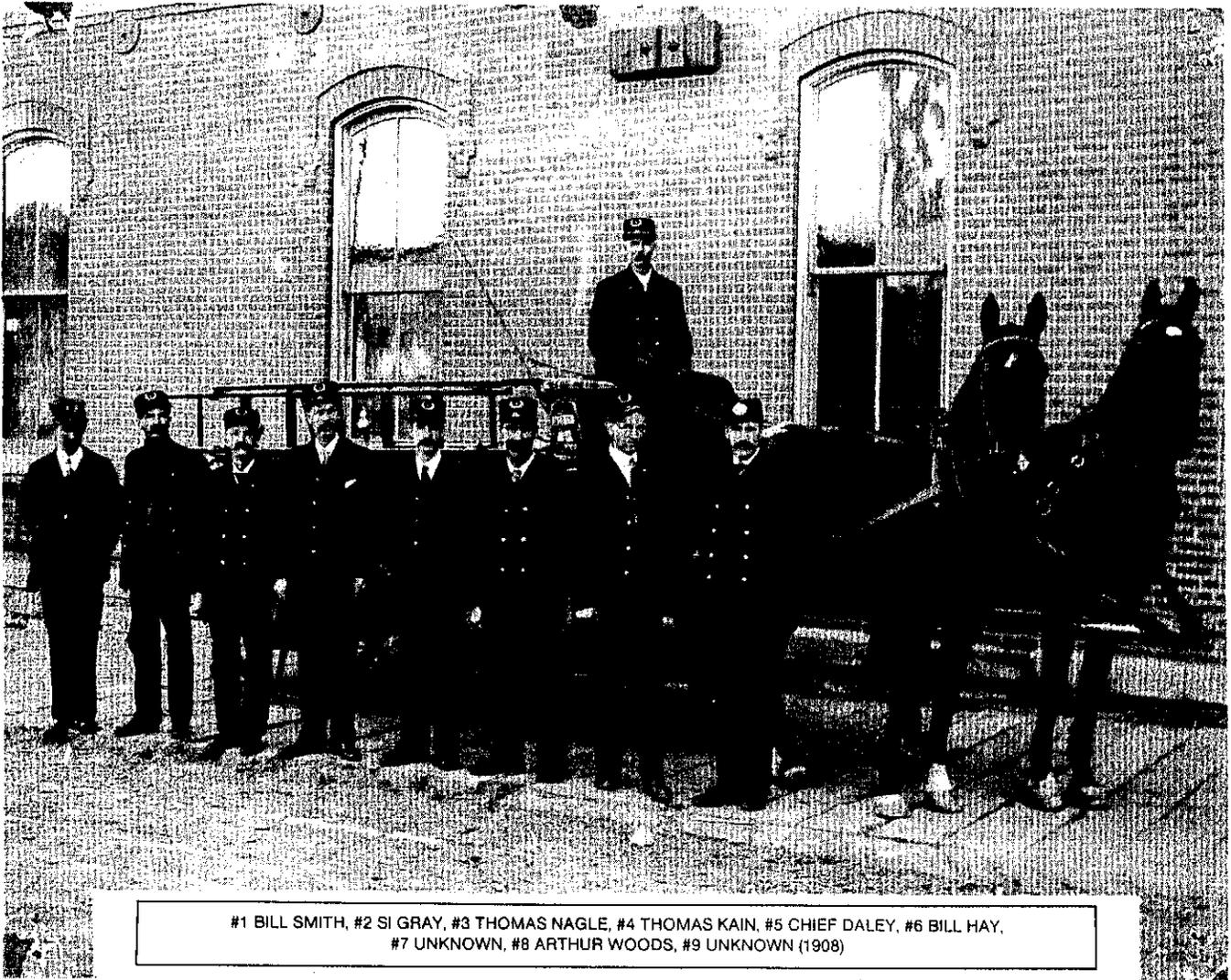


Bernie Swanson

HELENA FIRE DEPARTMENT

1988 ANNUAL REPORT

AS SUBMITTED TO
THE HONORABLE MAYOR AND THE CITY COMMISSION
NORM GRAY, FIRE CHIEF
RICH COE, ASS'T CHIEF
BOB KNUDSON, FIRE MARSHAL



#1 BILL SMITH, #2 SI GRAY, #3 THOMAS NAGLE, #4 THOMAS KAIN, #5 CHIEF DALEY, #6 BILL HAY,
#7 UNKNOWN, #8 ARTHUR WOODS, #9 UNKNOWN (1908)

1889 - 1989 THE HELENA FIRE DEPARTMENT CELEBRATES A CENTURY OF
FIRE PROTECTION AND PUBLIC SERVICE IN THE STATE OF MONTANA

This year Montana celebrates her 100th birthday as a state, and the Helena Fire Department celebrates a century of fire protection and public service in the State of Montana. The cover picture, taken in 1908, illustrates the dedication and tradition of fire fighters in Montana from the past to the present. Retiring Fire Chief Norm Gray's grandfather, Si Gray, began his career with the Helena Fire Department in the early part of the century, in the era of the horse drawn fire apparatus. The tradition of dedication and service to the citizens of Helena continued with the appointment of Gene Gray to the fire department in the late 30's, that tradition continued into a third generation when Norm Gray joined the department on January 1st, 1960. Norm began his career in the fire service at the bottom of the ladder and over the years worked his way up through the ranks, and in the true spirit of "Hometown Helena Pride" was appointed chief of the department in September of 1979. With the retirement of Chief Gray on January 21, 1989, a family tradition of over some 80 odd years of service to the citizens of Helena comes to an end. The members of the Helena Fire Department wish to salute and thank Chief Gray for his outstanding dedication and support over the years and wish him the best of luck and success in retirement.

INDEX

PAGE 1.....SUBMITTAL LETTER BY CHIEF, NORM GRAY
PAGE 2.....MAYOR, CITY COMMISSION AND CITY MANAGER
PAGE 3.....MEMBERS OF HELENA FIRE DEPARTMENT
PAGE 4.....MOTORIZED EQUIPMENT
PAGE 5,6,7.....FIRE INCIDENT ANALYSIS
PAGE 8.....FIRE LOSS ANALYSIS
PAGE 9,10,11.....FIRE PREVENTION REPORT, BOB KNUDSON
PAGE 12,13.....CODE ENFORCEMENT ACTIVITIES
PAGE 14.....PLAN REVIEW'S
PAGE 15.....FIRE INVESTIGATION
PAGE 16,17,18.....HAZARDOUS MATERIALS
PAGE 19.....FIRE PREVENTION WEEK
PAGE 20.....PUBLIC SERVICE ANNOUNCEMENTS
PAGE 21.....COUNSELING JUVENILE FIRE SETTERS
PAGE 22,23,24.....FIRE DEPT. TRAINING-ASS'T CHIEF RICH COE
PAGE 25,26.....MECHANIC'S REPORT, CAPTAIN DON HURNI
PAGE 27.....YEARLY FUEL REPORT
PAGE 28.....BUILDING MAINTENANCE
PAGE 29,30.....OPERATIONAL PROCEDURE
PAGE 31.....FIRE PROTECTION CONTRACTS
PAGE 32.....ALARMS BY AREAS (MAP)
PAGE 33.....ALARMS BY MONTH (CHART)
PAGE 34.....ALARMS BY DAY OF WEEK (CHART)
PAGE 35.....ALARMS BY HOUR OF DAY (CHART)

Commissioners
Russell J. Ritter, Mayor
Rayleen Beaton
Tom Huddleston
Rose Leavitt
Blake J. Wordal



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

Phone: 406/442-9920

William J. Verwolf
City Manager

City of Helena

January 12, 1989

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

Dear Mr. Verwolf,

I am submitting herein, the 1988 Annual Report of the Helena Fire Department. This report contains statistical data and information relating to the operation and activities for the year 1988.

