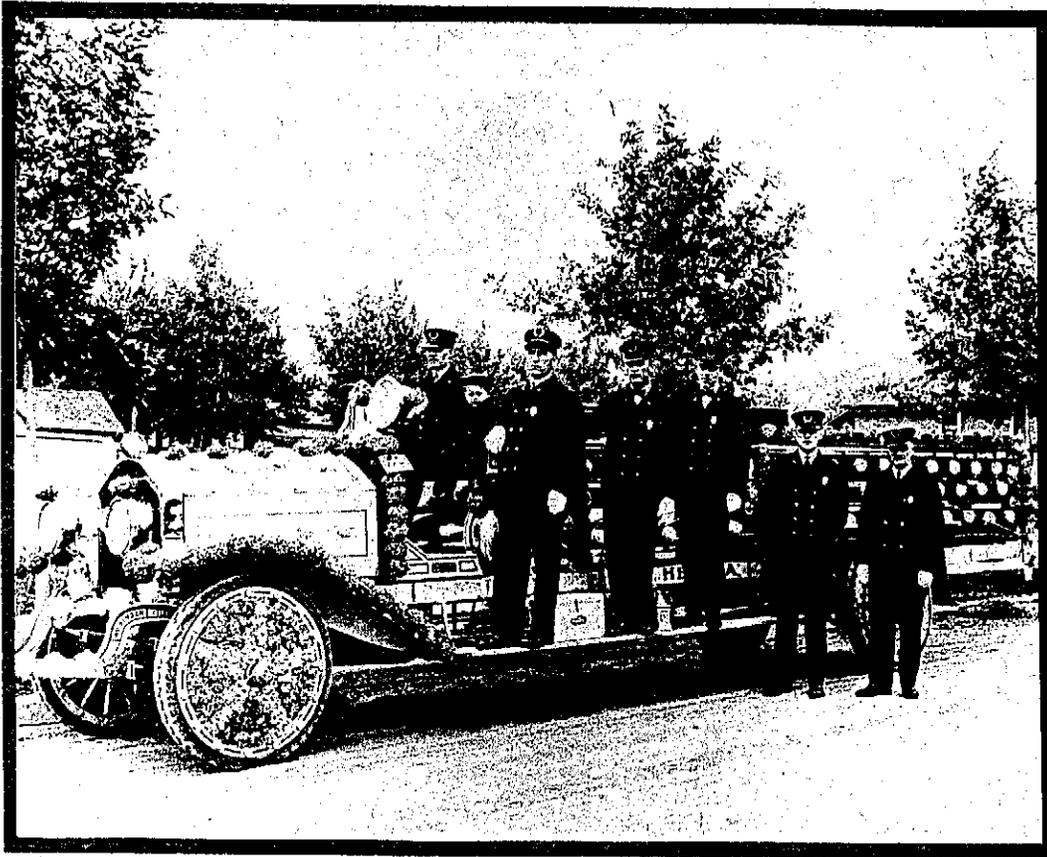


HELENA FIRE DEPARTMENT

1991 ANNUAL REPORT

*AS SUBMITTED TO
THE HONORABLE MAYOR
THE CITY COMMISSIONERS
AND BILL VERWOLF, CITY MANAGER*



1924 ROBINSON LADDER TRUCK

RANDY McCLAIN

"IN LOVING MEMORY"



Randy officially joined the fire department on June 24, 1989. But in reality, he was a part of the department long before. Unlike most of us, all Randy ever wanted to be was a firefighter. So when Randy's life long dream of becoming a firefighter became a reality, his life was fulfilled. On that day, both the fire department and the public which Randy so dearly loved to serve, were blessed. Randy was one of the most dedicated men I have ever met in this profession. If there was something that needed to be done, Randy would do it. To Randy, it didn't matter if it was his day off or not, he felt that it was his duty. There were many times when a school teacher would call requesting a fire department demonstration or the Boy Scouts would need a first aid class and immediately Randy would volunteer to do it on his own time. Just as he was there for the Cub Scouts as a Scout Leader and for Muscular Dystrophy to fill the boot or any other cause that needed to be done, Randy was always there.

It wasn't until Randy became ill that I really came to know him. It was during long conversations that I saw what a loving, compassionate person he really was. Randy's family and the men he worked with were the most important things in his life. Even through his illness his worries and concerns were for them. Randy never thought about himself, even when he knew that the cancer was beginning to spread again, he said nothing. I remember a conversation we had about how it had taken his illness for two grown men to be able to tell each other, "I love you", and we laughed.

A man once said, "the measure of a man's greatness is not what he achieves, but the measure to which he serves." In his service to others, Randy was truly a great man!

M.R.F.

Randy, from all of us whom you served to the very last, "we thank you, we love you and we'll miss you."

Don Hurni
Don Hurni

Bob Knudson
Bob Knudson

Dennis Sorrels
Dennis Sorrels

Norb Roth
Norb Roth

Warren Ziegler
Warren Ziegler

Larry Ross
Larry Ross

Jay Moore
Jay Moore

Ed Flies
Ed Flies

Bob Fearon
Bob Fearon

Scott Bockman
Scott Bockman

Bob Olson
Bob Olson

Jim Feucht
Jim Feucht

Joel King
Joel King

Kevin Kelly
Kevin Kelly

Jim Vonada
Jim Vonada

Mike Foster
Mike Foster

Fritz Zettel
Fritz Zettel

Jim Skinner
Jim Skinner

Doug Duncan
Doug Duncan

Pat Clinch
Pat Clinch

Ron Morris
Ron Morris

Dale Klugman
Dale Klugman

Steve Larson
Steve Larson

Jim Mitchell
Jim Mitchell

Bob Pare
Bob Pare

Mike Spoto
Mike Spoto

Don Gage
Don Gage

Roy Swanby
Roy Swanby

Brad Hampton
Brad Hampton

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MAYOR
H. KAY MCKENNA

COMMISSION
MARGARET CRENNEN
TOM HUDDLESTON
COLLEEN MCCARTHY
MIKE MURRAY

CITY MANAGER
BILL VERWOLF

Commissioners
Kay McKenna, Mayor
Margaret Crennen
Tom Huddleston
Colleen McCarthy
Mike Murray



