local CD Director or other public official to convince the householder of the need for the radio. This might take the form of convincing the householder that the radio would disseminate routine weather as well as all kinds of environmental emergencies. In other words, a general purpose alerting system.

Getting 100% acceptance is very doubtful.

The power company could buy weather receivers in volume at much reduced prices over list and distribute to all households in the 10 mile radius around the atomic electric plant. Aside from the cost factor, there are a number of variables to be considered.

1. Would the householder keep them plugged into a receptacle and ready for use?
2. What if the householder moves out of the area?
3. Should "summer cottages" have these receivers?
4. Who has maintenance responsibility?

Some control of the receivers could be exercised by the power company by permanently installing and wiring the instrument into the house. This would effectively answer three of the above items including "summer cottages" since most "summer cottage" occupants turn off the main breaker at the end of the season.

Maintenance of solid state devices such as these receivers is a minimal problem. It would be to the advantage of the power company to keep a few spare receivers available for replacement in case of breakdown of individual units. This would also give the power company some insight as to the usage of the unit by the individual householder.

Even better control could be exercised if the power company would buy receivers in quantity, permanently wire each receiver into each household, and bill for the unit and installation at a nominal sum over a period of several months with the electric bill. The householder would then have reason to protect and use the instrument. Should the householder move out of the area in some stipulated length of time, a graduated reimbursement would be in order.

2.3.4 Emergency Broadcast System (EBS)

2.3.4.1 Emergency Broadcast System (EBS)

The Emergency Broadcast System (EBS) was established in 1964 to provide the President of the United States with an expeditious method of communicating with the American public in the event of war, threat of war, or grave national crisis. It replaced the CONELRAD (Control of Electromagnetic Radiation) system with which many Americans are familiar.

The original concept of the EBS has been expanded so that it can also be used during day-to-day emergencies at the State and local levels to provide the means for prompt, reliable receipt and release of life- and-property-saving warning as well as emergency information. Examples of day-to-day emergencies are: tornadoes, hurricanes, tsunamis, flash floods, blizzards, earthquakes, wide-spread power failures, fires, industrial, transportation and nuclear accidents involving hazardous materials and toxic gases, and civil disorders.

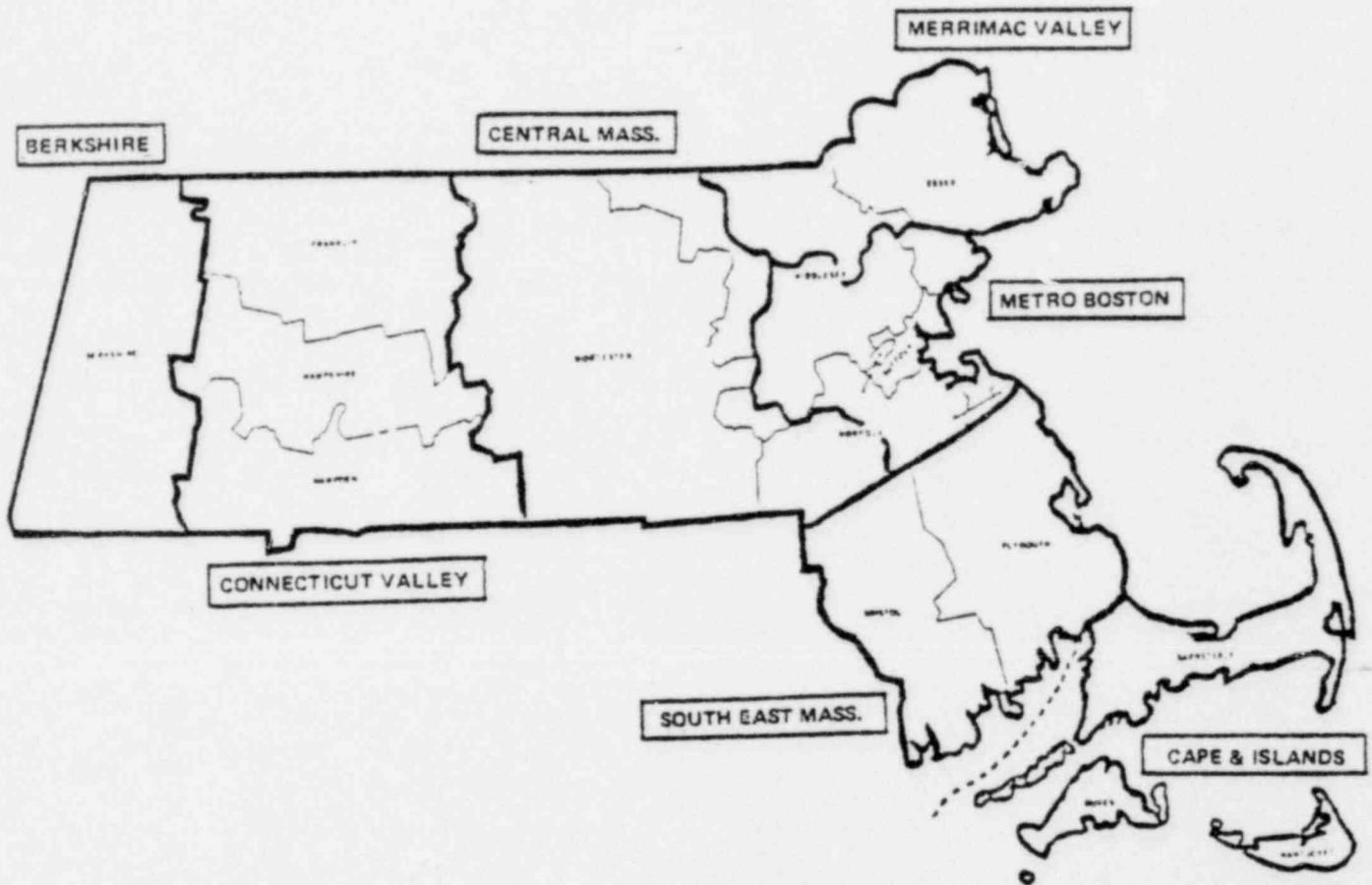
Activation of the National-level EBS is initiated by the President. He does this by directing the White House Communications Duty Officer to contact one of two government origination points, either the North American Air Defense Command (NORAD) or the Federal Emergency Management Agency (FEMA), will release the Emergency Action Notification to control points of the radio and TV networks, participating communications common carriers, and AP and UPI via a dedicated teletypewriter network. Authentication is provided at the control points by pre-selected code words.

Upon receipt of the activation message and its authentication, participating communications common carriers reconfigure the radio and TV networks to provide a common program source to all affiliates. In addition, independent stations with facilities in place are interconnected with the reconfigured network. AP, UPI and radio and television networks send the Emergency Action message to all subscribers and affiliates. Broadcast stations will use the two-tone Attention Signal on their assigned broadcast frequency to alert other broadcast stations and the public to stand by for a message from the President.

To activate the EBS at the State level, a request may be directed to an Originating Primary Relay Station (usually an FM station located near the State Capital) by the Governor, his designated representative, the National Weather Service, the State Civil Defense or Emergency Services Office, or other designated State authority. For instance, the Governor of Massachusetts can activate any or all of the seven operational areas within the State as shown in Figure 2-1. He would ordinarily do this through an FM network as shown in Figure 2-2.

At the local level, a request for activation may be directed to the common Program Control Station (CPCS-1), by the National Weather Service, local Civil Defense, local government, or public safety officials. Within the operational areas of Massachusetts, the Connecticut Valley area is of interest since both Yankee Vernon and Yankee Rowe are in this area. Within this area the primary activation stations are WHYM at Springfield and WFCR at Amherst. WHYN would in turn trigger WHAI in Greenfield. This is shown in Figure 2-3. Also in the Yankee Rowe area, WQRB, Pittsfield would trigger WMNB-FM in North Adams which covers Yankee Row communities. This is shown in Figure 2-4 for the Berkshire operational area.

In either case, communications facilities developed for use in contacting and providing emergency program material may include any of the following: telephone, remote pickup units, NOAA Weather Wire Service or NOAA Weather Radio, police and fire communications, amateur and citizens band radio. Station management at the Originating Primary Relay Station and/or the Common Program



	CPCS-1	PRI RELAY
BERKSHIRE	WBEC/WORB(FM)	WORB(FM)
CONNECTICUT VALLEY	WFCR(FM)	WFCR(FM)
CENTRAL MASS.	WSRS(FM)	CSRS(FM)
MERRIMAC VALLEY	WCCM/WCGY(FM)	WCGY(FM)
METRO BOSTON	WROR(FM)	WROR(FM)
SOUTH EAST MASS.	WPLM AM/FM	WPLM-FM
CAPE AND ISLANDS	WOCB AM/FM	WOCB-FM

Figure 2-1 Massachusetts Operational Areas

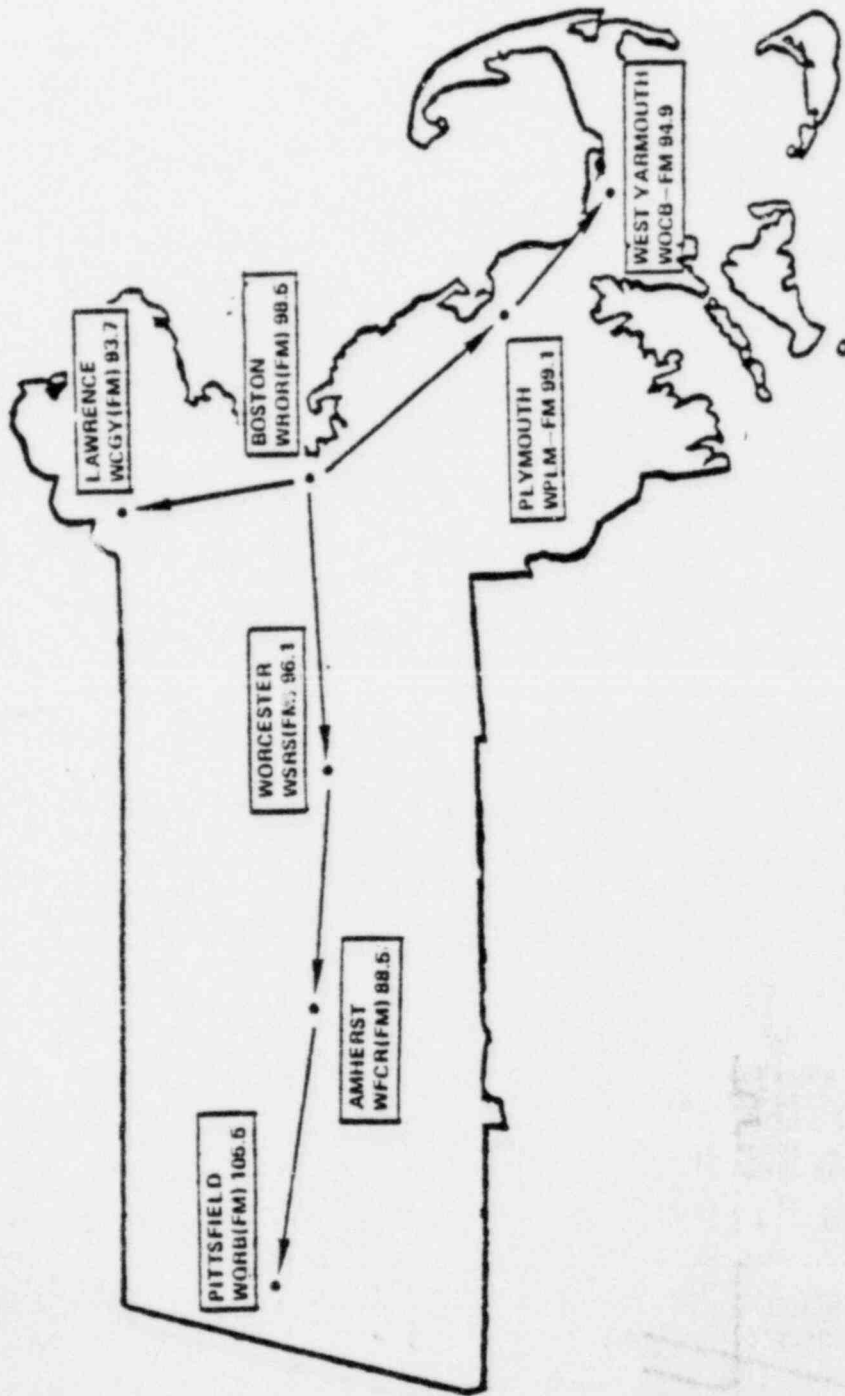
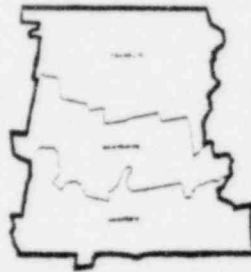
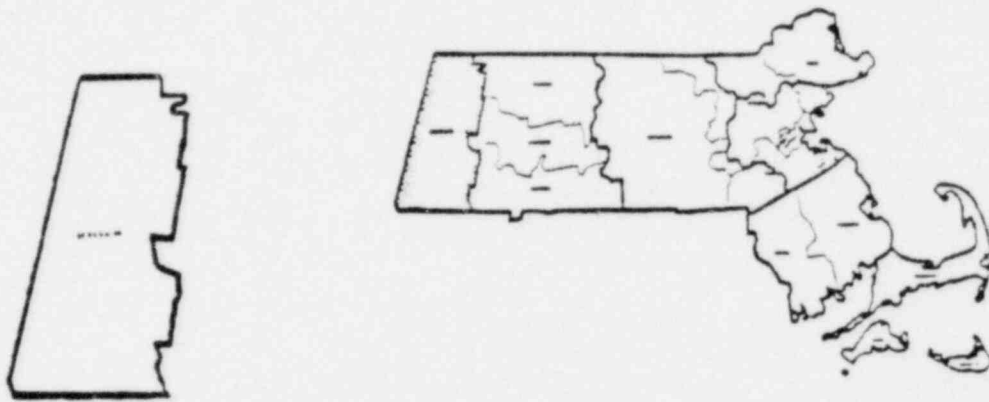


Figure 2-2 Massachusetts State Network (FM)



<u>STATION FACILITIES</u>	<u>FREQUENCY EBS DESIGNATION</u>	<u>STATION FACILITIES</u>	<u>FREQUENCY EBS DESIGNATION</u>
WTTT Amherst 5 kW DA-D	1430 PRIMARY	WHAI-FM Greenfield 1 kW -240 ft	98.1 PRIMARY
WACE Chicopee 5 kW D	730 PRIMARY	WCCH(FM) Holyoke 0.01 kW	89.5 PRIMARY
WIXY East Longmeadow 5 kW D	1600 PRIMARY	WHMP(FM) Northampton 1 kW 300 ft	99.1 PRIMARY
WHAI Greenfield 0.25/1 kW U	1240 PRIMARY	WMCH(FM) South Hadley 0.01 kW	91.5 PRIMARY
WREB Holyoke 0.5 kW D	930 PRIMARY	WAIC(FM) Springfield 0.13 kW 66 ft	91.9 PRIMARY
HMP Northampton 0.25/1 kW U	1400 PRIMARY	WAQY(FM) Springfield 27 kW 650 ft	102.1 PRIMARY
WCAT Orange 1 kW D CPCS-2	1390 PRIMARY	WHYN(FM) Springfield 10 kW 940 ft	93.1 PRI
WHYN Springfield 1/5 kW DA-2U	560 PRI CPCS-2	WMAS(FM) Springfield 22 kW 170 ft	94.7 PRIMARY
WMAS Springfield 0.25/1 kW U	1450 PRIMARY	WSCB(FM) Springfield 0.01 kW	89.9 PRIMARY
WSPR Springfield 1/5 kW DA-2 U	1270 PRIMARY	WTCC(FM) Springfield 4 kW 115 ft	90.7 PRIMARY
WARE Ware 1 kW DA-N U	1250 PRIMARY	WTRZ(FM) Springfield 0.01 kW 80 ft	89.1 PRIMARY
WLDM Westfield 1 kW D	1570 PRIMARY	WSKB(FM) Westfield 0.01 kW 130 ft	91.5 NON-EBS
WNUS West Springfield 0.25/1 kW DA-D U	1490 PRIMARY	WGBY-TV Springfield 776 kW 1000 ft	CH 7 PRIMARY
WAMB(FM) Amherst 0.15 kW 720 ft	89.3 PRIMARY	WHYN-TV Springfield 3680 kW 1000 ft	CH 40 PRIMARY
WPCR(FM) AMHERST 35 kW 720 ft	88.5 PRI RELAY PRI CPCS-1	WWLP (TV) Springfield 933 kW 750 ft	CH 22 PRIMARY
WMCA(FM) Amherst 1 kW 27 ft	91.1 PRIMARY		

Figure 2-3 Detailed Massachusetts EBS Operational Plan Connecticut Valley Operational Area



<u>STATION FACILITIES</u>	<u>EBS FREQUENCY DESIGNATION</u>	<u>STATION FACILITIES</u>	<u>EBS FREQUENCY DESIGNATION</u>
WSBS Great Barrington 0.25 kW D	860 PRIMARY	WJJW(FM) North Adams 0.01 kW	89.5 PRIMARY
WMNB North Adams 0.25/1 kW U	1230 PRIMARY	WMNB-FM North Adams 1 kW 480 ft	100.1 PRIMARY
<u>WBEC</u> PITTSFIELD 1 kW DA-N U	1420 PRI CPCS-1	WBRK-FM Pittsfield 3 kW 145 ft	101.7 PRIMARY
WBRK Pittsfield 0.25/1 kW U	1340 PRIMARY	WUPE-FM Pittsfield 0.71 kW 560 ft	95.9 PRIMARY
WUPE Pittsfield 1 kW D	1110 PRIMARY	<u>WORB(FM)</u> PITTSFIELD 0.63 kW 590 ft	105.5 PRI RELAY <u>PRI CPCS-1</u>
		WTBR-FM Pittsfield 0.01 kW	89.5 PRIMARY
		WBSL(FM) Sheffield 0.01 kW 50 ft	91.7 PRIMARY
		WCWL(FM) Stockbridge 1.45 kW 4 ft	91.3 PRIMARY
		WCFM(FM) Williamstown 0.44 kW 750 ft	91.9 PRIMARY
WCDC(TV) Adams 116 kW 2100 ft	CH 19 PRIMARY		

Figure 2-4 Detailed Massachusetts EBS Operational Plan Berkshire Operational Area

Control Station authenticates the validity of all requests to activate the system. Other broadcast stations may activate the EBS on an individual basis as needed. This is important since station management is responsible for all program material broadcast to the public.

The Originating Primary Relay Station at the State level, or the Common Program Control Station at the local level, will take the following steps to activate the EBS:

1. Take action to broadcast emergency programming which may include recording emergency message for use later.
2. Broadcast an initial statement.
3. Transmit the two-tone Attention signal.
4. Broadcast the emergency announcement.

All other participating stations, alerted via their off-the-air monitoring of the two-tone signal, repeat the above procedures.

2.3.4.2 EBS Coverage in Yankee Vernon Area

2.3.4.2.1 There are two Common Program Control Stations (CPCS) covering the Yankee Vernon area. WHAI (1240 AM and 98.3 FM) in Greenfield and WTSA/WMMJ-FM (1450 AM and 96.7 FM) in Brattleboro. Between these stations, each having a range of 25 miles, all of the 10 mile zone around Yankee Vernon is covered. Each station tests its EBS equipment once a week. The Originating Primary Relay Station for Greenfield is WHYN in Holyoke and for Brattleboro is WCFR-FM in Springfield, VT. National emergencies are triggered by CBS in New York.

2.3.4.3 EBS Coverage in Yankee Rowe Area

2.3.4.3.1 WMNB-AM (1230) and WMNB-FM(100.1) cover the 10 mile zone and Yankee Rowe from North Adams. WMNB is an Originating Primary Relay Station for this region. It tests EBS once a week.

2.3.4.4 Problems with EBS

2.3.4.4.1 All of these stations operate at a maximum 1000 watts during daytime and reduce to 250 watts during evening hours. All stations shut down both AM and FM transmitters at midnight and reactivate during the early morning hours - usually 5 to 6 A.M. (Power reduction on AM only - FM remains at full power during evening hours).

2.3.4.4.2 WTSA/WMMJ-FM operates EBS under a local EBS Operational Plan which covers Windham County, VT only, even though its coverage on both AM and FM extends into New Hampshire and Massachusetts. The Operational Plan thus restricts itself to only those designated officials given in the plan to activation of EBS. These officials are: National Weather Service in Burlington, VT, Civil Defense in Brattleboro and Montpelier, VT, and State Police in Brattleboro and Rockingham, VT. Additionally, the OPRS that triggers EBS on at WTSA is WCFR-FM, also in Vermont at Springfield. This is a serious defect insofar as Yankee Vernon is concerned in utilizing EBS as an alert media in the event of an incident at Yankee Vernon. Coordination between three-State Civil Defense or even between three-State Police can cut heavily into the 15 minute warning time to the public.

2.3.4.4.3 A similar problem exists at WHAI in Greenfield, MA. This station is triggered on by WHYN in Holyoke which is clear across the State from Yankee Vernon.

2.3.4.4.4 All of these stations program the bulk of their broadcast material to the local audience. Thus advertising, news, etc., will be patterned for the local audience in the immediate vicinity of the station. Also, the operating frequency may be well known to the local audience, but unknown to travelers passing through the area, if they even have a car radio turned on, will more than likely be listening to a clear channel station such as WBZ in Boston which can be heard for several hundred miles. Thus, the use of EBS as a warning to travelers for a local emergency is very doubtful.

2.3.4.4.5 Another problem exists in the Yankee Rowe area where WMNB (AM and FM) covers all the 10 mile zone around Yankee Rowe. In an interview with station management, they were not aware of any authority authorized to activate EBS for their station in North Adams. This station also covers that portion of the 10 mile zone in Vermont and is the only EBS equipped station in the area. This would pose another two-State coordination problem either between Civil Defense or State Police, again during the 15 minute warning time.

2.3.4.4.6 The most serious drawback to EBS is that EBS cannot trigger receivers on if they are turned off. This is even more serious during night time hours if the station is off the air. Even though a station can be on the air in a few minutes if an operator is close by, the possibility of local people having a radio on during these hours is virtually zero.

2.3.5 Police Communications

2.3.5.1 General

Communications within police jurisdictions in the Yankee areas can generally be categorized as follows:

1. State Police/State Police
2. State Police/Municipal
3. County Police/Municipal
4. Municipal only.

Contact with external sources concerning events which may effect the general public is usually done through State Police channels, and through those channels down to the municipality or municipalities which will be concerned, i.e., an event at Yankee Vernon or Rowe. We will therefore address only the first two channels given above.

2.3.5.2 Capabilities

The pertinent capabilities of the police departments in the communities in the Yankee area are given in Table 2-4. Several facts come to light in this table which require further comment.

In the Yankee Vernon area only 27% (5 communities) have 24 hour coverage. In the Rowe area this drops to 11% (2 communities). Those communities having police "on call" (no fixed hours) are 55% (10) in the Vernon area and 61% (11) in the Rowe area. In each area there are 7 facilities which are assigned for police work (police stations) where one could expect monitoring receivers could be covering police networks. 13 communities in the Vernon area have mobile vehicles dedicated to police work and 14 are P.A. equipped (one is a personal vehicle). 7 communities in the Rowe area have vehicles dedicated to police work and 9 are P.A. equipped (2 are personal vehicles).

2.3.5.3 Police Radio Frequency Monitoring

Figures 2-5 and 2-6 show the police frequencies each community monitors (or has duplex capability) in a rough geographic layout around each Yankee area. These frequencies are identified also in Table 2-4. There is a pattern apparent in this coverage which shows a great number of communities in Massachusetts and New Hampshire monitor county police circuits for some reason. For instance, 12 of the Massachusetts communities monitor either Berkshire or Franklin County networks and six New Hampshire communities monitor either Cheshire or Bennington County networks. However, this monitoring would be sporadic at best due to the "part time" and "on call" situations in most of the communities. In addition, county police are traditionally custodians of prisoners, jail operators, etc., and include some other civil duties. They are not usually involved in civic emergencies, excepting jail breaks, which are more the duty of state or municipal police. This report will not further consider county networks as a means of emergency warning.

Of greater interest are those frequencies used between State Police and municipalities. These channels are shown in Table 2-3, but are broken out

TABLE 2-4
POLICE COMMUNICATIONS CAPABILITIES - YANKEE VERNON AREA

COMMUNITY	POPULATION	V/T POLICE	V/T POLICE	HOURS OF OPERATION	RADIO STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	SIMPLEX/DUPLEX	MOBILE P, A, AVAILABLE	EMERGENCY STATION	NOTES ON PRIORITIES
Windsor, NH	3700	4	12	24 Hours	Police Station	2 Sedans	155.07 19.10 44.02	Duplex Duplex Duplex	2 Sedans	No	Cheshire Co. Police Brattleboro Police N. H. State Police
Chesapeake, NH	2100	2	0	24 Hours	Keene Police Transmission	1 Sedan 2 Stu. Wagon	155.07 156.09 155.475 154.43	Duplex Duplex Duplex Simplex	1 Sedan	No	Cheshire County Police N. H. State Police (Cb H) N. H. State Police (car to car) Southwest Mutual
Swanzey, NH	5000	0	23	On Call	Police Chief Home	1 Sedan 12 Personal	155.07 156.09 155.64 155.475	Duplex Duplex Duplex Duplex	1 Sedan 1 Personal	No	Cheshire County Police N. H. State Police (Cb H) Cheshire County Police (car to car)
Manchester, NH	3500	2	10	Daily 7a-2a Weeks 7a-3a	Police Station	2 Sedans	155.07	Duplex	2 Sedans	No	Cheshire County Police
Richmond, NH	500	0	4	On Call	500A Keene	4 Personal	155.07	Duplex	None	No	Cheshire County Police
Warwick, NH	575	0	4	On Call	Chief's Home	1 Sedan	19.16	Duplex	1 Sedan	No	Franklin County Police
Vernon, VT	1206	2	3	0800-0200	Sheriff's Office Brattleboro	1 Sedan	158.71 155.97 460.29 460.50	Duplex Duplex Duplex Duplex	1 Sedan	No	Vernon Police (Freq 1) Vernon Police (Freq 2) Vermont State Police Vermont State Police (car to car)
Northfield, NH	2400	1	10	8-10 hours Daily	Police Dept	1 Sedan 1 Pick-up	19.16	Duplex	1 Sedan	No	Franklin County Police

POOR ORIGINAL

TABLE 2-4
POLICE COMMUNICATIONS CAPABILITIES - YANKEE VERNON AREA (CONT.)

COMMUNITY	POPULATION	V/T POLICE	P/T POLICE	HOURS OF OPERATION	RADIO STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	DUPLIX/ P. A. AVAILABLE	MOBILE P. A. AVAILABLE	EMERGENCY STATION	NOTES ON FREQUENCIES
Gall, MA	1,276	0	0	On Call	101 Mount- ain Road, Gall	9 Sedans (Personal)	33.19 33.34		2 Sedans	No	Gall Police Dept. Franklin County Police
Greenfield, MA	1800	1	0	24 Hours	Town Hall & Greenfield Dispatcher Service	1 Sedan	39.16 39.24	Duplex Duplex	1 Sedan	No	Franklin County Police usually used for jail business but used as car to station in Beth- ardston.
Greenfield, MA	10,500	34	4	24 Hours	Police Station	7 Sedans	156.33 39.16	Duplex Duplex	4 Sedans	Yes	Greenfield Police Franklin County Police
Leyden, MA	550	0	3	On Call	Chief's Home	1 Personal	35.16	Duplex	2 Personal	No	Franklin County Police
Colrain, MA	1500	0	6	On Call	Chief's Home	1 Sedan 1 Private	39.16	Duplex	None	No	Franklin County Police
Colford, VT	4435	0	1	On Call	None	1 Personal	St. Polle- radio in personal vehicle 460.475 460.500		None	No	Vermont State Police provide services.
Bullfax, VT	458	1	0	On Call	State Police	1 Sedan (Personal)	460.475 460.500	Duplex Duplex	1 Sedan (Personal)	No	Vermont State Police Vermont State Police (car to car)
Brattleboro, VT	12,000	26	15	24 Hours	Police Dept	5 Sedans	39.10 460.20	Duplex Duplex	5 Sedans	Yes	Brattleboro Police Vermont State Police

POOR ORIGINAL

TABLE 2-4
POLICE COMMUNICATIONS CAPABILITIES - YANKEE VERNON AREA (CONT.)

COMMUNITY	POPULATION	F/T POLICE	F/T POLICE	HOURS OF OPERATION	RADIO STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	SIMPLEX/DUPLEX	MOBILE P. A. AVAILABLE	EMERGENCY STATION NUMBER	NOTES ON FREQUENCIES
Maxboro, VT	600										
Dunbar, VT	1100	0	5	On Call	Tom's Garage East-Mont Road	1 Sedan	19, 10	Duplex	1 Sedan	80	Brattleboro Police

POOR ORIGINAL

POOR ORIGINAL

TABLE 2-4
POLICE COMMUNICATIONS CAPABILITIES - YANKEE ROWE AREA (CONT.)

COMMUNITY	POPULATION	F/T POLICE	P/T POLICE	HOURS OF OPERATION	RADIO STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	MOBILE PHONES/ P, A, AVAILABLE	EMERGENCY STATION	NOTES ON PREFERENCES
Windsboro, VT	663	1	0	On Call	Bennington County System	1 Pickup Truck (Personal)	400.50 155.00 466.175	1 in Truck	No	Vermont State Police (car to call) Bennington County Sheriff
Scarsburg, VT	80	0	2	On Call	None	Personal	None	None	None	
Whitingham, VT	1200	0	1 + 2 State Troopers at home	3 pm-5 am at home	State Police	Personal	State Police in Troopers sedans 400.475 460.500	None	Yes - at Constable's home	Vermont State Police (Troop D Brattleboro) Vermont State Police (car to call)
Wilmington, VT	1800	4	2	8 am - 3 am	Police Dept	2 Sedans	400.475 45.48	2 Sedans	Yes	Vermont State Police (Troop D Brattleboro) Wilmington Highway Department
Halifax, VT	458			SEE HALIFAX IN YANKEE VERMONT AREA						
Acworth, MA	484	0	4	On Call	Chief's home	1 Sedan	39.16	1 Sedan	No	Franklin County Police
Colrain, MA	1500			SEE COLRAIN UNDER YANKEE VERMONT AREA						
Rowe, MA	340	0	5	On Call	Town Hall	1 Jeep (Personal)	39.16	1 Jeep	No	Franklin County Police

POOR ORIGINAL

TABLE 2-4
POLICE COMMUNICATIONS CAPABILITIES - YANKEE ROWE AREA (CONT.)

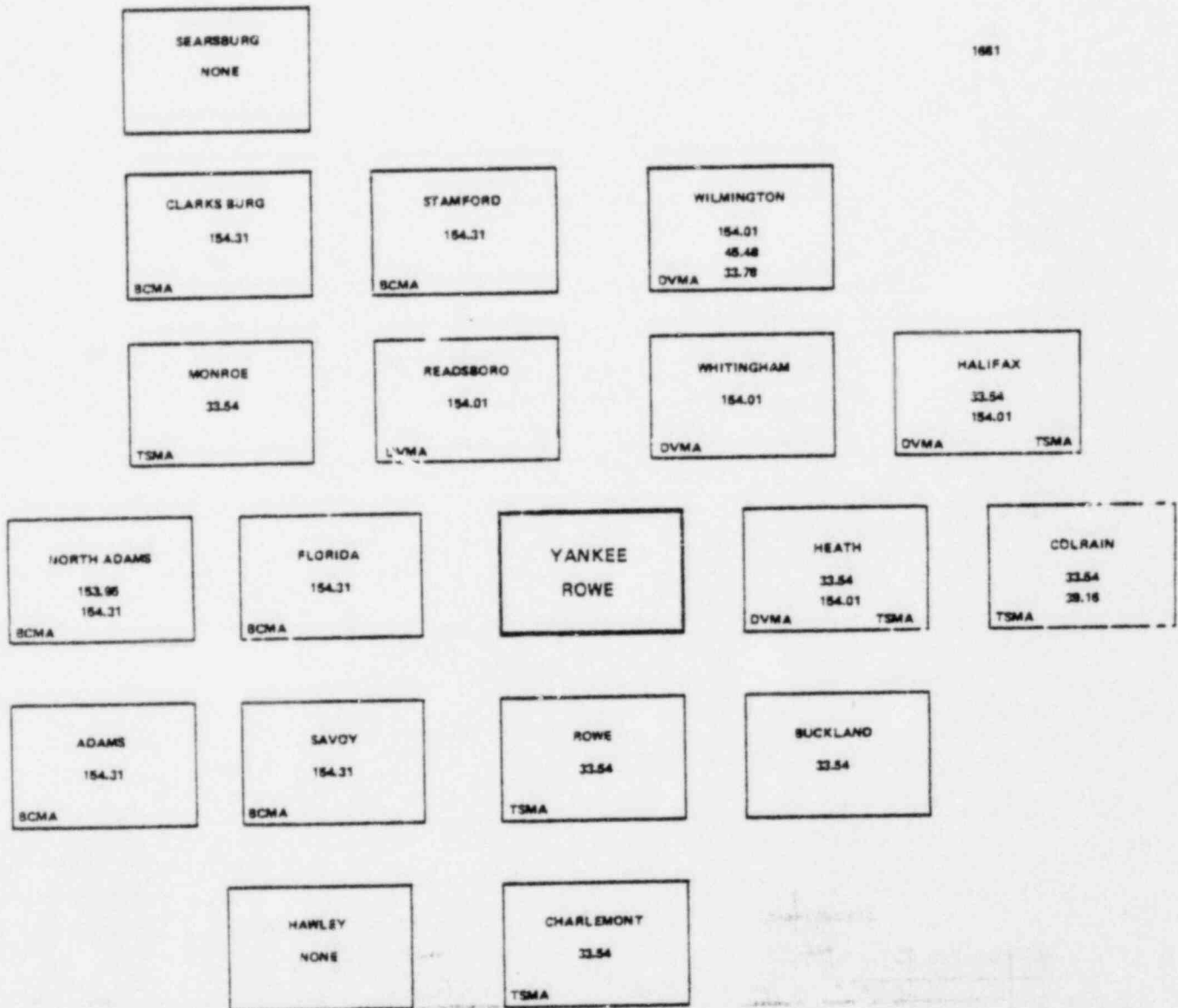
COMMUNITY	POPULATION	F/T POLICE	F/T POLICE	HOURS OF OPERATION	RADIO STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	DUPLIX/ P. A. AVAILABLE	EMERGENCY STATION NUMBER	NOTES (w/ FREQUENCIES)
Buckland, MA	3000	1	4	8 Hours Daily and On Call	Town Office (State St.)	1 Sedan	44.74	Duplex	No	Mass. State Police (old freq.)
Charlton, MA	1050	0	12	On Call	Main Street	1 Sedan	44.74	Duplex	No	Mass. State Police (old freq.) Franklin County Police
Bawley, MA	300	0	2	On Call	Home	2 Trucks (Personal)	None	None	No	Savoy Public Works (used by Police)
Savoy, MA	500	0	6	On Call	Adams Road	Personal	45.42	None	No	
Florham, MA	800	0	12	On Call	Chief's Home	Personal	C.B. used in cars		No	
Adams, MA	10,700	24	0	24 Hours	Police Dept (Park St.)	2 Sedans 1 Wagon	115.13 156.21 154.74	Duplex Duplex Duplex	No	Adams Police Adams Police Berkshire County Police
North, MA	200	0	4	On Call	Officer's Home	Personal	39.16	Duplex	No	Franklin County Police
North Adams, MA	17,500	35	3	24 Hours	Summer St.	5 Sedans	156.21 154.74	Duplex Duplex	Yes	Adams Police Berkshire County Police

POOR ORIGINAL

TABLE 2-4
POLICE COMMUNICATIONS CAPABILITIES - YANKEE ROWE AREA (CONT.)

