

1977 REPORT



ELDON E. MAGINNIS
CHIEF

MADISON FIRE DEPARTMENT

325 W. JOHNSON STREET • MADISON, WISCONSIN 53703

TELEPHONE NO.
266-4420

The 1977 Madison Fire Department Annual Report briefly outlines some of the problems confronted during the past year--what we are doing to prevent recurrence and how we are planning for the future to meet the changing needs of our city and our citizens.

1977 was a year of accomplishments and disappointments. The estimated fire loss was down a million dollars--although the fire loss for the first quarter started off at a record pace. The early fire problem was attributed to two factors--the large losses from arson-related fires and severe cold weather that plagued our city.

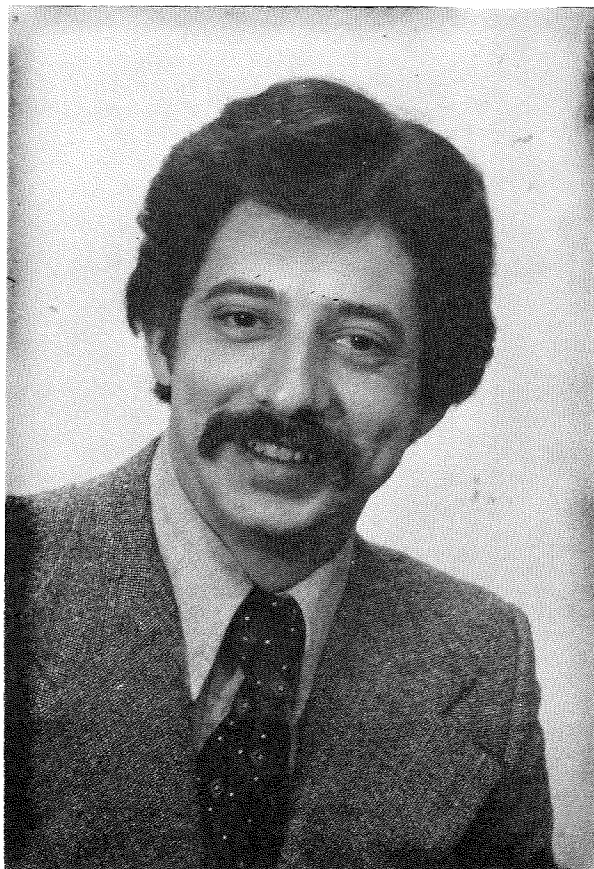
The biggest setback in 1977 was the loss of four lives in fire, plus five people requiring hospitalization because of fire-related injuries. This is our greatest concern. Our first objective, always, is saving lives and preventing injuries.

The success of the combined Police-Fire Arson Squad was gratifying. They were successful in clearing 45% of all arson classified fires. It is appalling that these senseless acts accounted for \$819,676 of the charted fire loss.

A new UHF radio network was installed to further meet the needs of our increased fire and ambulance activities, and to keep abreast with our constant changing environment.

Firefighting personnel of our department were the first in the nation to complete recommended standards for Journeyman Firefighters and were presented certificates recognizing them as professional firefighters.

As we look forward to 1978, our continuing goal will be the prevention of fires. We can't do it alone--we need the day-to-day help of every member of the community. When fire does ignite, or an emergency exists, you may rest assured that we stand ever ready to meet the challenge with unselfish duty.



MAYOR PAUL R. SOGLIN

MEMBERS OF THE COMMON COUNCIL

DISTRICT

- 1 Natalie Gingell Smith
- 2 Donald R. Murdoch
- 3 Frederick M. Arnold
- 4 John C. Mattes
- 5 Roney L. Sorensen
- 6 Michael Christopher
- 7 Jay M. Wexler
- 8 James D. Yeadon
- 9 Mark Koppelkam
- 10 Sheila M. Chaffee
- 11 Michael J. Briggs

DISTRICT

- 12 Loren M. Thorson
- 13 Bonnie Gruber
- 14 Betty A. Sperstad
- 15 Warren E. Onken
- 16 Leonard L. Knutson
- 17 S. Michael Shivers
- 18 Douglas M. Onsager
- 19 Betty W. Smith
- 20 Jean P. Stewart
- 21 Judith A. Bowser
- 22 Richard E. Disch