Again this year, we set a record for emergency responses. We responded to 1044 alarms in 1988. We responded to 160 fires, 584 emergency medical calls, 58 smoke scare calls, 142 false alarms and 100 miscellaneous calls. We had 4 firefighter injuries (minor) no civilian injuries and again, this year, no fire deaths in the City of Helena. We had one major fire this year at 22 Jefferson with an estimated loss of \$360,000.00. The total fire loss this year was \$427,669.00.

As this will be my final Annual Report as Fire Chief of the Helena Fire Department, I would like to thank you, the members of the City Commission, both past and present, and all the members of the Helena Fire Department, which I have worked with this past 29 years. I feel that we have made a lot of progress in the Helena Fire Department since I started my career January 1, 1960. I am sure that the dedicated members of the Fire Department and my successor will see that this progress will continue. Again thank you for the support you have given me during my years as the Chief of the best Fire Department in the State of Montana.

Respectfully submitted,


Norm Gray, Fire Chief
Helena Fire Department

Commissioners
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Blake J. Wordal

William J. Verwolf
City Manager



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City of Helena

MAYOR

RUSS RITTER

COMMISSION

RAYLEEN BEATON
TOM HUDDLESTON
ROSE LEAVITT
BLAKE WORDAL

CITY MANAGER

BILL VERWOLF

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City Manager

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HELENA FIRE DEPARTMENT

FIRE CHIEF

NORM GRAY

ASS'T. FIRE CHIEF

RICH COE

FIRE PREVENTION BUREAU

FM - BOB KNUDSON
DFM - HARRY CRAWFORD
CFFI - FRITZ ZETTEL

COMBAT

SHIFT #1

BATT. CHIEF--Dennis Sorrels
CAPT.-----Ted Simpson
LT.-----Jim Skinner
ENG.-----Norb Roth
FF 1/C-----Warren Ziegler
FF 1/C-----Don Gage
FF 1/C-----Doug Duncan
FF-----Pat Clinch
FF II-----Larry Ross

SHIFT #2

BATT. CHIEF--Joe Cross
CAPT.-----Ron Morris
LT.-----Bob Olson
ENG.-----Mike Spotorno
FF 1/C-----Jim Feucht
FF 1/C-----Ed Flies
FF 1/C-----Steve Larson
FF II-----Bob Fearon
FF II-----Jim Mitchell

SHIFT #3

BATT. CHIEF--Bob Pare
CAPT.-----Don Hurni
LT.-----Mike Foster
ENG.-----Jay Moore
FF 1/C-----Dale Klugman
FF III-----Joel King
FF II-----Roy Swanby
FF II-----Kevin Kelly

SECRETARY

BERNIE MARTIAN

RETIRED: Ronald L. Jacobsen - Battalion Chief

PROMOTED: Dennis Sorrels - Battalion Chief
Ron Morris - Captain
Jim Skinner - Lt.
Norb Roth - Engineer

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City Manager

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FIRE APPARATUS

<u>APPARATUS #</u>	<u>STATION</u>	<u>TYPE 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 PU	1981
#130	1	Staff Pickup	Ford PU	1985
#131	1	Staff Van	Ford Van	1986

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City Manager

City of Helena

FIRE INCIDENT STATISTICAL REPORT

For many years it has been recognized by the fire service that it can become more successful in its attempts to educate people in fire safety habits, to make or suggest changes in fire and building codes, and to help reduce the needless loss of life and property by fire in the United States through the collection and use of meaningful data.

In 1972, the Presidents Commission on Fire Prevention and Control issued a document entitled, "America Burning". This document was the first in-depth discussion of this country's fire problem. The outgrowth of

"America Burning" was the National Fire Prevention and Control Act, Public Law 93-498, which established the National Fire Prevention and Control Administration.

One of the mandates of Public Law 93-498 was the establishment of the National Fire Incident Reporting System or NFIRS. Since 1976, several changes have taken place. Today, NFIRS at the national level is supported by the Federal Emergency Management Agency (FEMA). The State of Montana, and the City of Helena participate in NFIRS, through the Montana Fire Incident Reporting System. At the local level, incident and casualty report information is being used by the Helena Fire Department for setting priorities and targeting resources. The data now being collected is particularly useful in designing fire prevention and education programs specifically suited to the real problems of the citizens of Helena. Every time the fire department respond to an alarm, an incident occurs. The alarm may be for a fire, medical, rescue, hazardous material incident, or other public service. In all cases an incident report is filed. The following is a break down of fire incident reporting system date:

-continued on next page

Source of Alarm

	<u>This year</u>	<u>Last Year</u>
Fire Department telephone.....	24	27
Dispatch Center.....	921	863
Alarm Board.....	75	92
Radio.....	16	9
Direct report.....	8	9
Total.....	<u>1044</u>	<u>1000</u>

Type of Situation Found

	<u>This Year</u>	<u>Last Year</u>
Fire, explosion, etc.....	160	192
Smoke scare.....	58	60
Rescue, crash emergency.....	584	548
Hazardous condition.....	36	44
Public Service.....	17	19
Alarm - (no fire).....	113	105
False alarm (malicious).....	29	8
Electrical problem.....	27	19
Miscellaneous.....	20	5
Total.....	<u>1044</u>	<u>1000</u>

	<u>This Year</u>	<u>Last Year</u>
In City.....	992	949
Fire District.....	40	39
Contract.....	6	7
Mutual Aid.....	6	5
Total.....	<u>1044</u>	<u>1000</u>

Fire Location

	<u>This Year</u>	<u>Last Year</u>
In building.....	55	74
Wild Land.....	35	26
Rubbish near building.....	4	2
Rubbish in vacant lot.....	9	9
Trash cans.....	2	4
Vehicles.....	20	37
Dumpsters.....	21	33
Miscellaneous.....	13	7
Total.....	<u>159</u>	<u>192</u>

-continued on next page

Fire Control Method

	<u>This Year</u>	<u>Last Year</u>
By Fire Department.....	128	141
By occupants.....	5	6
Sprinkler system.....	0	0
Fire out on arrival.....	23	34
Other.....	4	1
Total.....	<u>160</u>	<u>192</u>

Fire Causes (In Building)

	<u>This Year</u>	<u>Last Year</u>
Chimneys and wood burning appliances.....	19	20
Combustibles near heaters.....	9	13
Careless use of open flame.....	1	4
Careless use of smoking material.....	3	6
Children with matches.....	2	1
Defective electrical.....	10	13
Flammable liquids.....	0	1
Fireworks.....	0	0
Natural conditions.....	0	2
Incendiary.....	3	6
Suspicious.....	4	1
Unknown.....	9	0
Miscellaneous.....	6	7
Total.....	<u>66</u>	<u>74</u>

Fire Loss Analysis

	<u>This Year</u>		<u>Last Year</u>	
	<u>Fires</u>	<u>Loss</u>	<u>Fires</u>	<u>Loss</u>
Public buildings.....	2	\$ 25.00	3	\$ 1,600.00
Dwellings.....	12	\$417,279.00	53	\$351,350.00
Mercantiles.....	6	\$ 780.00	13	\$ 45,250.00
Manufacturing.....	4	\$ 100.00	4	\$125,000.00
Miscellaneous buildings.....	3	\$ -0-	2	\$ 35,200.00
Outdoor (vehicles).....	39	\$ 9,494.00	12	\$ 45,225.00