COMMUNITY	POPULATION	F/T POLICE	P/T POLICE	HOURS OF OPERATION	RADIO STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	SIMPLEX/DUPLEX	MOBILE P, A, AVAILABLE	EMERGENCY STATION TUNER	NOTES ON FREQUENCIES
Clarkston, MA	2000	0	3	On Call	None	1 Sedan	154.74	Duplex	1 Sedan	NO	Berkshire County Police
Stamford, VT	750	0	1	On Call	None	Personal	None		None	NO	

POOR ORIGINAL



BCMA-- 154.31 MHZ--PITTSFIELD, MASS.
 DVMA-- 154.01 MHZ--WILMINGTON, VT.
 TSMA-- 33.54MHZ--GREENFIELD, MASS.

Figure 2-5 Fire Frequencies - Yankee Rowe Area

POOR ORIGINAL

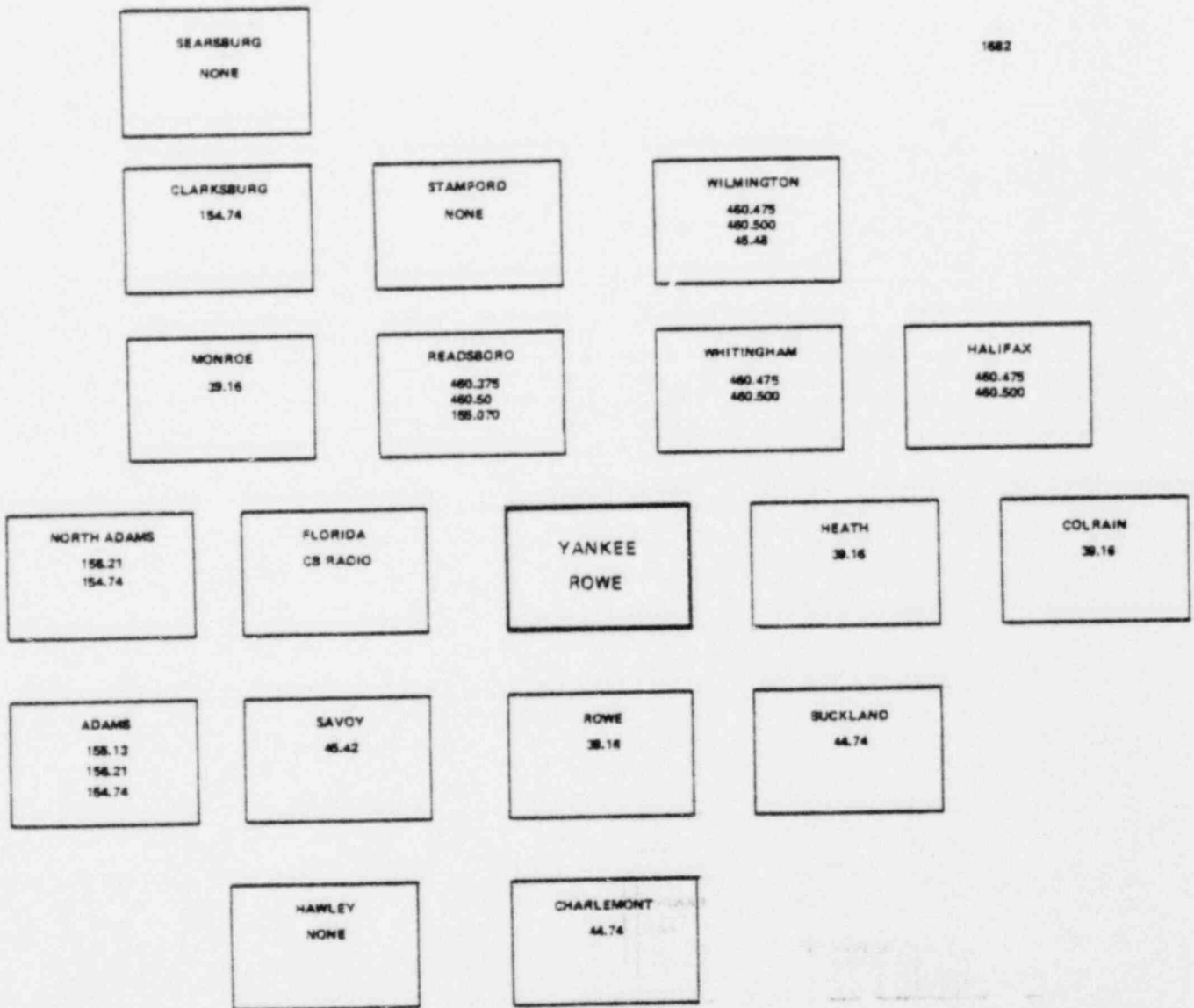


Figure 2-6 Police Frequencies - Yankee Rowe Area

separately by frequency, community and State for clarity in Figures 2-7 and 2-8. It is readily apparent from the figures that none of the Massachusetts communities monitor State Police frequencies, only three of the five New Hampshire communities monitor State Police and six of the eleven Vermont communities monitor State Police. It would seem a simple matter to equip each community lacking State Police monitors, but the lack of 24 hour coverage in most communities does not make this a viable emergency warning network.

2.3.5.4 Mobile P.A. Capability

Of great importance, once word has reached a community of a warning of possible trouble, is dissemination within the community. In those few cases where power is not available or handicapped people are involved, then a mobile paging system can be valuable. In the case of wholesale power failure, the mobile paging equipment on a police vehicle may be the only available source of notification within a community.

All communities in the Yankee Vernon area have at least one vehicle equipped with mobile P.A., excepting three. In Yankee Rowe area, six communities have no mobile P.A. system. This really means, in the case of catastrophic power failure, that more than 3400 people in the Vernon area and nearly 2000 people in the Rowe area might not get timely warning if no other notification means is available.

2.3.6 Fire Communication Systems

Communication systems in the Yankee Vernon and Rowe areas are centered around four mutual aid systems:

1. Southwest Mutual Aid at Keene, NH (SWMA),
2. Tri-State Mutual Aid at Greenfield, MA (TSMA),
3. Berkshire County Mutual Aid at Pittsfield, MA (BCMA),
4. Deerfield Valley Mutual Aid at Wilmington, VT (DVMA).

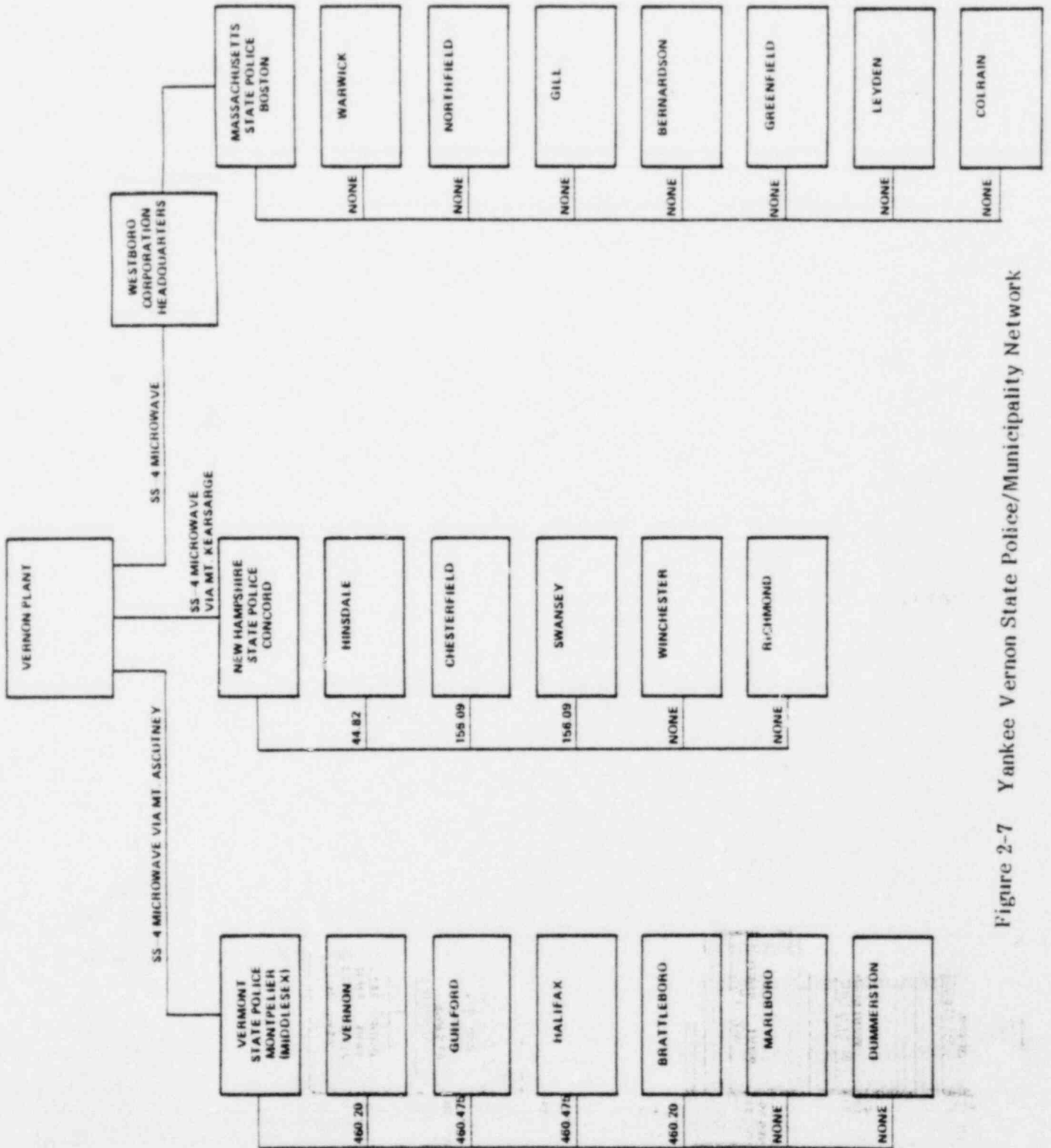


Figure 2-7 Yankee Vernon State Police/Municipality Network

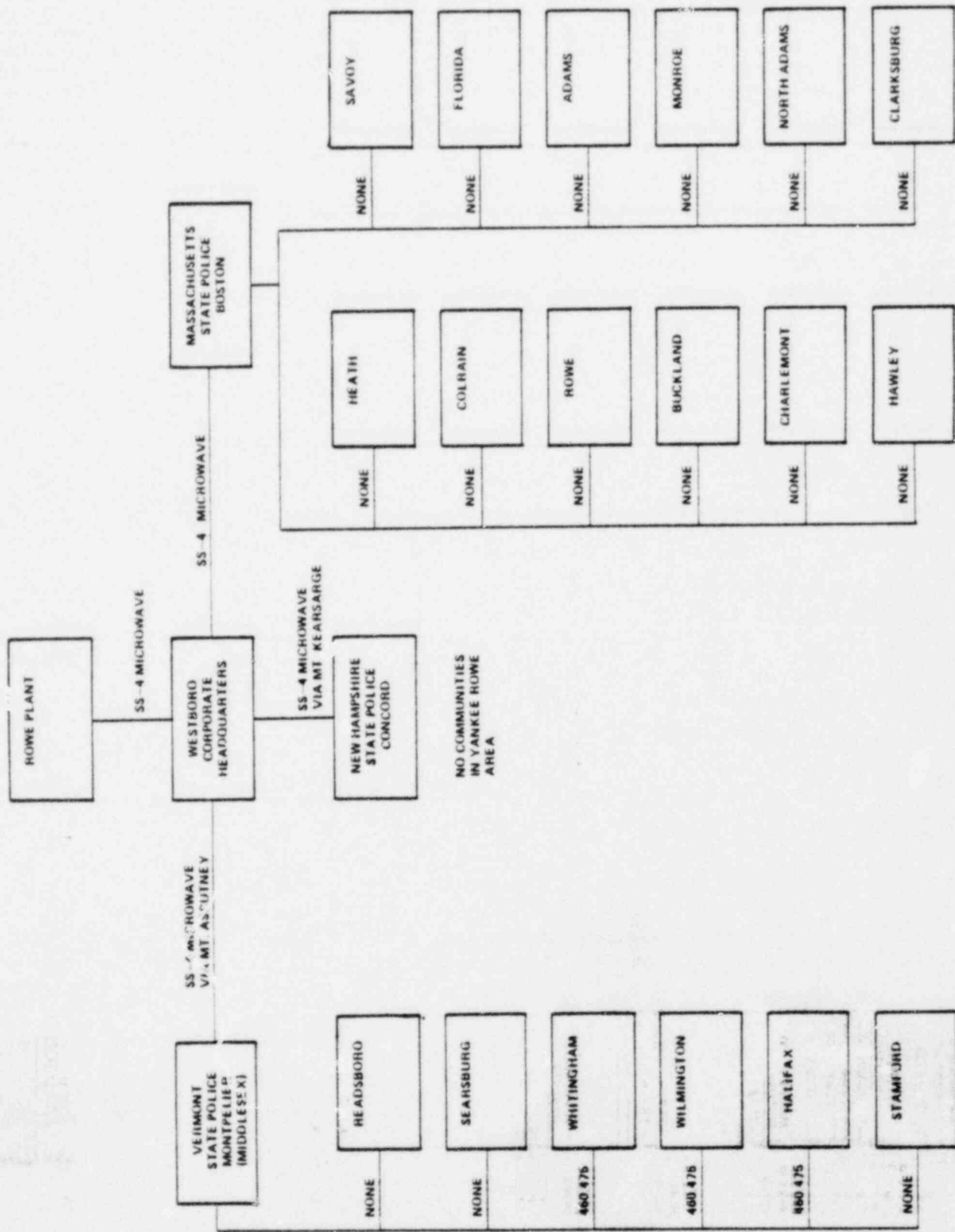


Figure 2-8 Yankee Rowe State Police/Municipality Network

2.3.6.1 The communities in both areas making use of these mutual aid systems are shown in a rough geometric pattern around the atomic plants in Figures 2-9 and 2-10. Three of these systems, SWMA, TSMA and BCMA, are true mutual aid systems with 24 hour service to their respective communities. DVMA is not considered a viable system since it does not have continual manning of the system. Unfortunately, two of the communities use DVMA (Readsboro and Whitingham) and are in close proximity to Yankee Rowe. Neither of these communities have a backup system as many other communities have. Statistical data for each community is given in Table 2-5.

2.3.6.2 Two communities in the Yankee Vernon area have full time coverage of fire frequencies, Brattleboro and Greenfield and both are members of TSMA. One community in the Yankee Rowe area has full time coverage and it is a member of BCMA. All other communities are on an "on call" status which means even though a community may have monitoring equipment for a mutual aid frequency, it will not be covered on a regular basis. However, mutual aid dispatchers have remote startup of 11 community sirens in the Yankee Vernon area and dispatchers can phone fire chiefs in all serviced communities.

2.3.6.3 Sixteen of the eighteen communities in the Yankee Vernon area have some form of emergency power, usually in the form of a small portable generator sufficient to operate two or three lights and one or two radio receivers. Usually not enough power is available to key a transmitter. Communities without any emergency power are Hinsdale and Leyden. In the Yankee Rowe area this situation is much worse. Five communities, Whitingham, Florida, Monroe, Searsburg and Hawley have no emergency power equipment. Those communities with emergency generators have sufficient capacity to operate one or two receivers but not transmitters.

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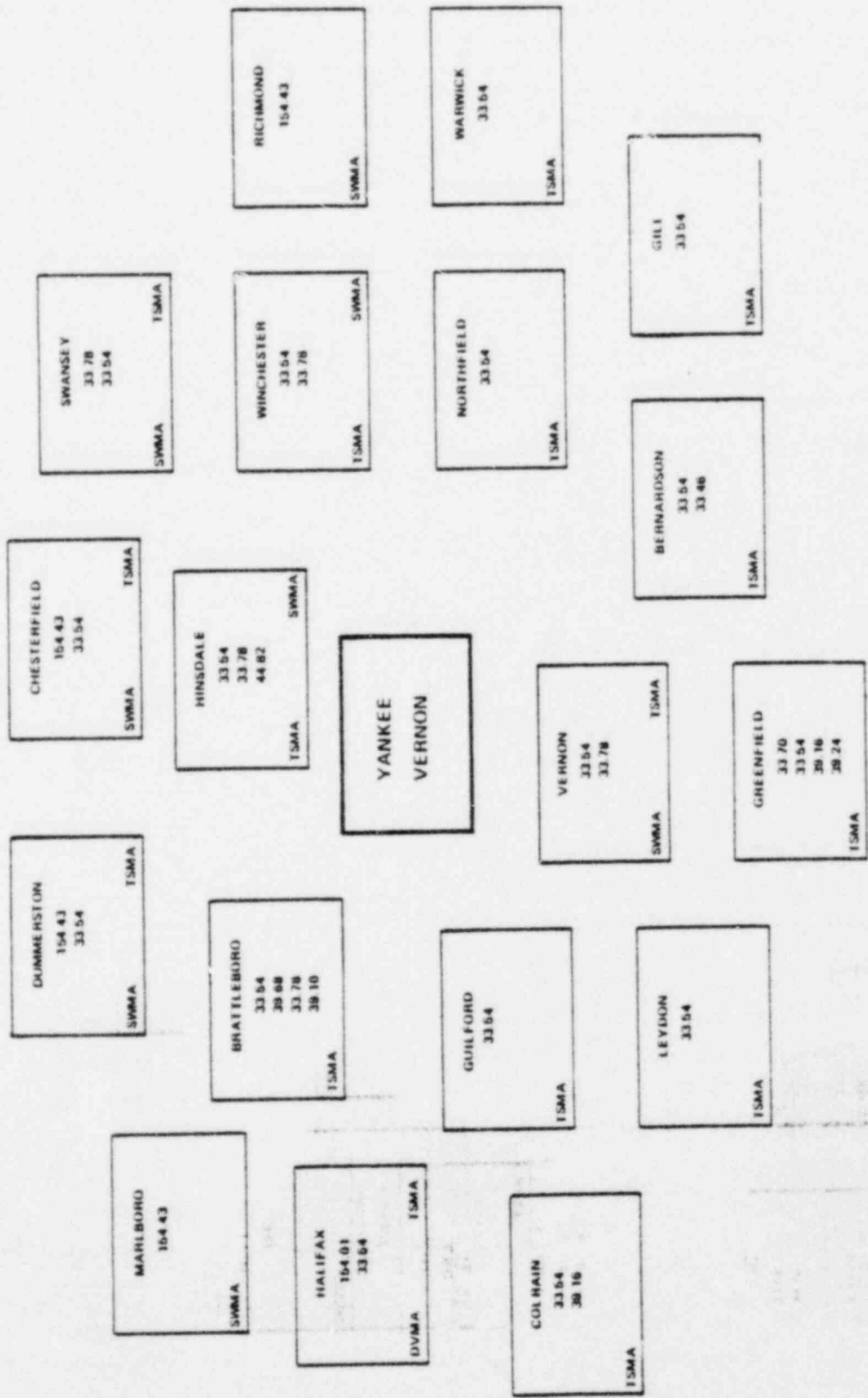


Figure 2-9 Fire Frequencies - Yankee Vernon Area

TSMA - 33.54MHZ - GREENFIELD, MASS
 SWMA - 33.78MHZ - 154.43MHZ - KEENE, NH
 DVMA - 154.01MHZ - WILMINGTON, VT

16 79

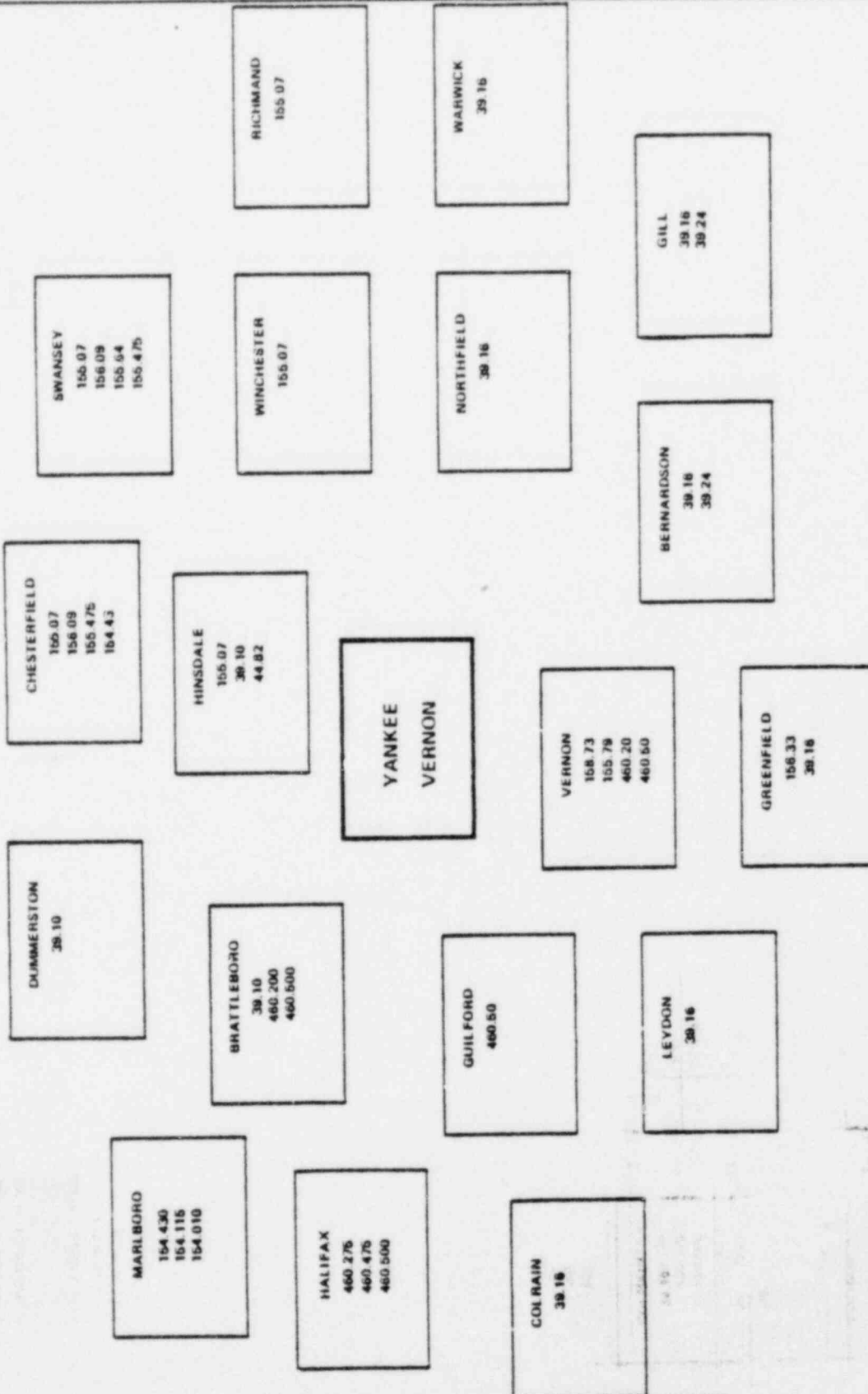


Figure 2-10 Police Frequencies - Yankee Vernon Area

TABLE 2-5
FIRE COMMUNICATIONS CAPABILITIES - YANKEE VERNON AREA

COMMUNITY	POP.	F/T FIRE	F/T FIRE	HOURS OF OPERATION	FIRE STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	STIMPLEX/DUPLEX	MOBILE P. A. AVAILABLE	EMERGENCY POWER	PAGERS AVAILABLE	REMOTE SIREN CONTROL
Wadsworth, VT	663	0	26	On Call	Wilmington	4	154.01		1	No Portable Yes	0	Local Red Phones
Searsburg, VT	80				WILMINGTON FIRE DEPARTMENT			AMBULANCE FEE				
Wilmington, VT	1200	0	30	On Call	In Town	5	154.01		0	No	0	Local
Wilmington, VT	1800	0	36	On Call	In Town	4	154.01 45.48 (Local)		1	No Portable Yes	27	Local Red Phones
Hallfax, VT	456	0	23	On Call	Monitor in Chief's Home	5	154.01		0	No Portable Yes	0	Local Red Phones
Heath, MA	404	0	30	On Call	In Town	4	33.54 154.01		2	No Portable Yes	0	Local Red Phones
Colrain, MA	1500	0	25	On Call	In Town	4	33.54		4	Yes	1	Local Red Phones
Rose, MA	340	0	27	On Call	In Town	2	33.54 154.01		2	No Portable Yes	0	Manual Only
Buckland, MA	1000	0	21	On Call	In Town	3	33.54		1	Yes	0	Local Full Box
Charlton, MA	1050	0	15	On Call	In Town	6	33.54		1	No Portable Yes	0	Manually and by pull stations
Rowley, MA	100				SERVICE FROM CHARLESTON ON FEE BASIS							
Savoy, MA	500	0	19	On Call	In Town	3	154.11 BCMA		1	No Portable Yes	10	BCMA Activates Pagers

TABLE 2-5
FIRE COMMUNICATIONS CAPABILITIES - YANKEE ROWE AREA (CONT.)

COMMUNITY	POP.	F/T FIRE P/T FIRE	HOURS OF OPERATION	FIRE STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	SIMPLEX/DUPLEX	MOBILE P. A. AVAILABLE	EMERGENCY POWER	PAGERS AVAILABLE	REMOTE SIREN CONTROL
Altondale, NH	3700	0	On Call	In Town	7	33.54 TDMA 33.78 SDMA		1	No	0	SDMA
Chesterfield, NH	2300	0	On Call	In Town	2	33.78		0	Portable Yes	0	SDMA
W. Chesterfield, NH		0	On Call	In Town	3	33.54		0	Portable Yes	0	SDMA
Stafford, NH		0	On Call	In Town	3	33.78		1	No	1	SDMA
Somerset, NH	5000	0	On Call	3 STATIONS	12	33.78 33.54		0	Portable Yes	0	SDMA
Windsor, NH	1500	0	On Call	In Town Solo-Station At Ashcroft	7	33.54 33.78		2	No Portable Yes	0	SDMA
Wichfield, NH	500	0	On Call	In Town	5	154.43 SDMA		2 *	No Portable Yes	0	SDMA
Windsor, NH	575	0	On Call	In Town	2	33.54		1	No Portable Yes	10	Local Red Phones
Windsor, VT	1400	0	On Call	In Town	6	33.54 33.78		1	Yes	10	Station & Pagers by Radio Radio by Radio Emergency Services
Windsor, VT	2400	0	On Call	In Town	4	33.54		2	No Portable Yes	12	Pagers by TDMA Station Removal
Windsor, VT	1770	0	On Call	In Town	4	33.54		4	Yes	3	Local Red Phones in Range

TABLE 2-5
 FIRE COMMUNICATIONS CAPABILITIES - YANKEE ROWE AREA (CONT.)

COMMUNITY	POP.	V/T FIRE	P/T FIRE	HOURS OF OPERATION	FIRE STATION LOCATION	VEHICLES AVAILABLE	RADIO FREQUENCIES AVAILABLE	SIMPLEX/DUPLEX	MOBILE P. A. AVAILABLE	EMERGENCY POWER	PAGERS AVAILABLE	REMOTE SIREN CONTROL
Barnardston, MA	1000	0	6	On Call	In Town	5	11.54 11.46 (Local Fire)		2	No Portable Yes	12	Pagers by Tri-State Siren Local
Greenfield, MA	10500	12	15	24 Hours	In Town	9	11.70 (Local Fire)		5	Yes	20	Local
Greenfield Fire is location of TSMA												
Leyden, MA	550	0	20	On Call	None	4	11.54		2	No	0	Local
Colrain, MA	1500	0	25	On Call	In Town	4	11.54 11.70 19.46		4	Yes	4 In Local Monitors	Local from Streets Garage
Wardford, VT	1415	0	21	On Call	In Town	5	11.54		2	No Portable Yes	0	Brattleboro Fire Dept
Halifax, VT	450	0	21	On Call	Monitor in Chief's Home	5	154.01 Desfield 11.54 TSMA		0	No Portable Yes	0	Local Red Phones
Brattleboro, VT	6200	22	10	24 Hours	In Town and West Brat- tleboro	12	11.54 19.68 Brattleboro Fire		5	Yes	0	Local
Warboro, VT	600	0	20	On Call	In Town	1	154.41 SMPA 154.415 (local)		0	No Radio On Battery for Emergency	2 9 Monitors In Firemen's Homes	Answering Service Opens Up Monitors And Then Uses SMPA Radio
Dummerston, VT	1100	0	40	On Call	2 Stations In Town	7	154.41 11.54		6	No Portable Yes	10	SMPA

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SECURITY SYSTEMS DIVISION

POOR ORIGINAL

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2.3.6.4 Ten communities in the Yankee Vernon area make use of individual pagers, primarily to alert volunteer firement to a fire emergency. Only six communities in the Yankee Rowe area make use of pagers. Since the pagers are not carried at all times by the individual and are not in general used by all departments, the usefulness as a warning device throughout both areas is questionable. Also, the cost of the individual pager (\$80 and up) makes them less cost effective than other warning systems. Further, in high ambient noise areas (sawmills, tractor operation) the pager beep can go unnoticed.

2.3.6.5 The radio networks used by the four mutual aid systems in both areas are illustrated in Figures 2-11 and 2-12. It will be noted from Figure 2-11 that the Yankee Vernon plant is tied by radio to both SWMA in Keene and to TSMA in Greenfield as the primary means of communication. This circuit is backed up by commercial telephone lines. The Yankee Rowe plant is not presently tied to either of the mutual aid systems operating in its area. Present plans, including the future installation of the SS-4A system, do not include any of the mutual aid systems in either Yankee area.

2.3.6.6 Table 2-4 also shows which fire departments have vehicles carrying mobile (or fixed to vehicle) P.A. systems. Sixteen communities in Vernon and thirteen communities in the Rowe area have at least one fire vehicle equipped with a P.A. system. However, due to the obvious use to which P.A. systems can be put in street-to-street announcements during power failures and in circumstances where other notification systems are not 100% adequate, a closer study of P.A. systems is given here.