City-County
Administration Building
316 North Park
Helena, MT 59623

Phone: 406/447-8000

William J. Verwolf
City Manager

City of Helena

November 24, 1992

Mr. Bill Verwolf
City Manager
316 N. Park Avenue
Helena, MT 59623

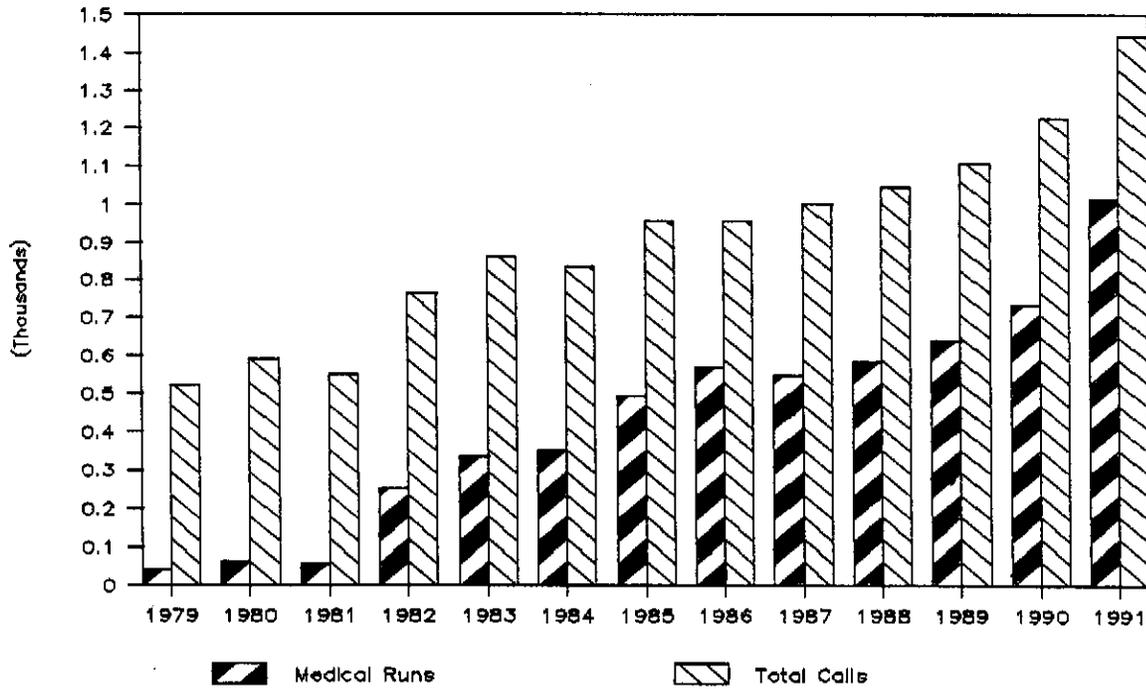
Dear Mr. Verwolf:

I am pleased to present the 1991 Annual Report of the Helena Fire Department. This report contains statistical data and information regarding all aspects of the department, including fire suppression, fire prevention, emergency medical services and training divisions.

During the past year, the Helena fire Department responded to a total of 1,446 alarms. As in the past, the total number of alarms has continued to rise each year. This coupled with the ever increasing demands on the fire service to provide a wide range of services such as E.M.S., hazardous materials response, and target hazard fire protection, have taken a significant toll on the departments ability to provide effective fire suppression capabilities to the citizens of Helena.

Consider for example, that in 1979 the department responded to a total of 523 alarms of which 38 were requests for emergency medical services compared to 1991 in which 1,012 of the 1,446 alarms answered by the department were E.M.S. calls, at the same time our department staffing levels at each station have remained exactly the same. This has led to a situation where on numerous occasions the number of on-duty personnel immediately available to respond to an emergency situation is inadequate, and constitutes a threat not only to the public, but firefighter safety. The following graph illustrates the increase in the number of alarms.

Total Calls Compared to Medical Runs



It is my sincere desire to achieve, with your support and that of the City Commission, the goal of providing the citizens of Helena with the best possible levels of fire and emergency services protection.

Respectfully Submitted,

Don Hurm
 Don Hurm, Fire Chief
 Helena Fire Department

HELENA FIRE DEPARTMENT

FIRE CHIEF

Don Hurni

ASSISTANT FIRE CHIEF

Mike Foster

DEPUTY ASSISTANT CHIEF/TRAINING OFFICER

Steve Larson

FIRE PREVENTION BUREAU

FIRE MARSHAL - Bob Knudson

INSPECTOR II - Fritz Zettel

PF PREVENTION OFFICER - Craig Trapp

ADMINISTRATIVE ASSISTANT

Bernie Martian

COMBAT

SHIFT #1

BATT.CHIEF----Dennis Sorrels
CAPT.-----Ron Morris
LT.-----Norb Roth
ENG.EMT-D----Warren Ziegler
FF III EMT-D--Ed Flies
FF III EMT-D--Pat Clinch
FF III EMT-D--Larry Ross
PFF EMT-----Brian Roberts
PFF-----Rick Justice

SHIFT #2

BATT.CHIEF-----Bob Olson
CAPT.EMT-D-----Jim Skinner
LT.-----Mike Spotorno
ENG.EMT-D-----James Feucht
FF III-----Doug Duncan
FF III EMT-D---Bob Fearon
FF III EMT-D---Kevin Kelly
CFF-----Scott Bockman
PFF-----David Harvey

SHIFT #3

BATT.CHIEF-----Bob Pare
CAPT.EMT-D-----Jay Moore
LT.-----Dale Klugman
ENG. MECHANIC-----Don Gage
FF III EMT-D Med.Dir.--Joel King
FF III EMT-D-----Roy Swanby
FF III EMT-D-----Jim Mitchell
FF I EMT-D-----Brad Hampton
PFF-----Jim Vonada

MEDICAL RETIREMENT: Randy McClain----CFF

RETIRED: Ted Simpson-----Captain
Joe Cross-----Battalion Chief
Harry Crawford---Deputy Fire Marshal

PROMOTED: Brad Hampton-----FF I
Joel King-----Medical Director
Steve Larson-----Engineer
Dale Klugman-----Lieutenant
Jim Skinner-----Captain
Scott Bockman----CFF
Randy McClain----FF I
Robert Olson-----Battalion Chief
Jay Moore-----Captain
Norb Roth-----Lieutenant
Don Gage-----Engineer
Warren Ziegler---Engineer
Steve Larson-----Deputy Assistant
Chief/training officer