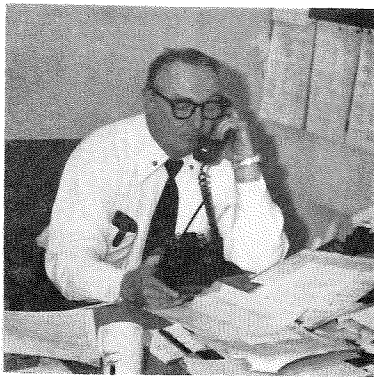


Chief
Eldon E. Maginnis



The Firefighter

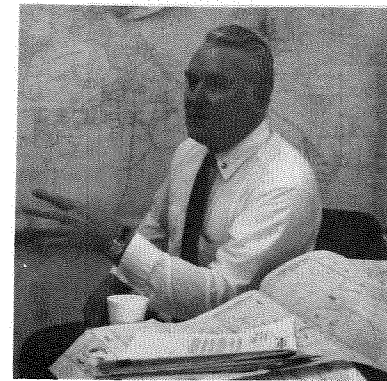
The Administrator



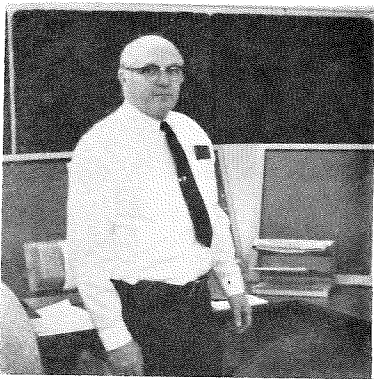
Paul R. Toltzien



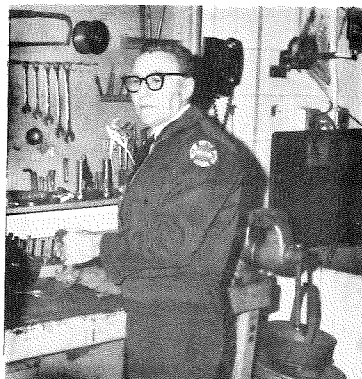
Glenn A. Wilcox



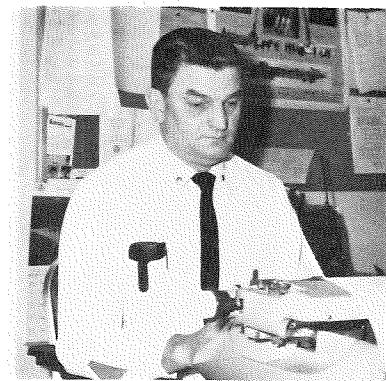
John R. Tappen



DONALD M. OLSON



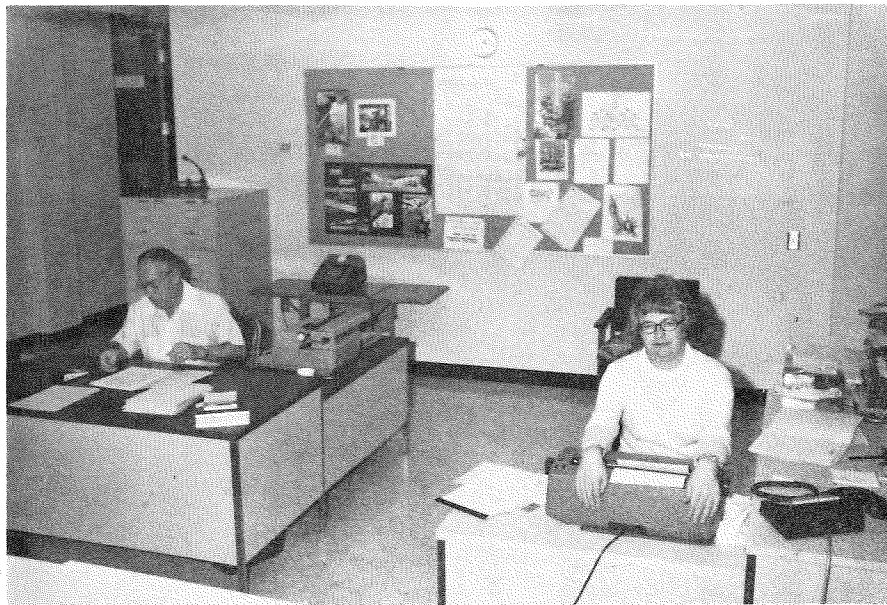
James C. Olson



Donald A. Huggins

Chief Eldon Maginnis, Assistant Chief Glenn Wilcox, and the five division heads utilize a combined total of 194 years of experience in directing the operations of the Fire Department.

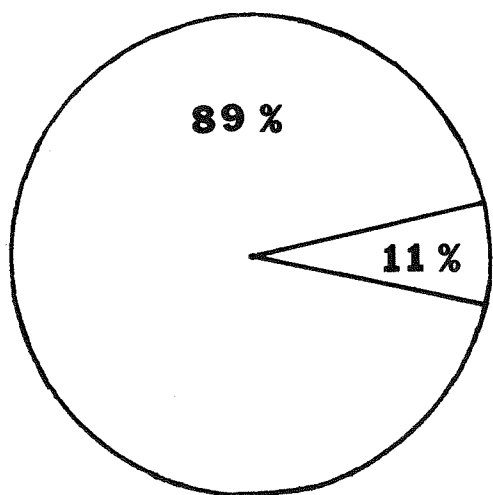
In these years they have seen the department grow and have obviously helped in meeting the needs of our changing city, in fire prevention activities, firefighting tactics, and emergency medical services.



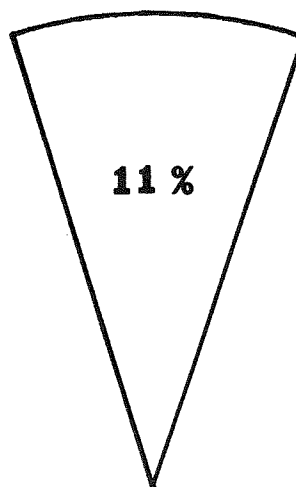
As in any business, the office staff of the Fire Department is an integral part of its operation. John Hereid, Administrative Assistant, upper left, and the two staff assistants, Patricia Einfeldt and S. H. Tiedeman, right, are responsible for budgeting, records, payroll, and routine office duties.

The budget for 1977 was approximately 8.1 million dollars. 7.2 million of this was used for salaries and fringe benefits for 259 uniformed employees and 15 civilian employees.

Fire records are essential as a tool of management to know exactly where and what the fire problem is. This enables concentration of efforts in any target area.



Salaries 89%
Fringe Benefits . . 11%



Hydrant Rental 7.40%
Purchased Services 1.80%
Materials and Supplies . . 1.40%
Fixed Assets26%
Inter-Agency Charges14%



Variables and uncertainties in the fire service make it impossible to determine the number of personnel that are needed at a given time. Nevertheless, in order to reach short- and long-term objectives, capable, experienced people are required.

Staff meetings keep everyone informed, critique recent emergencies and plan for the future as well as solve problems that might arise.

Division Chief Paul Toltzien, center, and, from left to right, District Chiefs Lloyd Briggs, Thomas Moore, Dean Beyler, William Carow, Robert Mutch and Harry Klinger rely on their combined 181 years of fire service experience in directing firefighting operations and coordinating rescue activities at the scene of an emergency.

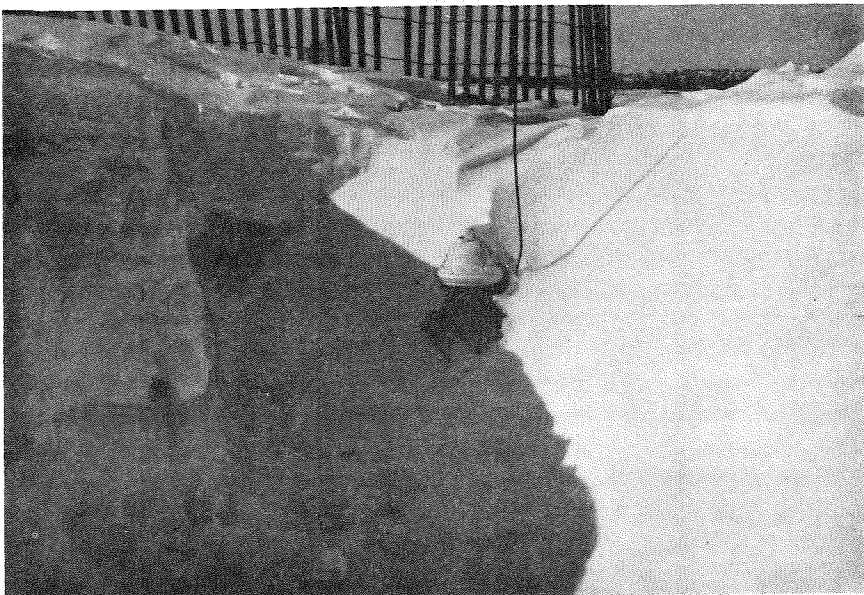
They also have the responsibility of directing uniformed firefighters in their daily activities of maintaining both personal and department equipment.

Firefighters must perform in-service inspections, survey buildings, and participate in training exercises at various locations in their respective territories. It is essential that the district chiefs are informed of their activities in order to assure a rapid response when the alarm sounds.



In sub-zero temperatures, the firefighter must endure the bitter cold as well as the ice conditions created by water from the hose streams as it immediately turns to ice.