Table 2-5 combines our survey information on community vehicles, personal vehicles used in community work (police or fire) and vehicles equipped with P.A. systems. As expected, the preponderance of community owned vehicles are for fire fighting and some of these vehicles carry P.A. systems (about one-third). However, several communities have inadequate P.A. systems when looked at from

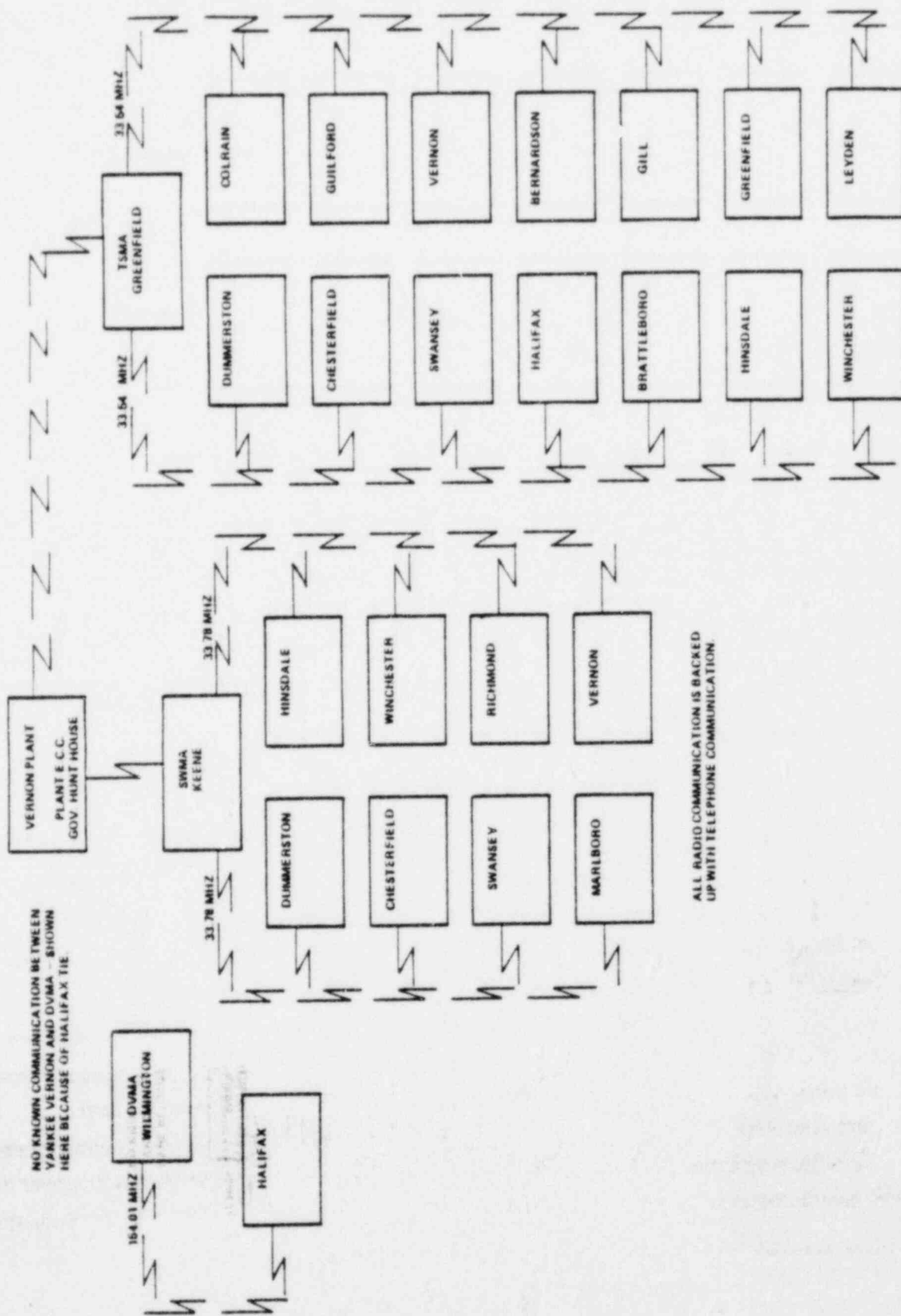
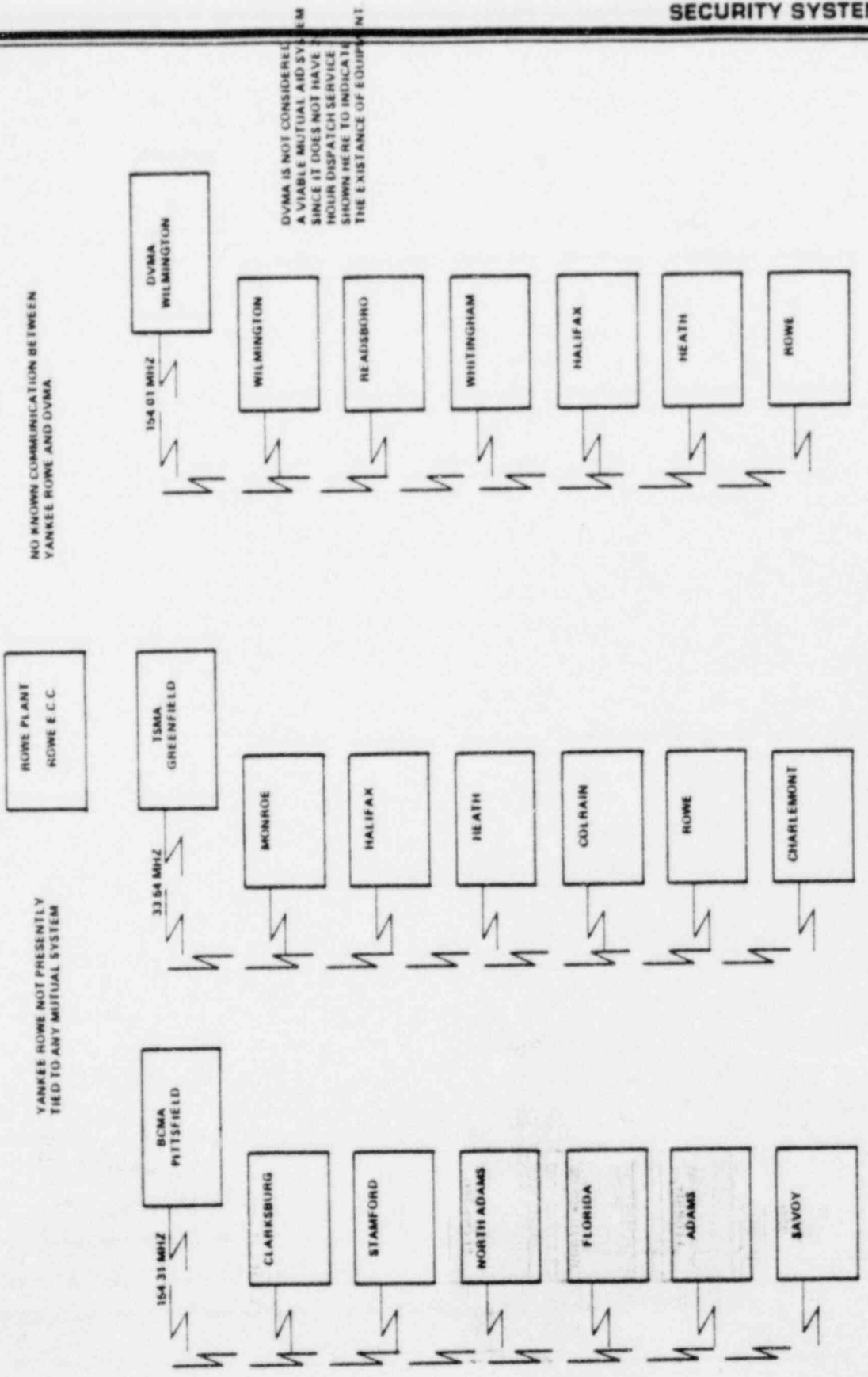


Figure 2-11 Fire Communications Coverage - Yankee Vernon Area

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ALL RADIO COMMUNICATION IS BACKED UP WITH TELEPHONE COMMUNICATION

Figure 2-12 Fire Communications Coverage - Yankee Rowe Area

the standpoint of population concentration and miles of town roads that need to be covered. An example of this is the community of Chesterfield which is really four communities separated by several miles of town roads considered secondary or light duty roads. These are Chesterfield, West Chesterfield, Spofford and the Spofford Lake resort area. There is one police vehicle with a P.A. system and one fire vehicle with P.A. West Chesterfield has five roads with reasonably concentrated population totalling approximately two miles. Four miles East is Chesterfield with three roads populated and approximately two miles. Three and one-half miles East is Spofford having eight populated roads totally about one and one-half miles. Just North of Spofford about one mile is the lake resort area with a peripheral road approximately five miles long with numerous side roads leading down to lakeside homes. Most of these side roads are several hundred yards in length and terminate at the lakeside homes. Due to terrain and heavy ground cover (trees) it is considered very difficult to warn each individual home in this area in timely fashion via mobile P.A. A small portion of this lake resort is outside the 10 mile zone (perhaps 70 homes), however, there is only one peripheral road around the lake and it must be traversed in its entirety to cover all those within the 10 mile zone. Clearly, two P.A. equipped vehicles could not get an intelligent message of warning considering the miles to be covered within the 15 minute time frame. There should be a minimum of one P.A. equipped vehicle permanently assigned to each of these communities with the one designated for the resort area located in Spofford which would be assigned the East and North Shore of the lake and the other assigned the South and West shores after warning the Spofford area. This minimum capability might be considered as just meeting the 15 minute time frame, but should be considered as only a backup to some primary warning capability.

Looking further at Table 2-5, it is noted in the Yankee Vernon area that all communities have two or more P.A. systems available in vehicles with the exception of Marlboro and Halifax. In the Yankee Rowe area there are nine communities either with no mobile P.A. or only one P.A. available. These are Florida (1), Clarksburg (0), Savoy (1), Readsboro (1), Whitingham (0), Halifax (0), Stamford (1) and Searsburg (0).

In view of the power outages which appear to occur more frequently in these areas than in large cities, it seems essential that a backup warning system be available in the form of sufficient mobile P.A. capacity to service those areas within the 10 mile zone. In judging this capacity, consideration has been given to the number of roads within the 10 mile zone having habitations, the approximate number of people involved, distance from town center and other criteria. Using these parameters it is judged that certain communities should be upgraded in this type of backup communication. These communities are Florida (1 unit), Clarksburg (2 units), Savoy (1 unit), Hawley (1 unit), Readsboro (1 unit), Whitingham (2 units), Halifax (West Halifax only - 1 unit), Stamford (1 unit), Searsburg (0 unit), Marlboro (1 unit), and Halifax (East) (0 unit).

2.3.7 National Warning System (NAWAS) Communications Network

In the Late 1950's some thought was given at the Federal level to replacement of the old CONELRAD system of early warning of nuclear attack for the general public. This eventually resulted in President Kennedy signing Executive Order 10952 on 20 July 1961 directing the Secretary of Defense to assume responsibility for warning the public. This resulted in the creation of the Emergency Broadcast System (EBS-see section 2.3.4 of this report) and the National Warning System (NAWAS).

In February, 1971, through personnel error, an attack warning was actually initiated within the EBS although no warning broadcasts were made for reasons given in section 2.3.4 of this report. Subsequently, the EBS was removed as an instrument of early warning through actions of the Office of Telecommunications as directed by the WhiteHouse. Today, remnants of this system remain in some parts of the Country, but its maintenance and usage are mainly on a regional or even local level and at the discretion of the operators of the equipment. Authority for activation of the equipment is frequently unknown to the operators.

The one remaining warning system stemming from Executive Order 10952 is the NAWAS which is a largely Federally-funded telephone network of dedicated

lines intended to warn federal, military and civilian authorities of impending or actual attack. The Disaster Relief Act of 1974 (Public Law 93-288) signed 22 May, 1974 established a new base for disaster activities of the Federal Government and authorized the President to make available Federal Civil Defense communication systems for the purpose of providing warning to governmental authorities and the civilian population in areas endangered by disaster. In effect, this was intended not only to encompass warning of nuclear attack by hostile elements, but also to include all environmental disasters such as tsunami, earthquake, volcanic activity, fire, explosion, major aircraft crash and a host of other environmental activity effecting the safety or health of the public.

The NAWAS is not all that encompassing nor can it warn of disaster to all local governmental authorities. This system is described below.

2.3.7.1 The NAWAS System

NAWAS is a dedicated nationwide party line telephone warning system operated on a 24-hour basis. It covers the contiguous United States and Alaska.

The national grid for NAWAS is given in Figure 2-13. Pursuant to the basic purpose of NAWAS, i.e., nuclear attack warning, the National Warning Center is located in the Combat Operations Center in Cheyenne Mountain, Colorado Springs, Colo., manned continuously by an Attack Warning Officer. This center in turn is connected to eight regional offices and approximately 350 Federal Agencies and military installations. Also connected to this system are 49 State warning points, one for each of the contiguous states and Alaska. This can be considered the Federal level of NAWAS and carries the circuit identification number GP2285001. Circuits from regional centers to each State have a different identifying number, and the three we are concerned with are GP2285003 (Vermont), GP2285004 (Massachusetts) and GP2285002 (New Hampshire). These three States are served by Region One which is depicted in Figure 2-14.

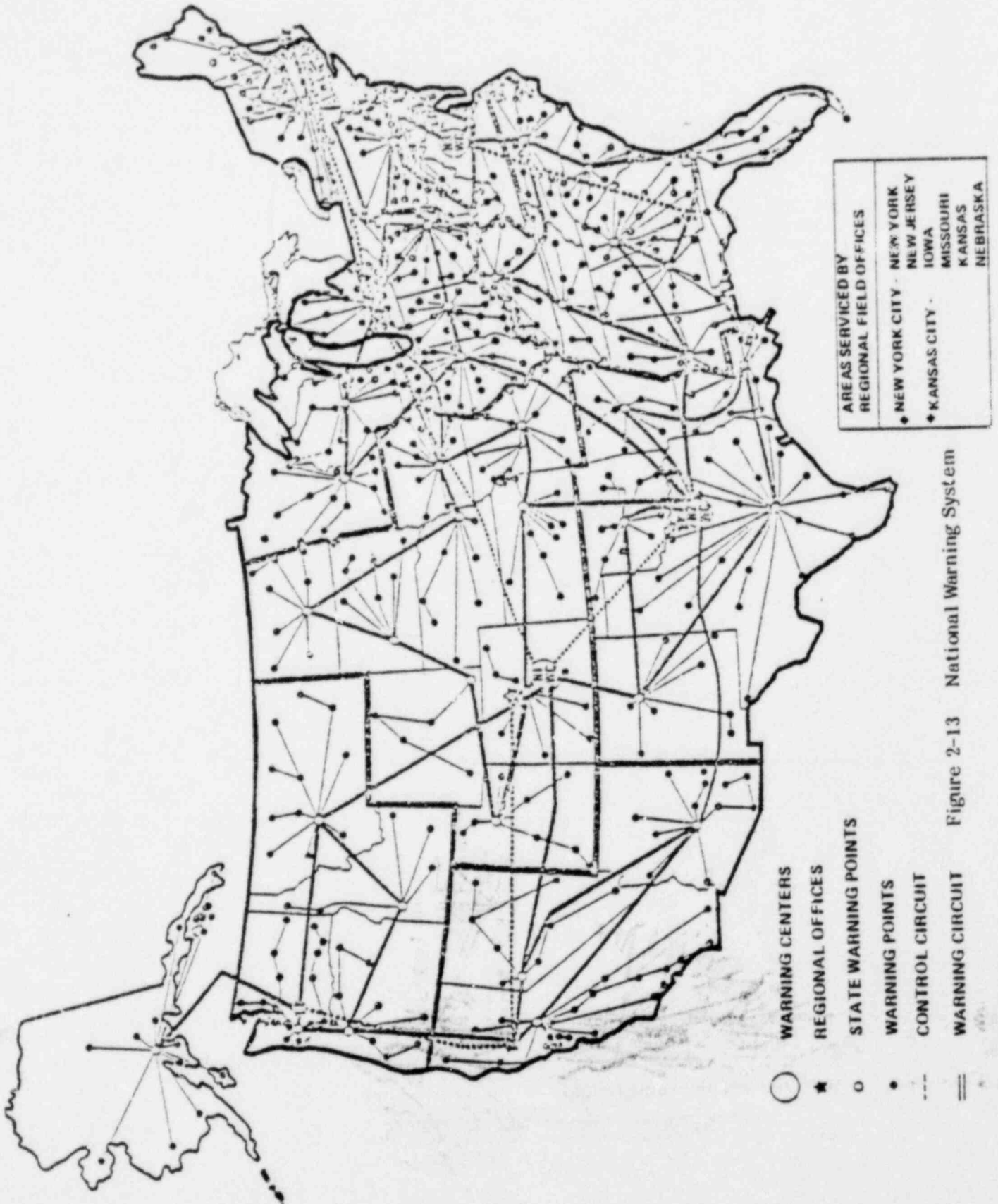


Figure 2-13 National Warning System

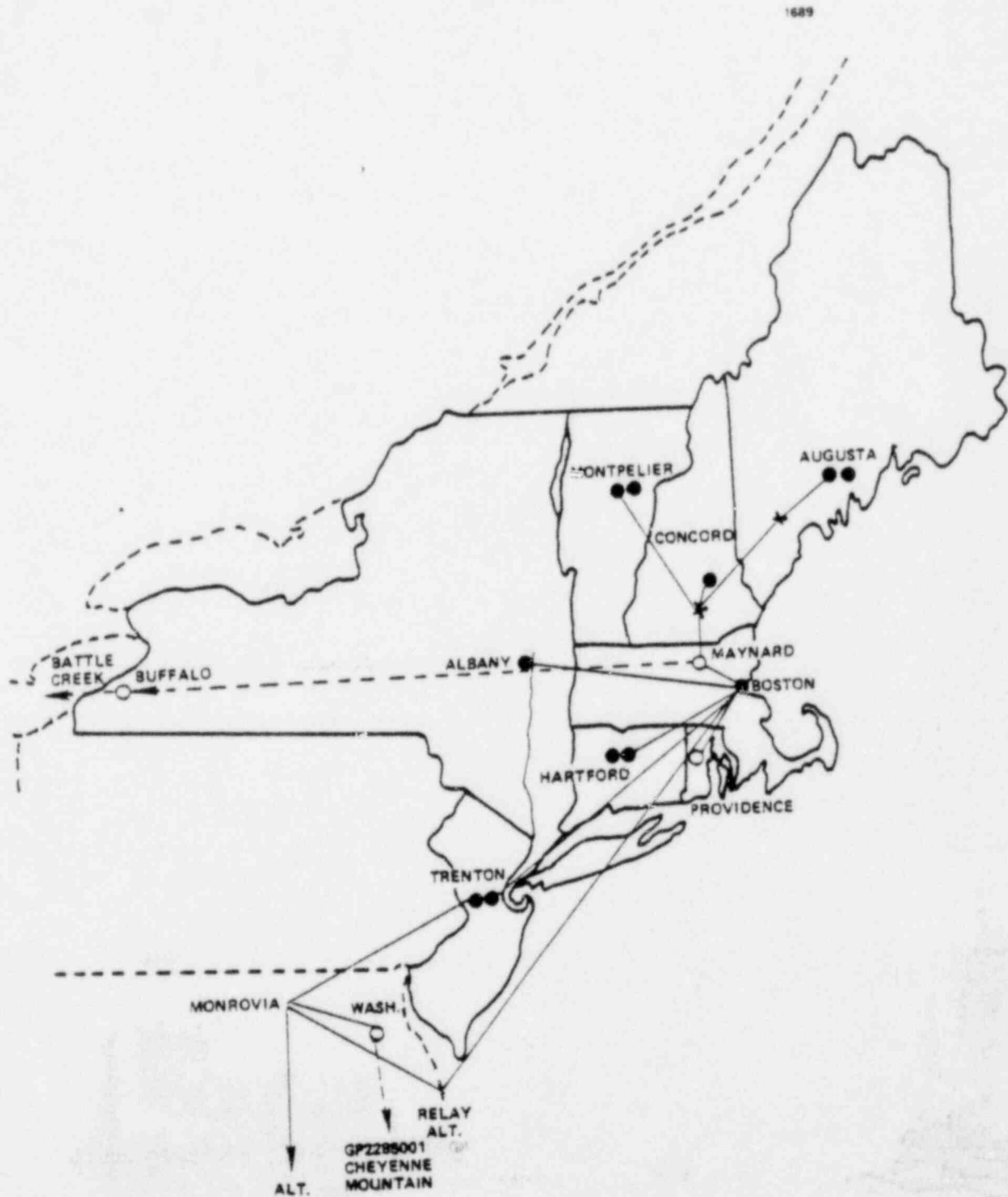


Figure 2-14 Region 1 (NAWAS)

State warning points are usually located in the State capitol and in a building or office which is staffed continuously due to NAWAS 24 - hour operation. From each State warning point NAWAS continues within the State to local governments which are usually local law enforcement or local fire stations. Not all local governments are on the NAWAS system since certain criteria must be met to qualify for a NAWAS installation. Among these are that the coverage must be 24-hour, must have warning responsibility for one or more political subdivisions, and must be at least 25 miles from an adjacent warning point.

Massachusetts has 50 warning points, New Hampshire 29 and Vermont 17. The closest warning point to Yankee Rowe is Greenfield, Mass. Fire Department, and the closest to Yankee Vernon is Brattleboro, Vermont Police Department. However, Yankee Rowe does not have an interface to Greenfield, so its' nearest NAWAS network within the State would be the State Police tie in Boston. Yankee Vernon has an interface to SWMA in Keene, and thus to Keene Fire Department (NAWAS state net) or Brattleboro Police (NAWAS state net).

As part of their responsibility for assistance in nuclear power plant safety, the Federal Government will provide NAWAS service to civilian nuclear power plants, but this service and subsequent charges must be paid by the power plant operator.

In view of the fact that this service is not presently available in any of the 36 contiguous communities (excepting Greenfield, North Adams and Brattleboro fire or police departments), and since no phone or radio is continuously manned in these communities, the NAWAS system and its interface through indirect means is not considered a cost effective way to proceed in the notification network around either Yankee Vernon or Yankee Rowe.

2.3.8 State CD Networks

2.3.8.1 General

Only one of the three state CD networks interfaces into the Yankee Atomic plants. That interface is a radio transceiver located in Governor Hunt House at Yankee Vernon. Manning of this transceiver during any type of emergency at Yankee Vernon could not be determined. Its use and effectiveness during the 15 minute time frame is at best neutral.

The presently used microwave network linking Yankee Rowe and Yankee Vernon does not directly interface any of the three state CD networks but does contact all three of the State Police Headquarters (Concord, Middlesex and Boston.).

Thus, getting the CD networks initiated (during all off-duty hours) would require State Police contact to appropriate CD authorities in each state.

Once activated, the top level CD network appears adequate between top level CD personnel, CD operational centers and CD alternate operational centers. However, once these operational centers are manned, communication between the centers and individual communities and their CD Directors is unclear at best. For instance, none of the communities around Yankee Rowe or Vernon have transceivers for use on the state CD networks.

For example, if the wind was out of the Southwest and an incident occurred at Yankee Vernon where it seemed prudent to evacuate personnel downwind, the communities of Hinsdale, Winchester, Richmond, Swansey and Chesterfield would be affected. All of these communities are in New Hampshire. All of these communities are "on call" for both police and fire which means none of the present radio networks available in the communities is monitored. All of these communities have sirens which can be remotely controlled by SWMA (which can be alerted by State Police), but none of the sirens are effective nor do they have a specific

"environmental alert" tone. Very few, if any, of the population within the 10 mile zone could hear them if activated, and even then they would assume a fire in the community given the present attitude toward sirens. This really boils down to a first alert into each community by phone. (We are assuming a "worst case" condition of a middle-of-the-night alarm). Even though trunk capacity is limited in these communities, the chances are good that a "first alert" by phone would go through. As the first alarm is given and a "pyramid" of calls start after that, the chances of getting calls completed begin to drop to zero due to limited telephone equipment in the area. Thus, there is real danger that many of those within the 10 mile zone would never hear of the alert if the phone alone is the only communication house-to-house.

2.3.8.2 Yankee Vernon and Vermont CD

Vermont CD utilizes a radio network within the State (45.52 MHZ) which links the E.O.C. in Montpelier, the alternate E.O.C. in Rockingham, the I.F.O. in Brattleboro, State Police, Vermont National Guard, the NOAA (NWS) office in Burlington, as well as the previously-mentioned transceivers at Governor Hunt. This is shown in Figure 2-15. Other means of communication are available for CD, but other than commercial telephone, none of these media interface with Yankee Vernon.

2.3.8.3 The Future SS-4A Network

The type 490 SS-4A Selective Signalling System is also shown in part in Figure 2-15 with another part shown in Figure 2-16. This network is scheduled for installation in the Fall of 1980.

This is a 4-wire private line selective signaling system consisting of a terminal or group of terminals interconnected to form a network. Selective Signaling (SS) is an arrangement for the independent signaling of individual stations

within the network interconnected via a dedicated 4-wire line. This system can be arranged to operate on selective signaling networks which employ either Dual Tone Multifrequency (DTMF) or Single Frequency (SF) signaling. The basic station can be expanded up to a maximum of 54 stations per terminal.

The basic arrangement of a terminal will consist of transmitters and receivers, either DTMF or SF (but not mixed), individual station interface circuits (one for each telephone), ring generator and power supply, decoder (converts BCD incoming format to a decimal number), latch (where programmed call numbers are stored), common control (controls privacy operations) and a tone/lamp control (produces dial tone, intrusion tone, ringback tone and busy tone). In addition, there will be a line interface module connecting 4-wire lines to other terminals.

All the above equipment will be contained in a rack presumably mounted somewhere in the control room of one of the atomic plants. We do not have detailed plans but assume Yankee is using only one terminal since as many as 54 stations can be hung on the one terminal. The network supplied indicates a maximum of 17 stations at this time with Seabrook, Seabrook E.C.C. Rockingham E.O.C. and Yankee Framingham stations to be added later.

The distance between stations in most cases is beyond the range of loop signalling, therefore local signalling (Yankee Vernon to Concord E.O.C. for example) will be converted to DTMF or SF tone signals and sent down the network via the 4-wire dedicated line. This means that additional ringdown generators, decoders, latch and common control modules will be needed at most of the other stations. This increases cost considerably.

The SS-4A terminal, as mentioned previously, is intended to operate through a 4-wire dedicated line to other stations. In this specific case, a microwave link already exists between some of these stations making a copper path unnecessary.

The private microwave channel is between:

- Yankee Vernon - Mt. Ascutney - Vermont State Police microwave
- Yankee Vernon - Mt. Kearsarge - New Hampshire State Police microwave
- Yankee Vernon - Westboro Corporate Headquarters
- Yankee Vernon - Bald Peak

There is a 4 wire active bridge (conferencing and relay) at Westboro allowing either Yankee Vernon or Yankee Rowe to talk to each other and an additional microwave link from Westboro to a station identified as PRUD having a leased wire link to State Police in Boston.

There is one additional microwave link which appears to emanate from Ascutney (probably Vermont State Police control) to Brattleboro E.O.C.. Thus, the SS-4A system will have access to all of the above and by means of leased wire, can access Yankee Rowe E.C.C., alternate E.C.C. at Shelburne Falls, Yankee Vernon E.C.D. in Governor Hunt House, alternate Vernon E.C.C. and the Belchertown E.O.C. via Bald Peak.

4-wire activity bridges (conferencing and relay) are apparently available in Montpelier and Concord State Police headquarters for contacting Vermont State Police at Middlesex, Montpelier E.O.C., and Concord E.O.LC.

Again making an assumption that E. C.'s are manned by CD people, then this system is adequate to get warnings to the following tiers of officials:

- State Police - Vermont (Montpelier - Middlesex) New Hampshire (Concord) Massachusetts (Boston)
- E.C.C. - Yankee Vernon Vernon (alt.) Yankee Rowe Shelburne Falls (alt.)
- E.O.C. - Montpelier Concord Keene Belchertown Framingham Brattleboro

It is highly unlikely that alternate E.C.C.'s or any of the E.O.C.'s are manned in off-hours (weekends - nights). In this event, only State Police get immediate notification who presumably will notify CD people through other available communications networks (pagers, telephone).

Note that being full duplex, the system will probably get heavy use once the first warning is out for follow-on reporting of progress in assessment, containment and the like.

This system is an enhancement of the present system in that it enlarges the scope of contact between Yankee Vernon and Rowe to top-tier officials. But, as in the present system, it leaves to the public officials the manner and means of notifying individual communities and their populations.

2.3.8.4 Yankee Vernon and New Hampshire C.D.

Again, Yankee Vernon has no direct interface to New Hampshire CD. The indirect interface is through microwave to New Hampshire State Police in Concord and State Police to Civil Defense in Concord via radio (or pager or telephone at nights, weekends or holidays). State Police can alert SWMA via radio 24 hours and SWMA can contact some communities in the Vernon area by radio or phone and Tri-State (copies SWMA) can alert other communities in Massachusetts. This route would be preferable during off-hours since getting State CD alerted would be to use up more minutes in the 15-minute time range. Also, how State CD would get the alert into affected communities is unclear. See Figure 2-17.

To save even more time, Yankee Vernon has direct radio contact (33.54 mhz) with SWMA that can be activated at the same time State Police are notified. Thus, while State Police are notifying top state officials, SWMA and Tri-State can be

notifying community officials. This communications network presently existing is clearly the fastest means of getting notification into New Hampshire and Massachusetts communities around Yankee Vernon.

2.3.8.5 Yankee Rowe and Massachusetts CD

The Massachusetts CD E.O.C. is located in Framingham with the State being divided into four areas for CD purposes. Each area has an alternate E.O.C. and each area E.O.C. is tied to Framingham E.O.C. by microwave backed up by TTY and commercial telephone. In addition, Framingham acting as state control and warning point has access to NAWAS as does each area within the state.

The state has two assigned frequencies for CD work, 45.36 mhz. as primary and 45.32 mhz. as secondary. The Pilgrim Station in Plymouth and its E.O.C. are tied to Bridgewater (area two) E.O.C. by the secondary network.

The Yankee Vernon and Rowe areas are both within Massachusetts area four with E.O.C. at Belchertown. Belchertown has supplied an antenna with connecting hardware to Yankee Vernon which is mounted on Governor Hunt house to be used by Belchertown mobiles for communication by these mobiles back to Belchertown. There is no transceiver for either C.D. frequency at Yankee Vernon.

Yankee Rowe has no interface to Belchertown C.D. but this will be remedied in part by the SS-4 network, when installed. This same interface will then exist for Yankee Vernon to Belchertown. Again, in this state as well as in the other two, off-duty hours remain as a problem.

There is a program through FEMA for matching funds to purchase transceivers for use by communities to area E.O.C.'s. Massachusetts has already applied for frequencies to establish C.D. area/municipality networks. It is understood that this fund must be replenished to FEMA to be of use by municipalities.

2.4 SPECIAL PROBLEMS ASSOCIATED WITH THE ROWE AND VERNON AREAS

2.4.1 Population Density

There are two categories of population density in the Vernon and Rowe areas. The first category could be called high density which encompasses only four communities, i.e., Greenfield, Brattleboro, Adams and North Adams. These communities could be classified as cities in that they contain populations over 10,000, have full time fire and police protection and contain multiple service shopping centers, etc. However, their density of population per square mile averages only 458 people, far below truly large cities. In addition, the bulk of the population of Greenfield and Adams are outside the 10 mile limit for either atomic plant, so we are really concerned with only two large population centers, Brattleboro and North Adams.

The other density category encompasses all other communities in the Vernon and Rowe areas where population density in the Vernon area averages only 49 people/square mile and the Rowe area with an average population density of 37 people/square mile.

Given this density, or lack of it, makes it extremely difficult to recommend the conventional warning (notification) systems such as sirens, air horns and the like. Only a very few areas have been noted in this report as suitable for siren coverage. In recommending any such coverage, population density and its distribution has been a prime parameter in determining cost effectiveness.

2.4.2 Topography

Another factor mitigating against audible alarm devices is the local terrain. Altitude in both areas ranges from under 1000 feet MSL to over 2400 feet MSL. Both Yankee areas are bordered on the West by the Hoosac Range within the Appalachian chain, and the entire region is a series of mountains and valleys with little flat land available anywhere. Further, the entire region is heavily

forested primarily with temperate zone perennial trees such as beech, birch, elm, pine, spruce and balsam. There are several State forests in the region such as Mohawk Trail, Catamount, Savoy Mountain, Hawley and Mt. Grace. These factors plus the distances between habitations makes it mandatory to investigate other means of notification over and above audible alarm devices.

2.4.3 Recreational and Seasonal Use Areas

There are 16 public recreational areas in Massachusetts considered subject to the 10 mile - 90% - 15 minute, and 10%-45 minute regulation. They are primarily State forest areas covering an area of over 50 square miles, and are generally available for both summer and winter activities. Most areas can be entered at numerous points around their perimeters without hindrance and without checkpoints of any kind.

New Hampshire has four areas (State parks or State forests) partly within the 10 mile zone and again with numerous entry points with no check on entrance or exit. Approximately 20 square miles are within the 10 mile zone.

Vermont has three recreational areas in the 10 mile zone. They total approximately 250 acres and are usually populated only during the summer months.

Except for a few privately owned campgrounds or beaches, there is no check on use of any of these areas and communications in these areas is limited to a single phone at a ranger station (where provided) or at the owner's establishment in case of privately owned beaches or campgrounds. There is no emergency power available in any of these areas, and with the single exception of a skating rink in North Adams, no P.A. systems are available.

In general, there are very few roads into the State forest areas. Such roads as exist are only suitable for 4-wheel drive vehicles or snowmobiles. They can be characterized as trails with travel slow and arduous.

One area is highly isolated and available only by boat. This is Perry Island in Lake Spofford. Perry Island is nine miles from Yankee Vernon. There is no power and no communications available. It is a popular picnic area during the summer months.

A few of the larger State forests, such as Savoy, contain fire towers with limited radio equipment contacting usually the nearest State Police barracks for forest fire warning. These are manned by a single warden who is usually available only during peak fire months (May through August).

There are a few designated areas in the State forests for camping, but none of them have commercial power available, and roads into these grounds are not normally plowed during winter months.

All of these areas will have a highly transient population, and during summer months the larger areas may have 1000 or more people present at any given time.

There is no cost effective approach to a warning notification system which would be effective in these recreational areas. If the recreational areas such as State forests can be considered as that portion of the population outside the 5 mile zone and within the 10% to be warned in 45 minutes, then there is a possibility that communities having portions of these areas can warn campgrounds or picnic areas by means of vehicles equipped with mobile P.A. systems. This reasoning could not apply to such areas within the 5 mile zone such as parts of the Monroe State Forest just East of Yankee Rowe and parts of Pisgah Mountain range, neither of which has any bordering roads. Such areas are true void areas. Thought should also be given to giving the present wind direction from the generating plant should a level 3 or 4 warning ever be needed so that local public officials (police, fire, CD) will have some idea which areas should have priority in notification.

2.4.4 Limitations of Local Government

By far the most serious limitation of local government is the "on call" aspect of all police and fire departments excepting those on 24 hour coverage. This could be offset to some extent by replacing antique sirens with modern high powered sirens having dual tone capacity (fire and environmental emergency), training the public in the dual-tone use and supplying sirens in strategic areas not presently equipped. This is not considered viable or cost effective for the various reasons given in Section 2.3.6 of this report. Placing at least the fire nets on 24 hour surveillance in each community would place a burden on the smaller communities which is not reasonable, or again, cost effective.

2.4.5 Auxiliary Power

One of the purposes of the survey conducted under this contract was to determine the capability of any fixed or portable generators owned by each community to support emergency communications in the event of a power outage.

The probability of a power failure in almost all of the communities surveyed is considered relatively higher than most urban areas for the following reasons:

1. Almost all areas are heavily forested.
2. Most of the distribution system used for these communities (13KV or lower) are on poles close to or within forested areas.
3. Severe storms can and have knocked down power lines in many areas.
4. Severe surges (lightning) will knock out power breakers mounted on poles and isolate areas in each community for periods up to several hours due mainly to the distance involved and geography of the areas.

High power distribution grids (108KV and up) are relatively immune to severe surges due to lightning protection carried by all towers, and these crisscross both areas in the warning zone (10 mile radius). However, these grids are not intended to service individual areas, thus the possibility of power outages remains high.

Recognizing this, most communities around each atomic power plant have some form of auxiliary power available. Exceptions are two communities in the Yankee Rowe area (Hawley and Florida) which have no form of auxiliary power for either fire or police communication. In Yankee Vernon area, Hinsdale and Leyden have no emergency power.

Most communities have portable generators in the 1000 to 3000 watt range which can handle a receiver and limited emergency lighting. Most of these portables are associated with the community fire department or are carried on fire fighting mobile equipment. All are energized by gasoline with a very marginal supply available to the operation of the generator. Some generators have sufficient capacity to handle one or two small lights as well as the fire station radio.

The larger communities (Brattleboro, Greenfield) have fixed station generators capable of handling radios and a number of lights and some peripheral equipment. One small community, Vernon, VT., has a 20 KVA generator that could handle the entire fire station.

With the exception of the larger communities, none of the police stations have auxiliary power. However, in some cases portable generators, where available, could be transported to the police radio location to keep this equipment operating.

A general assessment of auxiliary power capability in either Yankee Atomic area is that it is marginal for the following reasons:

1. Available power is just sufficient to keep one radio operating with possibly one or two small lights.

2. Fuel capacity immediately available is very small (one or two hours operation).
3. Maintenance procedures in most areas appear non-existent. Periodic operation under load is seldom if ever carried out.

2.4.6 Telephone Networks

This subject is discussed in Section 2.3.2, but is mentioned here as a limitation in many of the communities around Yankee Rowe and Yankee Vernon due to lack of trunks, dial equipment and other hardware necessary to prompt and efficient telephone service. A detailed study of the present system will be made when technical information is available on local equipment in these areas.