NEW HIRE: Jim Vonada
Brian Roberts
Craig Trapp
David Harvey
Rick Justice

DECEASED: Randy McClain----CFF

FIRE APPARATUS

<u>APPARATUS #</u>	<u>STATION</u>	<u>TYPE OF APPARATUS</u>	<u>DESCRIPTION</u>	<u>YEAR</u>
Engine 1	1	1250 Pumper	Sutphen	1986
Engine 2	2	1250 Pumper	Hahn	1980
Engine 3	1	1250 pumper	Seagrave	1975
Truck 1	1	85' Tower	Sutphen	1976
Truck 2	2	75' Ladder	Pirsch	1946
Squad 1	1	Mini/Rescue	Ford	1986
Squad 2	2	Mini/Rescue	Chevrolet	1979
#127	1	Staff	Ford 2 dr.	1980
#128	1	Staff	Ford 4 dr.	1980
#129	1	Staff Pickup	Ford Pickup	1981
#130	1	Staff Pickup	Ford Pickup	1985
#131	1	Staff Van	Ford Van	1986

SELECTED STATISTICAL DATA---FIRE SUPPRESSION DIVISION

1) Source of alarm		
a) Telephone to Fire Department		7
b) Municipal Alarm System	1433	
c) Radio		3
d) Direct report		1
e) Other means		2

Total number of alarms	1446	
2) Type of situation found		
a) Fire/explosion		160
b) Smoke scare		85
c) Emergency medical service	1012	
d) Hazardous condition		55
e) Public service		4
f) Alarm system malfunction	111	
g) False alarm, malicious		14
h) Electrical problem		3
i) Miscellaneous		2

Total number of alarms	1446	
3) Alarms by area		
a) In city		1417
b) Fire District		24
c) Contract		4
d) Mutual aid		1

Total number of alarms	1446	
4) Fire location		
a) In building		64
b) Wildland		20
c) Rubbish, trash containers		33
d) Vehicles		30
e) Miscellaneous		13

Total number of fires	160	
5) Fire control method		
a) Fire Department		109
b) Occupants		11
c) Sprinkler system		1
d) Out on arrival		25
e) Other		14

Total number of fires	160	

6)	Fire causes (structures)	
	a) Wood burning appliances	6
	b) Combustibles near heaters	2
	c) Careless use of open flame	20
	d) Careless use of smoking material	32
	e) Children with matches	22
	f) Defective wiring and electrical appliances	20
	g) Flammable liquids	10
	h) Incendiary	16
	i) Suspicious	25
	j) Miscellaneous	4
	k) Unknown	3

	Total alarms	160
7)	Injuries	
	a) Civilians	4
	b) Firefighters	1

	Total Injuries	5
8)	Deaths	
	a) Civilians	1
	b) Firefighters	0

	Total Deaths	1
9)	Fire loss analysis	
	a) Public dwellings	\$2,700.00
	b) Dwellings	\$339,600.00
	c) Mercantiles	\$53,910.00
	d) Manufacturing	\$5,000.00
	e) Vehicles	\$61,250.00
	f) Miscellaneous	\$5,200.00

	Total Fire Loss	\$467,660.00

Commissioners
Kay McKenna, Mayor
Margaret Crennen
Tom Huddleston
Colleen McCarthy
Mike Murray



City-County
Administration Building
316 North Park
Helena, MT 59623
Phone: 406/447-8000

William J. Verwolf
City Manager

City of Helena

TO: Don Hurni, Fire Chief
FROM: Bob Knudson, Fire Marshal
DATE: November 20, 1992
SUBJECT: Annual Report from the Fire Prevention Bureau for the year 1991

The first organized efforts to protect property and prevent fires, dates as far back as 300 B.C. in Rome. In almost all respects, the efforts of Rome to prevent and protect property from fire, resemble our efforts today.

Almost before the settlement of America began, there were serious setbacks because of fire. The first permanent colony in Virginia was destroyed by fire and then in 1623, the colony in Plymouth suffered near destruction by fire.

These losses from fire could not continue if the colonies were to survive, and to attempt a lessening of fire loss called for regulation.

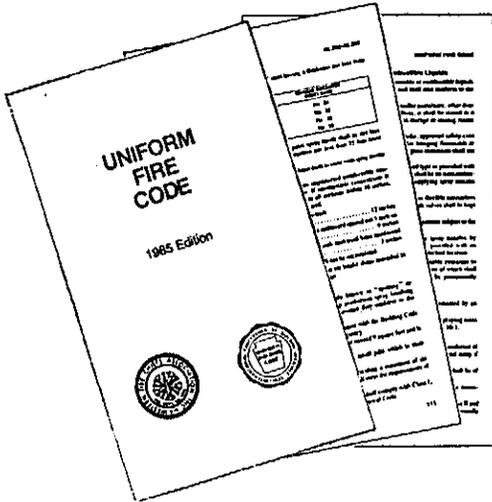
During the years from 1900 to the present, fire deaths and losses provided the basis for legislation after the fact. Each major fire loss gave rise to new and revised building construction, fire and life safety regulations.

Historically, fire prevention regulations have been enacted following fire loss. By studying their history we can prevent the same mistakes. On the other hand, we can ignore history and be doomed to repeat the pattern of loss of life by fire, by reacting too late.

The functions of the Fire Prevention Bureau are many. The Bureau is responsible for conducting routine, as well as technical fire inspections, complaint investigations, fire and arson investigations, plan reviews for commercial construction and remodeling, consultation with architects, contractors, and property owners concerning all aspects of fire protection and prevention.

The Bureau also has the task of informing the public about its fire safety program and how it concerns each and everyone of them. To reach this broad area of people in our community, it takes a constant on-going public education program. In order to accomplish this, the Bureau uses several different things, including the use of the news media, talks at meetings, two (2) seasonal programs, including Fire Prevention Week and spring clean-up, and various other programs for educating children, baby-sitters, employees and employers in many of the different businesses throughout our community.

With this in mind, I am submitting the following activities for the Fire Prevention Bureau for the year 1991.



CODE ENFORCEMENT ACTIVITIES

The Uniform Fire Code was initially developed by the California Fire Chiefs Association and was first published in 1971 by the International Conference of Building Officials and the Western Fire Chiefs Association. A revised edition was published in 1973 and subsequent editions incorporate changes approved at annual meetings of the Western Fire Chiefs Association.

It is the intent of the International Conference of Building Officials and the Western Fire Chiefs Association to correlate the provisions of the Uniform Fire Code and the Uniform Building Code so that there is no conflict between them. Neither code is intended to stand alone; rather, the total package, i.e., the Uniform Fire Code, the Uniform Building Code, the Uniform Mechanical Code, the Uniform Plumbing Code and the National Electrical Code, give cities and counties a complete and comprehensive program of model codes that are compatible with each other.

Both the State of Montana, and the City of Helena adopt the Uniform Fire Code. The Fire Prevention Bureau is required to inspect, as often as may be necessary, all buildings and premises, including such other hazards or appliances as the chief may designate for the purpose of ascertaining and causing to be corrected any conditions which would reasonably tend to cause fire or contribute to its spread, or any violation of the purpose or provisions of the Fire Code and of any other law or standard affecting fire safety.