Total Fire Loss

	<u>This Year</u>	<u>Last Year</u>
Outdoor fires (vehicles & dumpsters).....	\$ 9,494.00	\$ 45,225.00
Building fires.....	\$418,175.00	\$558,400.00
TOTAL ESTIMATED FIRE LOSS.....	\$427,669.00	\$603,625.00

Death and Injury

	<u>This Year</u>	<u>Last Year</u>
Civilians injured.....	0	4
Firefighters injured.....	4	4
TOTAL.....	<u>4</u>	<u>8</u>
Civilians killed.....	0	0
Firefighters killed.....	0	0
TOTAL.....	<u>0</u>	<u>0</u>

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Phone: 406/442-9920

William J. Verwolf
City Manager

City of Helena

TO: Norm Gray, Fire Chief
FROM: Bob Knudson, Fire Marshal
DATE: January 12, 1989
SUBJECT: Annual Report from the Fire Prevention Bureau
for the Year of 1988

COMMENTARY:

As Montana enters her one hundredth year of statehood, perhaps it is fitting to review the accomplishments and tragedies faced by the Helena Fire Department and the citizens of Helena as a result of the ravages of fire. In preparing the opening commentary for the Fire Prevention Bureau's annual report to the elected officials and the citizens of Helena, it seems to grow harder each year to find new ways to stress the importance of fire prevention. In looking back at the history of our city, it is my fervent hope that the lessons learned, both positive and negative, will allow us to enter our second century of statehood with a greater awareness and resolve to combat and prevent the pain, suffering, and loss brought about by fire.

Early city fire codes were quite different than the present codes and standards of today. For example, the firechief's duties and powers included being responsible for the horses, engines, hose, hose carriages, hooks and ladders, and all other property of the city connected with the fire department. In addition, the fire chief had the power during any fire, to order any and all saloons in the vicinity of the fire, closed for such length of time as he deemed proper. Anyone refusing to close his saloon when so ordered, could be fined not less than ten dollars, nor more than one hundred dollars. The fire code also prohibited anyone from tying a horse or any animal to a public hydrant or fire plug. And, provided that no person within the fire limits of the city, store or keep at anytime in his ordinary place of business, any quantity of giant powder or dynamite, nor have or keep hay, straw or other combustible fodder in open stock.

The earliest records of the Helena Fire Department paint an interesting picture of some of Helena's early fires. In the "Committee on Origin of Fires", report to the mayor and city council dated February 14, 1889, the Fire Department responded to 8 alarms of fire in the first 45 days of the year, these included:

-continued

January 3rd, 3:00 PM, the department was called to the Christian Church on Benton Avenue. Fire caused from furnace in basement, damage about \$500.00. Insured.

January 14th, 9:30 AM, a small blaze on Broadway, in frame building used as store and photograph gallery. Slight damage. Cause; overheated stove.

January 19th, 7:30 PM, Clore Street. Small fire in frame building owned by Frank Hanvy and occupied by Mrs. Bonlanger as dwelling. Damage \$25.00. Cause; lamp explosion.

January 21st, 3:00 AM, corner Clore and Wall Street. Frame building, plastered, owned and occupied by John Ziegler and used as stable, loss \$8,000.00. Insured \$5,000.00. Cause unknown. Small frame building in rear of stable, and used as storeroom by C.K. Wells was also totally destroyed. Origin of fire unknown, but evidence shows that it started in the latter building from where it spread to stable.

February 1st, 5:00 PM, Pacific Hotel building. Chimney burning out, no damage.

February 3rd, 3:00 PM, several old stage coaches were found ablaze on 9th Avenue near Main. Origin supposed to be; boys playing in the coaches with matches.

February 7th, 5:30 PM, frame dwelling on Clore Street owned by Frank Hanvy and occupied by Mrs. Bonlanger. Lamp explosion caused another small blaze.

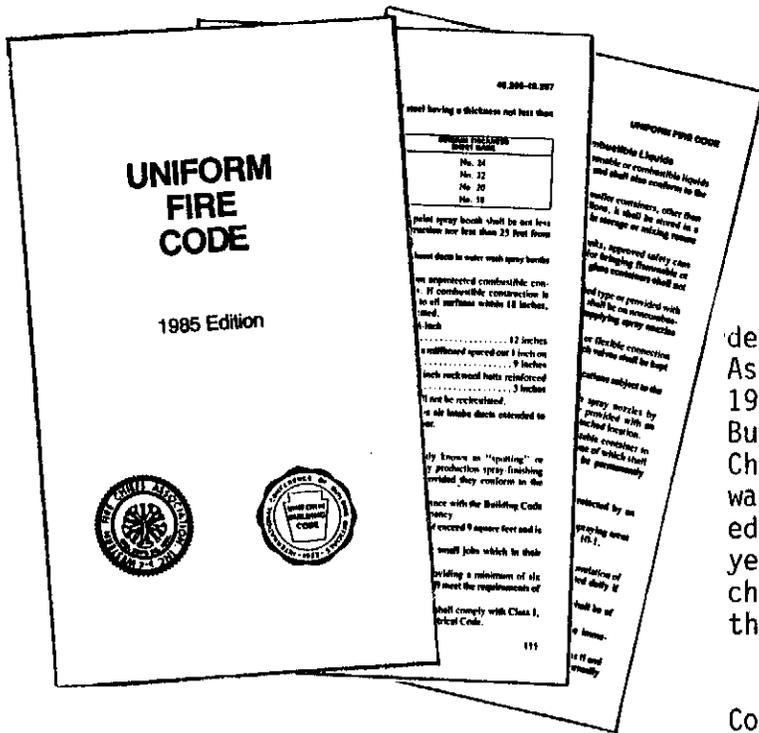
February 8th, 10:45 PM, a small frame stable, owned and occupied by Andy O'Connell on South Benton Avenue was totally destroyed by fire, fire origin supposed to be incendiary.

Throughout the intervening years, between 1889 and the present, a number of major fires occurred in the City of Helena, some with very tragic results. In July of 1928 for example, a fire started in a two-story brick building in the center of a well built-up block within the principal mercantile district. The fire developed rapidly, spreading beyond the control of the Fire Department, destroying seven buildings, injuring two men, and partially burning eighteen others before the fire was extinguished. The estimated property loss at the time, was over one and a half million dollars.

In the official report of the Board of Fire Underwriters of the Pacific, it is interesting to note that, "none of the buildings involved were of a class which

would resist the spread of fire, either horizontally or vertically". The report goes on to say that "the weakly manned Fire Department, which was insufficiently equipped with hose and heavy stream appliances, was also a contributing factor to the heavy loss". As time went by, advancement in apparatus, training, and equipment improved the level of fire protection in the City. The adoption of more stringent fire codes however, didn't take place until about the mid 1960's, with the adoption of the Fire Prevention Code, Ordinance 1712. The "Fire Prevention Code" was based on the 1965 edition of the fire prevention code of the American Insurance Association. In re-typing the ordinance for the Fire Prevention Code, however, several mistakes were made changing the meaning of the code. Up until the adoption of the Uniform Fire Code in the early seventies, fire codes in the City of Helena, were largely inadequate and outdated, with some ordinances still in effect from the early 1900's.

As you read through the annual report of the Helena Fire Department, it is our hope that the lessons of the past and the accomplishments of the preceding year, as well as the goals for the future, will continue to increase the level of protection afforded to the citizens of Helena. The following sections summarize some of the present day functions of the Fire Prevention Bureau.



