

**ANNUAL REPORT**  
**1973**



MADISON, WISCONSIN



RALPH A. MCGRAW  
CHIEF

# MADISON FIRE DEPARTMENT

325 W. JOHNSON ST. • MADISON, WISCONSIN 53703

TELEPHONE NO.  
255-9406

Mayor Paul R. Soglin  
Members of the Common Council  
Members of the Police and Fire Commission

December 31, 1973

Ladies and Gentlemen:

This report of the activities of the Madison Fire Department for 1973 is the last one to be submitted under my stewardship as Chief.

It is my fond hope that the stage has been set for many anticipated changes and improvements that will become necessary as new technology becomes available and changes in the city's character and growth come about.

The watchword during my administration has been improved service and efficiency as witnessed by the closing of a fire station, the abolishment of a ladder company, the relocation of several stations, a revised communications and training programs and undertaking of added public services, such as crash fire protection at the airport, provision of emergency medical service, handling of bicycle licenses, voter registration, home inspections and increased emphasis on fire prevention through company inspections and adoption of a comprehensive city Fire Prevention Code.

The many changes that I have implemented have succeeded in creation of a recognition of the need for and the ready acceptance and implementation of such changes by members of the department as they have become necessary. It is this attitude now prevailing that gives me much confidence in the future of the ability of the department to provide ever-improved services to the citizens.

During my tenure the nation's fire service went through some very trying times with citizen unrest and the advent of public employee union militancy. Most of the problems which arose from these developments have been coped with locally, and the traumatic effects are disappearing and have evolved into new techniques and recognition of the need for a dramatic increase in the efforts given to supervisory and management training for those persons charged with those responsibilities. The short-range and long-range goals and objectives for the Fire Department should be kept clear and obvious to all members and citizens at all times and need constant review by the city's management team.

My service to the city has been a source of great pride and personal satisfaction, and I shall always treasure the fine associations which came about through that opportunity.

Yours very truly,

pme

Ralph A. McGraw  
Chief



**RALPH A. McGRAW, CHIEF, MADISON FIRE DEPARTMENT**



### STATE CAPITOL FIRE — FEBRUARY 27, 1904

Since before Madison was incorporated as a City in 1856, the Fire Department has played an important part in its colorful past. As the year 1973 comes to a close the Madison Fire Department pauses to reflect on the men and events which brought us to this day. From its meager beginning in 1856 to our well-equipped and well-trained department of today, the fire service stands "Semper Paratus" — always prepared.

Prior to the establishment of a fire department, Madison, then a village, relied on a "Bucket Rack". This piece of equipment was built in Madison for carrying leather fire buckets. It was thirty feet long and had wooden pegs to hold sixty leather buckets. Each residence was also required to have a fire bucket, and at the sound of the alarm "Turn out", people would throw their fire buckets out in the street. Volunteers and citizens would form bucket brigades to supply water to extinguish the fire.

Water was obtained from "cisterns" placed throughout the village. It is not clear when these cisterns were constructed, but they were in existence when the official fire department was formed in April of 1856. They were 4 x 6 x 8 feet and held approximately 1,500 gallons of water.

(Continued on page 31)