HAZARDOUS MATERIALS

Hazardous materials are regulated under a number of provisions of the Uniform Fire Code. In addition to which the Fire Prevention Bureau participates in a number of programs in conjunction with the National Fire Protection Agency, the Montana Department of Health and Environmental Sciences, and the U.S. Environmental Protection Agency.

The Bureau conducts an on-going hazard assessment and risk analysis of all facilities involved in the transportation, storage, handling and use of hazardous materials within the city. This is done as part of the Bureau's uniform inspection procedure.

In 1976, Congress passed the Toxic Substances Control Act (TSCA) and specifically directed the Environmental Protection Agency to regulate polychlorinated biphenyls (PCBs). More recently, EPA has adopted regulations for the manufacturing, processing, distribution in commerce, and use prohibitions for PCBs under the Toxic Substances Control Act. Under these regulations and effective on December 1, 1985, notification was required to be provided to the Fire Department in whose jurisdiction, all PCB transformers (including PCB transformers in storage) are located.

In June of 1985, the Environmental Protection Agency began a program to assure that communities are prepared to deal effectively with possible accidental releases of acutely toxic chemicals. The EPA has developed criteria to identify acutely toxic chemicals, and a list of such chemicals. The EPA's criteria has been incorporated into the Helena Fire Department's hazard assessment and risk analysis for hazardous materials. In addition to which many of the programs criteria are covered under the Bureau's permit system and the requirements of the Uniform Fire Code.

The City of Helena Landfill is listed on the Environmental Protection Agency's Comprehensive Environmental Resource Compensation and Liability Information System (CERCLIS) list. The Fire Prevention Bureau conducts periodic sampling and monitoring of methane gas levels at various test sites on and around the landfill and in adjoining buildings. Results of sampling and monitoring are measured in terms of percent L.E.L. (lower explosive level) and percent gas present and serve to readily identify any problems.

FIRE INVESTIGATIONS

As required by State law, the Fire Prevention Bureau is responsible for investigating all fires within its jurisdiction. The term "fire investigation," describes a broad range of activities dealing with post-fire data gathering and analysis to document fire ignition scenarios, fire development, material identification, human behavior, and important fire safety lessons learned.

Investigations of this type are usually concerned with ignition scenario and area of origin determination, with particular emphasis on the investigation of incendiary and suspicious or fatal fires. Fire incidents are also investigated for loss analysis and prevention purposes. These investigations are usually conducted to determine what can be learned from a particular fire incident. Investigations conducted for loss analysis purposes focus on the reasons for fire spread, performance of fire protection features, and those factors contributing to life loss or property damage in addition to the fire cause and origin details.

At the present time all Fire Prevention Bureau personnel have completed the State Fire Marshal Bureau's basic and advanced arson investigation programs and are members of the International Association of Arson Investigators.

In 1991, the Bureau investigated a total of 49 fires, 21 were determined accidental and 28 incendiary.

NOTICES, ORDERS AND CITATIONS

Notices are issued for the correction of routine code violations, orders are issued for the correction or more hazardous violations, and to gain code compliance, after all other measures have failed, a citation is issued.

During 1991, the Bureau issued 342 notices, 19 orders and 4 citations.

COMPLAINT INVESTIGATIONS

The Fire Prevention Bureau conducts investigations of complaints received from local businesses and the citizens of Helena, concerning code violations, hazardous conditions and public safety. During 1991 the Bureau received and investigated 64 complaints.

Unrepaired Leaks Can Be Costly

Size of Leak	Gallons Per Hour	Gallons Per Day	Gallons Per Month	Gallons Per Year
One/two drops per second	.05	1.2	36	438
Intermittent stream	0.9	21.6	648	7776
1/16 inch stream	3	72	2160	25920
1/8 inch stream	10.2	244.8	7344	88128
3/16 inch stream	14	336.9	10107	121284
1/4 inch stream	38.8	931.2	27936	335232

As this table indicates, there is no such thing as a small leak. Over a period of months or years, the cost of even the smallest product leak can be very expensive, both in terms of lost gasoline and damage to the surrounding groundwater tables. Note also that the top line on this table is the generally accepted standard as established by the National Fire Protection Association for underground tank tightness.

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UNDERGROUND STORAGE TANK PROGRAM

The United States Environmental Protection Agency (EPA) estimates that three to five million underground tanks in the United States contain petroleum or "hazardous substances". It has been estimated that thousands of these tanks are currently leaking, and many more are expected to leak within the next five years.

In addition to the fire and explosion potential, growing evidence indicates that such tanks are a major cause of groundwater contamination. Because half the population of the United States depends on groundwater as a source of drinking water, the underground storage tank problem has been recognized as one of national significance requiring federal legislation.

Congress responded to the problem by incorporating a new subtitle in the Hazardous and Solid Waste Amendments of 1984, which President Reagan signed on November 8, 1984. Subtitle I provides for the development and implementation of a comprehensive regulatory program for underground storage tanks.

The installation, operation and use of underground storage tanks, piping and related fuel handling equipment is regulated under the provisions of Article 79 of the Uniform Fire Code, and as such the Fire Prevention Bureau has the primary responsibility for conducting inspections of underground storage tanks, piping and equipment to insure compliance with the Fire Code and other applicable regulations.

FIRE PREVENTION WEEK

During Fire Prevention Week and throughout the year, the Helena Fire Department distributes a number of different fire safety materials, ranging from coloring and comic books to crossword puzzles. These materials designed to teach fire safety to the children of Helena serve a valuable purpose.

Each year throughout the nation many young children are burned and injured by the ignition of their clothing. Clothing fires cause more severe burns than burns on an unclothed area. Injury from clothing fires can be greatly reduced if a child will immediately **stop, drop and roll**. This action protects the face, neck and breathing passages. Heat and flame rise, so that when a child is standing up they go straight into the face, nose and mouth. This is aggravated if the child runs and fans the flame. When the child drops and becomes horizontal, the heat and flame still go up, but away from sensitive areas. Rolling smothers the fire to extinguish it.

Various other aspects of fire safety are also covered in these materials, such as preventing fires in and around the home, and what to do if a fire strikes.

COUNSELING JUVENILE FIRE SETTERS

Learning about fire is a part of every child's growth process. A passing interest in fire is quite normal from the ages of approximately 2 to 7 years. This interest is often exhibited when children light small fires or play with matches, lighters, or candles. Children are great imitators. They mimic the adults they see lighting cigarettes, candles, and fireplaces. To most children under seven there is little understanding of fire and its destructive consequences. To them fire has a magical quality. Small children can strike a match and start a small fire. They can then touch the lighted match to a small pile of papers and create a large, warm, bright fire, all through the magic of their match.