Another sign of winter is wood burning stoves. Often improperly installed, they are just beginning to add to the existing fire problem.



After a large snowfall, it is often necessary to shovel the snow from the fire hydrant before being able to attach the hose to it.

COMPARATIVE FIRE STATISTICS

	<u>1975</u>	<u>1976</u>	<u>1977</u>
Fires in Buildings	428	351	341
Fires in Vehicles	193	197	205
Fires in Brush and Rubbish, Outside Buildings	283	513	283
All Other Fires		39	35
Malicious False Alarms	161	160	141
All Other Alarms, Public Service Calls, Accidental and Mistaken Alarms, Etc.	<u>1,790</u>	<u>2,223</u>	<u>2,039</u>
TOTAL	2,855	3,483	3,044

BREAKDOWN OF FIRES

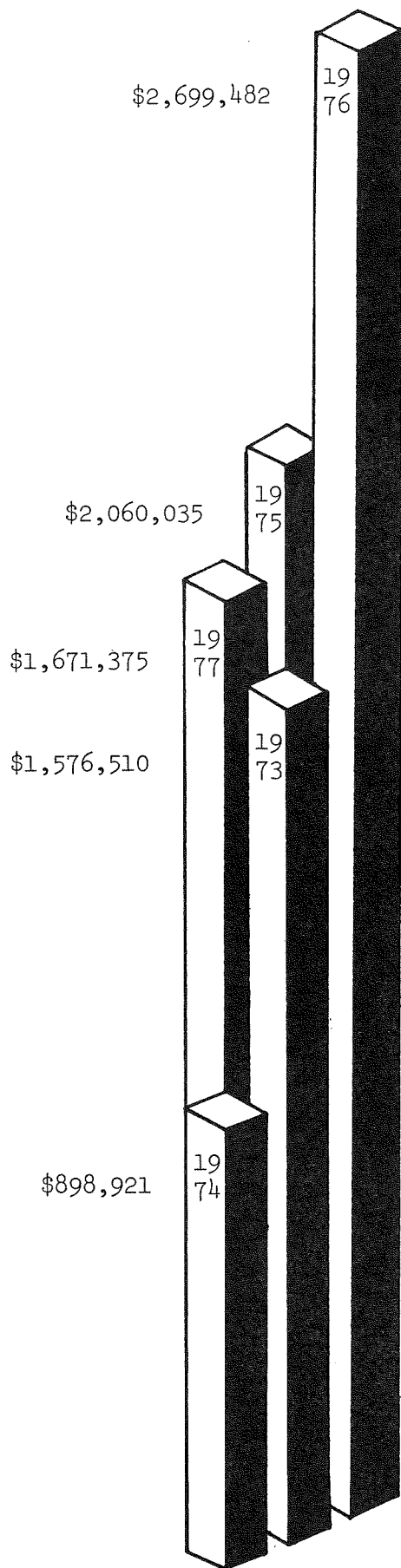
	<u>1975</u>	<u>1976</u>	<u>1977</u>
Public Assembly	25	39	26
Schools and Colleges	11	28	19
Institutions	40	50	28
Private Dwellings	135	165	153
Apartments	121	107	128
Hotels and Motels	11	16	13
Mobile Homes	7	7	3
All Other Residential	10	11	10
Total Residential	284	306	314
Stores and Offices	22	38	24
Industry, Utility and Defense	10	33	42
Storage	27	26	26
Special or Unclassified	6	580	401

Emergency Rescue Responses

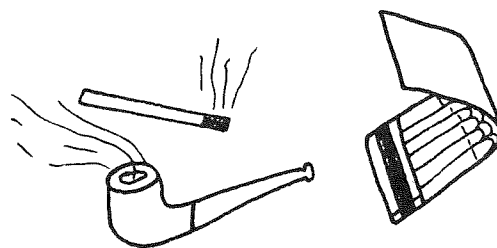
	<u>1975</u>	<u>1976</u>	<u>1977</u>
Ambulance Conveyance	4,125	4,202	4,070
No Conveyance--Emergency Care at the Scene	1,466	1,883	1,959
False Alarms	<u>44</u>	<u>49</u>	<u>41</u>
TOTAL	5,635	6,134	6,070
TOTAL EMERGENCIES	8,568	9,617	9,114

Injuries - Fatalities

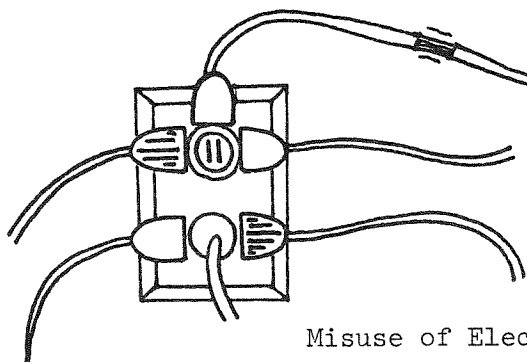
Injuries - Firefighter	85	101	85
Injuries - Civilian	20	33	10
Fatalities - Firefighter	0	0	0
Fatalities - Civilian	5	0	4