# FIRE CONTROL AND RESCUE OPERATIONS

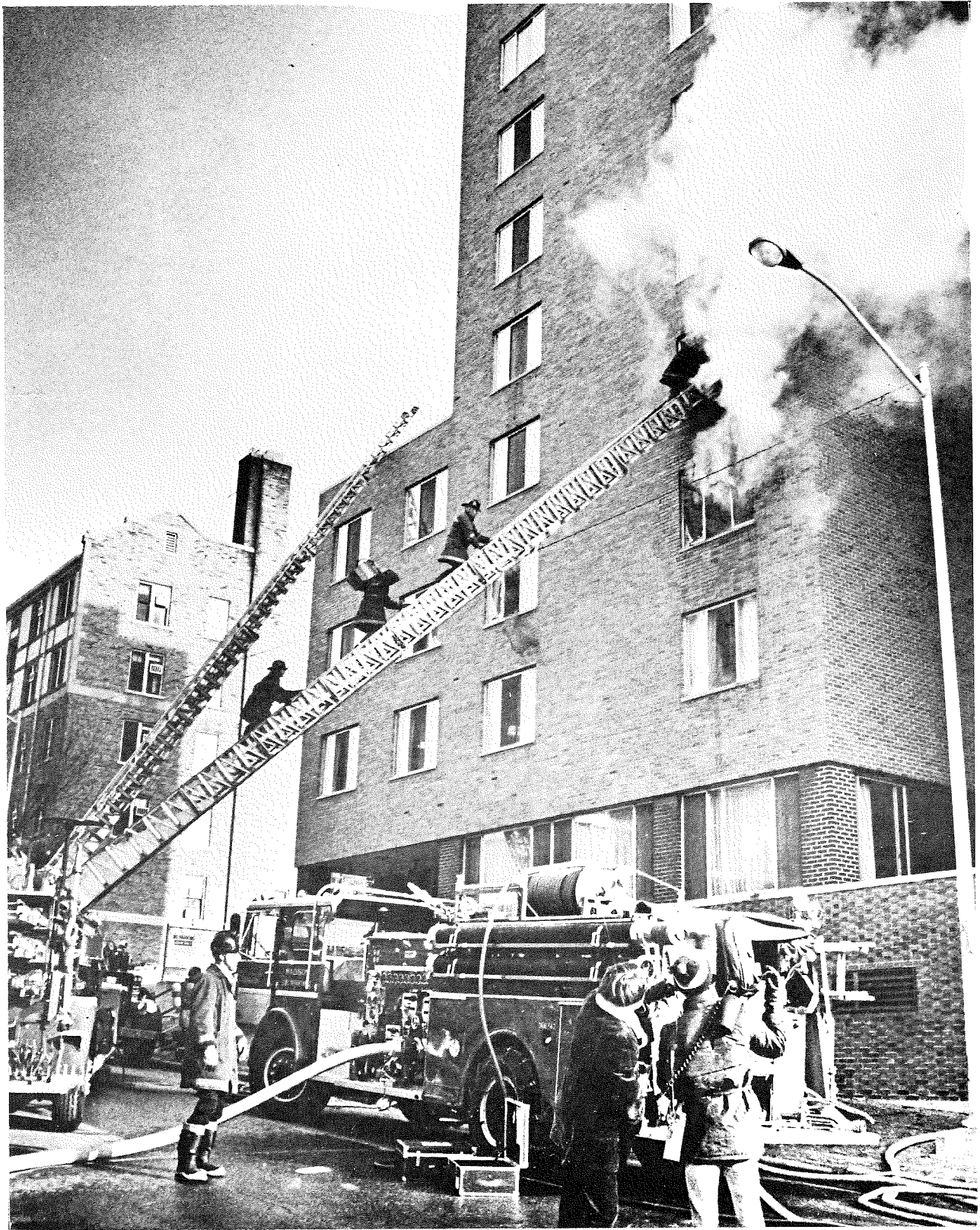


PHOTO BY: L. ROGER TURNER



**HAROLD O. MUENKEL, ASSISTANT FIRE CHIEF**  
**MADISON FIRE DEPARTMENT**

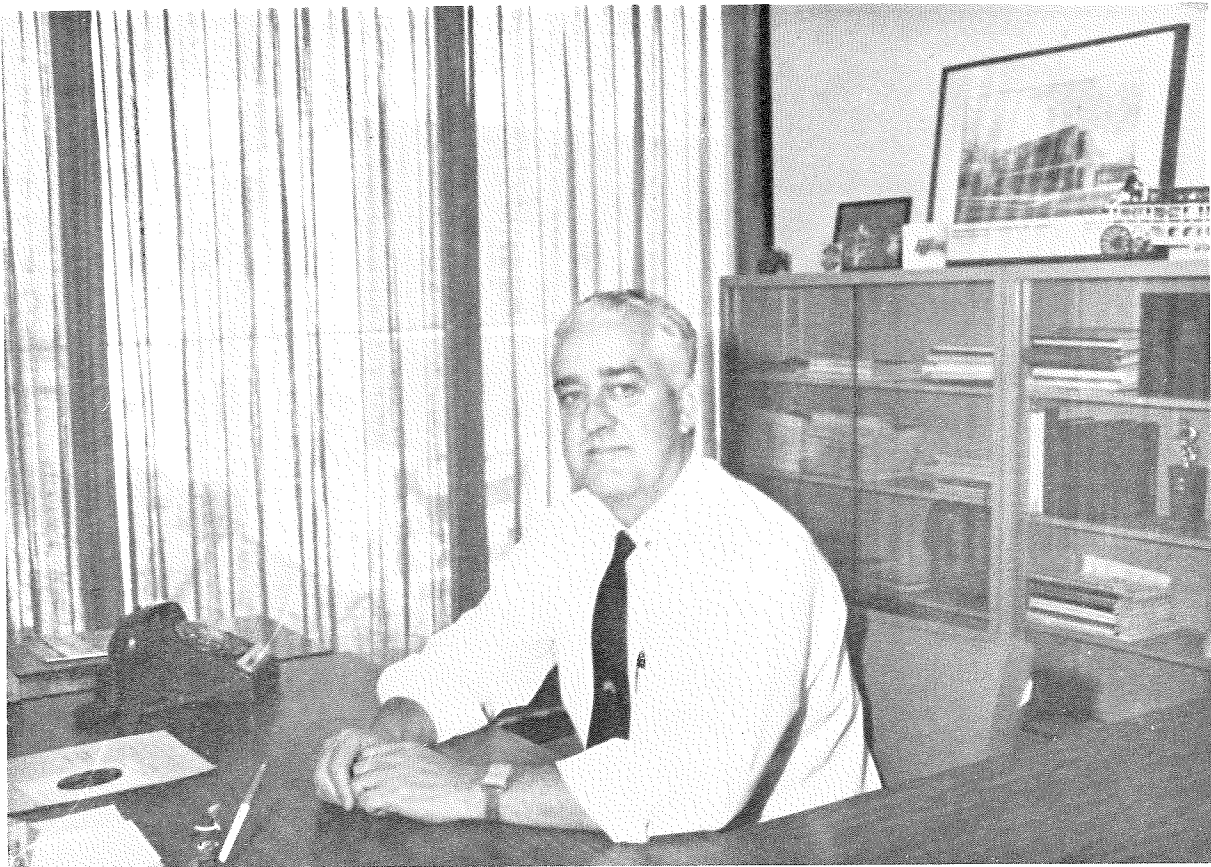
## **ADMINISTRATIVE OFFICE**



**JOHN HEREID**  
**Administrative Assistant to the Chief**

**STANLEY TIEDEMAN**  
**Administrative Clerk**

**PAT EINFELDT**  
**Secretary to the Chief**



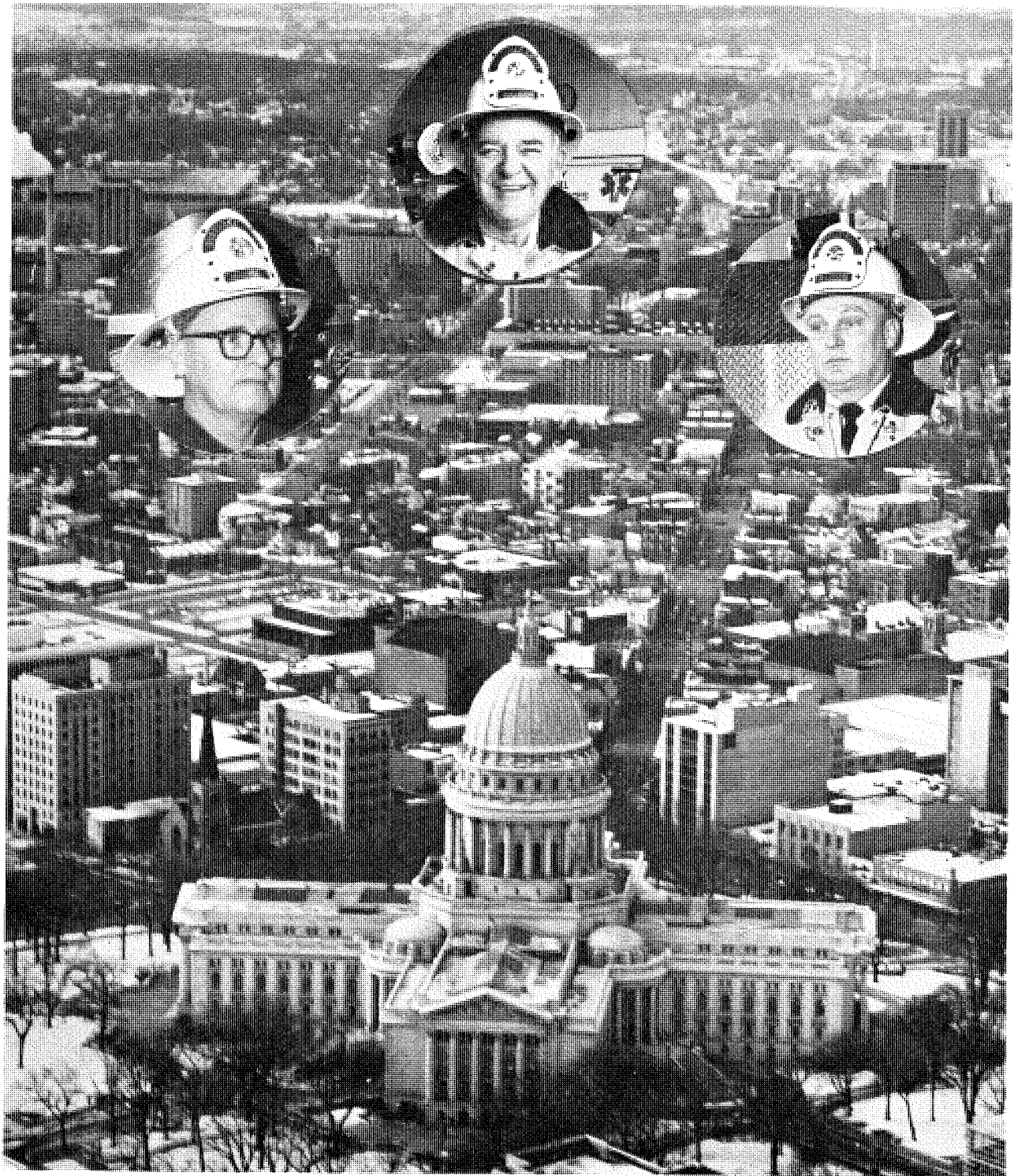
**ELDON MAGINNIS, ASSISTANT CHIEF, FIRE SUPPRESSION DIVISION  
MADISON FIRE DEPARTMENT**

In 1973 a record number of 7,289 emergency alarm responses were made by the fire suppression and emergency medical companies. This is an increase of 835 calls over 1972.

The estimated fire loss for the year 1973 was slightly over one and a half million dollars, showing an increase of one half million dollars in fire loss over the year 1972.

There were seven fire deaths and ninety-four fire related injuries in 1973. This was an increase of six fire deaths over the year 1972. The largest fire, causing deaths, was on January 8, 1973, Allen Hall, 505 North Frances Street, a resident care center. This fire resulted in three deaths and seven injuries including four Firefighters.

In 1973 the field operation companies conducted 15,600 in-service fire prevention inspections in multiple dwellings and business establishments as well as 1,981 requested home inspections.