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 have been published at three-year intervals. New 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

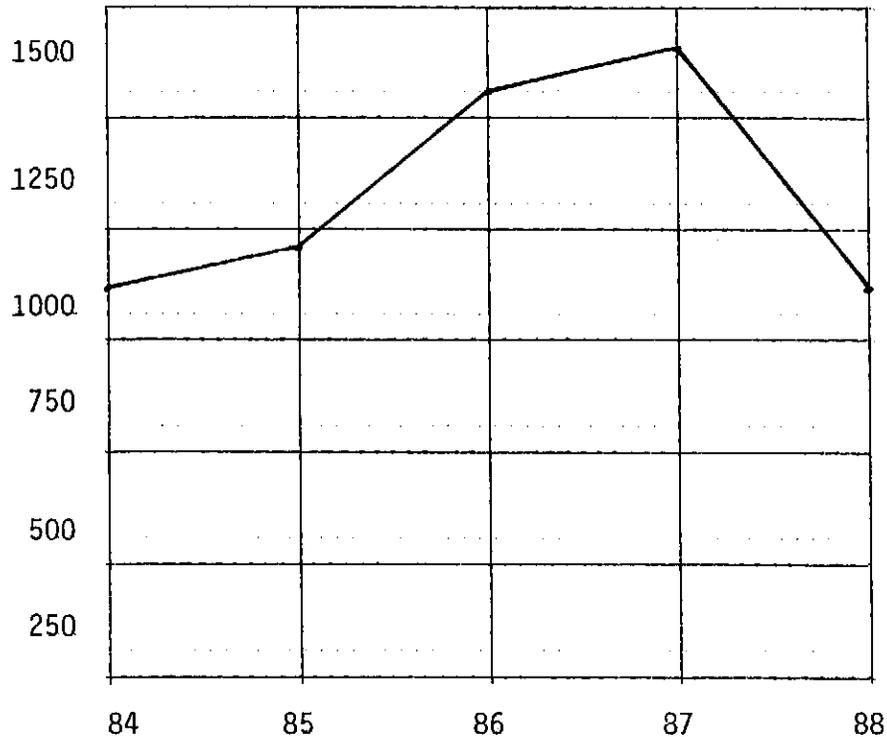
correlate the provisions of the Uniform Fire Code and the Uniform Building Code so that there is no conflict between them. Neither code is intended to stand alone; rather, the total package, i.e., the Uniform Fire Code, the Uniform Building Code, the Uniform Mechanical Code, the Uniform Plumbing Code 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 reasonable 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.

INSPECTIONS

<u>OCCUPANCY TYPE</u>	<u>NUMBER OF INSPECTIONS 1988</u>	<u>NUMBER OF INSPECTIONS 1987</u>
Mercantile.....	92.....	168
Educational.....	33.....	27
Public Assembly.....	57.....	70
Residential.....	68.....	104
Business.....	131.....	211
Industrial.....	167.....	208
Miscellaneous.....	3.....	26
Sub-Total.....	551.....	814
Re-inspections conducted.....	266.....	574
TOTAL INSPECTIONS FOR 1987-88.....	817.....	1388

TOTAL INSPECTIONS - FIVE YEAR COMPARISON



NOTICES, ORDERS AND CITATIONS:

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

During 1988, the Bureau issued 290 notices, 24 orders, and 19 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 1988, the Bureau received and investigated 60 complaints. Some of the complaints received concerned:

- Dynamite stored in a residential garage.
- Blocked exits in an office building.

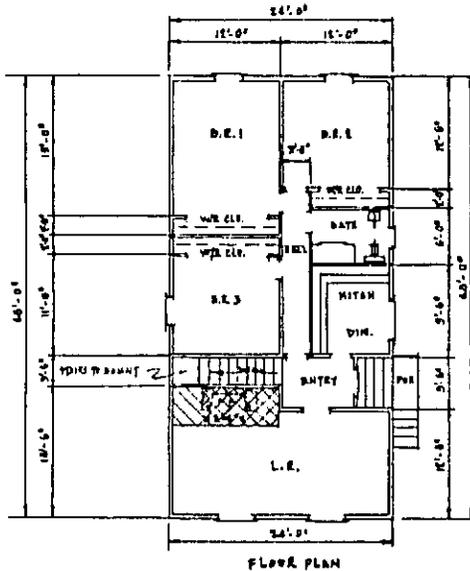


Figure 1-3

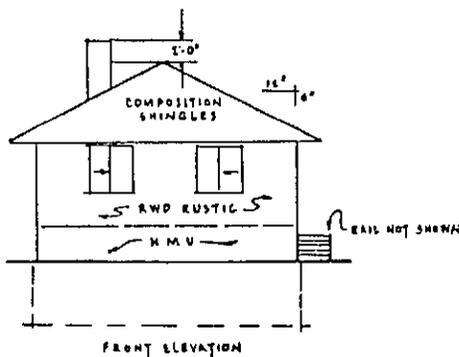


Figure 1-4

PLAN REVIEWS

Traditionally, the activity of the Building Department has involved the design, construction, and final occupancy inspection of the building. The Fire Department's role has usually begun upon occupancy of the building and has concerned the maintenance of life safety conditions and the handling of contents.

Today, the Fire Department's role in the building construction process is changing. The participation of the Fire Marshal in the review of building plans and specifications and the construction process, has become an increasingly important fire prevention function. The plan review process is conducted in close cooperation with the Building and Safety Department, and provides the Fire Department with its best opportunity to see that fire protection standards are met prior to the completion of construction and occupancy of the building.

If questions and issues concerning the effect of construction on fire safety are discussed during the plan review process with the architect, engineers, contractors and other code officials, misunderstandings and conflicts that may arise during the construction or final finish phase can be prevented, if not eliminated. Design professionals benefit from this process as well because problems which would otherwise cost them time and money are eliminated before construction begins.

During 1988, the Fire Prevention Bureau devoted 68.5 hours to plan reviews.



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 1988, the Bureau investigated a total of 20 fires, 9 were determined accidental, 10 incendiary, and 1 suspicious.

FIVE YEAR COMPARISON

<u>YEAR</u>	<u>NO. INVESTIGATED</u>	<u>INCENDIARY</u>	<u>ARRESTS</u>	<u>CONVICTIONS</u>
1988	20	10	2	2
1987	34	7	1	0
1986	16	6	1	0
1985	24	8	0	0
1984	16	1	0	0



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, and the Montana Department of Health and Environmental Sciences. The Bureau is also responsible for compliance with certain provisions of the Employee/Community Hazardous Chemical Information Act.

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. A summary of some of the programs dealing with hazardous materials is included in this section.

Methane Gas Monitoring

The City of Helena Landfill is listed on the Environmental Protection Agency's Comprehensive Environmental Resource Compensation and Liability Information System (CERCLIS) list. The site was included on the original list primarily because of the potential for methane gas problems associated with the landfill and also because of the potential of groundwater contamination from landfill leachate.

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.

PCB Monitoring Program

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.