3.0 RECOMMENDATIONS

3.1 GENERAL

The recommendations made in this section of this report are based on a number of parameters gathered during the survey and an analysis of present capability within each community. The parameters bearing on the recommendations are:

1. Population of each community and that portion within the Emergency Planning Zone.
2. Population density within the Emergency Planning Zone.
3. Kind, type of surface and roadway distances from population centers (location of public vehicles) to outlying habitations.
4. Public vehicles available on a continuous basis. NOTE: Personal vehicles used in community service are not considered as necessarily available continuously since they are usually the only vehicle available to the individual.
5. Equipment on vehicles which can be used to obtain warning or directional information and dissemination to the public (radios, P.A. systems, sirens, etc.)
6. Base station facilities and their usage (24 hour, "on call").
7. Communication networks within each community.
8. Communication networks external to the community but with simplex or duplex capability within the community.
9. State and Federal communication networks available to the community.
10. Community civil defense plans for alert notification and/or evacuation procedure.
11. Location and adequacy (coverage) of local audible warning devices.

12. Location, adequacy and portability of emergency power supplies.
13. Terrain features and unique impediments to dissemination of information to the public.
14. Adequacy of coverage of public communication systems; broadcast AM, FM, TV, cable TV, commercial power and telephone.

Rationale for recommendations:

For reasons stipulated throughout this report, the NOAA NWS communication warning network is selected as the basic notification system to the public. To implement this the basic transmitter at Mt. Ascutney must be supplemented by slave transmitters at or near ground zero (Rowe and Vernon plants). These slave transmitters will operate directly off the main transmitter at Burlington, Vermont via either landline or microwave. Costs of these equipments and related peripheral costs are given later in this section.

The rationale for selection of establishments for receivers is based on closeness of neighbors and roads between establishments. Usually if houses are close, one house in five is selected for a receiver. In cases where they are further apart, (keeping in mind the 15 minute time frame) one house in three is selected.

Back up systems were usually selected as community owned vehicles with mobile P.A. system. Where these are considered insufficient for the time frame or a large number of miles are involved, an enhancement to the present system is suggested.

In a few cases, telephone contact in sparsely settled areas is considered sufficient.

For larger concentrations of people, such as schools or camps, institutional grade receivers are suggested.

In a few other cases, audible devices are recommended, invariably where there are flat areas with larger concentration of the population.

3.2 YANKEE VERNON AREA

3.2.1 Warwick

The very sparse population within the Emergency Planning Zone can be covered by the available mobile P.A. systems and local telephone. The distance from ground zero (Vernon plant) makes this group a candidate for the 10-mile, 45 minute category.

3.2.2 Northfield

See Section 2.3.1 - Northfield. Two additional high power sirens are required, one near the Route 10 bridge and one near the consolidated school. They should be 125 db, rotatable and with back-up power. In addition, the old siren near center of town should be replaced with a high power (125 db) unit. All sirens should have dual-warn capability (fire and civil emergency) and be activated by fire department.

Est. Cost	\$24,000
Installation	<u>6,000</u>
TOTAL -	\$30,000

As backup for siren system, the police department should have one additional mobile P.A. system.

Est. Cost	\$800
Installation	<u>150</u>
TOTAL -	\$950

Camp Northfield and Mt. Hermon School should each have institutional grade NOAA weather receivers in appropriate offices.

Est. Cost	\$700
Installation	<u>150</u>
TOTAL -	\$850
 TOTAL FOR NORTHFIELD	 \$31,800

3.2.3 Gill

An institutional grade NOAA weather receiver should be installed in an appropriate office of Mt. Hermon School.

Est. Cost	\$350
Installation	<u>75</u>
TOTAL -	\$425

No other equipment is necessary.

TOTAL FOR GILL	\$425
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3.2.4 Bernardston

One additional mobile P.A. system is required on a fire department vehicle.

Est. Cost	\$800
Installation	<u>150</u>
TOTAL -	\$950

The following NOAA weather receivers are required in selected habitations along the following roads.

Route 5 -	10 NOAA receivers
Turners Falls Road -	5 NOAA receivers
Martindale Road - 5	NOAA receivers
Purple Meadow Road -	5 NOAA receivers

Bald Mountain Road -	6 NOAA receivers
Hill Road -	6 NOAA receivers
Haigs Road -	9 NOAA receivers
Eden Hill Road & Eden Road -	8 NOAA receivers

TOTAL RECEIVERS 54

Est. Cost	\$1,620
*Installation	810
TOTAL -	\$2,430

*Throughout these recommendations, installation of NOAA receivers has been based on installation of an external whip antenna only. A decision to permanently mount the receivers is a power company decision and costs would be variable in their circumstances.

TOTAL COST FOR BERNARDSTON \$3,380

3.2.5 Greenfield

The following NOAA receivers are needed along the roads specified.

Country Club Road -	2 NOAA receivers
Upper Barton Road -	5 NOAA receivers
Route 10 -	6 NOAA receivers
Lampblack Road -	8 NOAA receivers

TOTAL Receivers 21

Est. Cost	\$630
Installation	315
TOTAL -	\$945

TOTAL FOR GREENFIELD \$945

3.2.6 Colrain

NOAA receivers are suggested for the following locations:

Green River Road -	15 NOAA receivers
West Leyden Road -	8 NOAA receivers
New County Road -	8 NOAA receivers
TOTAL -	31

Est. Cost	\$930
Installation	465
TOTAL	\$1,395

TOTAL FOR COLRAIN (Vernon Area Only)	\$1,395
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3.2.7 Leydon

NOAA receivers are suggested at the following locations:

Oak Hill Road -	2 NOAA receivers
Greenfield Road -	7 NOAA receivers
East Glen Road -	5 NOAA receivers
Road between Greenfield & Glen -	2 NOAA receivers
Katlez Road -	4 NOAA receivers
Eden Road -	6 NOAA receivers
East Hill Road -	11 NOAA receivers
Frizzel Hill Road -	7 NOAA receivers
Brattleboro Road -	6 NOAA receivers
Greenfield Road (North of cemetery) -	17 NOAA receivers
Old County Road -	16 NOAA receivers
West Leyden Road -	6 NOAA receivers
River Road -	7 NOAA receivers
Alexander Road -	2 NOAA receivers
Brook Road -	3 NOAA receivers

TOTAL -	101 receivers
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Est Cost	\$3,030
Installation	1,515
TOTAL -	\$4,545

TOTAL FOR LEYDEN	\$4,545
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3.2.8 Richmond

NOAA receivers are suggested at the following locations:

Roaring Brook Road - 7 NOAA receivers

Est. Cost	\$210
Installation	<u>105</u>
TOTAL -	\$315
 TOTAL FOR RICHMOND	 \$315

3.2.9 Swansey

Equipment and receivers are suggested at the following locations:

Federal model 5A siren with control unit in center of Westport.

Est. Cost	\$2,292.50
Installation	750.00
Emergency Power	<u>2,000.00</u>
TOTAL -	\$5,042.50

NOAA receivers at five homes in hills within 10 mile zone.

Est. Cost	\$150
Installation	<u>75</u>
TOTAL -	\$225
 TOTAL FOR SWANSEY	 \$5,267.50

3.2.10 Chesterfield

Equipment and receivers are suggested at the following locations:

Spofford Lake area -	50 NOAA receivers
Route 63 -	22 NOAA receivers
Hubbard Hill Road -	5 NOAA receivers
Hubbard Hill extension road -	9 NOAA receivers
Hine Meadow Road -	7 NOAA receivers

Sargent Hill Road -	7 NOAA receivers
Streatso Hill Road -	5 NOAA receivers
River Road -	8 NOAA receivers
Route 9 -	31 NOAA receivers
Chesterfield/Westermoreland Road -	4 NOAA receivers

TOTAL receivers - 148

Est. Cost	\$4,440
Installation	2,220
TOTAL -	\$6,660

One mobile P.A. on fire vehicle for use in West Chesterfield.

Est. Cost	\$800
Installation	150
TOTAL -	\$950

TOTAL FOR CHESTERFIELD \$7,610

3.2.11 Winchester

Equipment and receivers are suggested at the following locations:

Pisgah Reservoir -	6 NOAA receivers
Camp Rabbit Hollow -	2 NOAA receivers
Dartmouth Road North -	17 NOAA receivers
Dartmouth College Road -	14 NOAA receivers
Batton Road -	4 NOAA receivers
Burnt Hill Road -	3 NOAA receivers
Hale Pond Road -	13 NOAA receivers
Roaring Brook Road -	10 NOAA receivers
Spot Meadow Road -	10 NOAA receivers
Forest Lake South -	5 NOAA receivers

TOTAL - 84 receivers

Est. Cost	\$2,520
Installation	1,260
TOTAL -	\$3,780

One mobile P.A. for fire vehicle.

Est. Cost	\$800
Installation	\$150
TOTAL -	\$950

TOTAL FOR WINCHESTER \$4,730

3.2.12 Hinsdale

The NOAA receivers are suggested at the following locations.

Porter Hill Road -	17 NOAA receivers
Bell Brook Road -	18 NOAA receivers
Swamp Brook Road and Lily Pond -	18 NOAA receivers
Dartmouth College Road -	19 NOAA receivers
Route 119 -	21 NOAA receivers

TOTAL - 93 receivers

Est. Cost	\$2,790
Installation	1,395
TOTAL -	\$4,185

3.2.13 Vernon

Equipment and receivers are suggested at the following locations.

One mobile P.A. for fire vehicle.

Est. Cost	\$800
Installation	150
TOTAL -	\$950

Pond Road -	23 NOAA receivers
Hill Road -	16 NOAA receivers
Newton Road -	7 NOAA receivers

TOTAL receivers - 46

Est. Cost	\$1,380
Installation	690
TOTAL -	\$2,070
TOTAL FOR VERNON	\$3,020

3.2.14 Guilford

Equipment and receivers are suggested at the following locations:

Weatherhead Hollow Road -	35 NOAA receivers
Route 5 -	33 NOAA receivers
Guilford Center Road -	23 NOAA receivers
Green River Road -	35 NOAA receivers
Packer Corner Road -	8 NOAA receivers
TOTAL -	134

Est. Cost	\$4020
Installation	2010
TOTAL	\$6030

Two mobile P.A. for fire vehicles

Est. cost	\$1600
Installation	300
TOTAL -	1900

TOTAL for Guilford \$7930

3.2.15 Halifax

Equipment and receivers are suggested at the following locations:

Hinesburg Brook Road -	6 NOAA receivers
Green River Road -	NOAA receivers
Mountain Road -	6 NOAA receivers
Amidon Road -	5 NOAA receivers
TOTAL -	24 receivers

SECURITY SYSTEMS DIVISION

Est. cost	\$720
Installation	<u>360</u>
TOTAL -	\$1080

One mobile P.A. on fire vehicle (Fire Chief does not want P.A. system) -
suggestion: convince him of a need or find another Fire Chief.

Est. cost	\$800
Installation	<u>150</u>
TOTAL -	\$950
 TOTAL FOR HALIFAX	 \$2,030

3.2.16 Brattleboro

Two high power sirens are needed - one on North side of high density population and one on south side of high density population.

Recommend Federal 1000A or equivalent.

Est. Cost	\$7,771
*Installation	<u>2,500</u>
TOTAL -	\$10,271

*emergency portable power available.

TOTAL FOR BRATTLEBORO \$10,271

3.2.17 Marlboro

Equipment and receivers are suggested at the following locations.

Ames Hill area -	6 NOAA receivers
Est. Cost	\$180
Installation	<u>90</u>
TOTAL -	\$270

One mobile P.A. on fire vehicle

Est. Cost	\$800
Installation	<u>150</u>
TOTAL -	\$950

TOTAL FOR MARLBORO \$1,220

3.2.18 Dummerston

NOAA receivers are suggested at the following locations.

Route 5 -	17 NOAA receivers
Center Road -	16 NOAA receivers
Cemetery Road -	10 NOAA receivers
Route 30 -	5 NOAA receivers

TOTAL receivers -	48
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Est. Cost	\$1,440
Installation	720
TOTAL -	\$2,160

TOTAL FOR DUMMERSTON	\$2,160
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TOTAL FOR YANKEE VERNON AREA - \$91,228.50

3.3 YANKEE ROWE AREA

3.3.1 Colrain

NOAA receivers are suggested at the following locations.

Thompson Road -	14 NOAA receivers
South Taylorbrook -	6 NOAA receivers
Christian Hill Road -	9 NOAA receivers
Stetson Road -	7 NOAA receivers
Wilson Hill Road -	10 NOAA receivers
Hillman Road -	1 NOAA receiver
Adamsville Road -	15 NOAA receivers
Maxam Road -	7 NOAA receivers
Taylorbrook Road -	7 NOAA receivers

TOTAL -	76 receivers
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Est. Cost	\$2,280
Installation	1,140
TOTAL	3,420

TOTAL FOR COLRAIN \$3,420

3.3.2 Charlemont

Equipment and receivers are suggested at the following locations.

Legato Hill Road -	5 NOAA receivers
Tatro Road -	2 NOAA receivers
Maxwell Road -	1 NOAA receiver
Rowe Road -	4 NOAA receivers
Warner Hill Road -	1 NOAA receiver

All the above within 5 mile zone.

Zoar Road -	9 NOAA receivers
Hawley Road -	9 NOAA receivers
Harris Road -	4 NOAA receivers
Route 2 West -	14 NOAA receivers
Mountain Road -	10 NOAA receivers
Tower Road -	2 NOAA receivers
Riddell Road -	2 NOAA receivers
South River Road -	5 NOAA receivers
Legato Hill Road (outside 5 mile)	3 NOAA receivers
Bassett Road -	2 NOAA receivers
Potters Road -	2 NOAA receivers
Warner Hill South -	7 NOAA receivers
Heath Road -	10 NOAA receivers
Route 2 East -	29 NOAA receivers
Vincent Road -	6 NOAA receivers
Burnt Hill Road -	8 NOAA receivers
West Oxborn Road -	10 NOAA receivers
East Oxborn Road -	4 NOAA receivers

TOTAL - 141 receivers

Two mobile P.A. for fire vehicles.

Est. Cost	\$4,230
Installation	<u>2,115</u>
TOTAL	\$6,345

Two mobile P.A. for fire vehicles.

Est. Cost	\$1,600
Installation	<u>300</u>
TOTAL -	\$1,900

TOTAL FOR CHARLEMONT \$8,245

3.3.3 Heath

Equipment and receivers are suggested at the following locations.

One institutional grade NOAA receiver in security office at Papoose Lake.

Est. Cost	\$350
Installation	<u>75</u>
TOTAL -	\$425

Two mobile P.A. for fire vehicles.

Est. Cost	\$1,600
Installation	<u>300</u>
TOTAL -	\$1,900

Number 9 Road -	14 NOAA receivers
Rowe Road -	6 NOAA receivers
Stetson Road -	4 NOAA receivers
Summer Road -	2 NOAA receivers
Underwood Hill Road -	2 NOAA receivers

All the above within 5-mile zone.

Colrain Road -	13 NOAA receivers
Underwood Road (North) -	4 NOAA receivers
Jacob Road -	5 NOAA receivers
Number 9 Road -(North)	10 NOAA receivers
Ben Road -	7 NOAA receivers
Flagg Road -	5 NOAA receivers
Colrain Stage Road -	8 NOAA receivers
Dell Road -	12 NOAA receivers
Burrington Road -	10 NOAA receivers
South Road -	9 NOAA receivers
Bassett Road -	2 NOAA receivers
Town Farm Road -	1 NOAA receiver
Avery Road -	8 NOAA receivers
Colrain Brook Road -	3 NOAA receivers
TOTAL Receivers -	187

Est. Cost	\$5,610
Installation	2,805
TOTAL -	\$8,415

TOTAL FOR HEATH \$10,740

3.3.4 Buckland

NOAA receivers are suggested at the following locations.

South River Road - 6 NOAA receivers

Est. Cost	\$180
Installation	90
TOTAL-	270

TOTAL FOR BUCKLAND \$270

3.3.5 Hawley

Equipment and receivers are suggested at the following locations.

Dodge Corner area -	3 NOAA receivers
East Road -	1 NOAA receiver
East Hawley Road -	20 NOAA receivers
Middle Road -	9 NOAA receivers
Pudding Hollow Road -	6 NOAA receivers
West Hawley Road -	21 NOAA receivers
West Hill Road -	6 NOAA receivers

TOTAL Receivers - 66

Est. Cost	\$1,980
Installation	990
TOTAL -	<u>2,970</u>

Two mobile P.A. in constable's vehicles.

Est. Cost	\$1,600
Installation	990
TOTAL -	<u>1,900</u>

TOTAL FOR HAWLEY \$4,870

3.3.6 Rowe

Equipment and receivers are suggested at the following locations.

Potters Road -	7 NOAA receivers
Cross Road -	6 NOAA receivers
Lesures Road -	7 NOAA receivers
Dauids Mine Road -	1 NOAA receiver
Cyrus Road -	2 NOAA receivers
Black Hill Road -	3 NOAA receivers
Shipper Road -	4 NOAA receivers
Brown Road -	2 NOAA receivers

Hazelton Road -	14 NOAA receivers
Tunnel Road -	5 NOAA receivers
Petries Road -	3 NOAA receivers
Brittingham Hill Road -	3 NOAA receivers
Zoar Road -	8 NOAA receivers
Davenport -	1 NOAA receiver
Maxwell Road -	3 NOAA receivers
Zoar Road (South) -	5 NOAA receivers
Steele Brook Road -	5 NOAA receivers
Ford Hill Road -	13 NOAA receivers
Pond Road -	4 NOAA receivers

TOTAL Receivers - 96

Est. Cost	\$2,880
Installation	<u>1,440</u>
TOTAL -	\$4,320

One mobile P.A. on fire vehicle.

Est. Cost	\$800
Installation	<u>150</u>
TOTAL -	\$950

TOTAL FOR ROWE \$5,270

3.3.7 Florida

Equipment and receivers are suggested at the following locations.

Replace siren at Olsen Road, replace siren at Shaft and Stryker Roads, new siren West of Whitecomb summit.

Est. Cost	\$23,313
Installation	<u>7,500</u>
Emergency generators	<u>6,000</u>
TOTAL -	\$36,813

One mobile P.A. for fire vehicle.

Est. Cost	\$800
Installation	150
TOTAL -	\$950

Bliss Road -	1 NOAA receiver
Tilda Hill Road -	10 NOAA receivers
Blackstone Road -	11 NOAA receivers
North Country Road -	1 NOAA receiver
Route 2 -	9 NOAA receivers
Shaft Road -	9 NOAA receivers
Strykers Road -	11 NOAA receivers
Savoy Road -	5 NOAA receivers
Monroe Road -	5 NOAA receivers
Whitcomb Hill Road -	14 NOAA receivers
Route 2 East -	10 NOAA receivers
South Street -	8 NOAA receivers
South County Road -	6 NOAA receivers
 TOTAL Receivers -	 100

Est. Cost	\$3,000
Installation	1,500
TOTAL -	\$4,500

TOTAL FOR FLORIDA \$42,263

3.3.8 Savoy

Equipment and receivers are suggested at the following locations.

Black Brook Road -	5 NOAA receivers
Harwood Road -	2 NOAA receivers
Brier Road -	4 NOAA receivers
Chapel Road -	5 NOAA receivers
Barnard Road -	3 NOAA receivers

Burnett Road -	2 NOAA receivers
Florida Road -	4 NOAA receivers
New State Road -	5 NOAA receivers

TOTAL Receivers - 30

Est. Cost	\$900
Installation	450
TOTAL -	\$1,350

One mobile P.A. on fire vehicle.

Est. Cost	\$800
Installation	150
TOTAL -	\$950

TOTAL FOR SAVOY \$2,300

3.3.9 Adams

No population in 10 mile zone.

3.3.10 North Adams

Equipment is suggested at the following locations.

New siren north of Route 2, new siren between radio tower and river, new siren north of technical school.

Est. Cost	\$23,313
Installation	7,500
Emergency generator	6,000
TOTAL -	\$36,813

Two mobile P.A. on fire vehicles.

Est. cost	\$1,600
Installation	300
TOTAL -	\$1,900

TOTAL FOR NORTH ADAMS \$38,713

3.3.11 Clarksburg

Equipment and receivers are suggested at the following locations.

West Street -	25 NOAA receivers
Cross Road -	40 NOAA receivers
East Street -	18 NOAA receivers
Middle Road -	28 NOAA receivers

TOTAL Receivers - 111

Est. Cost	\$3,330
Installation	1,665
TOTAL -	\$4,995

Two mobile P.A. on fire vehicles.

Est. Cost	\$1,600
Installation	300
TOTAL -	\$1,900

TOTAL FOR CLARKSBURG \$6,895

3.3.12 Monroe

Equipment and receivers are suggested at the following locations.

All north roads (20 homes) - 20 NOAA receivers

Est. Cost	\$600
Installation	300
TOTAL -	\$900

At Monroe Bridge new model 5A (Federal) or equivalent siren.

Est. Cost	\$2,292.50
Installation	2,000.00
Emergency Generator	2,000.00
TOTAL -	\$6,292.50

TOTAL FOR MONROE \$7,192.50

3.3.13 Stamford

Equipment and receivers are suggested at the following locations.

Harrigan Trail -	3 NOAA receivers
Cowan Brook -	2 NOAA receivers
Harrigan Road -	4 NOAA receivers
County Road -	4 NOAA receivers
County Road Extension -	3 NOAA receivers
East Street -	19 NOAA receivers
Route 8 -	83 NOAA receivers
 TOTAL Receivers -	 118

Est. Cost	\$3,540
Installation	<u>1,770</u>
TOTAL -	5,310

One mobile P.A. for fire vehicle.

Est. Cost	\$800
Installation	<u>150</u>
TOTAL -	\$950

TOTAL FOR STAMFORD - \$6,260

3.3.14 Readsboro

Equipment and receivers are suggested at the following locations.

Route 8 -	21 NOAA receivers
Turner Hill Road -	21 NOAA receivers
Main Road -	6 NOAA receivers
Route 8 East -	1 NOAA receiver
North Hill Road -	12 NOAA receivers

TOTAL Receivers - 3-21 61

Est. Cost	\$1,830
Installation	915
Total	\$2,745

One mobile P.A. for fire vehicle.

Est. Cost	\$800
Installation	150
TOTAL -	\$950

Siren replacement Village of Readsboro Model 5A (Federal) or equivalent.

Est. Cost	\$2,292.50
Installation	2,000.00
Emergency Generator	2,000.00
TOTAL -	\$6,292.50

TOTAL FOR READSBORO \$9,987.50

3.3.15 Searsburg

No population in 10 mile zone.

3.3.16 Whitingham

Equipment and receivers are suggested at the following locations.

Route 8 (West) -	14 NOAA receivers
Carley Cemetery Road -	1 NOAA receiver
Sadaruga Lake Road -	11 NOAA receivers
Route 8A -	25 NOAA receivers
Hasley Hill Road -	4 NOAA receivers
Route 8 East -	7 NOAA receivers
Gates Cemetery Road -	8 NOAA receivers
Laurel Lake -	3 NOAA receivers
Road in N.E. corner -	10 NOAA receivers

TOTAL Receivers - 83

Est. Cost	\$2,490
Installation	1,245
TOTAL -	<u>\$3,735</u>

Two mobile P.A. for fire vehicles.

Est. Cost	\$1,600
Installation	300
TOTAL -	<u>\$1,900</u>

TOTAL FOR WHITINGHAM \$5,635

3.3.17 Wilmington

NOAA receivers are suggested at the following locations.

Medburyville Road -	5 NOAA receivers
Reservoir Road -	15 NOAA receivers
Route 8 -	11 NOAA receivers

TOTAL Receivers - 31

Est. Cost	\$930
Installation	465
TOTAL -	<u>\$1,395</u>

TOTAL FOR WILMINGTON \$1,395

3.3.18 Halifax

Equipment and receivers are suggested at the following locations.

West Halifax only - one mobile P.A. on fire vehicle.

Est. Cost	\$800
Installation	150
TOTAL -	<u>\$950</u>

North of West Halifax - 19 NOAA receivers

South of West Halifax - 47 NOAA receivers

TOTAL Receivers 66

Est. Cost	\$1,980
Installation	<u>990</u>
TOTAL -	\$2,970

TOTAL FOR WEST HALIFAX \$3,920

TOTAL FOR YANKEE ROWE \$157,826

TOTAL FOR BOTH AREAS \$249,054.50

3.4 THE WARNING AND NOTIFICATION SYSTEM

The primary system cannot be activated without slave transmitters, one each located in the vicinity of Yankee Row and Vernon and operating on one of the three assigned NWS frequencies. These transmitters would routinely broadcast weather information keyed by the Burlington, Vermont NWS transmitter but would be interrupted to carry real-time warning alarm environmental disturbance that could effect life or health of the public. Actual location of these alarm transmitters would depend on field measurements made at the time of installation.

Est. cost (two systems)	\$11,000
Installation (estimated)	<u>5,000</u>
Emergency power	<u>4,000</u>
TOTAL	\$20,000

Recurring cost for lines from Mt. Ascutney to Vernon and Rowe:

Ascutney to Vernon \$137.60/month

Ascutney to Rowe \$206.80/month

APPENDIX A

TOWN Vernon STATE VT ID # _____

POPULATION 1286 DATE 5/28/80 SOURCE Town Hall

AREA (SQ. MI.) _____ % IN EPZ: (5MI) X (10MI) _____ Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Herbert Meyer</u>	<u>Police Chief</u>
<u>Raymond Capen</u>	<u>Actg. Fire Chief</u>
<u>Raymond Puffer</u>	<u>CD Director</u>
<u>Walter Zaluzny</u>	<u>Chairman BD of Selectmen</u>
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 2 Part Time 3 Hours of Operation 0800-0290

Vehicles 1 Type Sedan

Radio Equipped Yes Frequency 158.73, 155.97, 460.200, 460.500

P.A. Equipped Yes If funds Avail, Equip others -----

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Sheriff's Office Brattleboro

Other Dept's Monitored Brattleboro Police and Fire - Vernon Fire No
Hinsdale NH Police - VT State Police C.B.

Telephone Lines 4 802-254-6962

Hot Lines No

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 18 Hours of Operation Volunteer
Vehicles 6 Type Fire Fighting
Radio Equipped 6 Frequency 33.54
P.A. Equipped 1 If funds Avail, Equip others Yes
Portables 5 Pagers 18
Monitor Receivers in Officers Homes 18
Base Station Location Fire Dept.
Other Dept's Monitored Tri State and Southwestern Mutual Aid No
C.B.
Telephone Lines Avenue Answering Service - Brattleboro
Hot Lines No
Auxiliary Power (Yes) X (No) _____
Make/Model Winpower 20 KVA
Type/Amount of Fuel Gasoline - 1000 Gals
Any Added Capability CD at Fire Station
Portable Generators (Yes) X (No) _____
Make/Model Installed on Fire Vehicle
Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

Fire calls received by answering servie - Receivers/pagers tone activated by
answering service - Audible device at Fire Station also activated by the
service. Fire Dept. monitor in school.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) 2 (No) _____

Location(s) 1. Fire Station
2. Old School House (to be installed Fall 1980)

How Activated 1. Remotely from Avenue Answering Service - Brattleboro
2. Same

Make/Model 1. Federal 10 HP 360⁰ Rotary - "Thunderbolt"
2. Unknown Old Siren

Effective Range Both 96% of Town
Difficult to hear in southern section of town

Test Frequency Every Saturday 12:30 PM

Type of Tone _____

NOTES

POLICE DEPARTMENT

Full Time 0 Part Time 1 Hours of Operation _____

Vehicles None (Personal Car) Type _____

Radio Equipped State Police Frequency _____

P.A. Equipped _____ If funds Avail, Equip others _____

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location _____

Other Dept's Monitored _____ C.B.

Telephone Lines _____

Hot Lines _____

Auxiliary Power (Yes) _____ (No) _____

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

VT State Police provide Police Services in the Town. The elected constable has
a State Police radio in his personal car.

FIRE DEPARTMENT

Full Time 0 Part Time 23 Hours of Operation Volunteer
Vehicles 5 Type Fire Fighting
Radio Equipped 4 Frequency 33.54
P.A. Equipped 2 If funds Avail, Equip others Yes
Portables _____ Pagers _____
Monitor Receivers in Officers Homes _____
Base Station Location Fire Dept.
Other Dept's Monitored _____ C.B.
Telephone Lines _____
Hot Lines _____
Auxiliary Power (Yes) _____ (No) X
Make/Model Portables 1500 + 3000 Watt - Gasoline Unlimited Amount
Will run Radios + few Lights at Fire Station
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) X
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State and Southwestern Mutual Aid

Audible Devices (Yes) X (No) _____

Location(s) Fire Station

How Activated Remotely from Brattleboro Fire Dept.

Manually from Fire Station

Make, Model Unknown 5HP

Effective Range Two miles

Test Frequency _____

Type of Tone Siren

NOTES

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Fire Station Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) X (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ (No) _____

Types _____

NOTES

TOWN Brattleboro STATE VT ID # _____
POPULATION 12000 DATE 5/27/80 SOURCE Town Manager
AREA (SQ. MI.) 30 & IN EPZ: (5MI) X (10MI) _____ Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: Brattleboro is the commercial and economic center of area - The
population increases to 15-20 thousand people during the business
day.

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Corwin Elwell</u>	<u>Town Manager/CD Director</u>
<u>Howard Mattison</u>	<u>Fire Chief</u>
<u>Orman Holden</u>	<u>Director Public Works</u>
<u>Marcel LeClaire</u>	<u>Captain Police Dept.</u>
_____	_____
_____	_____

NOTES:

The Municipal Center uses a "Vanguard Telephone System" with interface to
New England Tel and Tel.

POLICE DEPARTMENT

Full Time 26 Part Time 15 Hours of Operation 24 hours

Vehicles 5 Type Sedans

Radio Equipped 5 Frequency 39.10 VTSP 460.500

P.A. Equipped 5 If funds Avail, Equip others

Portables Pagers

Monitor Receivers in Officers Homes

Base Station Location Police Dept.

Other Dept's Monitored C.B.

Telephone Lines 802-254-2321/2322

Hot Lines No

Auxiliary Power (Yes) X (No)

Make/Model

Type/Amount of Fuel

Any Added Capability

Portable Generators (Yes) (No)

Make/Model

Assist in Preparation of Notification Plan (Yes) X (No)

NOTES

Police Dept. also monitors a flood alarm for Whetsone Brook.

FIRE DEPARTMENT

Full Time 22 Part Time 30 Hours of Operation 24 hours
Vehicles 12 Type Fire Fighting
Radio Equipped 12 Frequency 33.54 and 39.68
P.A. Equipped 5 If funds Avail, Equip others yes
Portables _____ Pagers _____
Monitor Receivers in Officers Homes _____
Base Station Location Fire Dept.
Other Dept's Monitored Police Dept. - DPW - Southwestern Mutual Aid Chan #9
Telephone Lines 802-254-4831 and 257-0253 C.B.
Hot Lines _____
Auxiliary Power (Yes) (No) _____
Make/Model Willy's 10KW
Type/Amount of Fuel Propane Gas 250 lbs.
Any Added Capability -----
Portable Generators (Yes) (No) _____
Make/Model 1. 10KW Air cooled Gasoline
2. 1-3kw + 1 1 1/2KW Onan's Gasoline
Assist in Preparation of Notification Plan (Yes) (No) _____

NOTES

Main Fire Station Brattleboro Center - Substation W. Brattleboro

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) X (No) _____

Location(s) 1. Central Station - Elliott St.
2. Substation - W. Brattleboro

How Activated Manually - Central Station

Make/Model Gamewell

Effective Range _____

Test Frequency Every Evening 9:10 PM

Type of Tone Air Horn

NOTES

Fire Chief believes two additional audible devices will cover
the entire town.

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Municipal Center Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) X

Radio Capability (Yes) X (No) _____ State CD System - 23 Channel CB T/R

Telephones (Yes) See Notes (No) _____

Auxiliary Power at E.O.C. (Yes) X (No) _____

Make/Model See Police Fuel _____ Amount _____

E.O.C. Manned by Town and Dept. Officials

Types of Events Covered Incident at Vernon

Notification Plan in Place (Yes) X (No) _____

Types _____

NOTES

 Two telephones are in place 802-254-4541/4542 Neither phone works

PUBLIC WORKS DEPARTMENT

Full Time 34 Part Time _____ Hours of Operation 8A-6P Mon. thru Fri.

Vehicles 19 Type _____

Radio Equipped 19 Frequency 155.82

P.A. Equipped 0 If funds Avail, Equip others Yes

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Pleasant Valley Reservoir - Remote at Public Works Dept.

Other Dept's Monitored Tri State - VT State Police VT DPW C.B.

Telephone Lines 802-254-4255

Hot Lines None

Auxiliary Power (Yes) X (No) _____

Make/Model Miller 16 KW (Truck Mounted)

Type/Amount of Fuel Gasoline 10 Gals

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

TOWN Dummerston STATE VT ID # _____

POPULATION 1300+ DATE 6/25/80 SOURCE _____

AREA (SQ. MI.) _____ % IN EPZ: (5MI) _____ (10MI) ✓

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Cliff Emery</u>	<u>CD Director</u>
<u>Larry Lynch</u>	<u>Asst. Fire Chief</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

About 1/2 total population lives within 10 mile zone.

Putney converting Co. 75 employees (Putney Depot)

Vermont Graphics 30-40 employees Near Brattleboro line.

POLICE DEPARTMENT

Full Time 0 Part Time 5 Hours of Operation On call
Vehicles 1 Type Sedan
Radio Equipped X Frequency 39.10
P.A. Equipped X If funds Avail, Equip others _____
Portables 0 Pagers 0
Monitor Receivers in Officers Homes 4
Base Station Location Town Garage East West Road
Other Dept's Monitored Monitor Brattleboro PD FD - SP - Rescue C.B.
Telephone Lines Any Officer Larry Cook Chief - 2411 Days
Cliff Emery
Hot Lines 0
Auxiliary Power (Yes) _____ (No) X
Make/Model Town Garage
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 40 Hours of Operation Call
Vehicles 7 Type 2 pumpers; 2 tankers; 1 rescue, jeep & pickup
Radio Equipped 6 Frequency 154.43 Keene, MA
P.A. Equipped 6 If funds Avail, Equip others _____
Portables 6 Pagers 10
Monitor Receivers in Officers Homes 20
Base Station Location 1 each station
Other Dept's Monitored Tri State - Rescue Inc. Brattle C.B.
Telephone Lines 1
Hot Lines 0
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) X Rescue Trk (lighting) (No) _____
Make/Model Homelite 2500W
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Fire call Keene, MA Alarm remotely controlled

Both Fire Stations outside 10 mile zone.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with SWMA

Audible Devices (Yes) 2 (No) _____

Location(s) Dummerston + W Dumm.