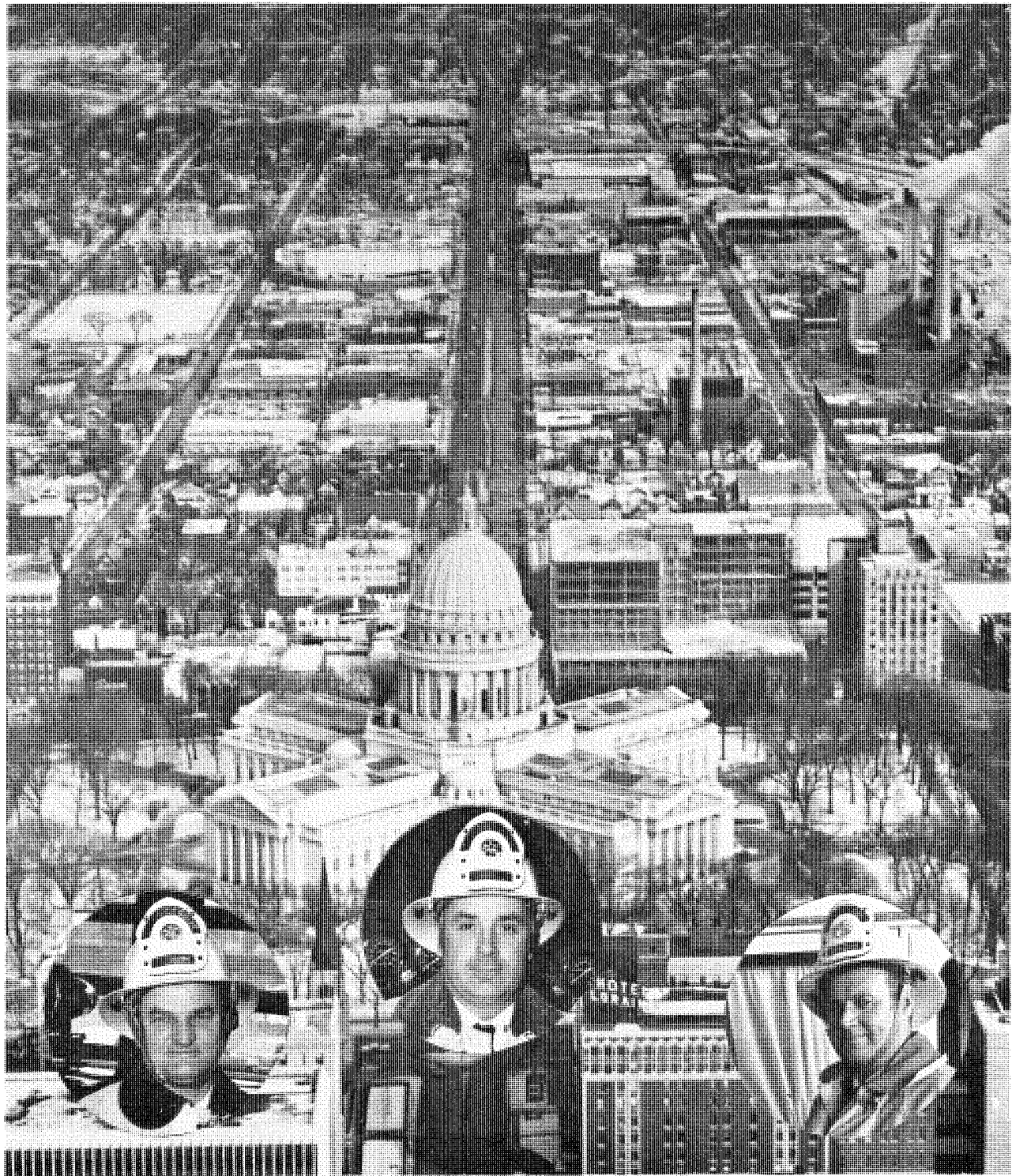
DON CHANDLER PHOTO  
FROM ROTOR AIRE  
HELICOPTER

## DISTRICT CHIEFS WEST

ARTHUR WICKS

HARLAND LIPPOLT

PAUL TOLTZIEN



DON CHANDLER PHOTO  
FROM ROTOR AIRE  
HELICOPTER

## DISTRICT CHIEFS EAST

**DON HUGGINS**

**GLENN WILCOX**

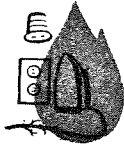
**LYLE MEPHAM**

# LEADING FIRE CAUSES



**Careless smoking**

298



**Improper use of electricity  
and appliances**

192



**Improper use and storage  
of flammable liquids**

107



**Accumulation of rubbish**

94