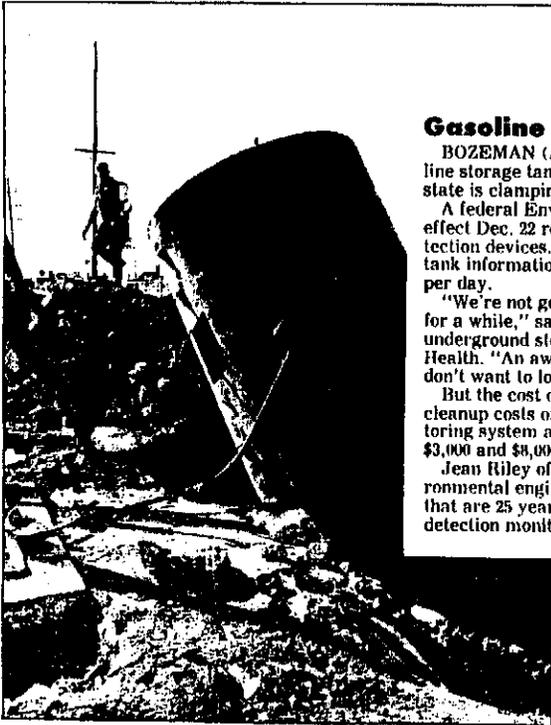
CHEMICAL EMERGENCY PREPAREDNESS PROGRAM

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 Environmental Protection Agency has developed criteria to identify acutely toxic chemicals, and a list of such chemicals. These acutely toxic chemicals can cause death or injury in the event of an accidental release into the air. The extent of harm will depend on the chemical involved, its physical state, how it is handled at the site, the amount released, the prevailing weather conditions at the time of release, the population potentially affected, the emergency preparedness measures in place in the community, and the actual response actions taken.

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.

At the present time there remains quite a bit of work to be completed, however, the Bureau feels that the City of Helena is ahead of many other communities in the state in accomplishing this task.



Gasoline leaks called common ■

BOZEMAN (AP) — A state hazardous waste official says gasoline storage tanks are leaking in every town in Montana and the state is clamping down on the problem.

A federal Environmental Protection Agency mandate goes into effect Dec. 22 requiring gas station owners to install gas leak detection devices. Civil fines for not providing required storage tank information in accordance with EPA regulations are \$10,000 per day.

"We're not going to be able to get the situation under control for a while," said Larry Mitchell of Helena, coordinator of the underground storage tank program for the state Department of Health. "An awful lot of tank owners are playing ostrich. They don't want to look."

But the cost of installing monitors is nominal compared to cleanup costs or a lawsuit, he said. The average cost of a monitoring system at a typical three-tank service station is between \$3,000 and \$8,000.

Jean Riley of Helena, the state storage tank program's environmental engineer, said storage tanks with pressurized pipes that are 25 years old or older by Dec. 22, 1989 must install a leak detection monitor by December 1990.

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. This 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.



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 1988, the bureau conducted 5 Public Service Announcements.

PUBLIC EDUCATION

During the year of 1988, the Fire Prevention Bureau conducted both demonstrations and lectures to the general public upon request.

Demonstrations.....	41
Number of adults.....	320
Number of students...	888
Lectures.....	26
Number of adults.....	268
Number of students...	2919



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 involved to channel this curiosity about fire into protective and non-destructive areas. During 1988, the Fire Prevention Bureau counseled seven (7) juvenile fire setters.

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Rayleen Beaton
Tom Huddleston
Rose Leavitt
Blake J. Wordal



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William J. Verwolf
City Manager

City of Helena

TO: Norm Gray, Fire Chief
FROM: Rich Coe, Ass't Fire Chief
DATE: January 12, 1989
SUBJECT: Fire Department Training

During 1988, City Fire Department personnel were involved with training that covered a wide range of subjects. These included:

- 1) The annual testing of approximately 500 hydrants.
- 2) Testing of the departments 20,000 feet of hose.
- 3) The 48 hour IFSTA "Apparatus" course was taken by most department members. The 20 hour "Ventilation" and 24 hour "Salvage and Overhaul" courses were offered as well.
- 4) In June, 6 men attended a 32 hour earthquake seminar at Helena High School.
- 5) Chemical emergency preparedness and hazardous materials schools were presented. One covering 12 hours, the other 8 hours.
- 6) Fire Department personnel were re-certified in C.P.R.
- 7) Self contained breathing apparatus (SCBA) maintenance course was attended by several men.
- 8) One man attended a 40 hour "Aircraft-Crash Fire Rescue" course.
- 9) A two-part course, "Tactical Operations for Company Officers", totaling 32 hours was attended by eight members of the City Fire Department.
- 10) Four men attended a "Mid-Level Management" course - 18.5 hours.
- 11) One man attended a 16 hour "Code Enforcement" course and a 10 hour course dealing with "Urban-Wildland Interface".

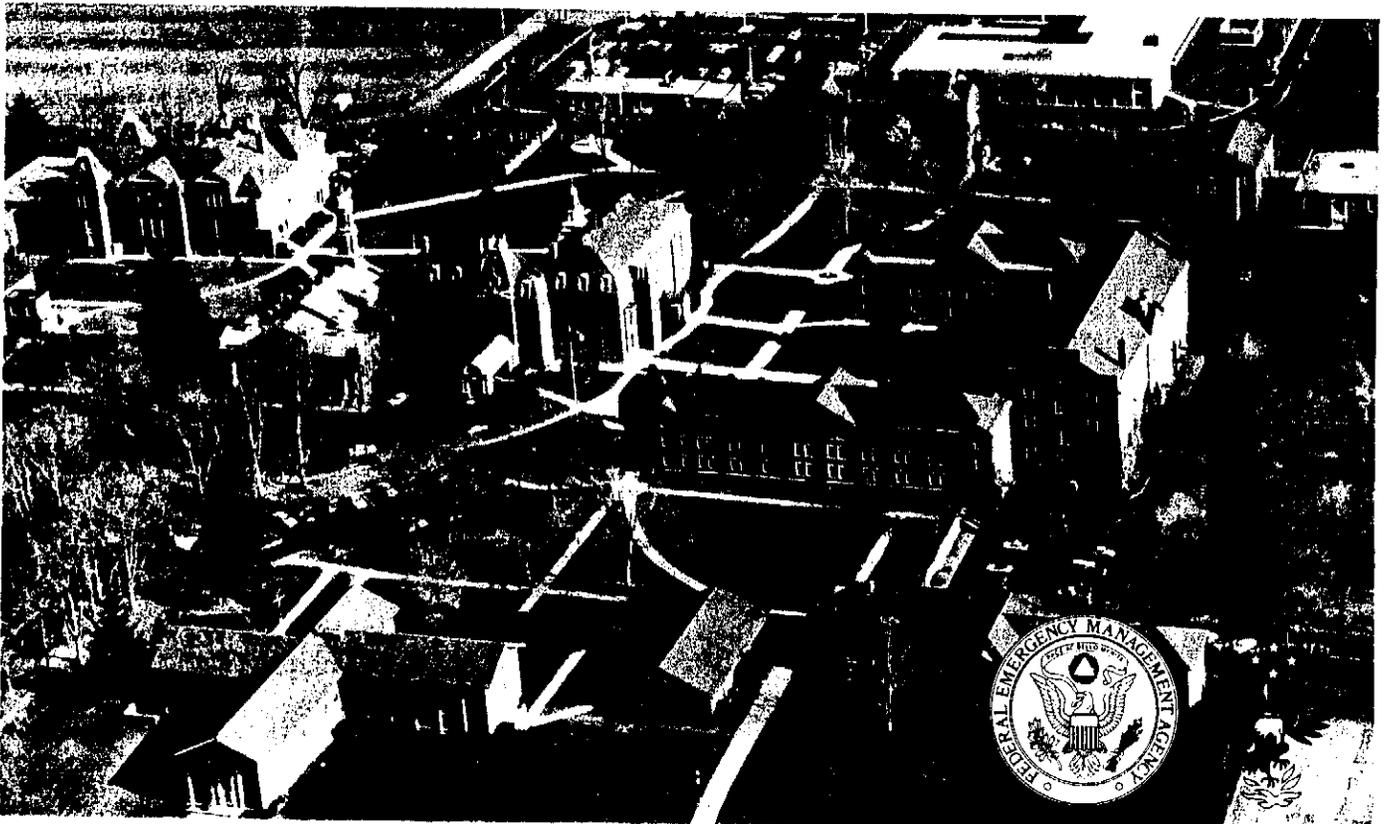
12) Video taped all Fire Department sprinkler connections and key box locations in the city.