If the fire rapidly spreads beyond the initial pile of papers, the curious fire players will usually attempt to extinguish the fire or run for help. This fire play, however innocent, is dangerous and must be controlled. Each year the Fire Prevention Bureau receives requests from parents of children playing with fire for counseling. As part of the Bureau's public education program the Fire Marshal works with the parents and child(ren) involved to channel this curiosity about fire into protective and non-destructive areas. During 1991, the Fire Prevention Bureau counseled 17 juvenile fire setters.



PUBLIC SERVICE ANNOUNCEMENTS

Among the many measures that can be taken to reduce fire losses, perhaps none is more important than educating people about fire. Americans must be made aware of the magnitude of fire's toll and its threat to them personally. They must know how to minimize the risk of fire in their daily surroundings. They must know how to cope with fire, quickly and effectively, once it has started.

The prevention of fires due to human carelessness is not all that fire safety education can hope to accomplish. Many fires caused by faulty equipment rather than carelessness could be prevented if people were trained to recognize hazards. And, many injuries and deaths could be prevented if people knew how to react to a fire, whatever its cause.

Each year through the use of Public Service Announcements, conducted with the cooperation and assistance of the local news media, the Fire Prevention Bureau strives to make the public aware of various fire hazards.

Some of the subjects covered by these PSA's include spring clean-up week, fireworks safety, fire prevention week, and holiday and Christmas safety.

During 1991, the Bureau conducted 5 Public Service Announcements.

PUBLIC EDUCATION

During the year of 1991, the Fire Prevention Bureau conducted both demonstrations and lectures to the general public upon request.

Demonstrations and Lectures.... 59

Number of adults..... 501

Number of students.....1296

Commissioners
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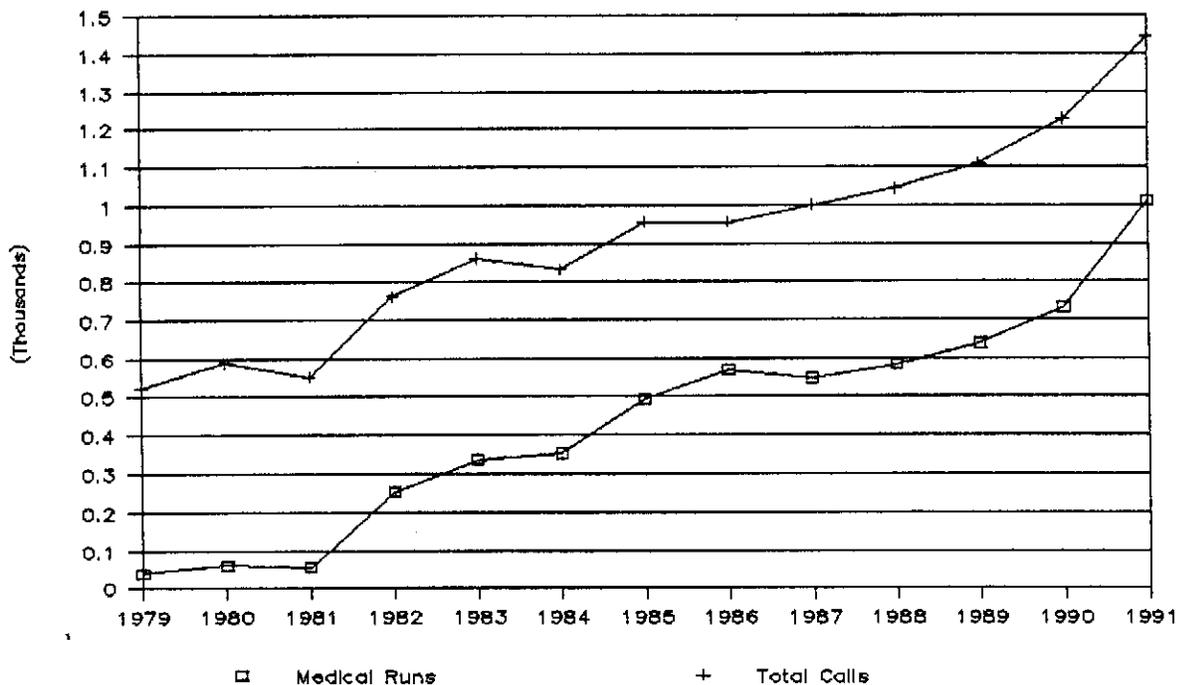
City of Helena

TO: DON HURNI, FIRE CHIEF
FROM: JOEL KING, MEDICAL DIRECTOR
DATE: NOVEMBER 25, 1992
SUBJECT: 1991 EMERGENCY MEDICAL SERVICES REPORT

Of the 1,446 calls the Helena Fire Department responded to in 1991, 1,012 were requests for medical assistance. This represents 70% of all requests for assistance received by the department.

Interesting to see is the trend over the years since the Helena Fire Department started its emergency medical program, for it shows how the Helena community has endorsed and utilized this service component. The following graph plots both total annual fire department calls and the portion of those calls that are medical assists.