**FIRES  
BY OCCUPANCY**

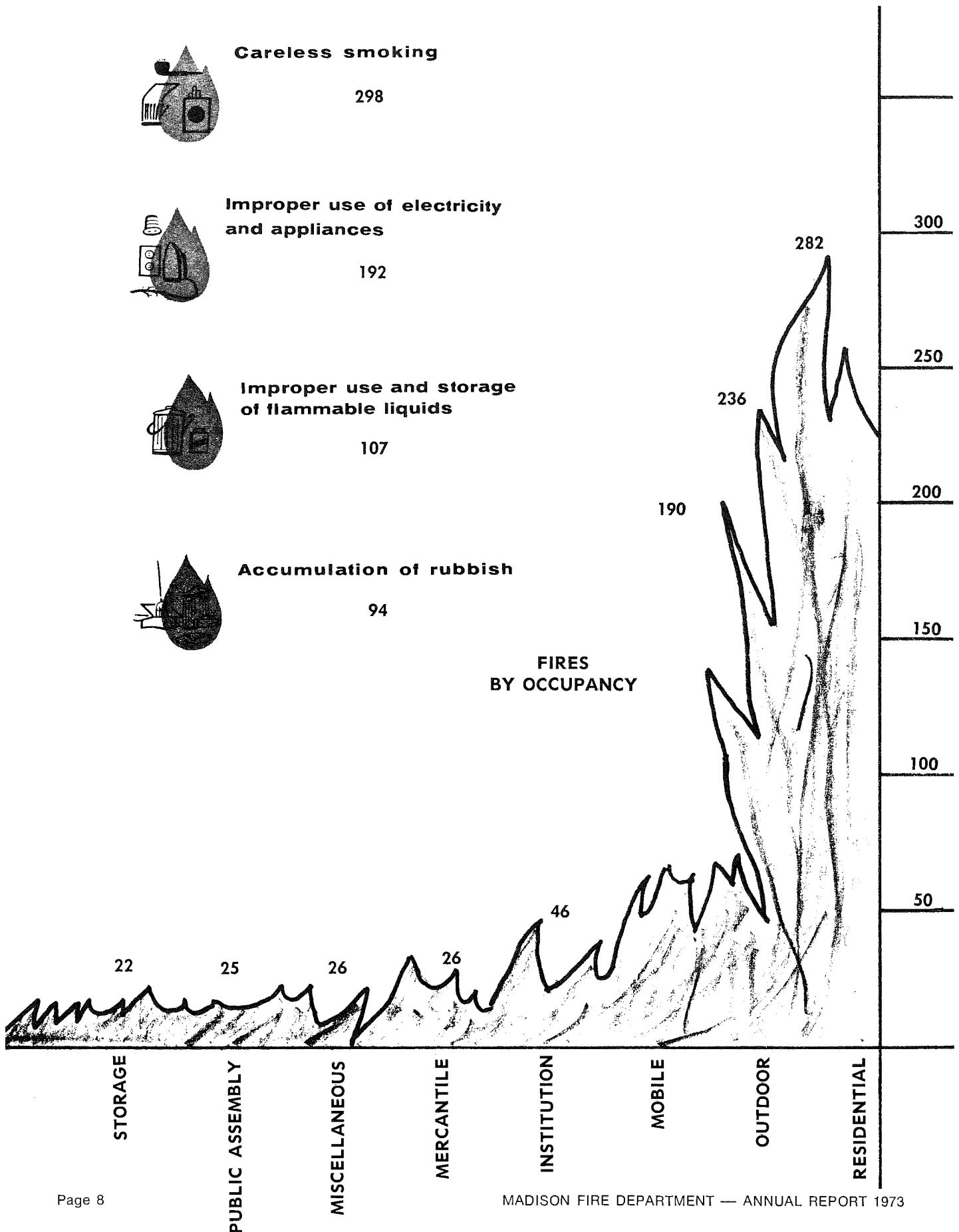




PHOTO BY:  
EDWIN STEIN



**QUICK ACTION** keeps restaurant and  
apartment fire loss to a minimum



PHOTO BY:  
EDWIN STEIN



**RESIDENTIAL FIRES** again  
in 1973 account for the  
largest number of fires  
in the city of **MADISON**

PHOTO BY:  
MARK PERLSTEIN



PHOTOS BY:  
L. ROGER TURNER



**RESCUE** is becoming an  
essential function of the  
**FIRE DEPARTMENT**

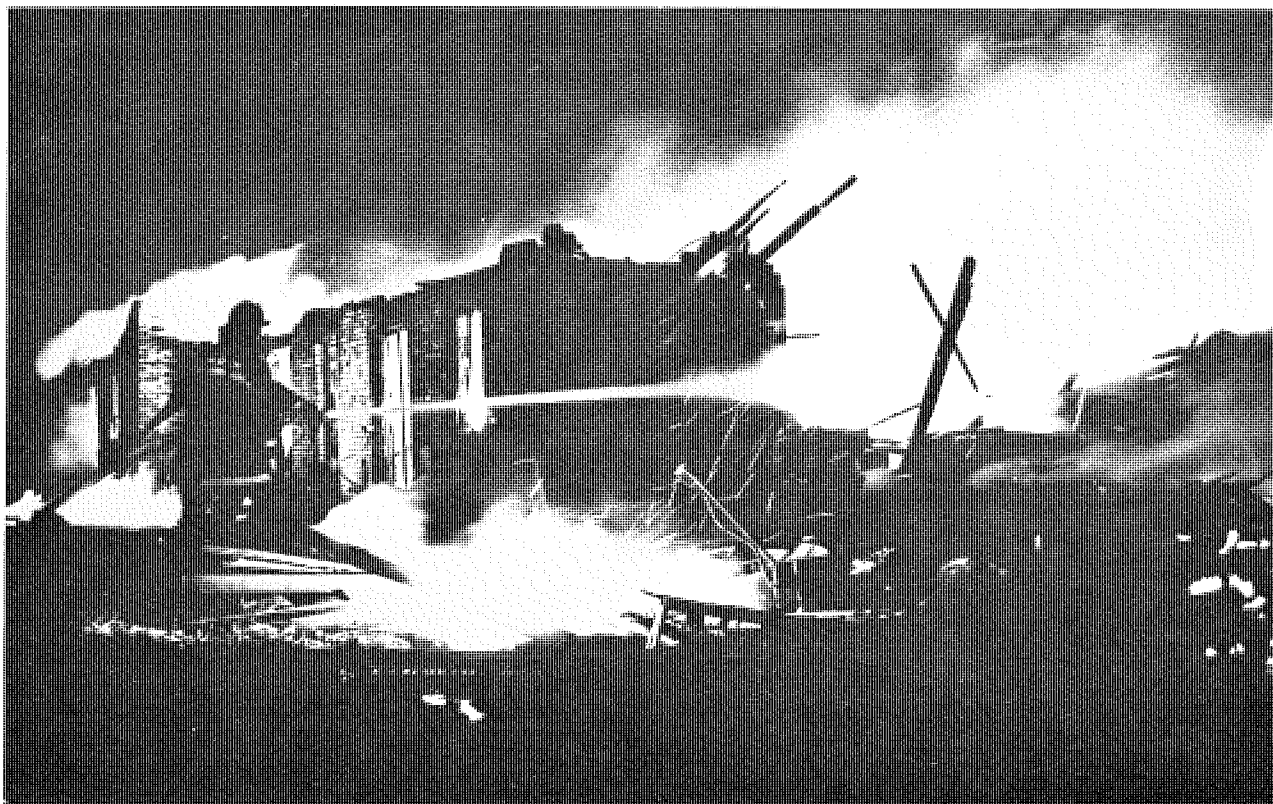


PHOTO BY:  
MARK PERLSTEIN

**MADISON'S LARGEST FIRE LOSS IN 1973 OCCURRED IN THE EARLY MORNING HOURS OF DECEMBER 8.**

**THE APARTMENT COMPLEX WAS UNDER CONSTRUCTION, AND UPON ARRIVAL THREE BUILDINGS WERE TOTALLY INVOLVED, CONSUMING 66 UNITS, WITH A DOLLAR LOSS OF APPROXIMATELY \$600,000.**



**JOHN R. TAPPEN, FIRE MARSHAL  
MADISON FIRE DEPARTMENT**

1973 fire prevention activities include the enactment of a new and updated Fire Prevention Code by the City Council, August 14. In addition to this ordinance, other City ordinances, State Codes and Statutes as prescribed are the responsibility of this division.