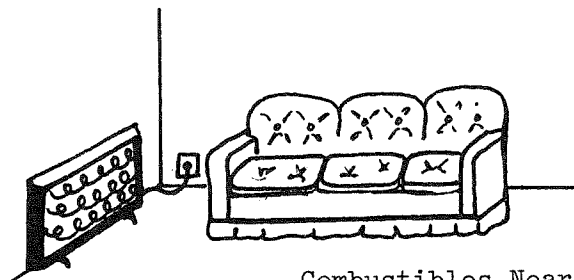
Five Year Fire Loss



Careless Smoking 17%



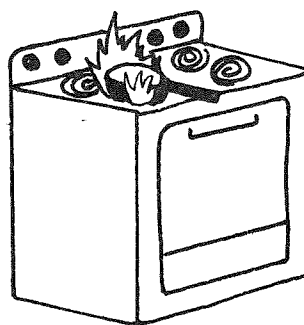
Misuse of Electricity 13%



Combustibles Near Heaters 9%

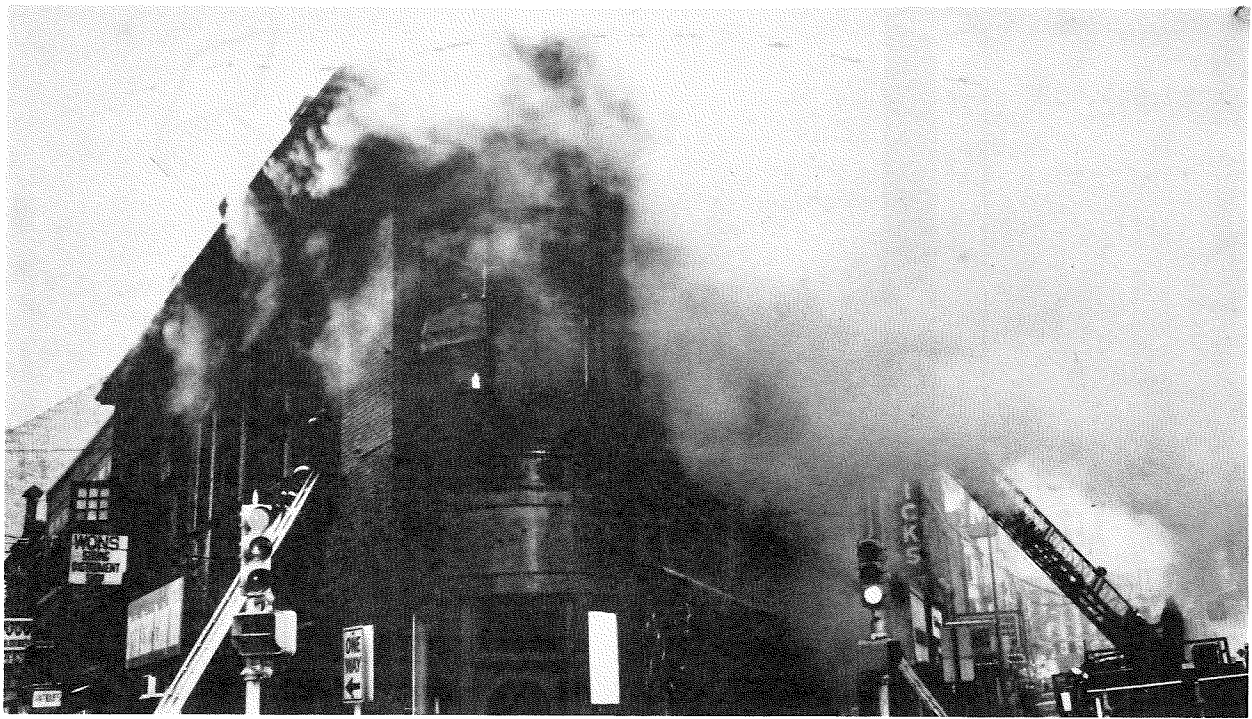


Incendiary 15%



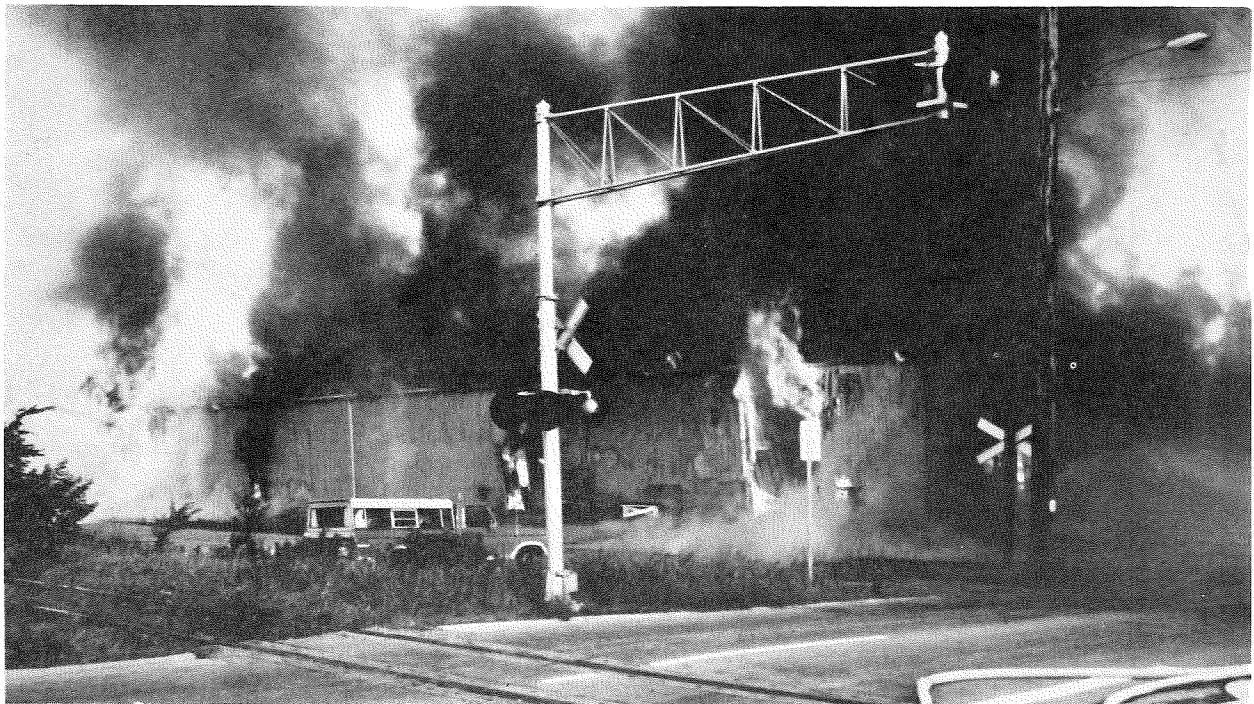
Grease on Stoves 14%

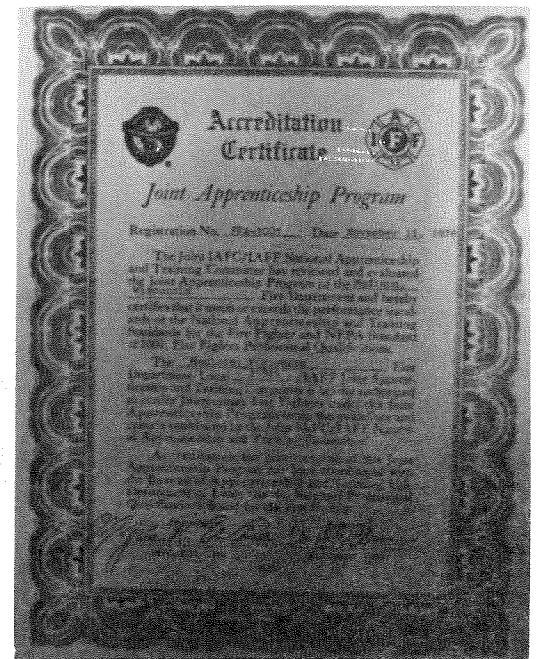
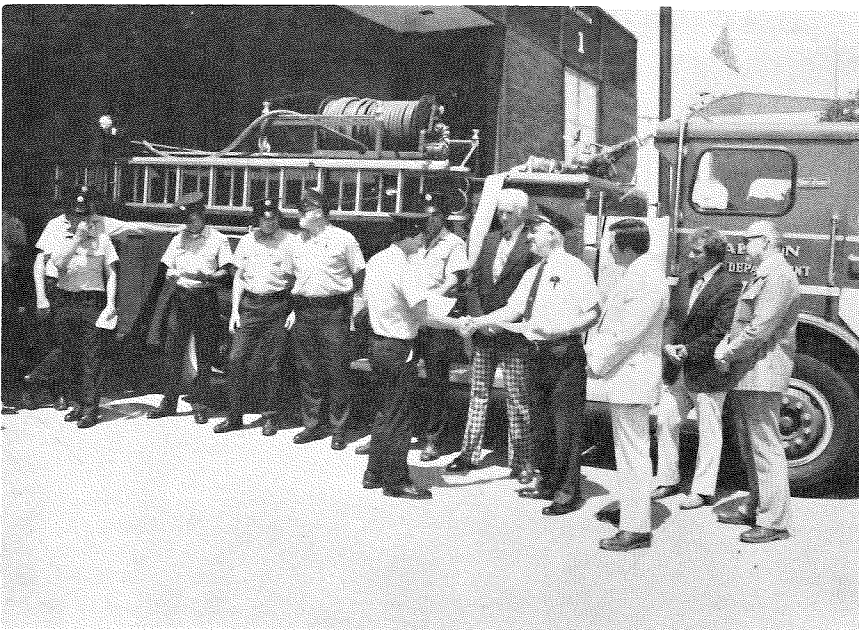
Leading Building Fire Causes