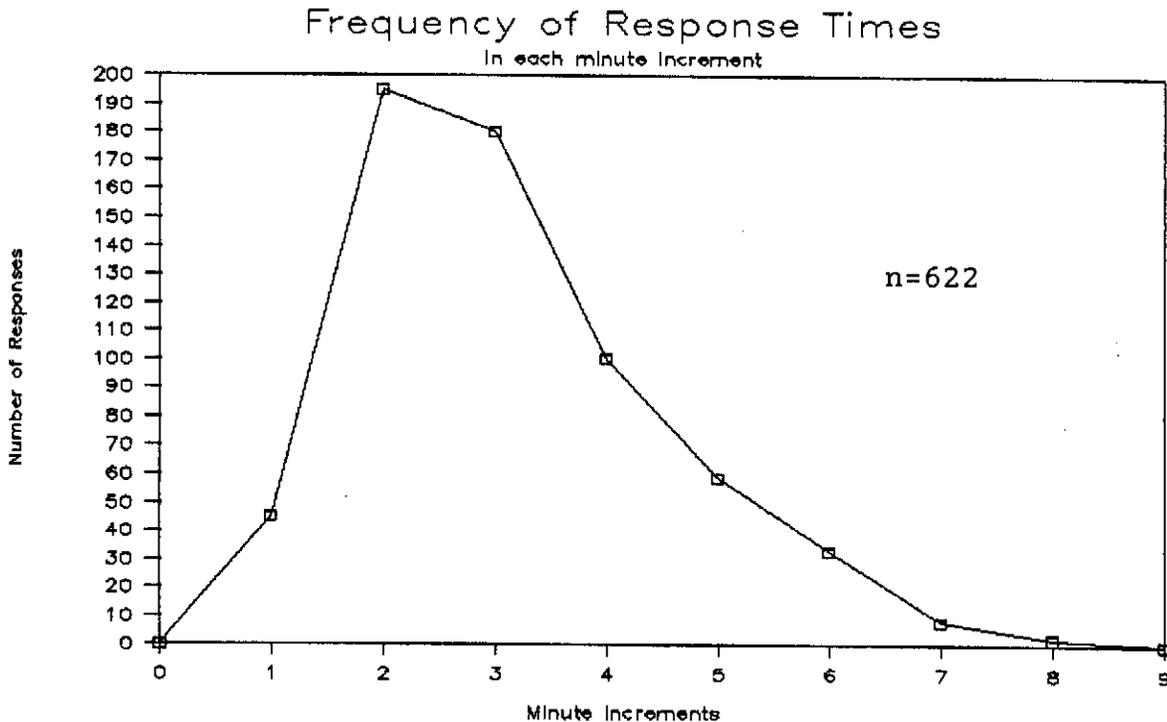
Total Calls Compared to Medical Runs



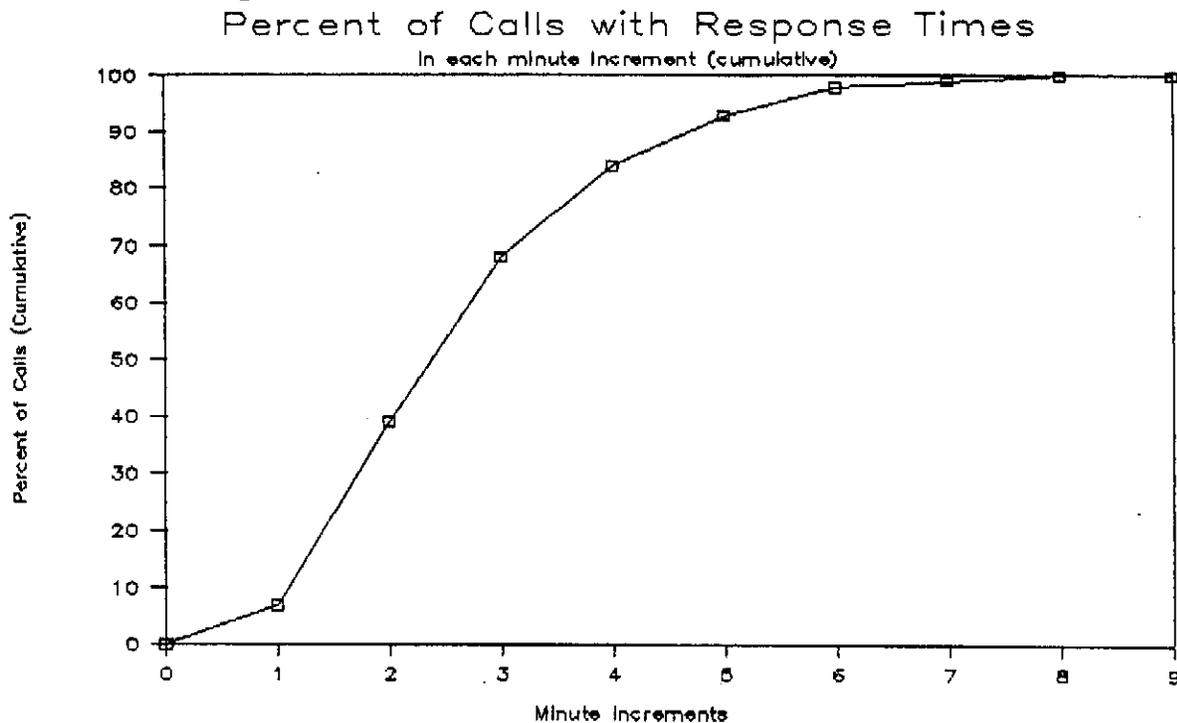
In just 10 years, the number of medical runs has gone from 38 in 1979 to 1012 in 1991. A decade ago, medical runs comprised just 7% of the Helena Fire Department's run load; today they comprise nearly 70% according to the 1991 figures. This trend is characteristic of fire departments nationwide during the past decade.

A paid fire department in any community is in a good position to assist in pre-hospital emergency care in that stations are staffed and in readiness 24 hours a day. With two staffed stations, the Helena Fire Department is able to rapidly deliver aid throughout the community. It is not unusual to hear, as department emergency medical technicians arrive on the scene, "Wow, you sure got here fast." Such rapid delivery of medical care is a fundamental component of emergency medical services.

To see where we stood with respect to medical call response time, I randomly sampled 622 medical runs in 1991 and developed the following graph. It shows the distribution of calls by the number of minutes from notification to the time of arrival on the scene. For example, the graph shows that 46 of the 622 calls sampled had a response time of one minute or less.



The next graph uses the same information to show cumulative response profiles. This shows, for example, that the Helena Fire Department was able to deliver a response time of 4 minutes or less during 84% of the time.



It should be obvious that a guaranteed response time for all areas of the fire service area is impossible to determine or deliver due to the many variables involved. Weather, simultaneous calls, travel time, and traffic levels are just some of the factors that impact the call response time period.

Another area of interest is the nature of the medical problems to which the Helena Fire Department responds, and the frequency of calls of various types. For 1991, all medical run reports were reviewed and the following "Nature of the call" information was generated. This is broken down according to the station responding to calls in 23 different categories.