East west rd - West rd.

How Activated Thru Keene (SWMA)

Make/Model Dummerston - Federal 5 HP

W. Dummerston - Unknown

Effective Range 2 miles north - east and west

Test Frequency Tues 7 PM weekly

Type of Tone Wailing Siren

NOTES

CIVIL DEFENSE

E.O.C. (Yes) X (No)

Location Town Garage Alternate E.O.C. Locations None

Emergency Warning Devices at E.O.C. (Yes) (No) X

Radio Capability (Yes) X (No) 39.10 Town Freq.

Telephones (Yes) X (No)

Auxiliary Power at E.O.C. (Yes) X (No)

Make/Model GE 30KW Fuel Gasoline Amount 2500 Gals

E.O.C. Manned by CDD et al.

Types of Events Covered Any emergency

Notification Plan in Place (Yes) X (No)

Types Revising Present Plan

NOTES

 Radio - Clear reception

 TV - Cable being installed

 Public Works - 8 Vehicles 39.10

 CDD car - Mobile radio with Montpelier VT CD:

FIRE DEPARTMENT

Full Time _____ Part Time 20 Hours of Operation Volunteer
Vehicles 3 Type Fire Fighting
Radio Equipped 2 Frequency 154.43 154.115 Town Freq
P.A. Equipped 0 If funds Avail, Equip others Yes
Portables 3 Pagers 2 1 Dep Fire Chief
Monitor Receivers in Officers Homes 9 + 6 Scanners
Base Station Location Fire Station and Remote Avenue Answering Service
Other Dept's Monitored So. Western - Deerfield Valley C.B.
Telephone Lines 254-4122
Hot Lines None
Auxiliary Power (Yes) _____ (No) X
Make/Model Fire Station equiped with emergency lights on battery charge
Type/Amount of Fuel Radio System equipped with battery backup on trickle
Any Added Capability charge for immediate switchover in event of loss of commercial power.
Portable Generators (Yes) 2 (No) _____
Make/Model 2500 W 2000 W Gasoline on on each truck
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

+2 Portables in PD with same Freq. Property of Town
Red Phone System (3) 1 Answering Service - 1 Whitney's Store - 1 Post Office -
Ans. Svc puts tone on 154.115 Opens up Scanners then calls via radio SWMA.
They activate tone opens up monitors

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Southwestern

Audible Devices (Yes) _____ (No) X

Location(s) _____

How Activated _____

Make/Model _____

Effective Range _____

Test Frequency _____

Type of Tone _____

NOTES

Phone NET+T - Red Phones out twice in this calender year

Electric Central VT Public Service

Radio WTSA Good +

TV Generally Good

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Town Clerks Office Alternate E.O.C. Locations Fire Station

Emergency Warning Devices at E.O.C. (Yes) _____ (No) X

Radio Capability (Yes) X Portable on _____ (No) _____
15443 + 154175

Telephones (Yes) 254-4080/4081 (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) X

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by Town Officials

Types of Events Covered Natural Disasters

Notification Plan in Place (Yes) X (No) _____

Types _____

NOTES

CD Director is also Police Chief. He estimates it would take 33 minutes

to notify the Dwellings within 10mz.

TOWN *Halifax STATE VT ID # _____

POPULATION 458 DATE 8/22 SOURCE _____

AREA (SQ. MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Vernon Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer

LOCATION(S): _____

TYPE: 500 Summer residents spread throughout town

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Thomas Rafus</u>	<u>CDD</u>
<u>Al Corey</u>	<u>Police Chief</u>
<u>Wayne Courser</u>	<u>Fire Chief</u>
_____	_____
_____	_____
_____	_____

NOTES:

413 Dwellings in Halifax

% w/o Electricity - Not Known

% w/o Telephones - Not Known

POLICE DEPARTMENT

Full Time 1 Part Time _____ Hours of Operation As Required

Vehicles 1 Personal Vehicle Type Sedan

Radio Equipped 1 (Town Owned) Frequency 460.475
460.500

P.A. Equipped 1 (Personal Property) If funds Avail, Equip others ----

Portables 0 Pagers 0

Monitor Receivers in Officers Homes _____

Base Station Location State Police

Other Dept's Monitored Fire/Rescue/State Police Yes C.B.

Telephone Lines Chief's Home

Hot Lines None

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State and Deefield Valley Mutual Aid

Audible Devices (Yes) X (No) _____

Location(s) Fire Station

How Activated *Red Phones

Make/Model 3½ HP Make/Model Unkn.

Effective Range Good Day 3 Miles

Test Frequency Weekly; Sunday 12:30 P

Type of Tone Siren

NOTES

Phone - NET+T Reliable

Elec - Vermont Elect

Radio - Good

TV - Pretty Good

* Not operable manually from Fire Station - except by station Red Phone (locked in station).

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ (No) X

Types _____

NOTES

Emergency plan not in place _____

TOWN Hinsdale STATE N.H. ID # _____

POPULATION 3700 DATE 5/27/80 SOURCE Fire Chief

AREA(SQ.MI.) 36/37 % IN EPZ: (5MI) X (10MI) _____

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer

LOCATION(S): _____

TYPE: Summer cottages (100) spread out in remote areas Hinsdale
Hinsdale Horse Track Season - Mobile homes near track

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>James Stanclift</u>	<u>Fire Chief 336-5512</u>
<u>Ralph Simonds</u>	<u>CD Director (Home)</u>
<u>Thomas McQuarry</u>	<u>Police Chief</u>
_____	_____
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 4 Part Time 12 Hours of Operation 24 Hours

Vehicles 2 Type Sedans

Radio Equipped 2 Frequency 155.07 (Cheshire Co.)

P.A. Equipped 2 If funds Avail, Equip others 39.10 Brattleboro Police

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Police Station

Other Dept's Monitored New Hamp. State Police 44.82 Chan #3 Winter C.B.

Telephone Lines 336-7766 and Tri State

Hot Lines None

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 40 Hours of Operation Volunteer
Vehicles 7 Type Fire Fighting
Radio Equipped 5 Frequency 33.54 & 33.78
P.A. Equipped 1 If funds Avail, Equip others Yes
Portables _____ Pagers _____
Monitor Receivers in Officers Homes _____
Base Station Location Fire Dept.
Other Dept's Monitored Tri State/Southwestern
Hindsdale/Keene and State Police C.B.
Telephone Lines Yes
Hot Lines No
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Southwestern

Audible Devices (Yes) X (No) _____

Location(s) _____

How Activated Manually from Fire Station

Remotely from Southwestern

Make/Model Antique

Effective Range 1 mile

Test Frequency Daily

Type of Tone Siren

NOTES

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Fire Dept. Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) X (No) _____

Radio Capability (Yes) X (No) _____

Telephones (Yes) X (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) X

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by Town Officials- Dept Heads

Types of Events Covered All emergencies

Notification Plan in Place (Yes) X (No) _____

Types All emergencies

NOTES

Notification plan calls for using telephone - fire and police PA systems and
door to door.

TOWN Winchester STATE NH ID # _____
POPULATION 3500 DATE 6/5/80 SOURCE _____
AREA (SQ. MI.) 55 & IN EPZ: (5MI) X (10MI) X Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: 1500

DURING MONTHS (WEEKS) OF: Memorial Day to Labor Day

LOCATION(S): _____

TYPE: Summer Cottages/Camping Area's at Forest Lake

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>John Sims</u>	<u>Police Chief</u>
<u>John Sullivan</u>	<u>Fire Chief</u>
<u>Paul Ciechonski</u>	<u>CD Director</u>
<u>Ernest Kirouac</u>	<u>Emergency Services</u>
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 2 Part Time 10 Hours of Operation Daily 7A - 2A
Weekends 7A - 3A

Vehicles 2 Type Sedans

Radio Equipped 2 Frequency 155.070

P.A. Equipped 2 If funds Avail, Equip others -----

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Police Station

Other Dept's Monitored _____ C.B. _____

Telephone Lines 239-4814

Hot Lines None

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 65 Hours of Operation Volunteer
Vehicles 7 Type Fire Fighting
Radio Equipped 7 Frequency 33.54 and 33.78
P.A. Equipped 2 If funds Avail, Equip others Yes
Portables _____ Pagers 0
Monitor Receivers in Officers Homes 65
Base Station Location Fire Station
Other Dept's Monitored Southwestern and Tri State C.B.
Telephone Lines _____
Hot Lines None
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) X 2 (No) _____
1. 1500 Watt - Gasoline - 5 gal cans
Make/Model 2. 1000 Watt _____
Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Southwestern and Tri State

Audible Devices (Yes) 2 (No) _____

Location(s) 1. Central Fire Station

2. Sub station - Ashuelot

How Activated 1. By Southwestern and manually at station

2. Manually at substation

Make/Model 1 and 2 unknown

Effective Range 2 miles - good day

Test Frequency _____

Type of Tone 1 Siren with Clapper

2 Siren

NOTES Brattleboro - WTSA

Greenfield - WHAI

Radio - Keene -

TV - Cable

Telephone - NET+T Reliable

Employers - AC Lawrence Leather Co
Employs approx 150 people

POLICE DEPARTMENT

Full Time 0 Part Time 23 Hours of Operation On Call

Vehicles 1 Town 12 Personal Type Sedan

Radio Equipped 1 Frequency 155.07 - County
156.09 State Police
155.64 Emergency

P.A. Equipped 1+1- Personal Cars If funds avail, Equip others -----
155.475 State Police

Portables 4 Chargers -----

Monitor Receivers in Officers Homes 23

Base Station Location Chief's Home

Other Dept's Monitored ----- C.B.

Telephone Lines Chiefs Business

Hot Lines None

Auxiliary Power (Yes) ----- (No) X

Make/Model -----

Type/Amount of Fuel -----

Any Added Capability -----

Portable Generators (Yes) ----- (No) -----

Make/Model -----

Assist in Preparation of Notification Plan (Yes) ----- (No) -----

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 80 Hours of Operation Volunteer
Vehicles 12 Type Fire Fighting
Radio Equipped 12 Frequency 33.78 and 33.54
P.A. Equipped 8 If funds Avail, Equip others Yes
Portables _____ Pagers _____
Monitor Receivers in Officers Homes _____
Base Station Location One at each of three stations
Other Dept's Monitored Southwestern C.B.
Telephone Lines 352-1100
Hot Lines _____
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) 3 (1 each station) (No) _____
Make/Model Unknown 5000 Watts - Gasoline 1000 Gals
Three lighting trucks
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

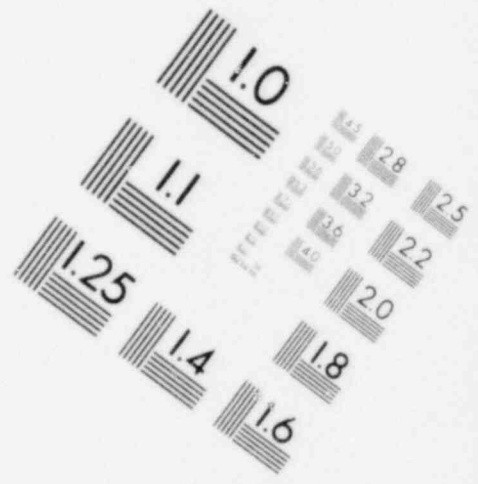
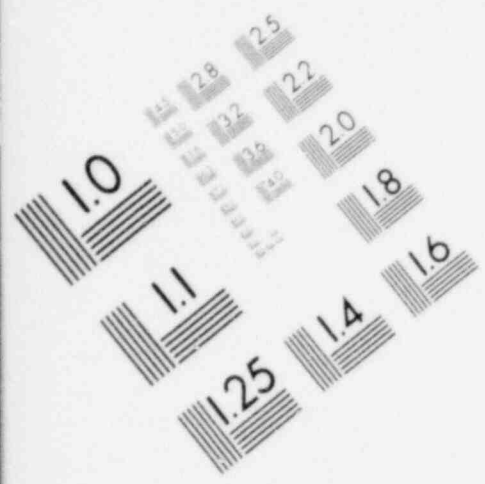
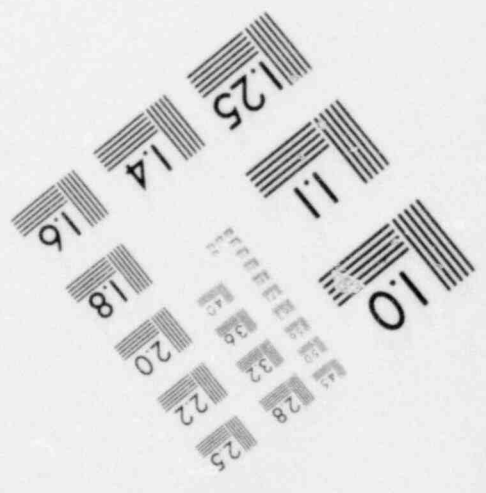
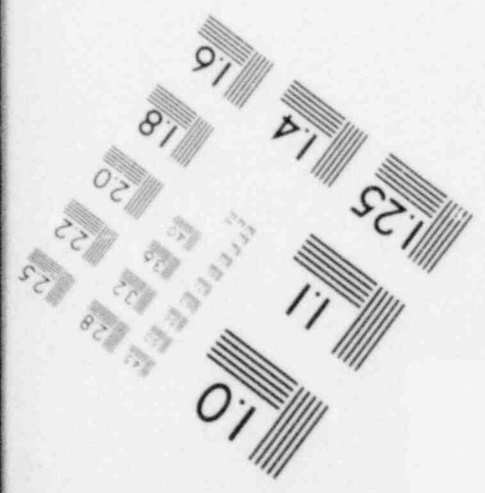
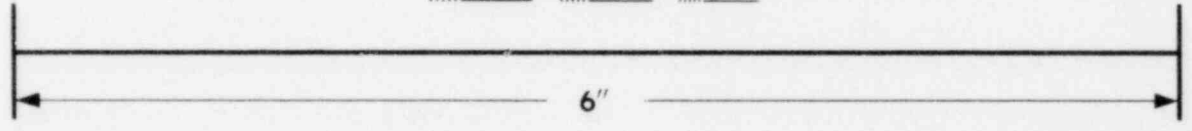
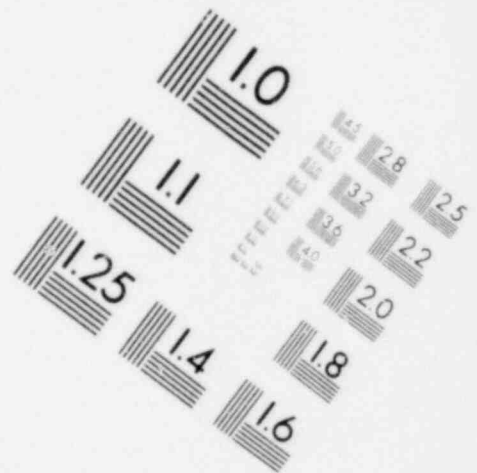
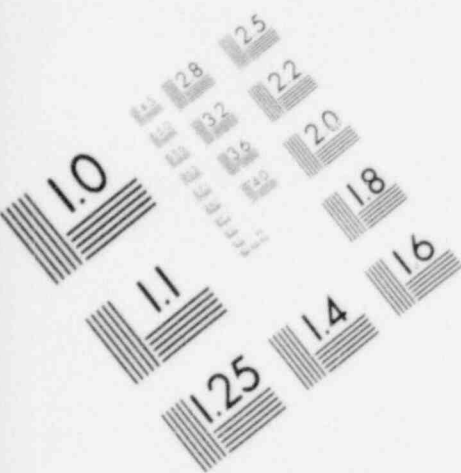
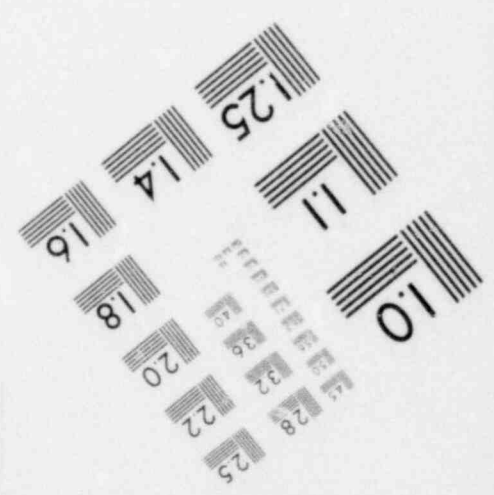
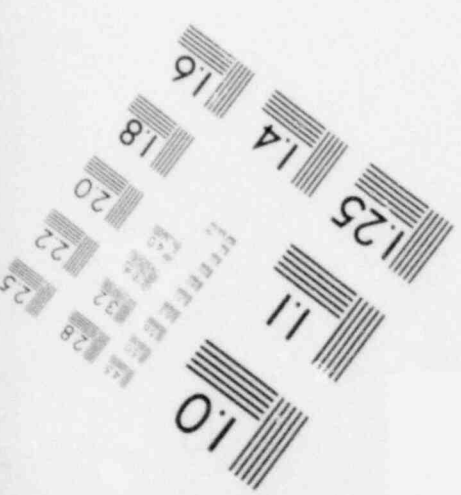
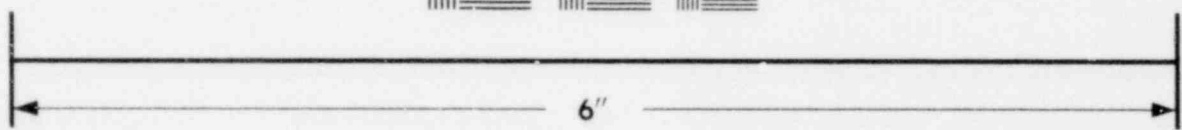


IMAGE EVALUATION
TEST TARGET (MT-3)





**IMAGE EVALUATION
TEST TARGET (MT-3)**



TOWN Richmond STATE NH ID # _____

POPULATION 500 DATE 7/30/80 SOURCE _____

AREA (SQ. MI.) 28/30 % IN EPZ: (5MI) _____ (10MI) X Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer

LOCATION(S): _____

- * TYPE: Camp Takota - YMCA - 100 youngsters
- Camp Wyaka - - 50 " and support staff
- Summer Residents approx 50 - Majority have phones and electricity

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Bob Van Brocklin</u>	<u>Fire And Police Chief</u>
<u>Wm J. Pearsall</u>	<u>Rescue Squad.</u>
<u>Fran Jillson</u>	<u>Fire Dept.</u>
<u>Bob Coy</u>	<u>CD Director</u>
_____	_____
_____	_____

NOTES:

*None of areas cited above are in 10 MZ

Approx 6 houses - (13 people) in town are within 10 MZ.

POLICE DEPARTMENT

Full Time 0 Part Time 4 Hours of Operation AS needed

Vehicles 4 personal cars Type 3 Sedans 1 pickup

Radio Equipped 4 (owned by Town) Frequency 155.07 Cheshire Couty

P.A. Equipped 0 If funds Avail, Equip others Yes

Portables 1 Not Working Pagers 0

Monitor Receivers in Officers Homes 3

Base Station Location Southwestern MA Keene

Other Dept's Monitored Two mobiles monitor 155.475 State Police Chan #2 C.B.

Telephone Lines *352-1100 1 Chief's Home

Hot Lines None

Auriliary Power (Yes) (No) X

Make/Model

Type/Amount of Fuel

Any Added Capability

Portable Generators (Yes) (No)

Make/Model

Assist in Preparation of Notification Plan (Yes) X (No)

NOTES

*352-1100 Rings in SWMA Keene where calls are taken and cruisers notified

Police have an office in Town Hall

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Southwestern Mutual Aid

Audible Devices (Yes) X (No) _____

Location(s) Fire Station

How Activated Remotely from SWMA or Manually from Fire Station
or box at Four Corners (center of town)

Make/Model World War II Model/Make unknown

Effective Range Very good day 1½ miles

Test Frequency Daily 11 AM Remotely from S.W.M.A.

Type of Tone Siren (cycled 10 times for fire)

NOTES

Rescue Squad - 19 members - (Part of Fire Dept.)

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Fire Station Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) X (No) _____

Radio Capability (Yes) X Fire Dept. (No) _____

Telephones (Yes) *239-6076 (No) _____

Auxiliary Power at E.O.C. (Yes) X (No) _____

Make/Model See Fire Dept. Fuel _____ Amount _____

E.O.C. Manned by CD and town officials

Types of Events Covered any emergency

Notification Plan in Place (Yes) Being Prepared (No) _____

Types _____

NOTES

 *Rings at Fire Dept and Library.

 10 KW generator obtained from Fed. excess property presently inoperable

 attempting to repair inhouse.

 NET+T Fairly Reliable

 Radio: Few get AM - FM good

 TV Depends on Location

 Electricity: Public Service Co. of NH

TOWN Bernardston STATE MA ID # _____
POPULATION 1800 DATE 7 / 8 / 80 SOURCE _____
AREA (SQ. MI.) _____ 3 IN EPZ: (5MI) X (10MI) X Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>David M. Mason</u>	<u>Police Chief</u>
<u>Eugene Dwight</u>	<u>Fire Chief</u>
<u>Linda Sedwick</u>	<u>CD Director</u>
_____	_____
_____	_____
_____	_____

NOTES:

less than 5% (100) of population within 5 mile radius
Those interviewed together with a number of fireman in attendance
were extremely critical and expressed deep concern that the State Government
would vacillate on initiating a notification to affected towns after the
Plant had notified the State.

POLICE DEPARTMENT

Full Time 1 Part Time 3 Hours of Operation 24 hours

Vehicles 1 Type Sedan

Radio Equipped X Frequency Franklin County
39.16 39.24

P.A. Equipped X If funds Avail, Equip others

Portables 3 Pagers 0

Monitor Receivers in Officers Homes 6-7

Base Station Location Town Hall and Dispatcher Greenfield

Other Dept's Monitored SO Windham Co MA State Police Chan. 9 and 19 C.B.

Telephone Lines Office and Dispatch

Hot Lines None

Auxiliary Power (Yes) (No) X

Make/Model

Type/Amount of Fuel

Any Added Capability

Portable Generators (Yes) (No)

Make/Model

Assist in Preparation of Notification Plan (Yes) (No) X

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) X (No) _____

Location(s) Town Hall

How Activated Button Fire Sta and Streets Store

Make/Model Sterling

Effective Range Good Day 1/2 town, about 60% of people

Test Frequency Once a week 12N Saturday

Type of Tone Siren

NOTES

TV/Radio Good

NET+T Reliable

Elec West MA

TOWN Leyden STATE MA ID # _____
POPULATION 550 DATE 8/5/80 SOURCE _____
AREA(SQ.MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Vernon

SEASONAL DEMOGRAPHICS:
ESTIMATED POPULATION INCREASES: _____
DURING MONTHS (WEEKS) OF: Summer
LOCATION(S): _____
TYPE: Camp Lion-Knoll 25 youngsters during day

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Ronald L. Barton</u>	<u>Fire Chief and C.D. Director</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 0 Part Time 3 Hours of Operation AS Needed
Vehicles 3 (Personal Vehicles) Type _____
Radio Equipped 3 Frequency 39.16 Franklin County Police
P.A. Equipped 2 If funds Avail, Equip others Yes
Portables 2 Pagers 0
Monitor Receivers in Officers Homes 0
Base Station Location Chief's Home
Other Dept's Monitored Franklin County C.B.
Telephone Lines
Hot Lines No
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

* Blue Phone Net - Rings in all officers' homes

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) (No)

Location(s) Fire Station

How Activated Manually

Make/Model Quite Old

Effective Range Good Day 1 mile at most

Test Frequency No regular testing

Type of Tone Siren

NOTES

Estimated only 5% of town covered by Siren. using PA System - Telephone

and door to door 50% of population could be notified in 15 minutes.

TOWN Northfield STATE MA ID # _____
POPULATION 2400 DATE 6/16/80 SOURCE _____
AREA (SQ. MI.) 40.32 1/3 IN EPZ: (5MI) _____ (10MI) _____
67 miles of Road Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): E Northfield "The Ridge" 70 summer cottages 150 people
1200 - 1500 People

TYPE: Northeast utilities skiing Winter - Hiking Summer

Camp Northfield - Summer 300 (Near VT Line)

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>David Mroczek</u>	<u>CD Director</u>
<u>Skip Donnell</u>	<u>Fire Chief</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 1 Part Time 10 Hours of Operation 8/10 hrs on duty
Vehicles 2 Type 1 Sedan 1 3/4 ton pick up
Radio Equipped yes Frequency 39.16 Franklin Co
P.A. Equipped 1 If funds Avail. Equip others Yes
Portables _____ Pagers 0
Monitor Receivers in Officers Homes 2
Base Station Location Police Dept.
Other Dept's Monitored Franklin County Net Yes
C.B.
Telephone Lines One
Hot Lines Fire Net
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Answering Service Greenfield (Crocker's Answering Service)
Station manned 8-4P Mon thru Fri.

FIRE DEPARTMENT

Full Time 0 Part Time 26 Hours of Operation _____

Vehicles 4 Type Fire Apparatus

Radio Equipped Yes Frequency 33.54 (Tri State)

P.A. Equipped 2 If funds Avail, Equip others Yes

Portables 4 Pagers 12

Monitor Receivers in Officers Homes 25

Base Station Location Fire Hdqts

Other Dept's Monitored Tri State Yes
C.B.

Telephone Lines 2

Hot Lines 0

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) X (No) _____

Make/Model 2.5M65 Kohler

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

3 Personal vehicles radio equipped

Auxiliary Generator on truck used to power radio in station

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State - Assoc Member So Western MA

Audible Devices (Yes) X (No) _____

Location(s) Fire Station

How Activated _____

Make/Model Sterling Siren

Effective Range 1 Mile

Test Frequency Twice A year

Type of Tone Siren Activated from station

NOTES

Red Phone Network at 7 locations town and fire personnel

Base sta. in three houses - pyramid phone alerting

WHA1 Greenfield - Reception Good

NET+T Phone service excellent

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) _____ X _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____ X _____

Radio Capability (Yes) _____ (No) _____ X _____

Telephones (Yes) _____ X _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____ X _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by CDD - Rep's of Fire Police Town Officials Health Etc

Types of Events Covered Nuclear Incidents - Other emergencies
Tornado, Flood etc.

Notification Plan in Place (Yes) _____ X _____ (No) _____

Types _____

NOTES

Plans - lower level of Town Hall, probably to fall.

Present Notification Plan - Fire Signal and PA on

Police/Fire vehicles. Present Plan current as of April.

TOWN Colrain STATE MA ID # _____
POPULATION 1500 DATE 7/31/80 SOURCE CD Director
AREA (SQ. MI.) 10 % IN EPZ: (5MI) _____ (10MI) X Vernon
+ Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None (in 10M zone)

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>James Sturgeon</u>	<u>CD Director</u>
<u>Gerald Streeter</u>	<u>Fire Dispatcher</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

Approx 100 people in each 10 MZ of Rowe and Vernon West (Rowe) Notification
thru F.D. via phone if no answer then door to door.
East (Vernon) Notification thru Police Chief with Assistance from F.D.
CD Director states "not likely" all could be notified within 15 minutes - also
states 15 min requirement "not realistic".

POLICE DEPARTMENT

Full Time 0 Part Time 6 Hours of Operation As needed

Vehicles 1 town 3 Private Type Sedan

Radio Equipped _____ Frequency 39.16

P.A. Equipped _____ If funds Avail, Equip others _____

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Chief's Home

Other Dept's Monitored Franklin County Police Radio C.B.

Telephone Lines _____

Hot Lines None

Auxiliary Power (Yes) _____ (No) _____

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 25 Hours of Operation Volunteer
Vehicles 4 (6 Private Vehicles with mobiles) Type 3 Fire 1 Ambulance
Radio Equipped 4 Frequency 33.54
P.A. Equipped 4 If funds Avail, Equip others -
Portables 2 Pagers 1
Monitor Receivers in Officers Homes 16
Base Station Location 3 Fire Station - Chiefs Home - Streeters Texaco Station
Other Dept's Monitored Greenfield Fire and Police - Franklin County Police State Police C.B.
Telephone Lines (Red phone system)
Hot Lines None
Auxiliary Power (Yes) X (No) _____
Make/Model Unknown
Type/Amount of Fuel Gasoline - Provides Lights/Radio Heat
Any Added Capability ---
Portable Generators (Yes) 1 (No) _____
Make/Model Truck mounted capable of 110V + 220V
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

Red phone system - Phone rings at ten locations - First answered at Streeter's

Texaco - Using encoder opens receivers - sends message and blows both sirens.

Kendall Mfg. Co has receiver in maintenance division where 5 firemen are

employed who also respond.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) 2 (No) _____

Location(s) 1 Fire Station

2 Streeter's Texaco Station

How Activated Both by tone or manually

Make/Model Un known

Effective Range Both - Good Day 5 miles

Test Frequency Every Sat at noon

Type of Tone Siren

NOTES

Kendall Mfg. Co has their own fire dept. - truck and internal alarm -

Company permits response to town needs.

Ambulance Sqd. - 12 Emerg. Med Technicians have their own distinct tone

alert.

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Fire Station Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) X Tri State (No) _____

Telephones (Yes) X (No) _____

Auxiliary Power at E.O.C. (Yes) X (No) _____

Make/Model See Fire Dept. Fuel _____ Amount _____

E.O.C. Manned by Town Officials and Dept Heads

Types of Events Covered All emergencies

Notification Plan in Place (Yes) X (No) _____

Types All emergencies

NOTES

Radio Good (WHAI lowers power in evening) _____

TV Good Cable available _____

Phone NET+T Excellent _____

Electric Western MA Electric _____

TOWN Gill STATE MA ID # _____
POPULATION 1276 DATE _____ SOURCE _____
AREA(SQ.MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Vernon
34 miles of road

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): Mt. Hermon School - 550 Students Sept/June

TYPE: Summer School - 250

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Edward Smith</u>	<u>Chief of Police</u>
<u>John Greene</u>	<u>Dep CDD</u>
<u>George E. Hastings Jr.</u>	<u>Chief Fire Dept.</u>
_____	_____
_____	_____
_____	_____

NOTES:

FIRE DEPARTMENT

Full Time 0 Part Time 22 Hours of Operation Call
Vehicles 4 (+3 private) Type 3 Fire 1 CD
Radio Equipped 4 Frequency 33.54 Tri State
P.A. Equipped 4 If funds Avail, Equip others -----
Portables 1 Pagers 3 (privately owned)
Monitor Receivers in Officers Homes 4 town owned (most have them)
Base Station Location Fire Station
Other Dept's Monitored County Police - State Police Western Ma Elec N.E.B.
Telephone Lines 2
Hot Lines Red phones
Auxiliary Power (Yes) X (No) _____
Make/Model 3.5KW Make Unkn
Type/Amount of Fuel LP Gas - 2 100 lb cylinders
Any Added Capability lights radios
Portable Generators (Yes) X carried in pumper (No) _____
Make/Model 2.5KW Make Unkn
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) 1 (No)

Location(s) Fire Station

How Activated At Stations or any red phone location

Activated also by Turners Falls FD

Make/Model Federal (omni directional) less than 5 yrs. old.

Effective Range 3 miles good job - West Gill and Rte 2 area poor

Test Frequency Every Sat 12:30 P

Type of Tone Siren (single Signal on 2 min cycle) if held onto
would change

NOTES

Red Phone - Chief's Home-Ret Chief Kozik - Turners Falls FD

Winslow Radiator Rte. 2 - Fire Station

CIVIL DEFENSE

E.O.C. (Yes) X (No)

Location Fire Station Alternate E.O.C. Locations

Emergency Warning Devices at E.O.C. (Yes) X (No)

Radio Capability (Yes) X 33.54 (No)

Telephones (Yes) 2 - FD Red Phone 863-2³²⁴ (No)

Auxiliary Power at E.O.C. (Yes) X (No)

Make/Model See FD Fuel LP Gas Amount 2 100lb tanks

E.O.C. Manned by CDD/Fire Dept

Types of Events Covered Enemy Attack/Nuclear - Natural Disaster

Notification Plan in Place (Yes) X (No)

Types Telephone - FD backup - Police Radio

NOTES

Sireen at FD covers 80/90% of town - New 3/4 yrs old. - Plan to notify every

street via CD - Fire - Police Vehicles with PA Systems. - Phone notification

for shut-in, bedridden, etc. thru health dept. CD has own vehicle converted

ambulance with FD radio.

Electric Company Western MA Elec
Phone NET... NET+T
Radio WHAI

Scanner - Franklin Co. Police
State Police
Hsp Freq.

TOWN Chesterfield STATE NH ID # _____

POPULATION 2300 DATE 6/17/80 SOURCE _____

AREA (SQ. MI.) 48 % IN EPZ: (5MI) _____ (10MI) X Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): Spofford Lake - Summer - 2500 (400+ Cottages)

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Antonio Souza</u>	<u>Chairman Board of Selectman</u>
<u>Winston Cray</u>	<u>Member Board of Selectman</u>
<u>Donald Emery</u>	<u>Member Board of Selectman</u>
<u>Wayne Winn</u>	<u>Fire Chief West Chesterfield</u>
<u>Winston Cray</u>	<u>Fire Chief Chesterfield</u>
<u>Warren G. Allen</u>	<u>Fire Chief Spofford</u>
<u>Alvin Davis</u>	<u>Road Agent</u>

NOTES: _____

POLICE DEPARTMENT

Full Time 2 Part Time 0 Hours of Operation 24 hr coverage

Vehicles 1 town 2 private Type Sedan/ 2 sta. wgn.

Radio Equipped 4 Frequency 4 channel

P.A. Equipped 1 If funds Avail, Equip 1

Portables 1 Pagers 1

Monitor Receivers in Officers Homes 1

Base Station Location Keene

Other Dept's Monitored C.B.

Telephone Lines 363-4624

Hot Lines _____

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Chesterfield
W. Chesterfield
Spofford

FIRE DEPARTMENT

Full Time 0/0/0 Part Time 25/23/23 Hours of Operation Call/Call/Call
Vehicles 2/3/3 Type FV/FV 2 trks 1 Rescue
Radio Equipped 2/3/3 Frequency 1 / Same/ SWMA
P.A. Equipped 0/0/1 If funds Avail, Equip others 2/3/2
Portables 0/3/3 Pagers 0/0/1
Monitor Receivers in Officers Homes 12/23/23
Base Station Location FS/FS/FS
Other Dept's Monitored SWMA/Tri State/SWMA C.B.
Telephone Lines 0 Keene/ One Unpub Keene/Keene
Hot Lines 0/0/0
Auxiliary Power (Yes) _____ (No) X/X/X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) 1. Onan 2500
2. Truck Unkn (No) 1500 Watts
3. Onan 2500
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

1. light lights - won't blow siren.
2. Portable Fire/Rescue /Town Police (1 Vehicle has portable)
155.820
2. Gen on Trk cannot be used to light lights
3. Port Gen wired in lights and Radio No Whistle
3. Rescue trk 4 freq Hosp/Police/SWMA/Road Agent (DPU).