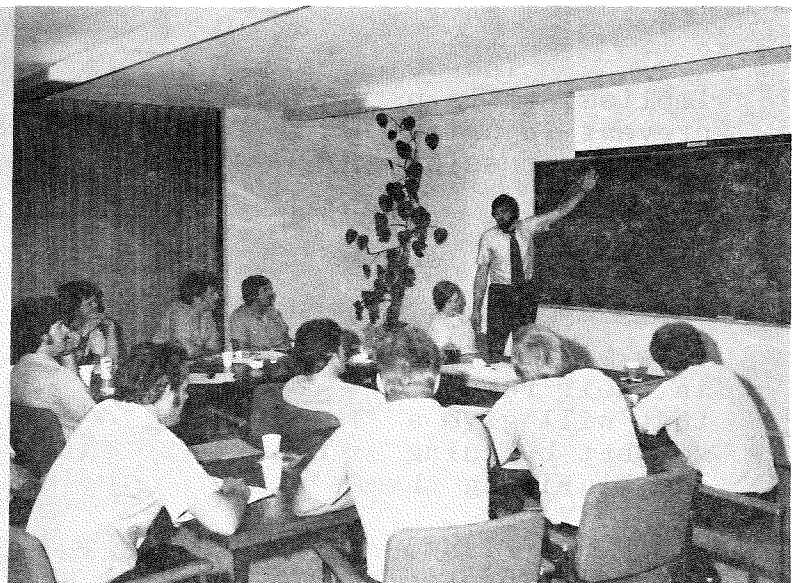
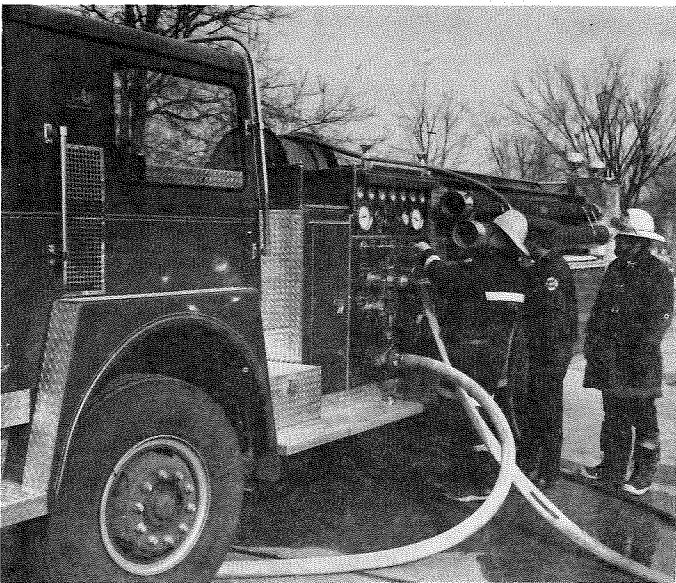
Often people take for granted the services performed by their fire department. Knowledge, speed and efficiency require constant training, retraining, strength and stamina in order to carry out the vigorous and hazardous duties of a firefighter. These skills are acquired through the training that begins upon their appointment and continues until the day they retire.

The most important aspect of acquired skills is application during an emergency--whether it's fighting a fire inside a building or combating a building that is fully involved.





In 1977 every eligible firefighter on the Madison Fire Department proved through written and performance testing that they were capable of performing the duties of a professional journeyman firefighter. They were so recognized by being awarded certificates in accordance with "Standard 1001" of the National Apprenticeship and Training Committee.



The Training Division tests pump operators on their ability to supply the proper amount of water at the right pressure to do the job. Too little water will result in an ineffective stream, and too much will cause unnecessary damage and possible harm to the firefighter holding the nozzle.

The Fire Department Medical Director, Dr. Marvin Birnbaum, University Hospitals, and his staff assist in retraining ambulance personnel. This retraining is essential in order to maintain a standard of excellence that is required when dealing with a life-or-death emergency.



OUR GOAL IS TO PREVENT THIS FROM HAPPENING TO ANOTHER PERSON

The objective of the Fire Prevention Division, as the title implies, is to prevent fires. In doing so, we hope to save lives, prevent injuries, lower insurance costs, lower the need for additional fire suppression equipment and personnel.