1988 marked the first occasion that the Fire Department has participated in classes at the National Fire Academy, in Emmitsburg, Maryland.

We sent two men for two weeks of training. Harry Crawford took a fire arson investigation course and Fritz Zettel, fire prevention specialist course.

Through courses and programs, the National Fire Academy works to enhance the ability of the fire service and allied professions to deal most effectively with fire and related emergencies. In eight years of operation, the NFA has gained a reputation as an institution of excellence; an institution whose courses are eagerly sought by State and local agencies who want to enhance their personnel's abilities to protect their local communities and citizens.

On the Emmitsburg campus, the Academy offers specialized training courses and advanced management programs of national impact. These courses and programs are offered in a concentrated, residential setting most conducive to intensive learning. On-campus resident programs are targeted to middle-and top-level fire officers, fire service instructors, technical professionals, and representatives from allied professions.





INTERNATIONAL FIRE SERVICE
TRAINING ASSOCIATION COURSES

The International Fire Service Training Association was formed in November 1934, when the Western Actuarial Bureau sponsored a conference in Kansas City, Missouri, to determine how all agencies that were interested in publishing fire service training material could coordinate their efforts.

The publications of the International Fire Service Training Association are compatible with the National Fire Protection Association's Standard 1001, "Firefighter Professional Qualifications (1974)," and the International Association of Firefighters International Association of Fire Chiefs "National Apprenticeship and Training Standards for the Firefighter." The standards are an effort to attain professional status through progressive training. The NFPA and IAFF/IAFC Standards were prepared in cooperation with the Joint Council of National Fire Service Organizations of which IFSTA is a member.

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City of Helena

TO: Norm Gray, Fire Chief
FROM: Don Hurni, Captain
DATE: January 12, 1989
SUBJECT: 1988 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).....	\$ 50.98
Engine 2 (1980 Hahn).....	\$ 13.28
Engine 3 (1975 Seagrave).....	\$ 393.24
Truck 1 (1976 Sutphen).....	\$3,102.54
Truck 2 (1946 Pirsch).....	\$ 489.88
Squad 1 (1987 Ford).....	\$ 134.99
Squad 2 (1980 Chevrolet).....	\$ 413.87
#127 (1980 Sedan).....	\$ 393.42
#128 (1980 Ford Sedan).....	\$ 19.11
#129 (1980 Ford Pickup).....	\$ 147.47
#130 (1985 Ford Pickup).....	\$ 55.31
#131 (1986 Ford Van).....	\$ ---

-continued on next page

1988 Truck and Equipment Maintenance
page 2

City Shop service charge.....	\$ 1,902.82
Total vehicle repair parts.....	\$ 7,766.27
Total equipment repairs.....	\$ 4,271.30
Total vehicle and equipment repair 1988....	\$13,940.39
Total man hours for mechanic.....	768 hrs
Total man hours shift personnel.....	3882 hrs

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HELENA FIRE DEPARTMENT

YEARL FUEL REPORT

(January 1, 1988 to December 31, 1988)

<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.....	794.2.....	1933.....	8382.....	2.4
#137 Engine #2.....	Diesel.....	697.3.....	2001.....	17866.....	2.9
#132 Engine #3.....	Diesel.....	261.3.....	812.....	14935.....	3.1
#139 Squad #1.....	Gasoline.....	690.9.....	1721.....	2266.....	2.5
#131 Squad #2.....	Gasoline.....	622.5.....	1769.....	11290.....	2.8
#134 Truck #1.....	Diesel.....	642.0.....	796.....	11340.....	1.2
#138 Truck #2.....	Gasoline.....	47.6.....	32.....	1894.....	.7
#127 Gray Ford.....	Non-Lead.....	244.6.....	3,183.....	34463.....	13
#128 Red Ford.....	Non-Lead.....	389.0.....	3528.....	35338.....	9
#129 Ford Pickup.....	Non-Lead.....	852.9.....	5422.....	37207.....	6.4
#130 Ford Pickup.....	Non-Lead.....	563.6.....	6174.....	22583.....	11
#133 Ford Van.....	Non-Lead.....	578.9.....	6304.....	10388.....	10.9
TOTAL GALLONS OF GASOLINE (NON-LEAD).....			2,629		
TOTAL GALLONS OF GASOLINE (REGULAR).....			1,361		
TOTAL GALLONS OF DIESEL.....			2,392.8		
TOTAL GALLONS OF FUEL.....			6,382.8		
TOTAL MILES (ALL VEHICLES).....			33,675		
AVERAGE MPG (ALL VEHICLES).....					5.2
TOTAL ODO (ALL VEHICLES).....				207,952	



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BUILDING MAINTENANCE

Members of the Helena Fire Department devote many hours each year to building maintenance. This includes all janitorial work and most minor repairs. Members of the Helena Fire Department take pride in keeping their quarters clean and in good repair.

Following is a breakdown of building maintenance costs and utility costs for both stations from January 1, 1988 to December 31, 1988.

BUILDING MAINTENANCE COSTS:

Station 1.....	\$ 1,204.81
Station 2.....	\$ 510.49
Total....	\$ 1,715.30

UTILITY COSTS: (1988)

Station 1	
Gas.....	\$ 3,595.92
Water & Sewer.....	\$ 348.64
Sanitation.....	\$ 251.16
Station 2	
Electric.....	\$ 2,242.72
Gas.....	\$ 1,916.21
Water & Sewer.....	\$ 863.74
Sanitation.....	\$ 243.72
Total Utilities.....	\$ 9,462.11

JANITORIAL COST: (1988)

Station 1 and Station 2	\$ 888.56
-------------------------	-----------

MAN-HOURS SPENT IN BUILDING MAINTENANCE - 3,273 hours

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HELENA FIRE DEPARTMENT OPERATIONAL PROCEDURE

IN-CITY ALARMS:

Small fires: 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 2 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:

Fire District #3:

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.