Chesterfield
W. Chesterfield
Spofford

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with	SWMA	SWMA	SMVA
Audible Devices (Yes)	X	X	X (No)
Location(s)	Crest/FS/FS		
How Activated	Remote Keene and Station	Same	Same
Make/Model	Federal 5 HP	Antique	Antique
Effective Range	2 miles GD 1/4 mile West Wind	1/2 mile GD	1 mile 1/2 mile bad weather
Test Frequency	Every Sat 12:45	Every Sat 12 Noon	Sat 11:58
Type of Tone	Siren 2 min Cycle Wailing	SAME	SAME
NOTES	9 times 2 mins		

Comment concurred in by all - on a good day if all sirens were activated

together 80% of the people wouldn't hear them - on a bad day (wind/rain/

snow) 90-95% wouldn't hear them.

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____ W. Chest FS

Location Chesterfield FS Alternate E.O.C. Locations Spofford FS

Emergency Warning Devices at E.O.C. (Yes) X (No) _____

Radio Capability (Yes) Fire Sta (No) _____

Telephones (Yes) _____ (No) S

Auxiliary Power at E.O.C. (Yes) See Fire (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by Chm. Bd of Selectmen and Town Officials

Types of Events Covered Any emergency

Notification Plan in Place (Yes) X (No) _____

Types Will be included in plan

NOTES

TOWN Warwick STATE MA ID # _____

POPULATION 575 DATE 7/31/80 SOURCE _____

AREA(SQ.MI.) 35 % IN EPZ: (5MI) _____ (10MI) X Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: 50

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): Summer Homes and Camps

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Arland (George) Day, Jr.</u>	<u>CD Director and Fire Chief</u>
<u>*Robert Kolka</u>	<u>Police Chief 544-2244 Office Home</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

Thirty-two homes within 10 MZ (26, year round)
CD has surveyed area and have all phone numbers
In emergency will notify all by phone - fire vehicle with PA
Will be sent to all no answered calls

*Not interviewed - data obtained from Mr. Day (Former Police Officer) familiar with PD capability as CD Director.

POLICE DEPARTMENT

Full Time 0 Part Time 4 Hours of Operation As required
Vehicles 1 Type Sedan
Radio Equipped 1 Frequency 39.16 Franklin Cty Police
P.A. Equipped 1 If funds Avail, Equip others -
Portables 2 Pagers 0
Monitor Receivers in Officers Homes 0
Base Station Location Chief's Home
Other Dept's Monitored Fire Dept - State Police - Orange Police 39.22 C.B.
Telephone Lines (Blue Phone System)
Hot Lines No
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

* Blue Phone System - Phone rings in all four officers homes.

CIVIL DEFENSE

E.O.C. (Yes) X (No)

Location Fire Station Alternate E.O.C. Locations

Emergency Warning Devices at E.O.C. (Yes) X (No)

Radio Capability (Yes) X Fire Radio (No)

Telephones (Yes) Private CD Line (No)

Auxiliary Power at E.O.C. (Yes) X (No)

Make/Model Fire Station Fuel Amount

E.O.C. Manned by Town Officials

Types of Events Covered Any emergency

Notification Plan in Place (Yes) X (No)

Types All emergency's including nuclear.

NOTES

TOWN Greenfield STATE MA ID # _____

POPULATION 18500 DATE 6/11/80 SOURCE _____

AREA(SQ.MI.) 23 % IN EPZ: (5MI) _____ (10MI) X Vernon

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>David Lyman</u>	<u>Dep Fire Chief</u>
<u>Charles Sedgwick</u>	<u>Dep CD Director</u>
<u>Stanley Kaczinski</u>	<u>Police Chief</u>
_____	_____
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 34 Part Time 4 Hours of Operation 24
Vehicles 7 Type Sedans
Radio Equipped All Frequency 156.33 Mhz
P.A. Equipped 4 If funds Avail, Equip others Yes
Portables 2 Pagers 0
Monitor Receivers in Officers Homes 0
Base Station Location Police Station
Other Dept's Monitored Franklin County Regional System Yes C.B.
Telephone Lines 4
Hot Lines 0
Auxiliary Power (Yes) X (No) _____
Make/Model 5KW Make Unknown
Type/Amount of Fuel Gasoline Four Gals.
Any Added Capability No - Runs Lights and Radios
Portable Generators (Yes) No (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT

Full Time 32 Part Time 35 Hours of Operation 24

Vehicles 9 Type Fire Fighting Vehicles

Radio Equipped 9 Frequency 33.70 (33.54 Tri State)

P.A. Equipped 5 If funds Avail, Equip others Yes

Portables 5 Pagers 20 (call firemen)

Monitor Receivers in Officers Homes 35 (Call firemen)

Base Station Location At Station (412 Main St)

Other Dept's Monitored Tri State - Franklin County Police Radio 39.16 + 39.24 C.B.
NAWAS and Sowestern MA

Telephone Lines 4

Hot Lines 0

Auxiliary Power (Yes) (No)

Make/Model Kohler 10 KVA

Type/Amount of Fuel 500 Gal LP Gas

Any Added Capability ---

Portable Generators (Yes) (No)

Make/Model 3.5 Ladder Truck/3.0 Resue Truck/10KW Trailer Mounted
2.5 on Vehicle M-6

Assist in Preparation of Notification Plan (Yes) (No)

NOTES

The transmitter for the Tri State system is located on Shelburne Mountain -

the location is equipped with an instant on Generator

Greenfield Fire Dept is the Dispatch Center for Tri-State

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State Mutual Aid

Audible Devices (Yes) X 2 (No) _____

Location(s) 1. Air Horns at Fire Hdqts.
2. Brookside Station

How Activated 1. Manually at Fire Station
2. Same as above and remotely from Fire Station

Make/Model Not Known

Effective Range 1.
2. Seven miles

Test Frequency Every Saturday

Type of Tone Air Horn at Fire Station
Siren at Brookside

NOTES

Brookside Fire Station is located about 1/2 mile outside the 10 mile radius -
Manned by volunteers - There is a 2 HP siren at the station it can be
activated from the station or from Fire Hdqts. and it was stated could be
heard for a seven mile radius: It is tested every Saturday. There is no
auxiliary power at the station. Three Minute waiting for fire - 2
minute solid signal for incident at Vernon. Signal may not reach Route
#2 Gill.

CIVIL DEFENSE

E.O.C. (Yes) X (No)

Location Fire Hdqts Basement Alternate E.O.C. Locations Police Station

Emergency Warning Devices at E.O.C. (Yes) X (No)

Radio Capability (Yes) * X (No)

Telephones (Yes) X (No)

Auxiliary Power at E.O.C. (Yes) X (No)

Make/Model Fire Dept's Fuel LP Gas Amount 500 Gals

E.O.C. Manned by CDD - Town Officials - Dept Head.

Types of Events Covered All Emergencies

Notification Plan in Place (Yes) X (No)

Types All

NOTES

 *Direct radio contact with MCDA Region IV Belchertown. Two and Six meter radio provides communication with surrounding towns. Twenty three channel

 CB T/R.

 CD has organized Crossroad CB Club (36 members) and Greenfield 4 wheel drive

 club for door to door notification of all residents within 10 MZ.

APPENDIX B

TOWN Rowe STATE MA ID # _____

POPULATION 340 DATE 8/12/80 SOURCE _____

AREA (SQ. MI.) _____ % IN EPZ: (5MI) X (10MI) _____

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer

LOCATION(S): _____

TYPE: Rowe Unitarian Camp 50 Attendees

Summer Residents 25% over year round

Pelham Lake Park (Beach) Residents - Guests

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Efford "Bud" Perce</u>	<u>CD Director</u>
<u>Jim Staub</u>	<u>Asst. Fire Chief</u>
<u>Henry Dandeneau</u>	<u>Police Chief</u>
_____	_____
_____	_____
_____	_____

NOTES:

Town - PWD - Bob Boulay has data.

POLICE DEPARTMENT

Full Time 0 Part Time 5 Hours of Operation As Required

Vehicles 1 (personal) Type 4 wheel dr jeep

Radio Equipped 1 Frequency 39.16 Franklin County

P.A. Equipped 1 If funds Avail, Equip others

Portables 3 Pagers 0

Monitor Receivers in Officers Homes 2 Fire Dept.

Base Station Location Town Hall

Other Dept's Monitored State Police/Greenfield/Rowe FD No
C.B.

Telephone Lines *

Hot Lines No

Auxiliary Power (Yes) (No) X

Make/Model

Type/Amount of Fuel

Any Added Capability

Portable Generators (Yes) (No) X

Make/Model

Assist in Preparation of Notification Plan (Yes) X (No)

NOTES

*Chief's Home

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State and Deefield Valley

Audible Devices (Yes) X (No)

Location(s) Fire Station

How Activated Manually from F.S.

Make/Model Federal STH-110

115 DB

Effective Range One Mile

Test Frequency Daily at Noon Except Sunday

Type of Tone Siren

NOTES

NET+T - Reliable

Radio - Valley's Poor - Upper Section Good

TV - Sames as Radio

Elec - MA Elec

Very small % (1 or 2) of yr round homes do not have phones 101 homes in town - 13 public bldg., churchs 99.9% have electricity.

CIVIL DEFENSE

E.O.C. (Yes) Town Hall (No) _____
Location " " Alternate E.O.C. Locations Fire Sta
Emergency Warning Devices at E.O.C. (Yes) X Fire Sta (No) X Town Hall

Radio Capability (Yes) X Police Radio (No) _____
Telephones (Yes) X (No) _____
Auxiliary Power at E.O.C. (Yes) _____ (No) X
Make/Model _____ Fuel _____ Amount _____
E.O.C. Manned by _____

Types of Events Covered All Emergencies

Notification Plan in Place (Yes) X (No) _____
Types All Emergencies

NOTES

Siren - Telephone - House to House - Lectron - PA System. Telephone
system of notification - Sectors using red phone systems.

POLICE DEPARTMENT

Full Time 0 Part Time 4 Hours of Operation As needed

Vehicles Personal Cars Type ---

Radio Equipped _____ Frequency 39.16 FC

P.A. Equipped 0 If funds Avail, Equip others _____

Portables 3 Porta Mobiles Pagers _____

Monitor Receivers in Officers Homes 0

Base Station Location One of Officers Homes

Other Dept's Monitored Franklin Co. C.B.

Telephone Lines Chief's Home / _____

Hot Lines No

Auxiliary Power (Yes) _____ (No) y

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) X

Make/Model _____

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) _____ (No) X

Location(s) Mill Whistle - Undependable

How Activated Manually

Make/Model Unknown

Effective Range 100 feet

Test Frequency None

Type of Tone Steam Whistle (train type)

NOTES

Closed two weeks a year and not available.

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) _____ X _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ X _____ (No) _____

Types _____ CD Director newly appointed _____

NOTES

Phone - NET+T Co. Not Reliable _____

Radio - Poor _____

TV - Good _____

Electricity - Mass Elec. _____

½% don't have phone, all have electricity

22 Homes in Village: 40 total

Village could be warned with 15 mins. - Not top of Mountain: CDD will consider

TOWN Florida STATE MA ID # _____

POPULATION 800 DATE 6/20/80 SOURCE _____

AREA (SQ. MI.) 24.71 * IN EPZ: (5MI) X (10MI) _____ Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: 20,000

DURING MONTHS (WEEKS) OF: Two weeks every October - Fall Foliage

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Daniel Fogarty</u>	<u>Selectman (Chairman)</u>
<u>Charles L. Briggs</u>	<u>Fire Chief</u>
<u>Charles L. Briggs, Sr.</u>	<u>Police Chief</u>
<u>Alfred Jallese</u>	<u>C.D. Director</u>
<u>Ralph Dodge</u>	<u>Selectman</u>

NOTES:

POLICE DEPARTMENT

Full Time 0 Part Time 12 Hours of Operation As Needed

Vehicles All private cars Type -

Radio Equipped C.B. Radios Frequency -

P.A. Equipped Thru C.B. If funds Avail, Equip others -

Portables 2 C.B. Pagers 0

Monitor Receivers in Officers Homes Chief - Berkshire County Police + Fire

Base Station Location Chief's Home 40 Channel C.B. Base

Other Dept's Monitored C.B.

Telephone Lines (1) (Chief's Home)

Hot Lines _____

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 12 Hours of Operation Call
Vehicles 4 Type 3 Fire Fighting, 1 Pumper
Radio Equipped 2 Frequency Berkshire County Mutual Aid System
154.310
P.A. Equipped 1 If funds Avail, Equip others Yes
Portables 0 Pagers 12
Monitor Receivers in Officers Homes 12
Base Station Location Pittsfield, MA
Other Dept's Monitored Berkshire County Mutual Aid C.B.
Telephone Lines No
Hot Lines _____
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

Telephone rings in Chief's home - and - BCMA in Pittsfield

Berkshire County activates the pagers

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Berkshire County

Audible Devices (Yes) X 3 (No)

Location(s) Route #2 Fire Station - Hoosac Tunnel - Central Shaft Road

How Activated Manually from Fire Station

Make/Model Unknown - World War II Antiques.

Effective Range Ideal conditions 1-1/2 miles

Covers 75% of population - top of mountain

Test Frequency Once a week - Saturday 12 noon

Type of Tone Siren

NOTES

AM radio - Reception generally good

TV - Good on top of mountain

Phone - NET+T Reliability - good

Electricity - Mass Electric Company.

POLICE DEPARTMENT

Full Time 0 Part Time 12 Hours of Operation As needed
Vehicles 1 Type Sdn.
Radio Equipped 1 Frequency FCR + 44.74
P.A. Equipped 1 If funds Avail, Equip others _____
Portables 2 WT/2 Port. Mobiles Pagers 0
County Freq.
Monitor Receivers in Officers Homes _____
Base Station Location Main Street, Charlemont
Other Dept's Monitored None C.B. _____
Telephone Lines ✓ Chief's Home _____
Hot Lines None
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Within 5M zone approx. 25 dwellings

Approx. 25 dwellings outside 10M zone

Will hire full time Chief in August - will go to a "blue phone" system

in the Fall similar to Fire Department "red phone" system.

CIVIL DEFENSE

Not contacted

E.O.C. (Yes) _____ (No) _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ (No) _____

Types _____

NOTES

TOWN Heath STATE MA ID # _____

POPULATION 484 DATE 8/8/80 SOURCE _____

AREA (SQ. MI.) 25 % IN EPZ: (5MI) X (10MI) _____ Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer - Weekends increases to 1000

LOCATION(S): _____

TYPE: Papoose Lake - 400

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Richard R. Giard</u>	<u>C.D. Director</u>
<u>Earl Gleason</u>	<u>Fire Chief</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

Papoose Lake Development has their own security force: Mohawk Estates
Security Police

POLICE DEPARTMENT

Full Time 0 Part Time 4 Hours of Operation As Needed

Vehicles 1 Type Sedan

Radio Equipped 1 Frequency 39.16 Franklin County

P.A. Equipped 1 If funds Avail, Equip others ---

Portables 4 Pagers 0

Monitor Receivers in Officers Homes _____

Base Station Location Chief's Home

Other Dept's Monitored Franklin County C.B.

Telephone Lines Chief's Home

Hot Lines No

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) X

Make/Model _____

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri-State

Audible Devices (Yes) X (No) _____

Location(s) Town Hall C.D.

Fire Station

How Activated Manually and at 5 pull stations - Gas Station and Fire personnel homes

Make/Model Antiques

Effective Range Calm day - 2 miles

Test Frequency Daily Town Hall 12 Noon week days

Type of Tone Wailing

NOTES

TV/Radio - Cable great - North Adams reception Fair/Poor

NET+T - Reliable

Elec. - MA. Elec.

FIRE DEPARTMENT

Full Time 0 Part Time 30 Hours of Operation Volunteer
Vehicles 4 Type 3 Fire Fighting-One 4-Wheel Dr.
Radio Equipped *3 Frequency 33.54
P.A. Equipped 2 If funds Avail, Equip others Yes
Portables 2 Pagers 0
Monitor Receivers in Officers Homes 3
Base Station Location Fire Station
Other Dept's Monitored Tri State - Deerfield Valley C.B.
Telephone Lines (Home)
Hot Lines No
Auxiliary Power (Yes) (No) X
Make/Model
Type/Amount of Fuel
Any Added Capability
Portable Generators (Yes) 2 1500 Watt (No) Gasoline 100 Gals
15 KW Army Surplus
Make/Model Agway - Winco
Assist in Preparation of Notification Plan (Yes) X (No)

NOTES

4 Red Phone; Chief's Home - Dep. Chiefs - Pers. Store - Fire Operator

* Chiefs Personal car has T/R Tri State

Each red phone makes a series of calls resulting in notification of 40 families.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) *1 (No) _____

Location(s) Fire Station

How Activated Red Phone Locations

Make/Model Unknown 5HP installed 1960

Effective Range Good Clear Day 7 miles

Test Frequency Monthly 2nd Tues 7 PM

Type of Tone Sireen

NOTES

*Fire Chief will not permit use of audible alarm for any reason except
fire alarms.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State and Deerfield Valley

Audible Devices (Yes) 1 (No) _____

Location(s) Fire House

How Activated Manually from Station

Red Phone

Make/Model Sterling 358 (WWII)

Effective Range Good Day 2-4 miles 20% of Population

Test Frequency Weekly Sat. Noon

Type of Tone Siren

NOTES

Radio - WHAI useless. Keene NH clear

TV - Bost - Hartford

Elec - Mass. Elec.

NET+T - Fairly reliable

CIVIL DEFENSE

E.O.C. (Yes) X (No) X

Location Fire House Annex Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) X (No) _____

Radio Capability (Yes) X (No) _____
337-4462

Telephones (Yes) Town Garage (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) X

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered Basically all emergencies

Notification Plan in Place (Yes) X (No) _____

Types _____

NOTES

Notification by PA - Phone - Mohawk Estates Security Police

Door to Door - Radio = 50% notification in 15 minutes. Thirty five people

within 5 mile zone - 27 Dwellings.

*

TOWN Clarksburg STATE MA ID # _____

POPULATION 7000 DATE 7/7/80 SOURCE _____

AREA (SQ. MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: State Park 47 Sites April/Oct (Pay Phone)

MUNICIPAL OFFICIALS INTERVIEWED:

NAME

POSITION

William B. Cardonnel

CD Director

Howard Tanner

Fire Chief

Town Garage
663-3451

John Scarbo

NOTES:

Fire Chief estimates 90% of Town within 10 mile zone.

POLICE DEPARTMENT

Full Time _____ Part Time 3 Hours of Operation As needed
Vehicles _____ 1 _____ Type Sedan
Radio Equipped _____ 1 _____ Frequency B County Police + Fire
154.740 154.310
P.A. Equipped _____ 1 _____ If funds Avail, Equip others _____
Portables _____ 8 _____ Pagers 0
Monitor Receivers in Officers Homes _____ 3 _____
Base Station Location _____
Other Dept's Monitored _____ C.B.
Telephone Lines _____
Hot Lines _____
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Police phone system in each officer's home.

Mobile radio not installed - waiting delivery.

FIRE DEPARTMENT

Full Time _____ Part Time 36 Hours of Operation _____ Vol. _____
Vehicles _____ 5 _____ Type 2 Pumpers - 2 Tankers - 1 Equip. Trk.
Radio Equipped _____ 5 _____ Frequency 154.310
P.A. Equipped _____ 0 _____ If funds Avail, Equip others Yes
Portables _____ 4 _____ Pagers _____ 0
Monitor Receivers in Officers Homes _____ 0
Base Station Location _____ Cross Road
Other Dept's Monitored _____ Berkshire _____ C.B.
Telephone Lines _____
Hot Lines _____ No.
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ X _____ (No) _____
Make/Model 2000 Watt - Make - Winco
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Red Base System - 7 locations - 6 firefighters' homes

1 private garage - Alarm sounded from the 7

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Berkshire County

Audible Devices (Yes) X (No) _____

Location(s) Omni Directional -
Houghton St. Pole

How Activated From Fire Phones

Make/Model Unknown

Effective Range Approx. 70%

Test Frequency Monthly - 1st Monday - 7 P.M.

Type of Tone Siren

NOTES

NET+T Fairly Reliable

Electric MA.Elec.

TV Cable

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) _____ X _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ (No) _____

Types _____

NOTES

Emergency Oper. Center will probably be located
in Fire Station. ~~hutton~~

TOWN No. Adams STATE MA ID # _____

POPULATION 17,500 DATE 6/20/80 SOURCE Fire Chief

AREA (SQ. MI.) 20.70 & IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): State College 3000 Sept/June

TYPE: Fall Foliage Oct (2 wks) 35,000

Ski (winter) +500-2000

Camping Area Winsor Lake 1000 Summer

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Mrs. Jeannette Sullivan</u>	<u>C.D. Director</u>
<u>Albert Denelli</u>	<u>Fire Chief</u>
<u>Dennis Kuzia</u>	<u>Sgt. Police Dept.</u>
<u>John Law</u>	<u>Wire Inspector</u>
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 35 Part Time 3/4 Reserves yes Hours of Operation 24
Vehicles 5 Type Sedans
Radio Equipped 5 Frequency 156.210
154.740 County
P.A. Equipped 4 If funds Avail, Equip others No
Portables 12 156.210 Pagers 0
Monitor Receivers in Officers Homes 0
Base Station Location Summer St. No. Adams
Other Dept's Monitored Berkshire, Co. Yes C.B.
Telephone Lines 3
Hot Lines 0
Auxiliary Power (Yes) X (No) _____
Make/Model See Fire Dept.
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) X
Make/Model _____
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT

Full Time 43 Part Time 0 Hours of Operation 24
Vehicles 8 Type 7 Fire Fighting 1 Sedan
Radio Equipped All Frequency 153.950
154.310 Berkshire County
P.A. Equipped 1 (Chief's Car) If funds Avail, Equip others Yes 7
Portables 5 Pagers 0
Monitor Receivers in Officers Homes 0
Base Station Location American Legion Drive
Other Dept's Monitored Berkshire Co. only /NAWAS/ C.B.
Telephone Lines 2
Hot Lines Direct line to Sprague Electric
Auxiliary Power (Yes) X (No) _____
Make/Model 3 KW 115V Single Phase 26 Amps
Type/Amount of Fuel Gasoline
Any Added Capability _____
Portable Generators (Yes) * X (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

DPW - Bucket Truck - PA System - Police and Fire Freq.

Mounted Generator with 2000 W - Portable 2000W McCullough

2 Portables (1 No. Adams FD only) (1 all four)

* Winco - FD302BH-FE/H166

Honda - G40

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Berkshire Co.

Audible Devices (Yes) 3 (No) _____

Location(s) Bliss Gamewell Diaphone - Non Directional

1-Roof of School E. Main St.

2-Roof Sprague Elec. Mashall St.

How Activated 3-Roof Pum, Sta. off Mass Ave.

By hand from each site - Automatically from FD

Make/Model _____

Effective Range Approx. 2 miles-varies with season of year

Test Frequency Every Day 8 AM Two Single blasts - Every Friday 3 PM

Type of Tone Air Whistle - CD Alert 2-5-2 (Four times)

NOTES

NET+T

Mass Elec.

AM/FM Reception Good - AM off at 12M

CIVIL DEFENSE

E.O.C. (Yes) X* (No) _____

Location Hariman West Airport Alternate E.O.C. Locations ---

Emergency Warning Devices at E.O.C. (Yes) _____ (No) X

Radio Capability (Yes) CAP radio (No) _____

Telephones (Yes) X (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) X

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by CDD/Municipal Scanner

Types of Events Covered All disasters

Notification Plan in Place (Yes) _____ (No) _____

Types All Types

NOTES

*will be a/o 7/1

When load of nuc.waste, leaves-Rowe FD ntfd.

*

TOWN Adams STATE MA. ID # _____

POPULATION 10,700 DATE 7/8/80 SOURCE _____

AREA (SQ. MI.) 23.02 § IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Leon H. Sanquinetta</u>	<u>CD Director</u>
<u>Arthur Hathaway, Jr.</u>	<u>Fire Chief</u> ✓
<u>John Tarsa</u>	<u>Police Chief Notch Rd</u>

NOTES:

No people within 10 mile zone.

POLICE DEPARTMENT

Full Time 24 Part Time _____ Hours of Operation 24 hrs.

Vehicles 3 Type 2 Sdn. 1 Wgn.

Radio Equipped 3 Frequency 155.130 156.210 154.740 Berkshire County

P.A. Equipped 3 If funds Avail, Equip others _____

Portables 10 (+8 not in use) Pagers 0

Monitor Receivers in Officers Homes 0

Base Station Location PD 67 1/2 Park St.

Other Dept's Monitored _____ C.B.

Telephone Lines 3 Police

Hot Lines _____

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) X

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

FIRE DEPARTMENT

Full Time _____ Part Time 45 Hours of Operation Volunteer

Vehicles 6 Type 1 Emerg. Trk. 5 Fire Vehicle

Radio Equipped 6 Frequency 154.310

P.A. Equipped 6 If funds Avail, Equip others _____

Portables 6 Pagers 45

Monitor Receivers in Officers Homes _____

Base Station Location Fire Station - 3 Columbia St.

Other Dept's Monitored Berkshire County C.B.

Telephone Lines Handled by Police Dept.

Hot Lines No

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) 3 (No) _____

Make/Model Unknown

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Fire Call received at Police Department. Transmitted over paging
system to volunteers - System works extremely well.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with _____ None _____

Audible Devices (Yes) _____ 1 _____ (No) _____

Location(s) _____ Fire Station _____

How Activated _____ Fire + Police Sta. or automatically thru _____

_____ 54 boxes thru town _____

Make/Model _____ Gamewell _____

Effective Range _____ 3+ mile radius. (100% of Population) _____

Test Frequency _____ Every Day 1 P.M. _____

Type of Tone _____ Air Horn Three Cone. _____

NOTES

Does not rely on audible signals.

Radio/TV - OK

NET+T - Reliable

Electric - NE Electric Co.

TOWN Savoy STATE MA ID # _____

POPULATION 500 DATE 7/8/80 SOURCE _____

AREA (SQ. MI.) 36.11 % IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): South Pond - State Apr/Oct 100-200 Campers

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Norman Bates</u>	<u>Police Chief</u>
<u>Robert P. Herrmann</u>	<u>Fire Chief + CD Director</u>
_____	_____
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time _____ Part Time 6 Hours of Operation As needed

Vehicles _____ Personal _____ Type _____

Radio Equipped Yes Frequency ✓

P.A. Equipped No If funds Avail, Equip others _____

Portables 0 Pagers 0

Monitor Receivers in Officers Homes _____

Base Station Location Adams Road, Savoy

Other Dept's Monitored No C.B. _____

Telephone Lines 743-9436 Home _____

Hot Lines _____

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) X

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

*Personally owned radio in private vehicle
on Highway Frequency.

FIRE DEPARTMENT

Full Time 0 Part Time 19 Hours of Operation Vol

Vehicles 3 Type 1 Pumper, 1 Tanker, 1 Combination

Radio Equipped 3 Frequency 154.310 BCFA

P.A. Equipped 1 If funds Avail, Equip others Yes

Portables _____ Pagers 10

Monitor Receivers in Officers Homes 9

Base Station Location Main Road, Savoy

Other Dept's Monitored None C.B.

Telephone Lines Routine

Hot Lines No

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) X (No) _____

Make/Model 3KVA McCullough

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Emergency line answered in Pittsfield + Chief's House

Tone activator pagers - no audible alarm.

Not possible to notify affected population within 15 minutes.

It takes the fire truck 12 minutes to reach the 10 mile circle
from the fire station.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Bershire County Mutal Aid

Audible Devices (Yes) _____ (No) X

Location(s) _____

How Activated _____

Make/Model _____

Effective Range _____

Test Frequency _____

Type of Tone _____

NOTES

TV Radio	Good - Top of Mountain	Poor - Low Section of Town
NET+T	Reliable	1% w/o
Elec.	Western MA.	1% w/o

TOWN Hawley STATE MA ID # _____

POPULATION 300 DATE 8/8/80 SOURCE _____

AREA (SQ.MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Weekend's year round 50 -100

LOCATION(S): Summer Residents - Ski

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
George Fournier	CD Director and Police Chief
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NOTES: NOT 3:

POLICE DEPARTMENT

Full Time 0 Part Time 2 Hours of Operation As Needed

Vehicles 2 personal cars Type 2 trucks

Radio Equipped 0 Frequency 0

P.A. Equipped 0 If funds Avail, Equip others

Portables 0 Pagers

Monitor Receivers in Officers Homes 0

Base Station Location 0

Other Dept's Monitored 0 C.B.

Telephone Lines 0 (Chief's Home)

Hot Lines

Auxiliary Power (Yes) (No) X

Make/Model

Type/Amount of Fuel

Any Added Capability

Portable Generators (Yes) (No)

Make/Model

Assist in Preparation of Notification Plan (Yes) X (No)
Partially

NOTES

FIRE DEPARTMENT

Full Time None Part Time _____ Hours of Operation _____

Vehicles _____ Type _____

Radio Equipped _____ Frequency _____

P.A. Equipped _____ If funds Avail, Equip others _____

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location _____

Other Dept's Monitored _____ C.B. _____

Telephone Lines _____

Hot Lines _____

Auxiliary Power (Yes) _____ (No) _____

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Fire Services provided by Charlemont on a reimbursible basis \$100 per

trk/per hour \$5 per man/per hour.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with _____

Audible Devices (Yes) _____ (No) X

Location(s) _____

How Activated _____

Make/Model _____

Effective Range _____

Test Frequency _____

Type of Tone _____

NOTES

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) X _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ (No) _____

Types _____

NOTES

Town Owns but 3 buildings _____

50% of population within 10 MZ _____

TOWN *Buckland STATE MA ID # _____
POPULATION 3000 DATE 7/9/80 SOURCE _____
AREA (SQ. MI.) _____ % IN EPZ: (5MI) _____ (10MI) _____ Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Ed Mowry</u>	<u>Police Chief</u>
<u>Eric D. Temple</u>	<u>CDD</u>
<u>Rollie Cusson</u>	<u>Dep. Fire Chief</u>
<u>Bill Walker</u>	<u>Dep. Fire Chief</u>
_____	_____
_____	_____

NOTES:

Not over 30 people within 10M zone (6 dwellings)
Oxbow Road

POLICE DEPARTMENT

Full Time 1 Part Time 4 Hours of Operation 8 hrs.daily & as needed

Vehicles 1 Type Sdn.

Radio Equipped 1 Frequency 44.74 (MA State Police)
(Old Freq.)

P.A. Equipped Yes If funds Avail, Equip others -

Portables 2 on Franklin Co. System Pagers -

Monitor Receivers in Officers Homes -

Base Station Location Town Office (F.C.R.) State Street

Other Dept's Monitored FCR + SP C.B.

Telephone Lines 625-6506

Hot Lines _____

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Area has approx. 6 dwellings - 30 people within 10M zone.

FIRE DEPARTMENT

Full Time 0 Part Time 21 Hours of Operation Volunteer
Vehicles 3 Type 3 Pumpers - 2 750 1 1000
Radio Equipped 3 Frequency 33.54 Tri-State
P.A. Equipped 1 If funds Avail, Equip others Yes
Portables 3 Pagers 0
Monitor Receivers in Officers Homes 15
Base Station Location Fire 9 Williams Street
Other Dept's Monitored SP - Local Police - Elec. Co. C.B.
Telephone Lines Reg - / Emerg - /
Hot Lines None
Auxiliary Power (Yes) X (No)
Make/Model Military Surplus (radio + couple of lig' ts)
Type/Amount of Fuel Gasoline 1-1/2 Gals.
Any Added Capability
Portable Generators (Yes) 1 (No)
Make/Model Wimco 3500 Watt on Fire Rescue Truck
Assist in Preparation of Notification Plan (Yes) (No)

NOTES

Ambulance - 33.54

4 Officers have mobiles in personal vehicles

625-6411 Red Phone System - 1 nursing home - 1 Steel Co. (May/hew)

5 in Officers' Homes

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri-State

Audible Devices (Yes) (No)

Location(s) 9 Williams Street (F.S.)

How Activated Thru a box (one of 57) or from Station,
or from 3 Officers' Homes

Make/Model Gamewell System

Effective Range Could not be heard within 10 mile zone

Test Frequency Every day at noon.

Type of Tone Air Horn

NOTES

57 Boxes throughout town

Radio/TV - Good (Cable)

NET+T - Very Reliable

Elec. - West MA.

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) _____ X

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____ X

Telephones (Yes) _____ (No) _____ X

Auxiliary Power at E.O.C. (Yes) Yes* _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) X _____ (No) _____

Types For those families within the 10M zone. _____

NOTES

*Proposing to use Fire Station.

Chief Russell Scott - Buckland F.D. - No alarm system.

TOWN Colrain STATE MA ID # _____

POPULATION 1500 DATE 7/31/80 SOURCE CD Director

AREA (SQ. MI.) 10 % IN EPZ: (5MI) _____ (10MI) X Vernon + Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None (in 10M zone)

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>James Sturgeon</u>	<u>CD Director</u>
<u>Gerald Streeter</u>	<u>Fire Dispatcher</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

Approx. 100 people in each 10 MZ of Rowe and Vernon West (Rowe) Notification thru F.D. via phone if no answer then door to door.

East (Vernon) Notification thru Police Chief with Assistance from F.D.

CD Director states "not likely" all could be notified within 15 minutes - also states 15 min requirement "not realistic".

POLICE DEPARTMENT

Full Time 0 Part Time 6 Hours of Operation As needed

Vehicles 1 town, 3 Private Type Sedan

Radio Equipped _____ Frequency 39.16

P.A. Equipped _____ If funds Avail, Equip others _____

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Chief's Home

Other Dept's Monitored Franklin County Police Radio C.B.

Telephone Lines _____

Hot Lines None

Auxiliary Power (Yes) _____ (No) _____

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time 25 Hours of Operation Volunteer
Vehicles 4 (6 Private Vehicles with mobiles) Type 3 Fire, 1 Ambulance
Radio Equipped 4 Frequency 33.54
P.A. Equipped 4 If funds Avail, Equip others -
Portables 2 Pagers 1
Monitor Receivers in Officers Homes 16
Base Station Location 3-Fire Station - Chiefs Home - Streeters Texaco Station
Franklin County Police
Other Dept's Monitored Greenfield Fire and Police - State Police C.B.
Telephone Lines 5 (Red phone system)
Hot Lines None
Auxiliary Power (Yes) X (No) _____
Make/Model Unknown
Type/Amount of Fuel Gasoline - Provides Lights/Radio/Heat
Any Added Capability ---
Portable Generators (Yes) 1 (No) _____
Make/Model Truck mounted capable of 110V + 220V
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

Red phone system - Phone rings at ten locations - First answered at Streeter's

Texaco - Using encoder opens receivers - sends message and blows both sirens.