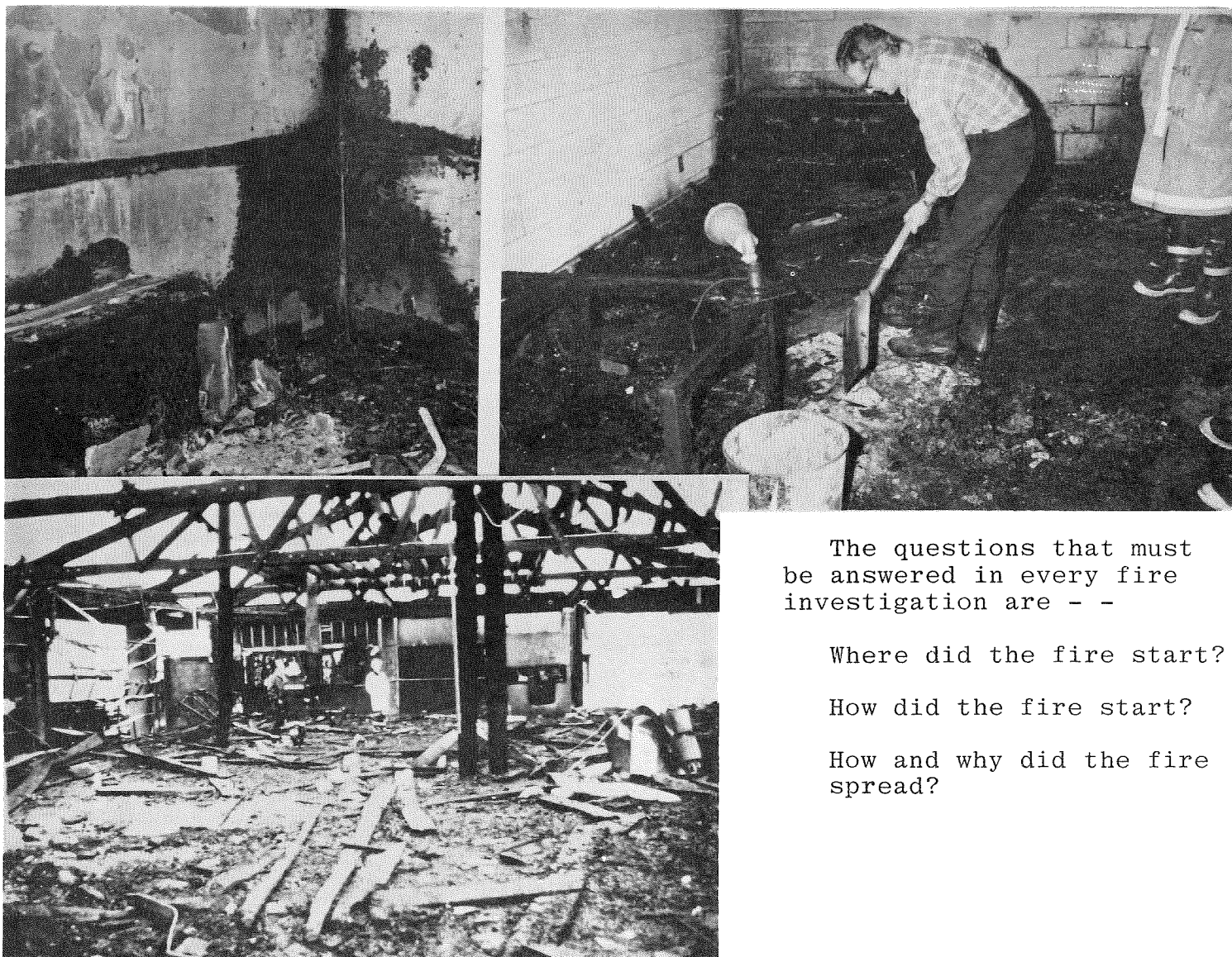
We attempt to accomplish this through inspection program plan review, issuing of permits, fire investigation, and public education.

The inspection program is coordinated and performed through this office, as well as being carried out in the field by on-duty personnel in their respective territories. Their objective is to remove hazards that will give a fire a place to start, see that exits are maintained so that building occupants can safely escape if necessary, as well as familiarizing themselves with the buildings they may have to respond to.

Plans are reviewed of required buildings to assure the necessary fire protection devices are designed into them. Plot plans have to include the necessary water supply to fight a fire and to be sure the streets have ample width to allow turning of Fire Department equipment.

Permits are issued for the storing, handling and using of any substance that could create a fire hazard.

Fire investigations are essential, not only in determining how and why the fire started, but, if necessary, to write codes to prevent it from occurring in the future.



The questions that must be answered in every fire investigation are - -

Where did the fire start?

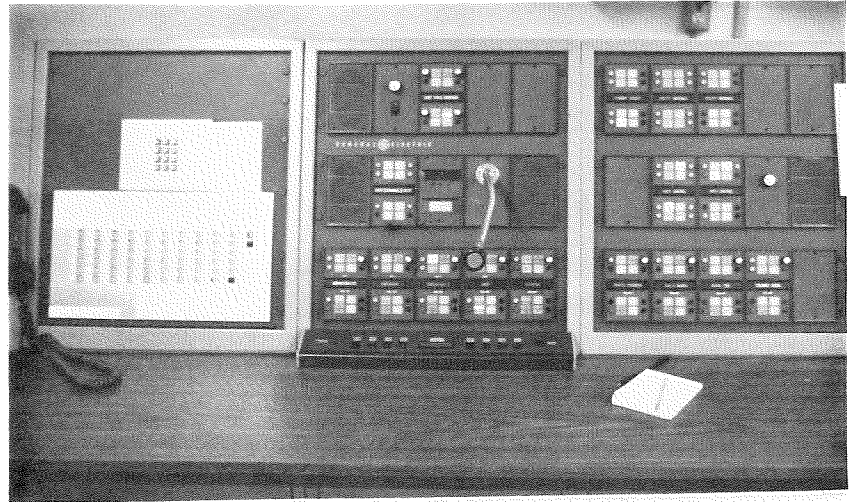
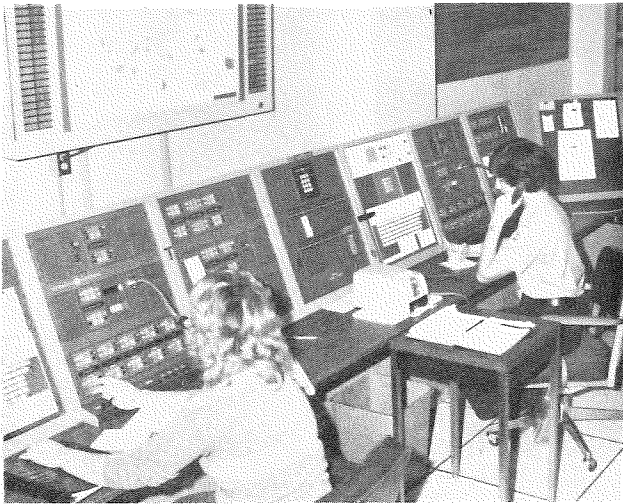
How did the fire start?

How and why did the fire spread?

In recent years, fires by acts of arson are on the increase throughout the nation. Madison is no exception--in fact, 49% of the estimated fire loss in 1977 was attributed to acts of arson.

Madison is attempting to do something about this problem. The efforts of a joint Police-Fire Arson Squad, working side by side to investigate all suspicious fires, is one of the Fire Department's answers to this problem. The fire investigators use their experience in fire investigation and fire behavior, while the police detectives are able to provide expertise in all other investigative procedures, including preservation of evidence and in discerning what facts are necessary in order to try a case in a court of law in order to obtain a conviction.

The combined efforts of this squad have been overwhelming. They were successful in obtaining arrests in approximately 45% of the arson-related fires, compared to the national average of about 3%. This success would never have been possible without the dedication of the administrators of each department and the squad members.



COMMUNICATIONS CENTER

The Communications Division, under the direction of Chief Don Olson, is the nerve center of the Department. The fire dispatchers are the vital links between the person with the emergency and the fire service.