MEDICAL CALLS HELENA FIRE DEPARTMENT 1991

TYPE OF CALL AND/OR PATIENT PROBLEM	STATION 1		STATION 2		1991 TOTAL MEDICAL CALLS	TOTAL PERCENT
	NO.	PERCENT	NO.	PERCENT		
Assaults & fights.....	33	4.57	7	2.6	40	4.0
Abdominal.....	23	3.18	10	3.8	33	3.3
Breathing Difficulty....	46	6.37	16	6.1	62	6.3
Cardiac Arrest.....	8	1.1	9	3.4	17	1.7
Chest Pain.....	34	4.71	9	3.4	43	4.4
Cancelled in Route.....	11	1.5	4	1.5	15	1.5
Cancelled at Scene.....	23	3.18	9	3.4	32	3.2
Deaths.....	12	1.66	1	.4	13	1.3
C.P.R.....	8	1.1	8	1.1	16	1.6
Defibrillator Use.....	8	1.1	0	3.0	8	.8
Diabetic.....	15	2.08	15	5.7	30	3.0
Alcohol/Drug Abuse.....	109	15.1	19	7.2	128	12.9
Falls.....	86	11.9	33	12.5	119	12.0
Fainting.....	8	1.1	6	2.3	14	1.4
Heart Problems.....	41	5.7	17	6.4	58	5.8
Strokes (CVA).....	17	2.3	3	1.1	20	2.0
Seizures.....	32	4.4	22	8.3	54	5.5
SIDS.....	1	.1	0	0.0	1	.1
Attempted Suicides.....	18	2.5	6	2.3	24	2.4
Minor Trauma.....	42	5.8	19	7.2	61	6.2
Motor Vehicle Accident..	73	10.1	37	14.0	110	11.1
Unknown Problem.....	21	2.9	4	1.5	25	2.5
Other (Hypothermia, burns sports injury, fevers)..	<u>53</u>	<u>7.3</u>	<u>10</u>	<u>3.8</u>	<u>63</u>	<u>6.4</u>
TOTAL.....	722.....		264.....		986.....	
TOTAL PERCENTAGE.....	73%.....		27%.....		100%.....	
	On Westside		On Eastside			

This is the first year an attempt was made to ascertain this type of information, and from it several interesting facts come to light. One can observe how often firefighter/EMTs are called to scenes of an emotionally stressful nature, such as deaths, heart attacks and Sudden Infant Death Syndrome calls. The number of falls responded to by the department shows to some degree its value to the elderly and developmentally disabled. The high percentage of calls involving alcohol and drug abuse reflects costly and prevalent problems within our community. With the large increase in medical run activity within our department, I felt it was important to analyze how this may be affecting our capacity and readiness for fire call response.

For a typical emergency medical run, the Helena Fire Department dispatches two EMTs in one squad truck. This usually leaves just one firefighter remaining at the station from which the medical team is dispatched. Usually, three firefighters are available for duty at the cross-town station. So when a medical call is ongoing, the "immediately available" firefighting force typically is reduced by one-third, from six people to four people.

When medical runs originate from the Civic Center station, one person remains there to respond to fires with either a pumper truck or the truck tower; this severely limits the department's ability to quickly place multiple apparatus at a fire scene.

During 1991, there were 10 occasions when two medical calls were in progress simultaneously; during these periods, the firefighting staff was reduced by two-thirds, from six people to two. On 21 occasions in 1991, one EMT went with the patient to the hospital, assisting the ambulance crew with patient care. This type of situation extends the time personnel are in a delayed fire response mode, but the trade-off is that it enhances patient survival.

On at least four occasions, medical calls occurred back to back, which again diminished staffing for fire response. On only one occasion during 1991 did a fire call occur while a medical run was in progress.

The mission of the fire service long has been the protection of lives and property from threats of all kinds. In the 1970s and 1980s, lessons learned from Vietnam combat medical care were brought stateside and applied to emergency medical services in urban communities. We learned to use techniques and equipment that enhanced our abilities to protect and save lives. As a result, the public increasingly requested our services in the area of emergency medical care. Today, it makes up the majority of our run load.

With increased run frequency comes the greater likelihood of simultaneous fire and medical requests and/or simultaneous medical requests. On one hand, the increase in medical call activity looks good to the department - we are needed, capable and utilized. But on the other hand, we are increasingly less able to deliver a well-staffed response to simultaneous calls because we have had no increase in personnel.

As pre-hospital care run frequency increases, we must be vigilant that it is not at the expense of maintaining a level of firefighting response consistent with what the public has come to expect.

FIRE PROTECTION CONTRACTS

At the present time the City of Helena has several Fire Protection contracts with areas outside the city limits. These include the Veteran's Administration Hospital, the State Highway Shops, and the area west of the City which is Fire District #3. We cover these areas with one (1) pumper and three (3) men. The cost of the fire protection for these areas is computed by mill levy necessary for operating the Helena Fire Department. The cost for taxpayers in the fire district is computed on the same basis as the people who live in the city limits. The private protection contracts are re-negotiated each year after it is determined what the operational budget for the Helena Fire Department is.

Following is a breakdown of the money received by the City of Helena from these contracts:

VETERAN'S ADMINISTRATION HOSPITAL.....	\$23,192.70
FAIRGROUNDS.....	\$ 2,972.35
HIGHWAY SHOPS.....	\$ 1,670.62
WESTSIDE FIRE SERVICE AREA.....	<u>\$64,872.00</u>
TOTAL.....	\$92,707.67

The Helena Fire Department also has two (2) Mutual Aid contracts. These contracts are with the West Helena Valley Volunteer Fire Department and the East Helena Volunteer Fire Department. These contracts state that in the event of a large fire, the Helena Fire Department would receive one (1) pumper and ten (10) men from each fire department for a total of two (2) pumpers and twenty (20) men. If either of the volunteer fire departments should need our help, we are obligated to send one (1) pumper and two (2) men.

HELENA FIRE DEPARTMENT OPERATIONAL PROCEDURE

IN-CITY ALARMS

Small fire: Grass, brush, cars, dumpsters, garbage, etc.

Two (2) men - either squad or 1250 pumper
East of Montana - Eastside Station
West of Montana - Main Station

Small Structure fire: (Initial attack)

East of Montana - Engine 2 and three (3) men
Engine 1 and two (2) men

West of Montana - Engine 1 and three (3) men
Engine 2 and two (2) men

Extra man - Truck 1

Large Structure fire: (Initial attack)

East of Montana - Engine 1 and three (3) men
Engine 1 and two (2) men
Truck 1 and one (1) man

West of Montana - Engine 1 and two (2) men
Truck 1 and one (1) man
Engine 2 and three (3) men

MUTUAL AID:

East Helena: Engine 2 and two (2) men (call in two (2) men to standby)

West Valley: Engine 2 and two (2) men (Call in two (2) men to standby)

OPERATIONAL PROCEDURE:

Westside Fire
Service Area

Engine 1 and three (3) men (Squad 2 and
Engine 2 move to Main Station if working
fire)

(Call in three (3) men to standby if working
fire)

V.A. Hospital

Engine 1 and three (3) men (Squad 2 and
Engine 2 move to Main Station if working
fire)

(Call in Three (3) men to standby if working
fire)

Highway Shops:

Engine 1 and three (3) men (Squad 2 and
Engine 2 move to Main Station if working
fire)

(Call in three (3) men to standby if working
fire)

Fairgrounds:

Engine 1 and three (3) men (Squad 2 and
Engine 2 move to Main Station if working
fire)

(Call in three (3) men to standby if working
fire)

If additional help is needed, call police desk and instruct
dispatcher how many men will be needed. If only one shift is
needed call in shift which was relieved.