Kendall Mfg. Co has receiver in maintenance division where 5 firemen are

employed who also respond.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State

Audible Devices (Yes) 2 (No) _____

Location(s) 1 Fire Station

2 Streeter's Texaco Station

How Activated Both by tone or manually

Make/Model Unknown

Effective Range Both - Good Day 5 miles

Test Frequency Every Sat. at noon

Type of Tone Siren

NOTES

Kendall Mfg. Co has their own fire dept. - truck and internal alarm -

Company permits response to town needs.

Ambulance Sqd. - 12 Emerg. Med. Technicians have their own distinct tone

alert.

CIVIL DEFENSE

E.O.C. (Yes) X (No)

Location Fire Station Alternate E.O.C. Locations

Emergency Warning Devices at E.O.C. (Yes) (No)

Radio Capability (Yes) X Tri State (No)

Telephones (Yes) X (No)

Auxiliary Power at E.O.C. (Yes) X (No)

Make/Model See Fire Dept. Fuel Amount

E.O.C. Manned by Town Officials and Dept Heads

Types of Events Covered All emergencies

Notification Plan in Place (Yes) X (No)

Types All emergencies

NOTES

Radio-Good(WHAI lowers power in evening)

TV - Good Cable available

Phone-NET+T Excellent

Electric-Western MA - Electric

TOWN Readsboro STATE VT ID # _____

POPULATION 663 DATE 5/28/80 SOURCE _____

AREA (SQ. MI.) 48 % IN EPZ: (5MI) X (10MI) _____

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Willis Smith</u>	<u>Fire Chief</u>
<u>Rizieri Comai</u>	<u>C.D. Director + Village Trustee</u> <u>and Police Chief 802-423-5454</u>
<u>Harry Kilbride</u>	<u>Town Constable</u>

NOTES:

The Village of Readsboro is an independent political entity within
the Town of Readsboro.

FIRE DEPARTMENT

Full Time 0 Part Time 26 Hours of Operation _____
Vehicles 4 Type Fire Fighting
Radio Equipped 4 Frequency 154.01
P.A. Equipped 1 If funds Avail, Equip others Yes 2.
Portables 0 Pagers 0
Monitor Receivers in Officers Homes _____
Base Station Location Wilmington VT Fire Department
Other Dept's Monitored Deerfield Valley Mutual Aid C.B.
Telephone Lines 802-423-5252
Hot Lines None
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) 2 (No) _____
1. 5 KVA
2. 3.5 KVA
Make/Model _____
Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

Red phone system - 4 locations.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Deerfield Valley M. A.

Audible Devices (Yes) 1 (No)

Location(s) Fire Station - Readsboro Village

How Activated From Station

From 4 Red Phones

Make/Model M-10 Sentry

Effective Range * Minimal Range

Test Frequency Weekly

Type of Tone Three Tone Siren

Fire - Alert - Take Cover

NOTES

No local radio station.

TV - Boston-Albany-Manch.NH-Hartford CT

Phone - NET+T - Reliable

*Alarm was sounded during my visit. The Constable by arrangement went to the donut shop on Main Street - less than a hundred yards away and barely heard the siren.

CIVIL DEFENSE

E.O.C. (Yes) X (No) _____

Location Elementary School Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) X (No) _____
Fire phone _____

Radio Capability (Yes) _____ (No) X

Telephones (Yes) X (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) X

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by CD Staff and Selectment

Types of Events Covered All emergencies

Notification Plan in Place (Yes) X Draft (No) _____

Types _____

NOTES

TOWN Whitingham STATE VT ID # _____

POPULATION 1200 DATE 6/19/80 SOURCE _____

AREA (SQ. MI.) 36.6 & IN EPZ: (5MI) X (10MI) X Rowe
(Portion)

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: Sadawga Pond - 20 Cottages Winter + Summer - 50 People.

Laurel Lake - 10/12 Cottages Summer

MUNICIPAL OFFICIALS INTERVIEWED:

NAME

POSITION

Robert Murdock

CDD and Fire Chief

Joel Betit

Constable

NOTES:

The Town of Whitingham includes the Village of Jacksonville. The

Village is incorporated only as an Electric Power Company to

service the Village.

POLICE DEPARTMENT

Full Time 0 Part Time _____ 1 + Two State Troopers Hours of Operation _____ 3p-5:30a available at home

Vehicles Personal Type Convertible

Radio Equipped 1 Frequency 460.475 460.500 SP

P.A. Equipped 0 If funds Avail, Equip others _____

Portables 0 Pagers 0

Monitor Receivers in Officers Homes Yes

Base Station Location State Police

Other Dept's Monitored _____ No C.B.

Telephone Lines Home SP 254-2382

Hot Lines No

Auxiliary Power (Yes) X (No) _____

Make/Model _____ Winco 3000W

Type/Amount of Fuel _____ Gasoline - 1 Gal

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) X (No) _____

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Deerfield Valley

Audible Devices (Yes) 2 (No) _____

Location(s) 1 - Roof of Business across Street-Jacksonville
1 - F.S. Whitingham

How Activated By Pull

Make/Model Antiques

Effective Range 1 mile at most

Test Frequency Couple times a year

Type of Tone Wailing

NOTES

CIVIL DEFENSE

E.O.C. (Yes) X (No)

Location Will be at F.S. Alternate E.O.C. Locations

Emergency Warning Devices at E.O.C. (Yes) Same as F.D. (No)

Radio Capability Same as F.D. (Yes) (No)

Telephones (Yes) (No)

Auxiliary Power at E.O.C. (Yes) (No)

Make/Model Fuel Amount

E.O.C. Manned by

Types of Events Covered

Notification Plan in Place (Yes) (No) X

Types Just getting started on plan.

NOTES

NET+T

Local radio good during day only.

TV - Cable.

Highway Department: 7 vehicles 153.845

Power Company - Village of Jacksonville

Vermont Electric - Johnson, VT

TOWN *Halifax STATE VT ID # _____

POPULATION 458 DATE 8/22 SOURCE _____

AREA (SQ.MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Vernon Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer

LOCATION(S): _____

TYPE: 500 Summer residents spread throughout town

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Thomas Rafus</u>	<u>CDD</u>
<u>Al Corey</u>	<u>Police Chief</u>
<u>Wayne Courser</u>	<u>Fire Chief</u>
_____	_____
_____	_____
_____	_____

NOTES:

413 Dwellings in Halifax

% w/o Electricity - Not Known

% w/o Telephones - Not Known

POLICE DEPARTMENT

Full Time 1 Part Time _____ Hours of Operation As Required

Vehicles 1 Personal Vehicle Type Sedan

Radio Equipped 1 (Town Owned) Frequency 460.475
460.500

P.A. Equipped 1 (Personal Property) If funds Avail, Equip others ----

Portables 0 Pagers 0

Monitor Receivers in Officers Homes _____

Base Station Location State Police

Other Dept's Monitored Fire/Rescue/State Police C.E.

Telephone Lines 1 Chief's Home

Hot Lines None

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) X

NOTES

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Tri State and Deefield Valley Mutual Aid

Audible Devices (Yes) X (No)

Location(s) Fire Station

How Activated *Red Phones

Make/Model 3 $\frac{1}{2}$ HP Make/Model Unkn.

Effective Range Good Day 3 Miles

Test Frequency Weekly; Sunday 12:30 P

Type of Tone Siren

NOTES

Phone - NET+T Reliable

Elec. - Vermont Elect.

Radio - Good

TV - Pretty Good

* Not operable manually from Fire Station - except by station Red Phone (locked in station).

CIVIL DEFENSE

E.O.C. (Yes) _____ (No) _____

Location _____ Alternate E.O.C. Locations _____

Emergency Warning Devices at E.O.C. (Yes) _____ (No) _____

Radio Capability (Yes) _____ (No) _____

Telephones (Yes) _____ (No) _____

Auxiliary Power at E.O.C. (Yes) _____ (No) _____

Make/Model _____ Fuel _____ Amount _____

E.O.C. Manned by _____

Types of Events Covered _____

Notification Plan in Place (Yes) _____ (No) X

Types _____

NOTES

Emergency plan not in place

TOWN Wilmington STATE VT ID # _____

POPULATION 1800 DATE 6/4/80 8/5/80 SOURCE _____

AREA(SQ.MI.) 26624 Acres IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
<u>Sonia Delury</u>	<u>Town Manager</u>
<u>Agostinho Fernandes Jr.</u>	<u>Police Chief</u>
<u>John B. Willard Jr.</u>	<u>Fire Chief</u>
<u>Clarence (Buzzy) Towne</u>	<u>Asst. Fire Chief</u>
_____	_____
_____	_____

NOTES:

POLICE DEPARTMENT

Full Time 4 Part Time 2 Hours of Operation 8A-3A

Vehicles 2 Type 1 Sedan; 1 Four Wheel Drive

Radio Equipped 2 Frequency 460.475 + 460.500

P.A. Equipped 2 If funds Avail, Equip others --

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location Police Dept

Other Dept's Monitored _____

T/R Monitor
C.B. #9

Telephone Lines Two

Hot Lines None

Auxiliary Power (Yes) X (No) _____

Make/Model ONAN

Type/Amount of Fuel LPG 2 100 16 tanks

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Police operate base on Highway Dept. Radio System 45.48 with nine vehicles.

Police answer fire phone calls 8A-6P and sound alarm via red phone system.

FIRE DEPARTMENT

Full Time 0 Part Time 36 Hours of Operation Volunteer

Vehicles 4 Type Fire Fighting

Radio Equipped 4 Frequency 154.01 Fire
45.48 Town Public Works

P.A. Equipped 1 If funds Avail, Equip others Yes

Portables _____ Pagers 27

Monitor Receivers in Officers Homes 3

Base Station Location Fire Station

Other Dept's Monitored Southwestern Mutual Aid C.B.

Telephone Lines --

Hot Lines None

Auxiliary Power (Yes) _____ (No) X

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) 2 (No) _____

Make/Model 1. 4500 Watt permanently installed on Rescue Truck - Gasoline
2. 3750 Watt Portable - will operate Radios and Couple of Lights - Gasoline

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Red phone system - instruments located Fire Chiefs Home - Fire Dept. -

Police Dept. and five fire fighter's homes. Each location can activate siren.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Deerfield Valley Mutual Aid

Audible Devices (Yes) 1 (No) _____

Location(s) Roof of Drug Store - Center of Town

How Activated Eight Red Phone Locations

Make/Model Federal (10 yrs old)

Effective Range Good Day 4/5 miles

Test Frequency Daily 12:30 PM

Type of Tone Siren

NOTES

*

TOWN Stamford STATE VT ID # _____

POPULATION 750 DATE 7/7/80 SOURCE _____

AREA (SQ. MI.) 6 & IN EPZ: (5MI) _____ (10MI) X Rowe

Estimated 90% of town within 10 mile zone

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: None

DURING MONTHS (WEEKS) OF: _____

LOCATION(S): _____

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
Floyd Lesure	Selectman - Act. CD Director
Robert Costine	Fire Chief

NOTES:

POLICE DEPARTMENT

Full Time 0 Part Time 1 Hours of Operation As required
Vehicles Personal Type 4 Wheel Dr. Chev. Wgn.
Radio Equipped No Frequency _____
P.A. Equipped No If funds Avail, Equip others _____
Portables 0 Pagers 0
Monitor Receivers in Officers Homes Scanner
Base Station Location N/A
Other Dept's Monitored Fire - No. Adams P.D. C.B.
Telephone Lines 0
Hot Lines _____
Auxiliary Power (Yes) _____ (No) X
Make/Model _____
Type/Amount of Fuel _____
Any Added Capability _____
Portable Generators (Yes) _____ (No) _____
Make/Model _____
Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Albert Mangrow, Chief

Not interviewed - reported to be 70 yrs. of age and inactive.

FIRE DEPARTMENT

Full Time _____ Part Time 25 Hours of Operation Voluntary
Vehicles _____ 2 Type 1 Pumper - 1 Tanker
Radio Equipped _____ 2 Frequency 154.310 BCMA
P.A. Equipped _____ 1 If funds Avail, Equip others Yes
Portables _____ 2 Pagers _____ 6
Monitor Receivers in Officers Homes _____ 12
Base Station Location Stebins Rd. + Remote at Fire Operator
Other Dept's Monitored _____ No _____ C.B.
Telephone Lines _____ Black 694-1361 (6 Red Phones 694-1314)
Hot Lines _____ No
Auxiliary Power (Yes) (No) _____
Make/Model 4000 Watts (Portable in Station) Wisconsin Engine
Type/Amount of Fuel _____ Gasoline - 2 Gals +
Any Added Capability _____ Lights for Building + Radio
Portable Generators (Yes) (No) _____
Make/Model Mighty Lite 1500 W
Assist in Preparation of Notification Plan (Yes) (No) _____

NOTES

6 Red Phones - Fire/Police Personnel - Store - Fire Operator

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with Berkshire County

Audible Devices (Yes) X (No) _____

Location(s) Roof of Fire Station

How Activated Any red phone or from Station

Make/Model Looks like Federal - 8 years old
12 Cone Omni directional

Effective Range Good day North-South 4 miles
East-West 1 mile

Test Frequency Monthly, Monday 8 P.M., 1st Monday of month

Type of Tone Siren - Covers 70% of the Town

NOTES

NET+T (No. Adams) Reliable

AM/FM (No. Adams) Good until 10 P.M.

TV Channel 19 Albany (via Mt. Greylock)

Elec. Green Mtn. Power (Wilmington)

TOWN *Searsburg STATE VT ID # _____

POPULATION 80 DATE 8/21 SOURCE _____

AREA (SQ. MI.) _____ % IN EPZ: (5MI) _____ (10MI) X Rowe

SEASONAL DEMOGRAPHICS:

ESTIMATED POPULATION INCREASES: _____

DURING MONTHS (WEEKS) OF: Summer

LOCATION(S): Summer Camps Approx. 50

TYPE: _____

MUNICIPAL OFFICIALS INTERVIEWED:

NAME	POSITION
Merton Rice	Selectman Chairman
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NOTES:

There is nobody living within the 10 mile zone.

POLICE DEPARTMENT

Full Time 0 Part Time 2 Hours of Operation as needed

Vehicles Personal Type _____

Radio Equipped 0 Frequency 0

P.A. Equipped _____ If funds Avail, Equip others _____

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location _____

Other Dept's Monitored _____ C.B. _____

Telephone Lines _____

Hot Lines _____

Auxiliary Power (Yes) _____ (No) _____

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

FIRE DEPARTMENT

Full Time 0 Part Time _____ Hours of Operation _____

Vehicles _____ Type _____

Radio Equipped _____ Frequency _____

P.A. Equipped _____ If funds Avail, Equip others _____

Portables _____ Pagers _____

Monitor Receivers in Officers Homes _____

Base Station Location _____

Other Dept's Monitored _____ C.B. _____

Telephone Lines _____

Hot Lines _____

Auxiliary Power (Yes) _____ (No) _____

Make/Model _____

Type/Amount of Fuel _____

Any Added Capability _____

Portable Generators (Yes) _____ (No) _____

Make/Model _____

Assist in Preparation of Notification Plan (Yes) _____ (No) _____

NOTES

Wilmington Fire Dept. handles at fee of \$500 annually.

FIRE DEPARTMENT (CONTINUED)

Mutual Aid with _____

Audible Devices (Yes) None (No) _____

Location(s) _____

How Activated _____

Make/Model _____

Effective Range _____

Test Frequency _____

Type of Tone _____

NOTES

Recreational Areas - Vernon

RECREATIONAL AREAS:

NAME Pauwācag Meadow Northfield Boat Ramp LOCATION Northfield

AGENCY RESPONSIBLE same

PERSON RESPONSIBLE Charles Alden TITLE _____

MAIN ACCESS ROUTE(S) Rt. 63

TELEPHONES -- PUBLIC/PAY -- AGENCY --
NUMBERS --

AGENCY PHONE -- HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS --

SITE USAGE ^{-- Boating-- X} BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Summer only

AVERAGE POPULATION OF SITE 200

PUBLIC ADDRESS SYSTEM AT SITE () YES () NO

AUXILIARY POWER () YES () NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME: Gill Boat Ramp LOCATION Gill

AGENCY RESPONSIBLE same

PERSON RESPONSIBLE Roland Levielle TITLE _____

MAIN ACCESS ROUTE(S) Rt. 2

TELEPHONES -- PUBLIC/PAY -- AGENCY --

NUMBERS --

AGENCY PHONE -- HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS --

SITE USAGE Boating
BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Summer

AVERAGE POPULATION OF SITE 200

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Greenfield Skating Rink LOCATION Greenfield

AGENCY RESPONSIBLE same

PERSON RESPONSIBLE Albin Korlinski TITLE _____

MAIN ACCESS ROUTE(S) Rt. 78

TELEPHONES _____ PUBLIC/PAY Yes AGENCY _____

NUMBERS (413) 772-6891

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS _____

SITE USAGE BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Oct - Apr normally - some summer

AVERAGE POPULATION OF SITE Approx 1,000

PUBLIC ADDRESS SYSTEM AT SITE () YES () NO

AUXILIARY POWER () YES () NO

MAKE/MODEL --

TYPE/AMOUNT FUEL --

RECREATIONAL AREAS:

NAME Mt. Grace State Forest LOCATION Warwick, MA

AGENCY RESPONSIBLE Same

PERSON RESPONSIBLE Charles Alden TITLE _____

MAIN ACCESS ROUTE(S) Rt. 78

TELEPHONES Private PUBLIC/PAY -- AGENCY --

NUMBERS (617) 544-7474

AGENCY PHONE -- HOURS COVERED --

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS --

SITE USAGE -- Picnicking X Snowmobiling X
BACK PACKING --- SWIMMING --- CAMPING --- SKIING ---

MONTHS/WEEKS IN USE Year Round

AVERAGE POPULATION OF SITE 500 (summer) 500 (winter)

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Northfield State Forest LOCATION Northfield

AGENCY RESPONSIBLE _____

PERSON RESPONSIBLE Charles Alden TITLE _____

MAIN ACCESS ROUTE(S) Quarry Road

TELEPHONES _____ PUBLIC/PAY _____ AGENCY _____

NUMBERS _____

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS _____

SITE USAGE BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE _____

AVERAGE POPULATION OF SITE Max of 20 (hunters, snowmobiling, hikers)

PUBLIC ADDRESS SYSTEM AT SITE () YES () NO

AUXILIARY POWER () YES () NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

open piece of land

RECREATIONAL AREAS:

NAME Cock St. Forest LOCATION Colrain & Heath

AGENCY RESPONSIBLE Same

PERSON RESPONSIBLE Roger Ward TITLE _____

MAIN ACCESS ROUTE(S) Rt 8A & 112

TELEPHONES -- PUBLIC/PAY -- AGENCY --

NUMBERS --

AGENCY PHONE -- HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS --

SITE USAGE Hiking X Fishing X
BACK PACKING SWIMMING CAMPING SKIING

MONTHS/WEEKS IN USE _____

AVERAGE POPULATION OF SITE 20 at best

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Daytime use
Main Road isn't plowed in winter

RECREATIONAL AREAS:

NAME Catamount State Forest LOCATION Colbrain, MA

AGENCY RESPONSIBLE Same

PERSON RESPONSIBLE Roger Ward TITLE _____

MAIN ACCESS ROUTE(S) Rt. 2 & 112

TELEPHONES -- PUBLIC/PAY -- AGENCY --

NUMBERS --

AGENCY PHONE -- HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS --

SITE USAGE BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Year Round - snowmobiling in winter biggest use

AVERAGE POPULATION OF SITE 75 (summer) 75 (winter)

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Passive Recreation - Day use - picnicking
No communications at all
visited - 3 times a week, policing only

RECREATIONAL AREAS:

NAME Bear Swamp Visitors Center LOCATION _____

AGENCY RESPONSIBLE Yankee Atomic - N.E. Utilities

PERSON RESPONSIBLE _____ TITLE _____

MAIN ACCESS ROUTE(S) _____

TELEPHONES _____ PUBLIC/PAY _____ AGENCY _____

NUMBERS 663-9204

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS _____

SITE USAGE BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Seasonal - Summer

AVERAGE POPULATION OF SITE _____

PUBLIC ADDRESS SYSTEM AT SITE () YES () NO

AUXILIARY POWER () YES () NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Chesterfield Gorge St. Park LOCATION Chesterfield N.H. (Spofford, N.H.)

AGENCY RESPONSIBLE Division of Forest & Lands

PERSON RESPONSIBLE Theodore Miller TITLE _____

MAIN ACCESS ROUTE(S) Route 9

TELEPHONES None PUBLIC/PAY _____ AGENCY _____

NUMBERS _____

AGENCY PHONE () (Home Phone) _____ HOURS COVERED Thurs. - Mon. (June to Oct.)

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE BACK PACKING picnicking SWIMMING Scenic walk CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Holiday weekends - summer

AVERAGE POPULATION OF SITE _____

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Size of Park - 15 acres

RECREATIONAL AREAS:

NAME Pierce Island (on Scofford Lake) LOCATION Chesterfield

AGENCY RESPONSIBLE Division of Lands and Forest

PERSON RESPONSIBLE Cecil Parker TITLE _____

MAIN ACCESS ROUTE(S) Boat (near route 63 & rout 9)

TELEPHONES None PUBLIC/PAY _____ AGENCY _____

NUMBERS _____

AGENCY PHONE _____ (Home phone) HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE BACK PACKING ^{Picnicing} _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Summer (closed to public except for picnics)

AVERAGE POPULATION OF SITE unknown (small)

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMONT FUEL _____

Size of Island - 5 acres

RECREATIONAL AREAS:

NAME Pisgah Wilderness St. Parks LOCATION Winchester, Hinsdale, Chesterfield
N.H.

AGENCY RESPONSIBLE Division of Lands and Forest

PERSON RESPONSIBLE Cecil Parker TITLE _____

MAIN ACCESS ROUTE(S) Route 63 Route 119

TELEPHONES None PUBLIC/PAY _____ AGENCY _____

NUMBERS _____

AGENCY PHONE _____ (Home phone) HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES N.H. Fish & Game for Rescue or Search

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE ^{Fishing -Hunting}
BACK PACKING x SWIMMING x CAMPING no SKIING x

MONTHS/WEEKS IN USE year round

AVERAGE POPULATION OF SITE Not Known

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Size of Park 12,140 acres

RECREATIONAL AREAS:

NAME Wantastiquet Mt. St. Forest LOCATION Hinsdale, Chesterfield N. H.

AGENCY RESPONSIBLE Division of Lands and Forest

PERSON RESPONSIBLE Cecil Parker TITLE _____

MAIN ACCESS ROUTE(S) Route 119

TELEPHONES None PUBLIC/PAY _____ AGENCY _____
NUMBERS _____

AGENCY PHONE 5 1 (Home phone) HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS _____

SITE USAGE BACK PACKING ^{Hiking-Hunting} _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Summer - Foliage Season

AVERAGE POPULATION OF SITE unknown

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Size of Forest - 907 acres

RECREATIONAL AREAS:

NAME Dutton Pines LOCATION Dummerston AREA 13 A. SQ. MILES --

AGENCY RESPONSIBLE Dept of Forest, Parks and Recreation

PERSON RESPONSIBLE Ruth Worden TITLE Ranger

MAIN ACCESS ROUTE(S) Route 5

TELEPHONES _____ PUBLIC/PAY None AGENCY x

NUMBER _____

AGENCY PHONE _____ HOURS COVERED 24 hours (summer only)

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE Picnic (only) x ~~BACK PACKING~~ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Memorial Day thru Labor Day

AVERAGE POPULATION OF SITE _____

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Fort Dummer State Park LOCATION _____ AREA _____ 217 A.
SQ:--MILES--
AGENCY RESPONSIBLE Dept of Forest, Parks and Recreation
PERSON RESPONSIBLE Don Squire TITLE Park Ranger
MAIN ACCESS ROUTE(S) Route 5
TELEPHONES _____ PUBLIC/PAY x AGENCY x
NUMBERS 5
AGENCY PHONE 802-254-2610 HOURS COVERED 24 Hours Daily
* RADIO COMMUNICATIONS AT SITE (x) YES () NO
FREQUENCIES CH 7 and 11
OTHER EMERGENCY COMMUNICATIONS None
SITE USAGE BACK PACKING x SWIMMING _____ CAMPING x SKIING _____
MONTHS/WEEKS IN USE Memorial Day to Labor Day
AVERAGE POPULATION OF SITE Weekdays 125, Weekend 175
PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO
AUXILIARY POWER () YES (x) NO
MAKE/MODEL _____
TYPE/AMOUNT FUEL _____

* Ranger has 2 channel master waldie ^K ^K tallies for on site use

RECREATIONAL AREAS:

NAME Moss Hollow Campground LOCATION W Brattleboro AREA 35 SQ. MILES acr

AGENCY RESPONSIBLE Private

PERSON RESPONSIBLE Burton Hill TITLE Owner

MAIN ACCESS ROUTE(S) Route 9

TELEPHONES _____ PUBLIC/PAY _____ AGENCY _____

NUMBERS 368-2418

AGENCY PHONE _____ HOURS COVERED 24 hours

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE BACK PACKING _____ SWIMMING _____ CAMPING SKIING _____

MONTHS/WEEKS IN USE _____

AVERAGE POPULATION OF SITE Week day 25 weekend 200

PUBLIC ADDRESS SYSTEM AT SITE () YES () NO

AUXILIARY POWER () YES () NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

APPENDIX B

RECREATIONAL AREAS:

NAME Dutton Pines LOCATION Dummers ton AREA 13. A SQ. MILES ---

AGENCY RESPONSIBLE Dept of Forest, Parks and Recreation

PERSON RESPONSIBLE Ruth Worden TITLE Ranger

MAIN ACCESS ROUTE(S) Route 5

TELEPHONES _____ PUBLIC/PAY None AGENCY x

NUMBERS 802-254-2277

AGENCY PHONE _____ HOURS COVERED 24 hours (summer only)

RADIO COMMUNICATIONS AT SITE () YES (X) NO

FREQUENCIES _____

(OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE Picnic (only) ~~BACK PACKING~~ X SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Memorial Day thru Labor Day

AVERAGE POPULATION OF SITE _____

PUBLIC ADDRESS SYSTEM AT SITE () YES (X) NO

AUXILIARY POWER () YES (X) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Fort Dummer State Park LOCATION _____ AREA _____ 217 A.
SQ--MILES--

AGENCY RESPONSIBLE Dept of Forest, Parks and Recreation

PERSON RESPONSIBLE Don Squire TITLE Park Ranger

MAIN ACCESS ROUTE(S) Route 5

TELEPHONES _____ PUBLIC/PAY x AGENCY x
NUMBERS _____

AGENCY PHONE 802-254-2610 HOURS COVERED 24 Hours Daily

* RADIO COMMUNICATIONS AT SITE (x) YES () NO

FREQUENCIES CH 7 and 11

(OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE BACK PACKING x SWIMMING _____ CAMPING x SKIING _____

MONTHS/WEEKS IN USE Memorial Day to Labor Day

AVERAGE POPULATION OF SITE Weekdays 125, Weekend 175

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

* Ranger has 2 channel master ^Kwaldie ^Ktalies for on site use

RECREATIONAL AREAS:

NAME Moss Hollow Campground LOCATION W. Brattleboro AREA 35 SQ. MILES Ac

AGENCY RESPONSIBLE Private

PERSON RESPONSIBLE Burton Hill TITLE Owner

MAIN ACCESS ROUTE(S) Route 9

TELEPHONES _____ PUBLIC/PAY _____ AGENCY _____

NUMBERS 368-2418

AGENCY PHONE _____ HOURS COVERED 24 hours

RADIO COMMUNICATIONS AT SITE () YES (X) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE BACK-PACKING _____ SWIMMING _____ CAMPING X SKIING _____

MONTHS/WEEKS IN USE _____

AVERAGE POPULATION OF SITE Week day 25 weekend 200

PUBLIC ADDRESS SYSTEM AT SITE () YES (X) NO

AUXILIARY POWER () YES (X) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Recreational Areas - Rowe



RECREATIONAL AREAS:

NAME Vietnam Veterans Skating Rink LOCATION Church St, N. Adams, MA

AGENCY RESPONSIBLE Mass. Division of Forest & Parks

PERSON RESPONSIBLE Mr. Zigamon Nash TITLE _____

MAIN ACCESS ROUTE(S) Route 8, N. Adams

TELEPHONES Private PUBLIC/PAY PAY AGENCY NO

NUMBERS (Pay Station Number unknown)

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (X) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE ICE SKATING XX
BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE Year-round, but periodically closed for maintenance and non-use

AVERAGE POPULATION OF SITE Approximately 500 persons maximum

PUBLIC ADDRESS SYSTEM AT SITE (XX) YES () NO

AUXILIARY POWER () YES (XX) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Clarksburg State Forest LOCATION Clarksburg, MA

AGENCY RESPONSIBLE Mass. Division of Forest & Parks

PERSON RESPONSIBLE Mr. Art Tanguay TITLE _____

MAIN ACCESS ROUTE(S) Route 8, Clarksburg

TELEPHONES No Private Lines PUBLIC/PAY XX AGENCY NO

NUMBERS _____

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (XX) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS None

SITE USAGE BACK PACKING XX SWIMMING XX CAMPING XX SKIING

MONTHS/WEEKS IN USE Closed Mid-October through Mid-May

AVERAGE POPULATION OF SITE Up to 700 People at all sites cumulative

PUBLIC ADDRESS SYSTEM AT SITE () YES (XX) NO

AUXILIARY POWER () YES (XX) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

According to Mr. Carl Curtin, Deputy Director for Region 5, Mass. Division of Forest & Parks, his agency does not maintain data on the emergency notification capabilities of private recreational facilities in his region. However, his personal experience shows that these facilities are usually manned 24-hours per day, 7 days per week by operating personnel, simply to keep track of customers and insure all who use their facilities pay for the privilege.

Private facilities known to be in Region 5 are:

Shady Pines Campground: Loop Road, Rt 116, Savoy, MA
(413) 743-2694
Open year-round; 150 campsites (usually equates to 450 people); providing swimming, camping, and snowmobiling. Also has capacity for group picnicing

Chilson's Pond Camping Area: Rt 2, Florida, MA
(413) 664-6001
Open May through October. 55 campsites (usually equates to 150 people); providing camping area with picnicing and hiking areas.