Because of the increased activities in fire-related services and the emergency ambulance service, the communications system underwent much needed changes in 1977.

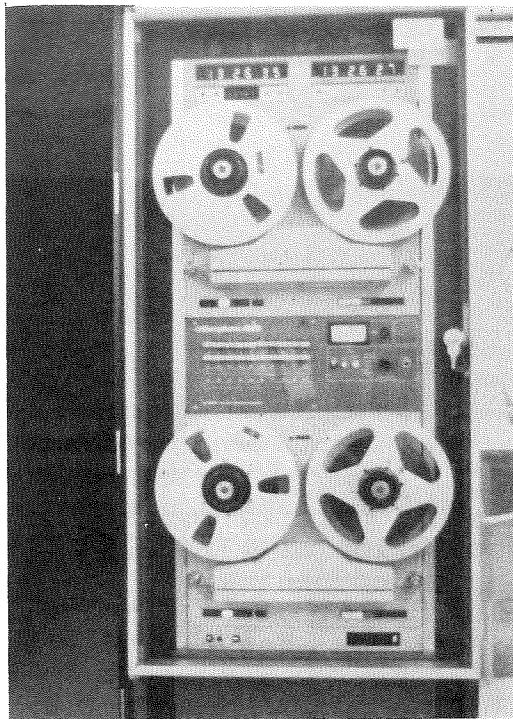
The most important change was the implementation of a UHF radio network. This system uses ten frequencies, permitting separate voice transmissions to be carried out simultaneously. It incorporates four base stations and nine satellite stations, with repeaters in all five ambulances to assure distinct voice communications from, any location in the city.

The new equipment has the capabilities of patching transmissions with rural fire departments in the event mutual aid is needed for fire or ambulance service. It is also able to voice communicate from radio to telephone or vice versa.

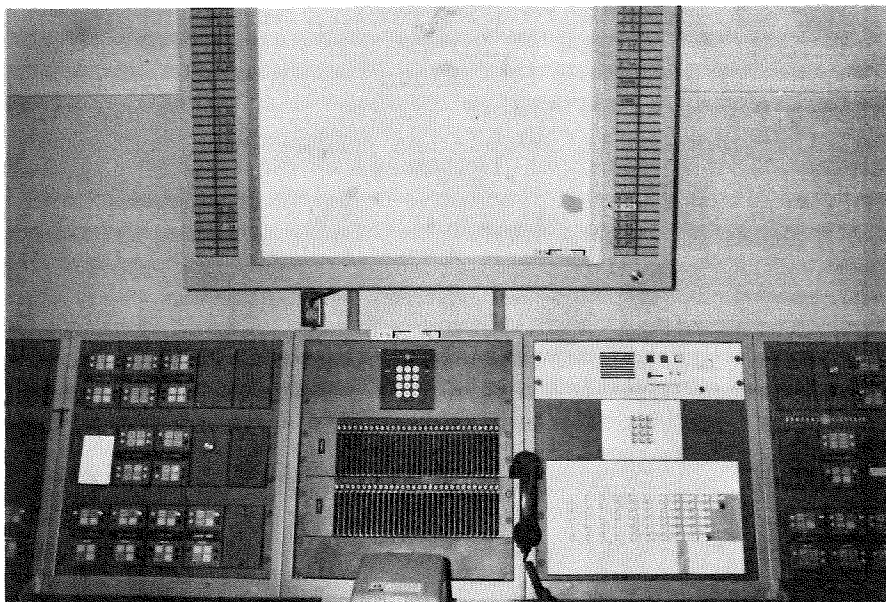
The primary objective of this system is to provide, without interference, the much needed voice communications on the fire scene, ambulance emergency, ambulance to hospital, or routine activities of the Fire Department, both presently and in the future.



Dual switchboards and radio panels were placed in service to more efficiently serve the growing needs of our community.



Along with the manual time stamp, a tape recording is maintained of all telephone calls received and all radio communications. This is proving to be invaluable in retrieving and providing time sequence information.



An electric status board enables the dispatcher to tell at a glance which pieces of equipment are available for response.



Madison's focal point is the State Capitol. Our city covers an area of approximately 52 square miles, has a population of 172,000 residents. Fire protection is provided, with 9 engine companies, 5 truck companies, 5 ambulances, plus specialized equipment that responds as needed. These companies operate out of 9 fire stations, and the monies are provided for by the property tax base.

The City is divided into 22 Aldermanic Districts, and our fire responses are recorded accordingly. This information serves a two-fold purpose--most important, it enables the Fire Department to concentrate its efforts of fire prevention to these target areas, as well as informing each elected representative of the fire problem in his or her respective district.

FIRE RUNS BY ALDERMANIC DISTRICTS

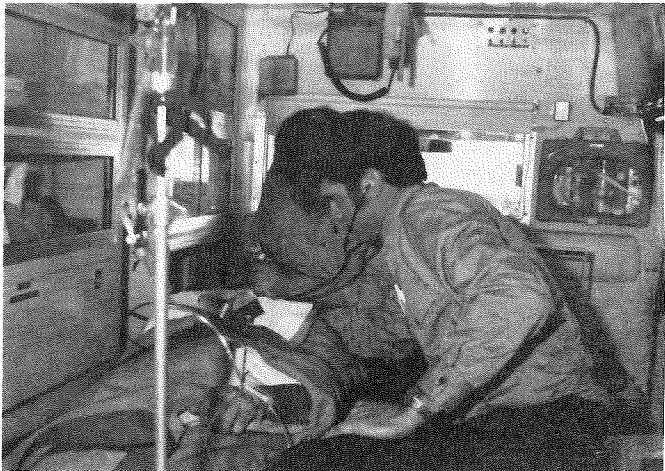
1 - 98	7 - 116	13 - 140	19 - 93
2 - 168	8 - 168	14 - 196	20 - 90
3 - 96	9 - 178	15 - 91	21 - 98
4 - 303	10 - 62	16 - 123	22 - 90
5 - 139	11 - 73	17 - 173	
6 - 208	12 - 164	18 - 162	