Commissioners
Kay McKenna, Mayor
Margaret Crennen
Tom Huddleston
Colleen McCarthy
Mike Murray



City-County
Administration Building
316 North Park
Helena, MT 59623
Phone: 406/447-8000

William J. Verwolf
City Manager

City of Helena

TO: Don Hurni, Fire Chief
FROM: Don Gage, Mechanic
DATE: April 21, 1992
SUBJECT; 1991 Truck and Equipment Maintenance

Major work on apparatus and equipment is performed by the Fire Department mechanic, and most minor work and preventative maintenance is performed by shift members.

Following is a breakdown of costs of repair parts by vehicle:

Engine 1 (1986 Sutphen).....	\$ 977.72
Engine 2 (1980 Hahn).....	\$ 300.92
Engine 3 (1975 Seagrave).....	\$ 188.75
Truck 1 (1976 Sutphen).....	\$ 500.79
Truck 2 (1946 Pirsch).....	\$ 717.85
Squad 1 (1987 Ford).....	\$ 188.97
Squad 2 (1980 Chevrolet).....	\$ 150.54
#127 (1980 Sedan).....	\$ 39.24
#128 (1980 Ford Sedan).....	\$ 244.78
#129 (1980 Ford Pickup).....	\$ 200.42
#130 (1985 Ford Pickup).....	\$ 756.86
#133 (1987 Ford Van).....	\$ 183.98
Total vehicle repair parts.....	\$ 1,469.00
City Shop Service Charge.....	\$ 4,450.00
Total equipment repairs.....	\$ 4,090.00
Total vehicle & equipment repair..	\$10,009.00

Total man hours for mechanic.....750 hrs
Total man hours shift personnel.....3912 hrs

HELENA FIRE DEPARTMENT

YEARLY FUEL REPORT

(January 1, 1991 to December 31, 1991)

<u>VEHICLE</u>	<u>FUEL TYPE</u>	<u>FUEL GAL</u>	<u>MILES YTD</u>	<u>MILES ODO</u>	<u>MPG</u>
#135 Engine #1.....	Diesel...	565.8....	2461.7....	15373.1..	4.3
#137 Engine #2.....	Diesel...	456.3....	2274.....	22148....	4.9
#132 Engine #3.....	Diesel...	171.6....	646.9....	15813....	3.7
#139 Squad #1.....	Gasoline.	623.....	2407.....	8443.....	3.8
#131 Squad #2.....	Gasoline.	507.2....	2298.....	17053....	4.5
#134 Truck #1.....	Diesel...	380.7....	831.....	13824....	2.2
#138 Truck #2.....	Gasoline.	17.0....	58.....	2227....	3.0
#127 Gray Ford.....	Non-lead.	141.4....	2363.....	43190....	17.2
#128 Red Ford.....	Non-lead.	302.7....	3442.....	45306....	11.3
#129 Ford Pickup...	Non-lead.	530.....	6148.....	52355....	11.6
#130 Ford Pickup...	Non-lead.	262.....	2847.....	33002....	10.8
#133 Ford Van.....	Non-lead.	285.6....	4017.....	24699....	14.1
TOTAL GALLONS OF GASOLINE (NON-LEAD).....				1,522	
TOTAL GALLONS OF GASOLINE (REGULAR).....				1,147	
TOTAL GALLONS OF DIESEL.....				1,574	
TOTAL GALLONS OF FUEL.....				4,243	
TOTAL MILES (ALL VEHICLES).....				29,794	
AVERAGE MPG (ALL VEHICLES).....				7.0	
TOTAL ODO (ALL VEHICLES).....				293,433	

Commissioners
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Administration Building
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Phone: 406/447-8000

William J. Verwolf
City Manager

City of Helena

TO: Donald C. Hurni, Fire Chief
FROM: Michael R. Foster, Assistant Fire Chief
DATE: October 18, 1992
SUBJECT: Fire Department Training

During 1991 the members of the Helena Fire Department attended or participated in more training than in any previous year. The department was also fortunate in having three members accepted to the National Fire Academy in Emmitsburg, Maryland.

<u>COURSE</u>	<u>LOCATION</u>	<u>HRS</u>	<u>STUDENTS</u>
Basic Wildland Firefighting	Helena	17	5
Intermediate Wildland Firefighting	Helena	16	6
I.C.S. Natural Gas & Electric	Helena	7	7
D.O.T. First Responder	Helena	44	1
Emergency Medical Technician Recert.	Boulder	24	1
Self Contained Breathing Apparatus, IFSTA	Helena	30	5
Response Area Familiarization	Helena	20	23
Hazardous Materials Railroad Early Response	Helena	5	7
Chemistry of Hazardous Materials	Emmitsburg, Maryland	80	1
Ground Ladders, IFSTA	Helena	30	2

Interpersonal Dynamics in Fire Service Organizations	Emmitsburg, Maryland	80	1
Emergency Medical Defibrillation	Helena	20	1
Fire Streams, IFSTA	Helena	48	2
Ventilation, IFSTA	Helena	30	1
Emergency Response to Hazardous Materials Incidents	Helena	40	2
Firefighter Safety & Survival	Helena	12	7
Basic Wildland Firefighting	Belt	16	1
Rescue, IFSTA	Helena	20	4
Hose Practices, IFSTA	Helena	30	1
Emergency Medical Technician Recert.	Helena	24	4
Salvage & Overhaul, IFSTA	Helena	30	1
Leadership I, NFA	Butte	12	5
Cause & Origin of Vehicle Fires	Great Falls	8	1
Leadership, IFSTA	Helena	12	1
Underground Storage Tanks Rules & Regs.	Helena	6	1
Emergency Medical Technician Intermediate	Helena	12	2
Advanced Trauma Life Support	Helena	16	2
Underground Storage Tank Inspector	Helena	13	2
Essentials of Firefighting, IFSTA	Helena	30	2
Vehicle Extrication, DOT Instructor	Helena	16	1
Command & Control of Fire Department Major Operations	Emmitsburg, Maryland	80	1
Introduction to Emergency Management	Helena	36	4

This training was in addition to the daily classroom and field training each member of the department attends. Courses such as water supplies, hazardous materials, preplans, high rise firefighting, chlorine safety, and public fire education to name a few. In addition, the members attended over 430 hours of emergency medical training to improve and maintain their skills.

On December 2, 1991 Steve Larson was appointed to the position of Training Officer. With the creation of this new and badly needed position, it is with enthusiasm and confidence that I see the future of this department.