RECREATIONAL AREAS:

NAME E. Charlemont Boat Ramp LOCATION E. Charlemont

AGENCY RESPONSIBLE Same

PERSON RESPONSIBLE Roger Ward TITLE _____

MAIN ACCESS ROUTE(S) Rt. 2

TELEPHONES -- PUBLIC/PAY -- AGENCY --

NUMBERS --

AGENCY PHONE -- HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES --

OTHER EMERGENCY COMMUNICATIONS --

SITE USAGE Boating X
BACK PACKING _____ SWIMMING _____ CAMPING _____ SKIING _____

MONTHS/WEEKS IN USE summer only

AVERAGE POPULATION OF SITE 50

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

RECREATIONAL AREAS:

NAME Monroe State Forest LOCATION Monroe

AGENCY RESPONSIBLE _____

PERSON RESPONSIBLE Frank Decoigne TITLE _____

MAIN ACCESS ROUTE(S) Rt. 2

TELEPHONES _____ ~~FEDERAL~~ PAY none AGENCY _____

NUMBERS 424-7600

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS _____

SITE USAGE -- snowmobiling X Hiking X
BACK PACKING X SWIMMING _____ CAMPING X SKIING _____

MONTHS/WEEKS IN USE Year Round

AVERAGE POPULATION OF SITE Approx 100 year round

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

Part of Bear Swamp Visitor's Center

Young adult conservation groups use it year round - about 12 persons
(old prison farm)

RECREATIONAL AREAS:

NAME Hawley State Forest LOCATION Hawley, MA

AGENCY RESPONSIBLE Same

PERSON RESPONSIBLE Roger Ward TITLE _____

MAIN ACCESS ROUTE(S) Rt. 8A

TELEPHONES Private RYB&I/PAY seasonal summertime AGENCY _____

NUMBERS 634-5567

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES (x) NO

FREQUENCIES _____

OTHER EMERGENCY COMMUNICATIONS _____
Youth Conservation Corps X snowmobiling X

SITE USAGE BACK PACKING SWIMMING CAMPING X SKIING

MONTHS/WEEKS IN USE Year - Round

AVERAGE POPULATION OF SITE 500 (Winter) 100 (Summer)

PUBLIC ADDRESS SYSTEM AT SITE () YES (x) NO

AUXILIARY POWER () YES (x) NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

If YEC overnight, state personnel stay there
47 miles of unpaved roads used by snowmobiling

RECREATIONAL AREAS:

NAME Mohawk Trail-State Forest LOCATION Charlemont

AGENCY RESPONSIBLE Mass. Dept. of Envir. Mgnt. - Div. of FHP

PERSON RESPONSIBLE Mr. Roger Ward TITLE _____

MAIN ACCESS ROUTE(S) Rt. 2

TELEPHONES Private PUBLIC/PAY June-Oct. AGENCY _____

NUMBERS _____ 339-8383

AGENCY PHONE _____ HOURS COVERED _____

RADIO COMMUNICATIONS AT SITE () YES () NO

FREQUENCIES 4. 151.205/235/370/310 MHz /Base - (Mobile(Fire Truck))

OTHER EMERGENCY COMMUNICATIONS _____

SITE USAGE BACK PACKING _____ Picnic Area ---X---
SWIMMING X CAMPING X SKIING _____

MONTHS/WEEKS IN USE Apr - Oct

AVERAGE POPULATION OF SITE Approx 1100 people

PUBLIC ADDRESS SYSTEM AT SITE () YES () NO

AUXILIARY POWER () YES () NO

MAKE/MODEL _____

TYPE/AMOUNT FUEL _____

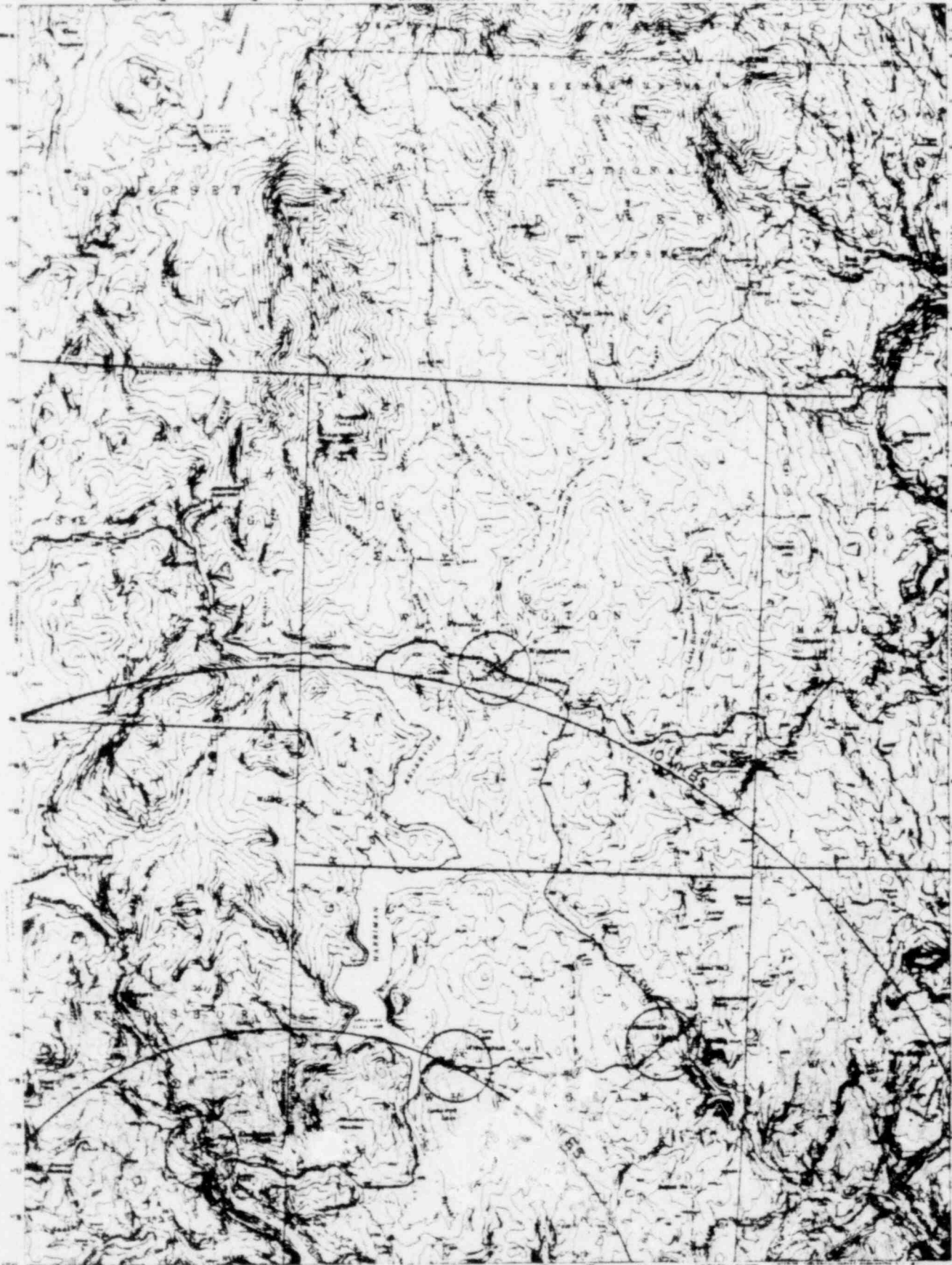
- Phone mile from picnic area, 1/2 mile for campground
- Mid-June to Labor Day, usually til 2am
- Weekend until midnight (weather permitting) weekday - 4PM

Snowmobiling - cross country skiing, unmanned EAC at winter

POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WILMINGTON QUADRANGLE
VERMONT
15 MINUTE SERIES (TOPOGRAPHIC)



ROADS SHOWN ARE CLASSIFIED BY THE GEOLOGICAL SURVEY
CLASSIFICATION: 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-12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POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

NORTHFIELD QUADRANGLE
MASSACHUSETTS - NEW HAMPSHIRE - VERMONT
15 MINUTE SERIES - TOPOGRAPHIC



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APPROVED FOR PUBLICATION BY THE GEOLOGICAL SURVEY
GEOLOGICAL SURVEY OF THE UNITED STATES
WASHINGTON, D. C. 20540
1957

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STATE OF MASSACHUSETTS
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15 MINUTE SERIES - TOPOGRAPHIC
1957

NORTHFIELD, MASS. - N. H. - VT.
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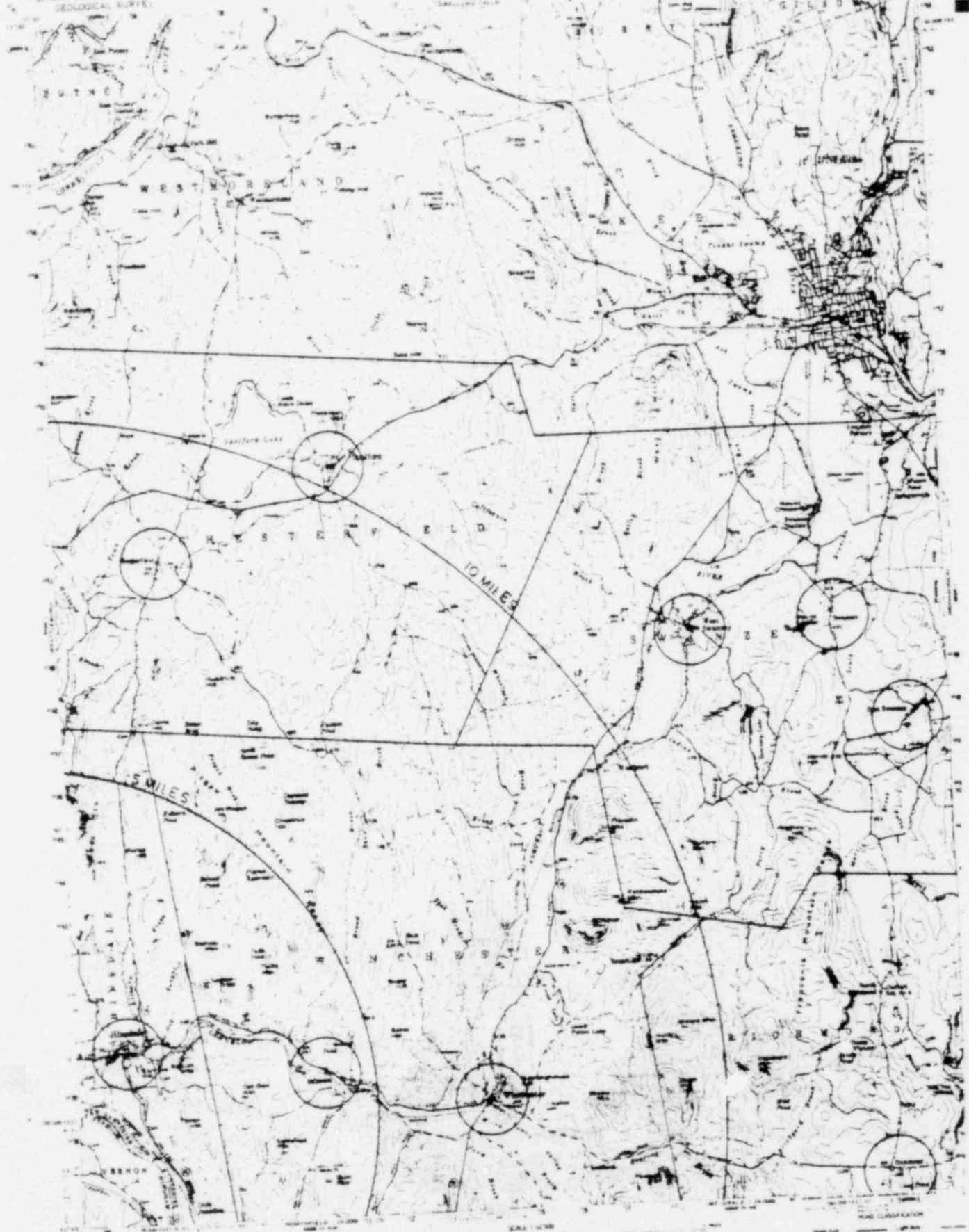
POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF NEW HAMPSHIRE
HIGHWAY DEPARTMENT

STATE OF VERMONT
CHARLES C. DOLL
STATE GEOLOGIST

KEENE AND ADJACENT
NEW HAMPSHIRE-VERMONT
5 MINUTE 18-15 TOPOGRAPHIC



PLACES, TOWNS, AND DISTRICTS BY THE GEOLOGICAL SURVEY
GIVEN IN ITALIC AND CAPITALS
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ROAD CLASSIFICATION
Main Road
Branch Road
Unimproved Road
U. S. Road
Local Road

KEENE, N. H.-V.
18-15-15
1:50,000
18-15-15

POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

COLRAIN QUADRANGLE
MASSACHUSETTS - VERMONT
15 MINUTE SERIES (70' x 100')



MASSACHUSETTS AND VERMONT QUADRANGLES OF THE GEOLOGICAL SURVEY
Scale 1:50,000
Vertical Datum: Mean Sea Level
Horizontal Datum: NAD 83
Projection: UTM
Contour Interval: 10 Feet
National Grid: UTM Zone 18N
Map Date: 1977
Original Date: 1950
Revised Date: 1977
Scale: 1:50,000
Vertical Datum: Mean Sea Level
Horizontal Datum: NAD 83
Projection: UTM
Contour Interval: 10 Feet
National Grid: UTM Zone 18N
Map Date: 1977
Original Date: 1950
Revised Date: 1977

ROAD CLASSIFICATION
Primary Highway
Secondary Highway
Tertiary Highway
Unimproved Road
Private Road
Scale: 1:50,000
Vertical Datum: Mean Sea Level
Horizontal Datum: NAD 83
Projection: UTM
Contour Interval: 10 Feet
National Grid: UTM Zone 18N
Map Date: 1977
Original Date: 1950
Revised Date: 1977

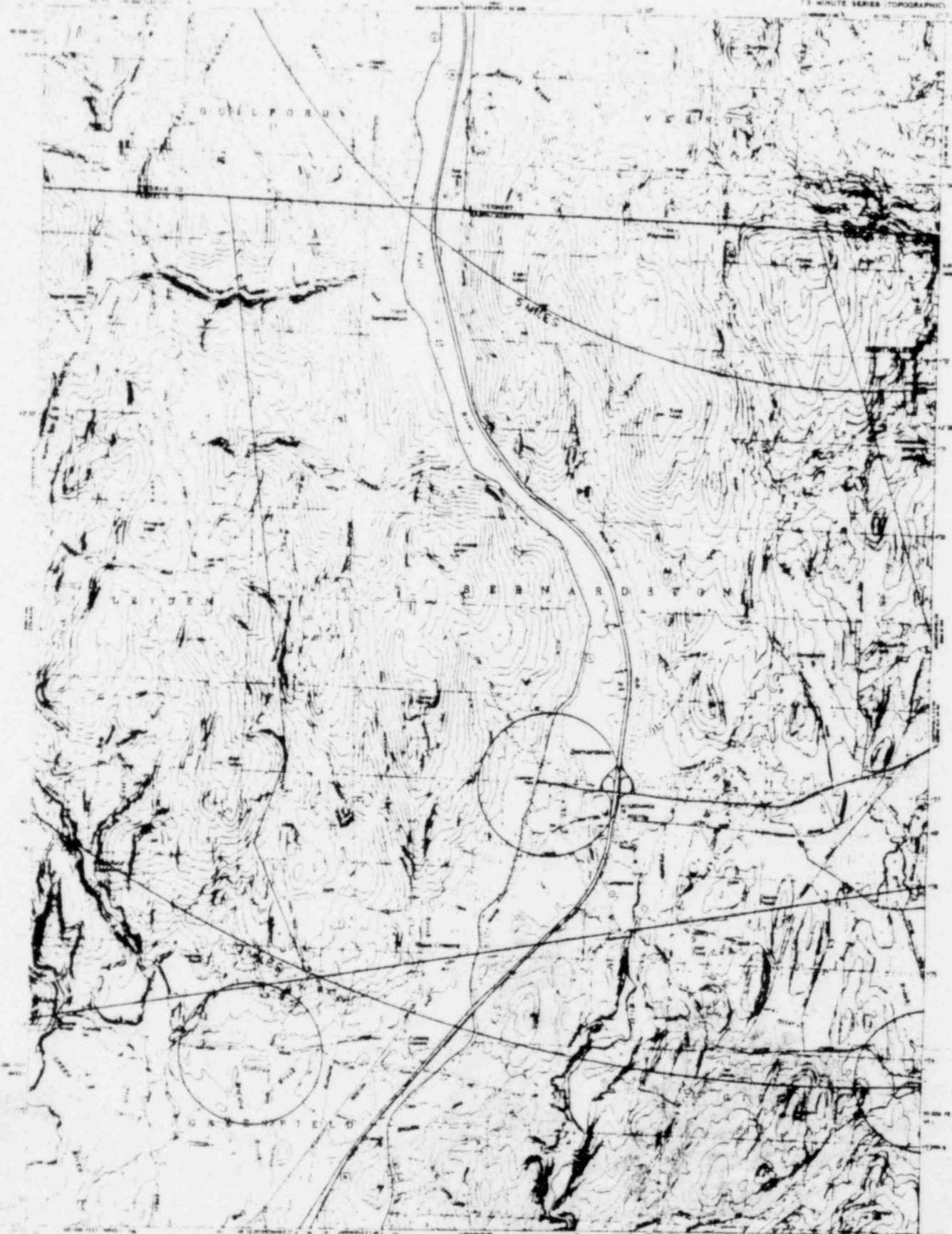
COLRAIN MASS - VT
15 MINUTE SERIES (70' x 100')

PCOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

BERNARDSTON QUADRANGLE
MASSACHUSETTS-VERMONT
7.5 MINUTE SERIES (TOPOGRAPHIC)



REVISIONS MADE AND AUTHORIZED BY THE CHIEF OF SURVEY
Control by U.S.G.S. MONITORING AND REVISIONS (CROSS-CHECK) SYSTEM
Comparison to published edition 1946 and 1948
Revised from aerial photographs taken 1972 (see National 1:250,000
Topographic Edition 7.5 Minute Series)
Photographic projection: U.S. National Plane Projection
Elevation and contour interval in meters (except where noted)
Horizontal scale and vertical contour interval in meters
1:250,000 (horizontal) 1:125,000 (vertical)
Scale: 1

SCALE 1:250,000
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC DATUM OF 1983
7' 30"

ROAD CLASSIFICATION
Thruway Highway
Main Highway
Secondary Highway
Tertiary Highway
Interstate Route
State Route
Light-duty Road
Improved Surface
Unimproved Road
Dirt Road
State Route

THIS MAP COMPLETES WITH NATIONAL MAP & LIBRARY COMPLETION
FOR SALE BY U.S. GEOLOGICAL SURVEY RESTON VIRGINIA 20192
A SERIES OF 7500 COORDINATE MAPS AND 1:250,000 7.5 MINUTE SERIES

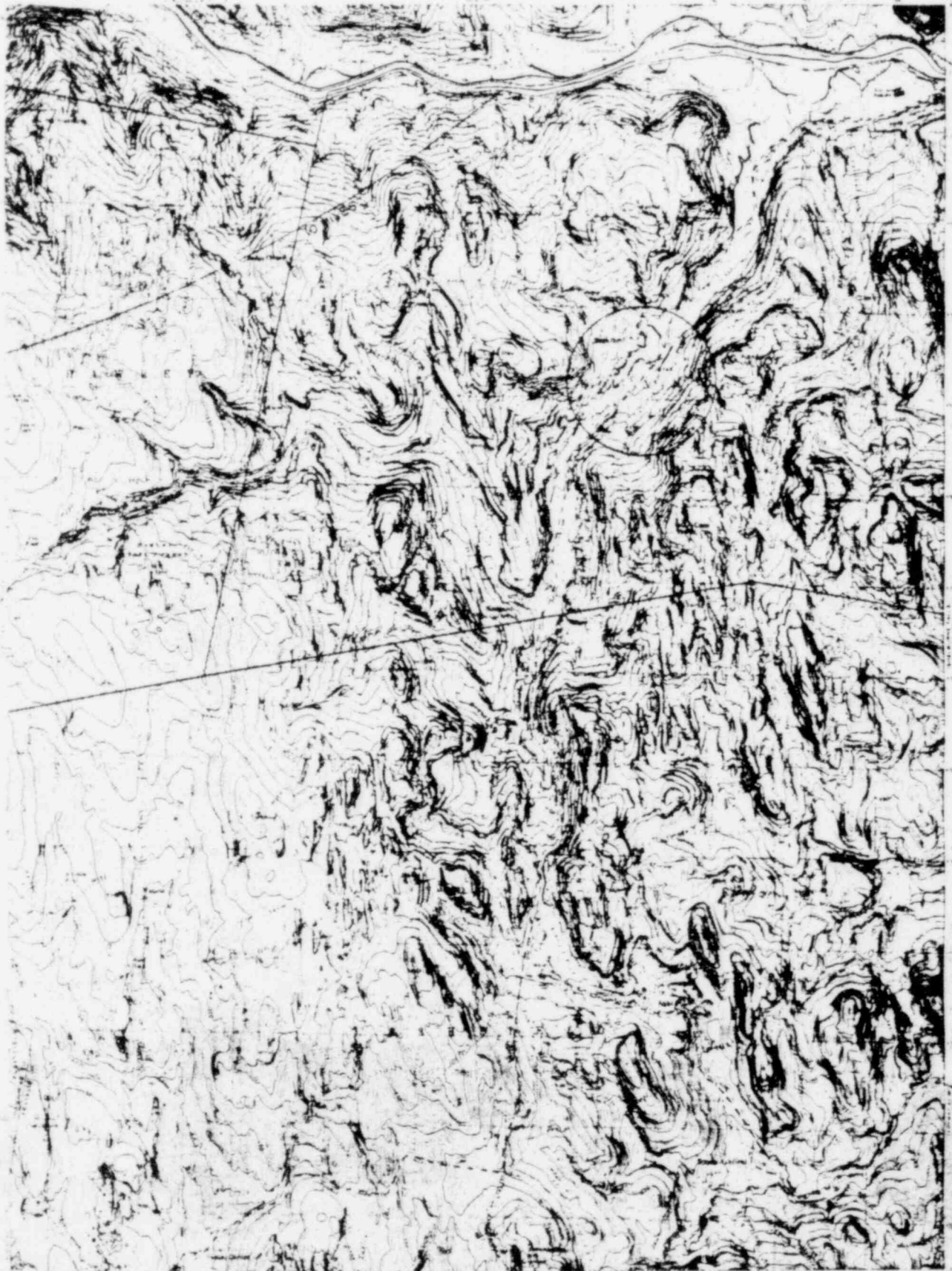
BERNARDSTON MASS-VT
8422 5-877301 1
1977

POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

ASHFIELD QUADRANGLE
MASSACHUSETTS
7.5 MINUTE SERIES, TOPOGRAPHIC



Topographic map of the Ashfield Quadrangle, Massachusetts, showing contour lines, roads, and geographical features. The map is a 7.5-minute series topographic map. It features a grid of latitude and longitude lines. The terrain is depicted with contour lines, showing a central valley and surrounding hills. A prominent road, likely Route 1, runs north-south through the center. Other roads and features are scattered throughout the area. The map is titled 'ASHFIELD QUADRANGLE MASSACHUSETTS 7.5 MINUTE SERIES, TOPOGRAPHIC' in the top right corner.

SCALE 1:50,000

SYMBOLS

SYMBOL	DESCRIPTION
(Symbol)	...
(Symbol)	...
(Symbol)	...
(Symbol)	...
(Symbol)	...

7 30"

ASHFIELD MASS

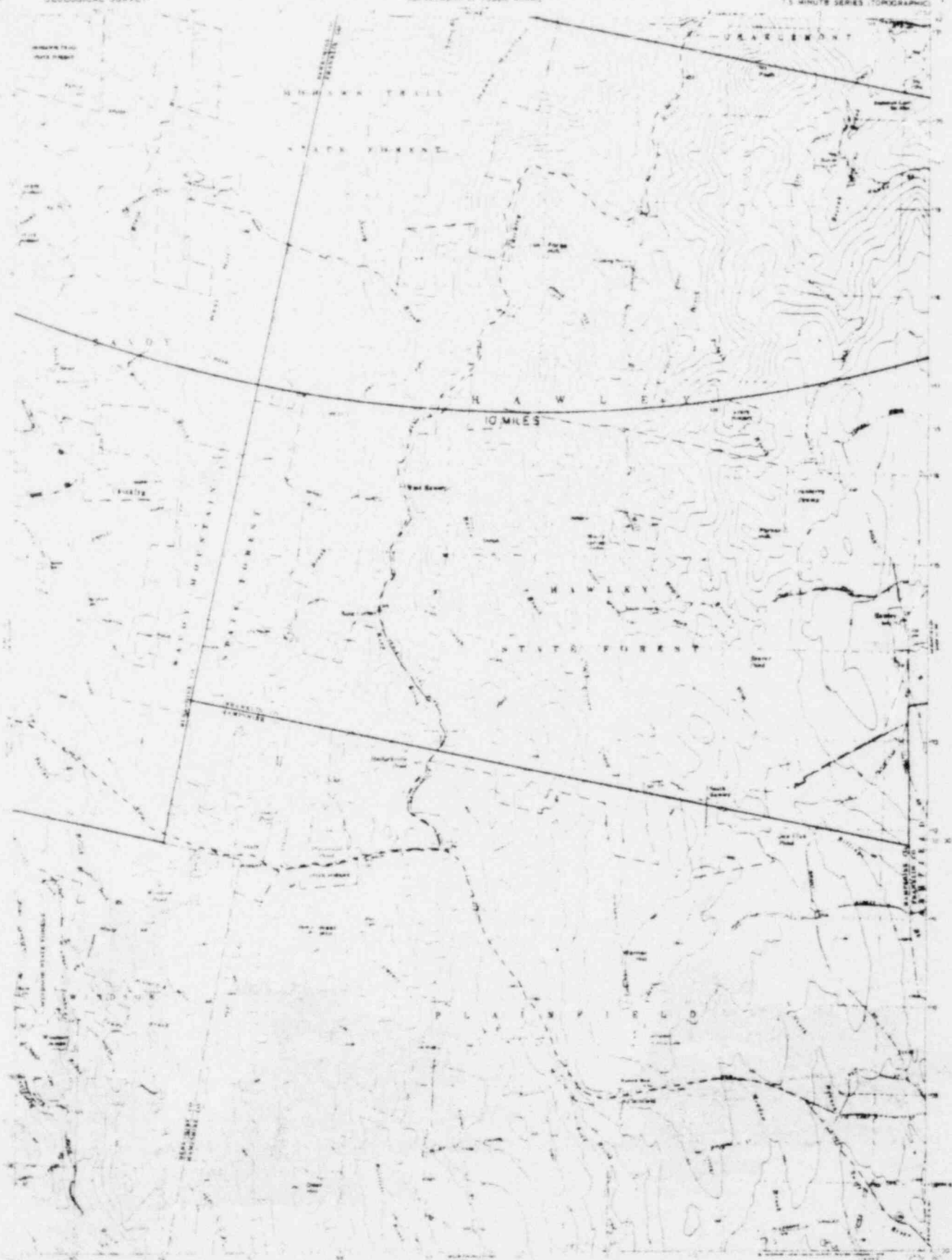
1911

POOR ORIGINAL

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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

PLAINFIELD QUADRANGLE
MASSACHUSETTS
7.5 MINUTE SERIES (TOPOGRAPHIC)



Plainsfield, Mass., and vicinity, 1890. Contour interval, 20 feet. The map is based on the original survey of 1890, and is not a reproduction of the original map. The map is a reproduction of the original map, and is not a reproduction of the original map. The map is a reproduction of the original map, and is not a reproduction of the original map.

SCALE 1:25,000

ROAD CLASSIFICATION

Primary Highway	Light Gray Line
Secondary Highway	Dark Gray Line
Unimproved Road	Thin Black Line
Railroad	Black Line with Cross-Ticks

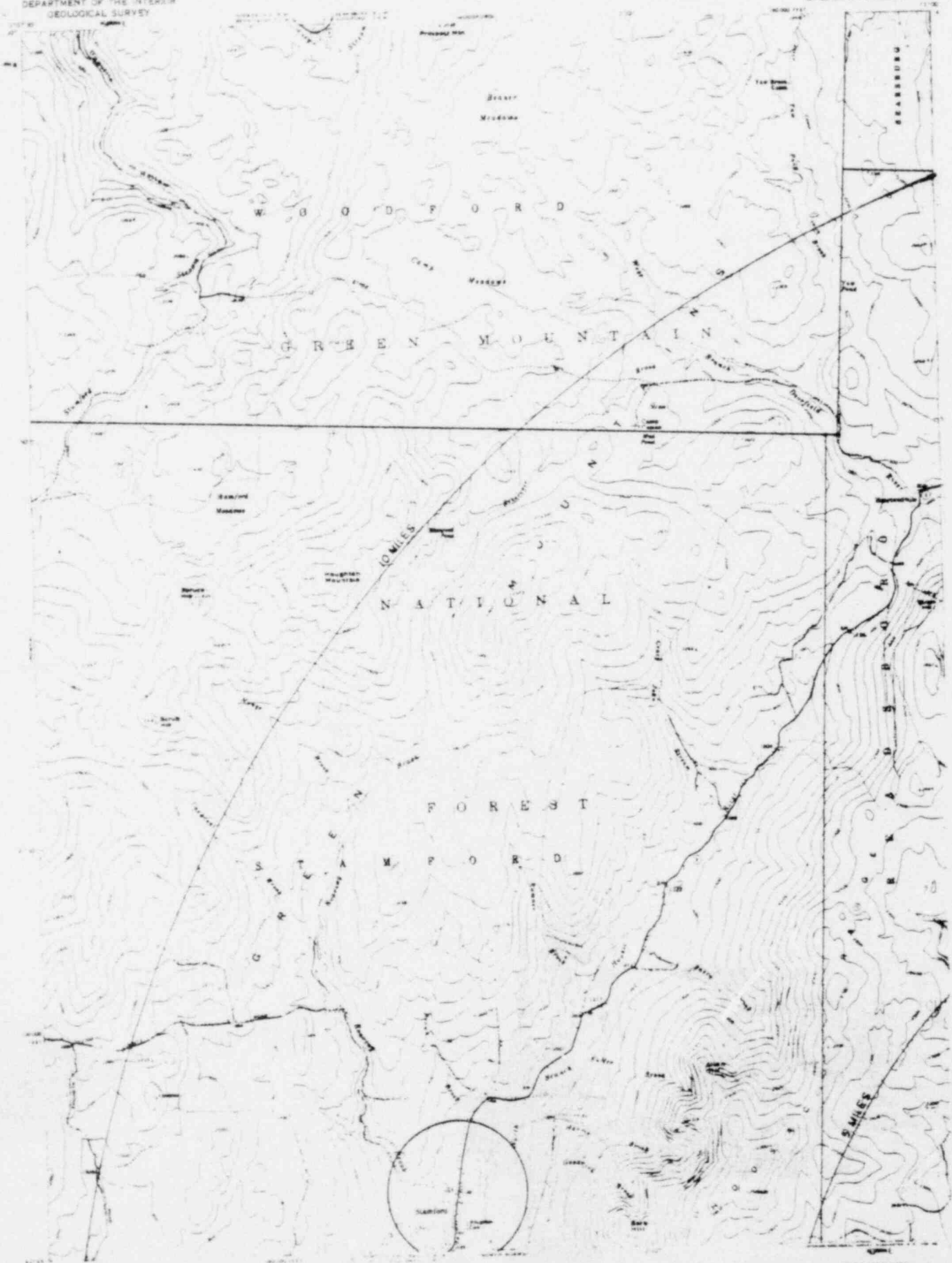
7' 30"

PLAINFIELD MASS.
PL. 100-100
1910
U.S. GEOLOGICAL SURVEY

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GEOLOGICAL SURVEY

STAMFORD QUADRANGLE
HERMONT, BENNINGTON CO.
7.5 MINUTE SERIES TOPOGRAPHIC
U.S. GEOLOGICAL SURVEY



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ROAD CLASSIFICATION
Main Road
Secondary Road
Tertiary Road
Other Road

STAMFORD, VT.
HERMONT, BENNINGTON CO.
7.5 MINUTE SERIES TOPOGRAPHIC
U.S. GEOLOGICAL SURVEY

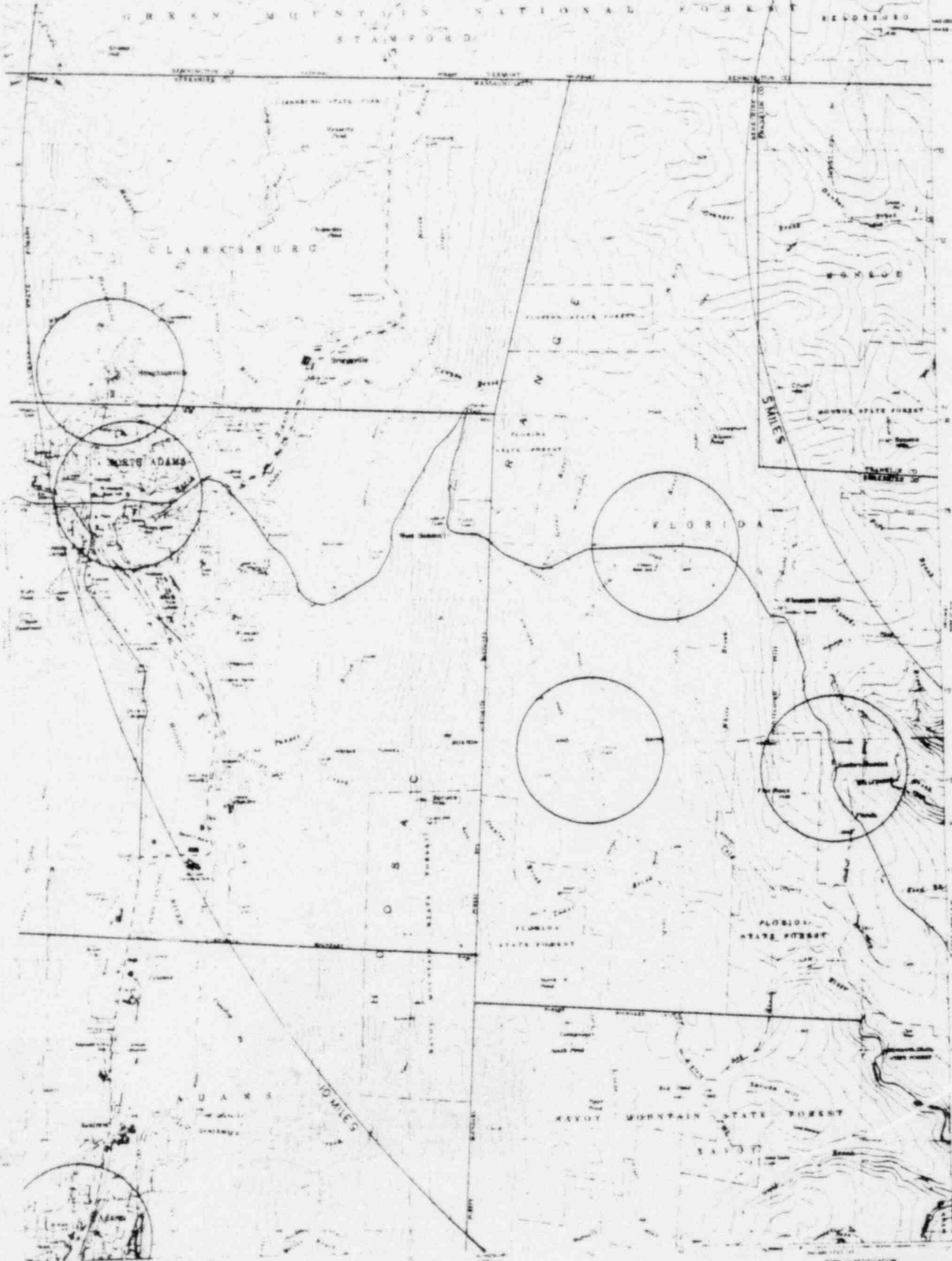
7 30'

POOR ORIGINAL

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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

NORTH ADAMS QUADRANGLE
MASSACHUSETTS - VERMONT
15 MINUTE SERIES (TOPOGRAPHIC)



Map of North Adams, Massachusetts, showing topographic features, roads, and landmarks. The map includes labels for 'GREEN MOUNTAIN NATIONAL FOREST', 'CLARKSBURG', 'NORTH ADAMS', 'FLORIDA', 'OSACA', 'KEYOT MOUNTAIN STATE FOREST', and 'VERMONT'. A scale bar indicates 10 miles. Several circular callouts are present on the map, highlighting specific areas of interest.

ROAD CLASSIFICATION
Light Gray Line - Light Gray Line
Dark Gray Line - Dark Gray Line
Thin Black Line - Thin Black Line
Thick Black Line - Thick Black Line

7' 30"

NORTH ADAMS, MASS. - VT.
SCALE 1:50,000
1914

POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

MT GRACE QUADRANGLE
MASSACHUSETTS-NEW HAMPSHIRE
7.5 MINUTE SERIES (TOPOGRAPHIC)



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SCALE 1:50,000
CONTOUR INTERVAL, 20 FEET
VERTICAL DATUM, MEAN SEA LEVEL
HORIZONTAL DATUM, NAD 83

ROAD CLASSIFICATION
Primary Highway
State Route
County Road
Local Road
UNCLASSIFIED ROAD
UNCLASSIFIED ROAD
UNCLASSIFIED ROAD
UNCLASSIFIED ROAD

7 30"

MT GRACE MASS.-N. H.
7517-1

POOR ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

WINDSOR QUADRANGLE
MASSACHUSETTS - BERKSHIRE CO.
15 MINUTE SERIES TOPOGRAPHIC



Map was compiled and corrected to the standard form
of the U.S.G.S. 1:25,000 scale. The original map was
compiled by the Massachusetts Department of Public Works
in 1908. It is based on the original map of 1898.
The original map was compiled by the Massachusetts
Department of Public Works. It is based on the
original map of 1898. The original map was compiled
by the Massachusetts Department of Public Works.
It is based on the original map of 1898.

SCALE 1:25,000

ROAD CLASSIFICATION

Primary Highway	Light Gray Line
Secondary Highway	Dark Gray Line
Tertiary Highway	Thin Gray Line
Unimproved Road	Dotted Line
Unimproved Path	Thin Dotted Line

7 30"

WINDSOR, MASS.
1911

U.S. GEOLOGICAL SURVEY