AMBULANCE ACTIVITIES

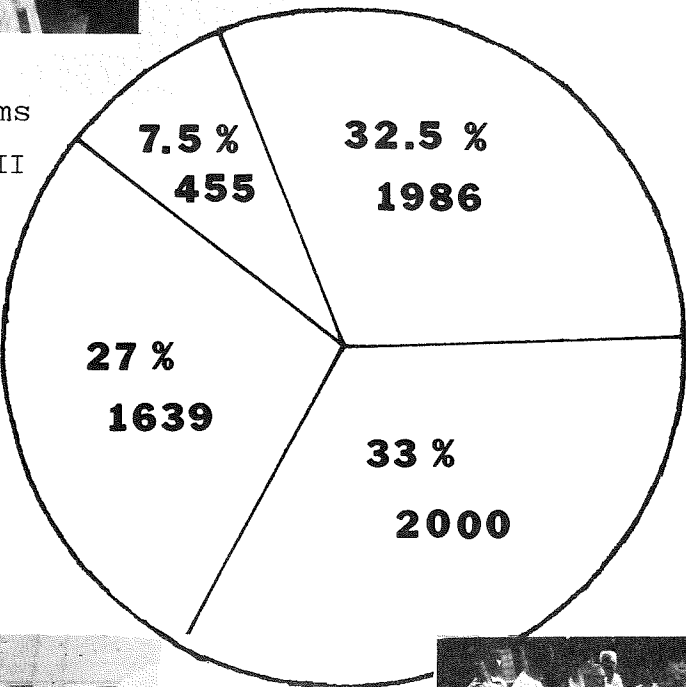


Cardiac Problems

Photo by Joseph Jackson III



Illness

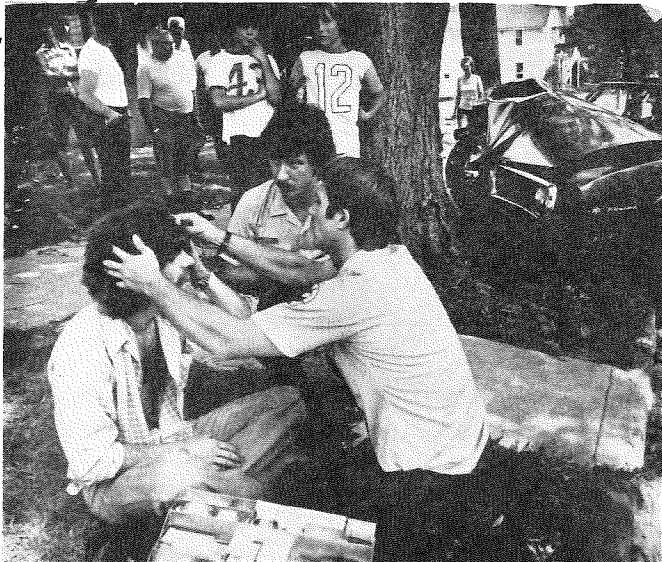


Total Ambulance
Alarms 6070



Physical Injuries

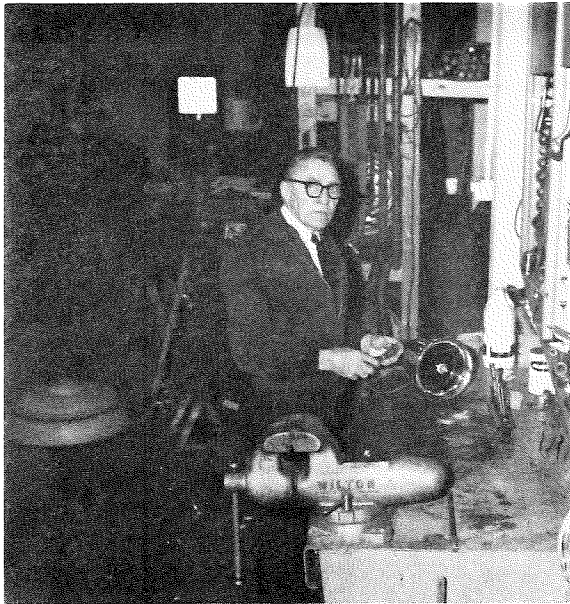
Photo by Dave Sandell



Cared for at Scene
Conveyance Not Necessary



The efficiency and performance of firefighters is only as good as the equipment they operate--therefore the key words for this division are "preventative maintenance". When the fire alarm sounds, it is a "must" that the equipment be ready to respond and perform for extended periods of time at the scene of a fire.



Ambulances must be in constant readiness as well as their emergency signaling devices--for seconds may mean the difference between life or death.

With appreciation, The Fire Department wishes to acknowledge the following organizations and businesses for their generosity and assistance during the past year: Dane County Chapter, American National Red Cross -- Madison Area Safety Council -- Madison Area Technical College -- and the Independent Insurance Agents of Dane County. Madison newspapers: The Wisconsin State Journal and the Capital Times. Radio and television stations: WIBA -- WISM -- WLUV -- WTSO -- WWQM -- WHA -- WHA-TV -- WISC-TV -- WKOW-TV -- and WMTV.

And, a special thanks to all unnamed citizens and organizations that have contributed to the prevention of fires - -

LEARN TO PREVENT FIRES

A Prevented Fire is no fire at all. We can't go it alone--we need your help.

- Dispose of smoking materials properly
- Unplug electrical appliances when not in use
- Don't leave unattended food cooking on the stove
- Store gasoline in approved metal containers--
never in the basement
- Install and maintain a smoke detector
- Hold fire drills in your home

An unwanted fire means we lose and you lose--it means

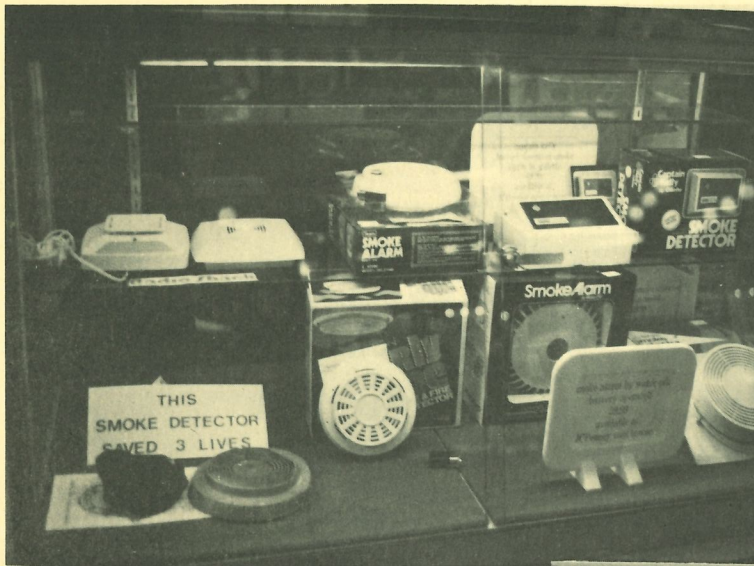
- Vacant business
- Vacant homes
- Loss of jobs
- Loss of possessions
- Loss of tax base

In Case of fire, don't wait--the number to call is:
255-7272.

1977 Annual Report - Compiled and edited by James Gschwend,
Lieutenant - Art work by Niki Olson, Dispatcher.

Printed in Madison, Wisconsin.

The Fire Department promotes fire safety campaigns throughout the year--"Wake up and live!" was for smoke detectors. But, sometimes, the children understand the problem moreso than adults as demonstrated in poster contests.



DON'T GAMBLE
WITH **FIRE...**
THE ODDS ARE
AGAINST YOU!