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FIRE PROTECTION CONTRACTS

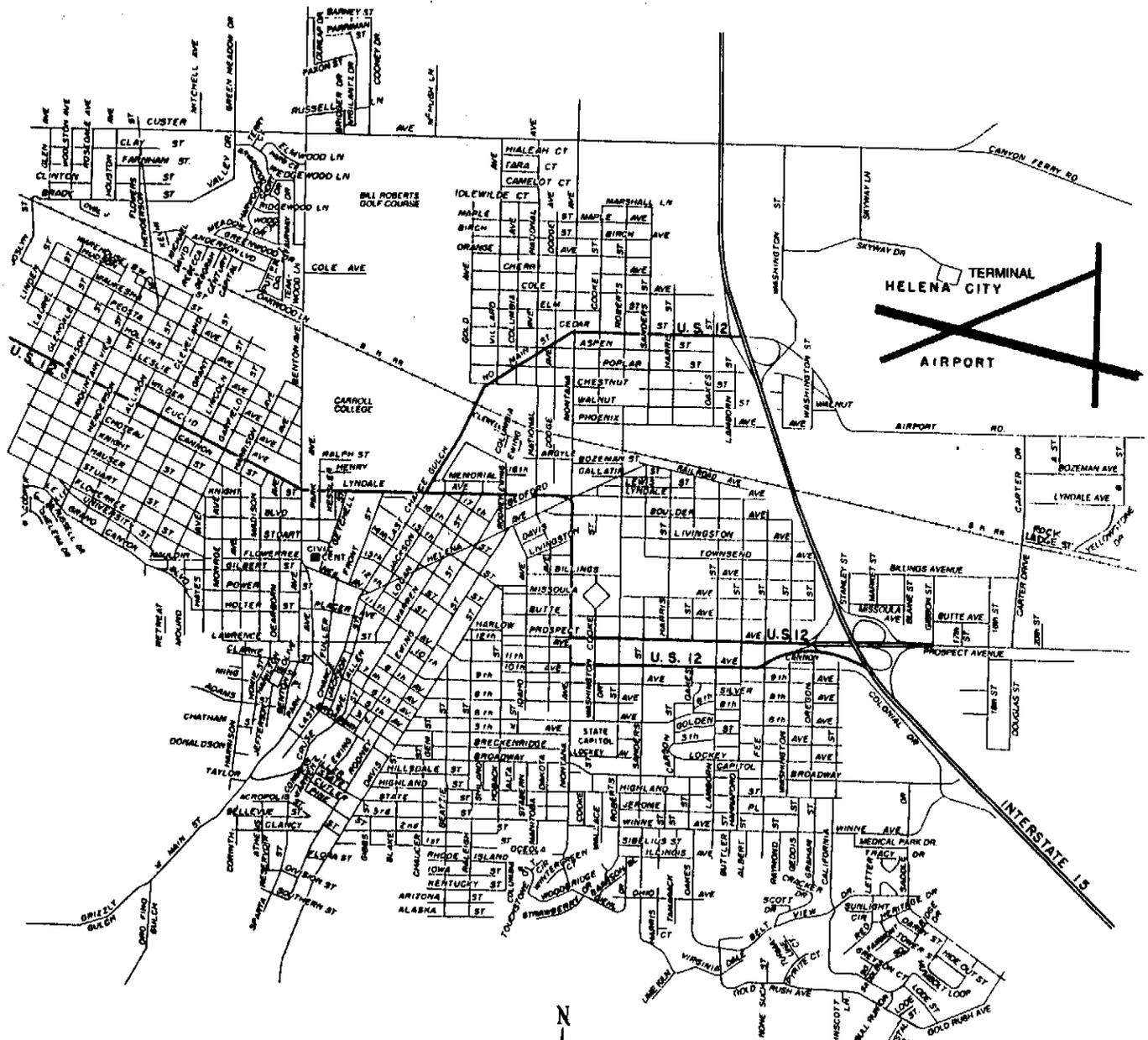
At the present time the City of Helena has several Fire Protection contracts with areas outside the city limits. These include the Veteran's Administration Hospital, the State Highway Shops, and the area west of the city which is Fire District #3. We cover these areas with one (1) pumper and three (3) 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.....	\$23,212.00
FAIRGROUNDS.....	\$ 2,974.00
HIGHWAY SHOPS.....	\$ 1,672.00
FIRE DISTRICT #3.....	<u>\$29,066.00</u>
TOTAL.....	\$56,924.00

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.

MAP OF HELENA



WEST OF MONTANA

Fires - 202
 EMS - 321
 Misc. - 76
 Total - 599

EAST OF MONTANA

Fires - 129
 EMS - 263
 Misc. - 53
 Total - 445

TOTAL CALLS BOTH EAST AND WEST SIDE - 1044

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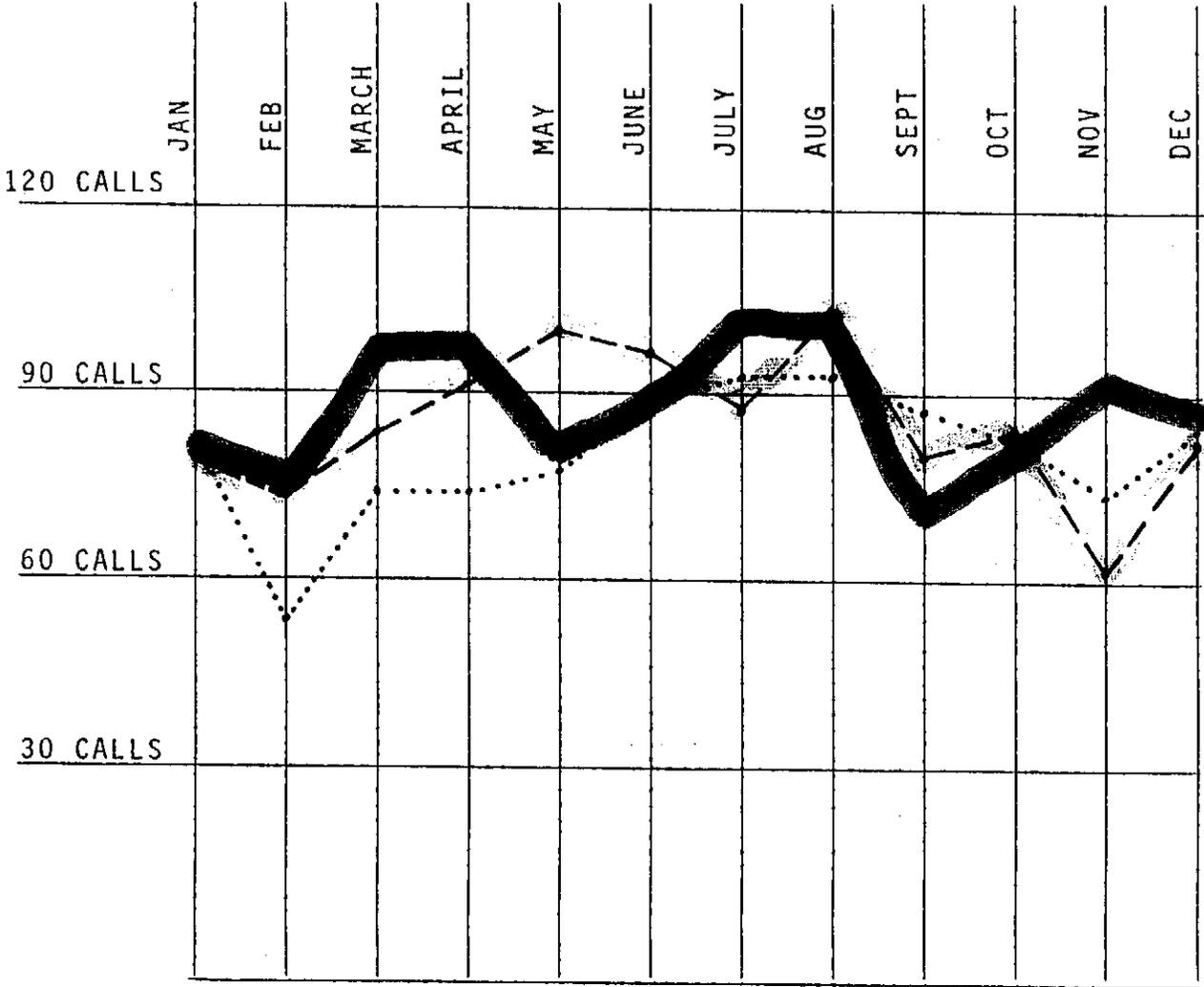


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CALLS PER MONTH OF YEAR - 1988 
 CALLS PER MONTH OF YEAR - 1987 
 CALLS PER MONTH OF YEAR - 1986 

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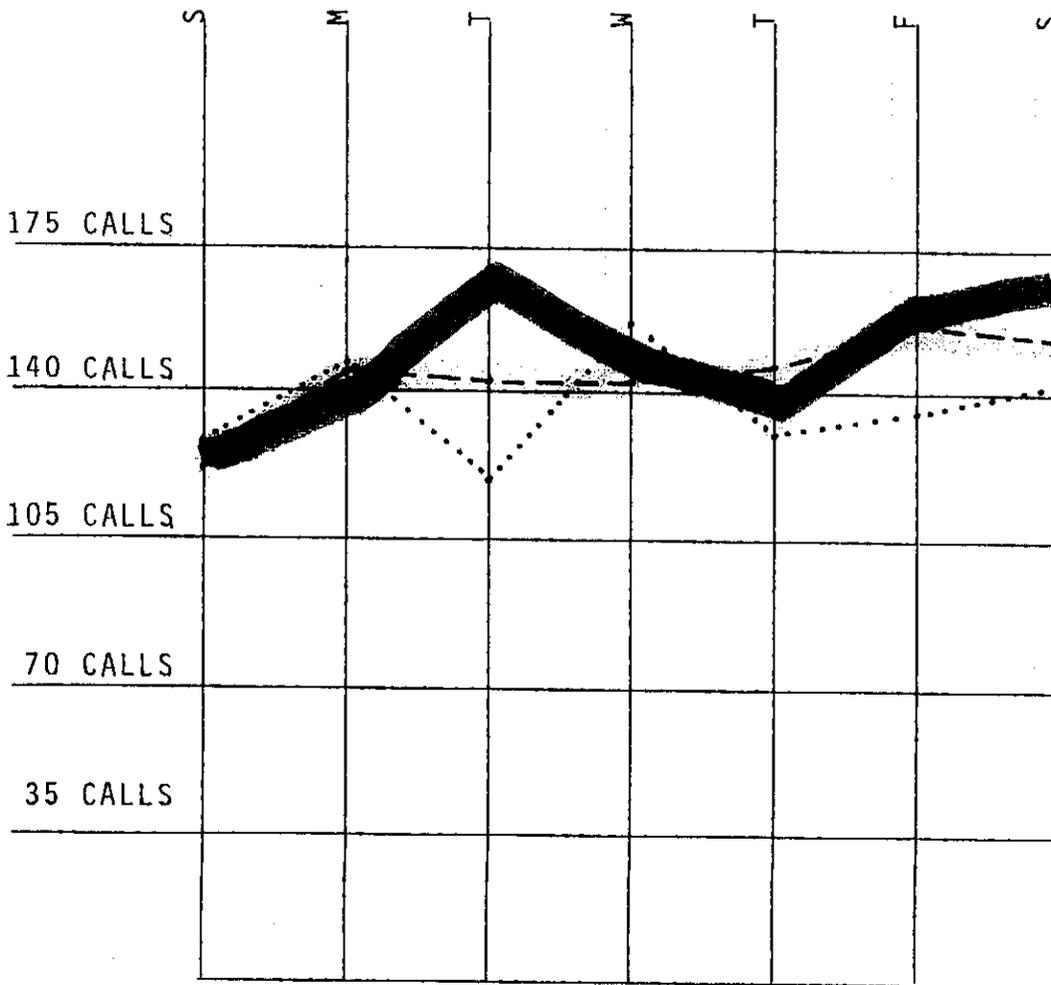


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CALLS PER DAY OF WEEK - 1988

CALLS PER DAY OF WEEK - 1987

CALLS PER DAY OF WEEK - 1986

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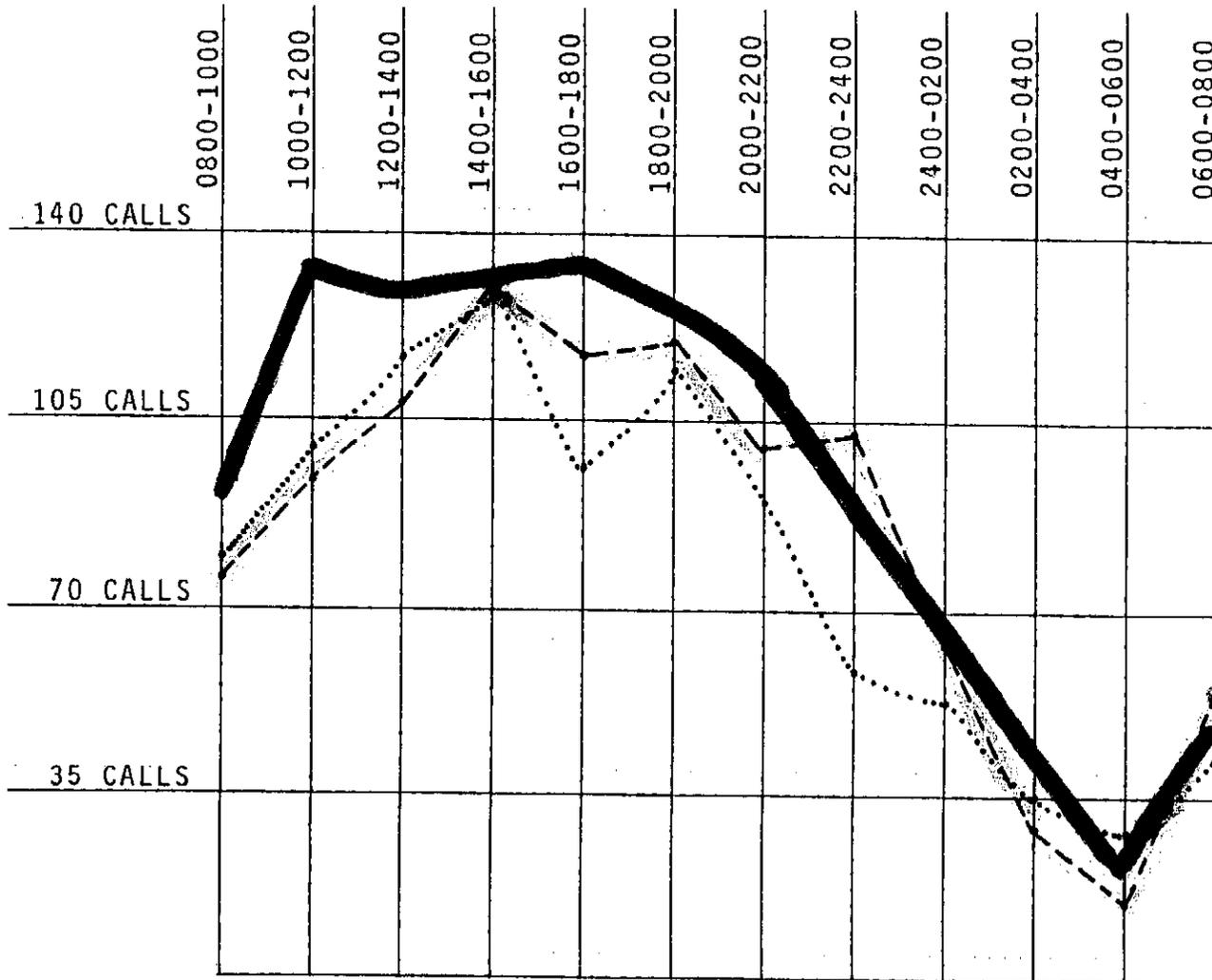


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CALLS PER HOUR OF DAY - 1988

CALLS PER HOUR OF DAY - 1987

CALLS PER HOUR OF DAY - 1986