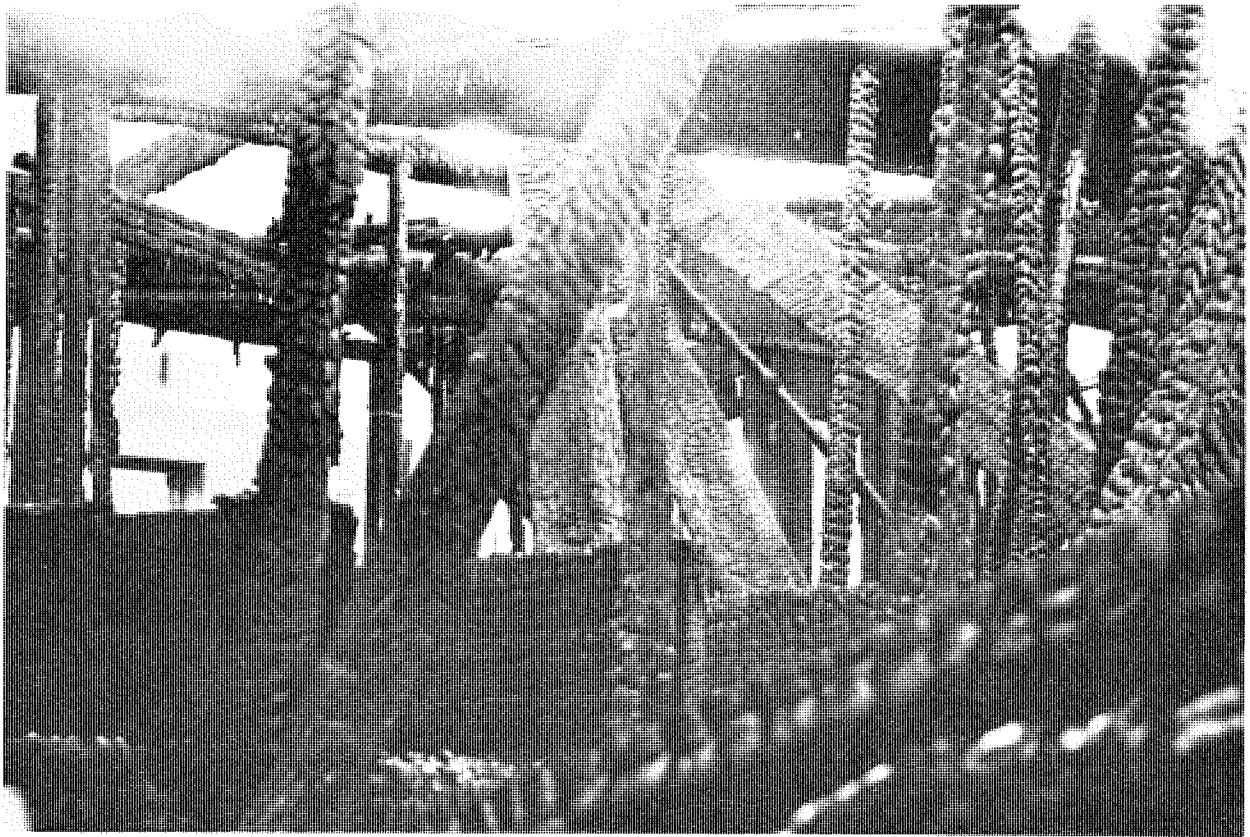
Included in the enforcement of these laws are other related activities such as Fire Investigation, Public Education, Plan Review and Special Inspections of high hazard occupancies, the surveillance and issuance of 42 permit requirements prescribed by the Fire Prevention Code.

Through the combined efforts of the Fire Suppression and Fire Prevention Division, the Fire Department is capable of inspecting all inspectable properties at least twice annually and those located in the Fire Limits four times annually, accounting for 18,131 inspections, detecting and correcting 5,587 violations.

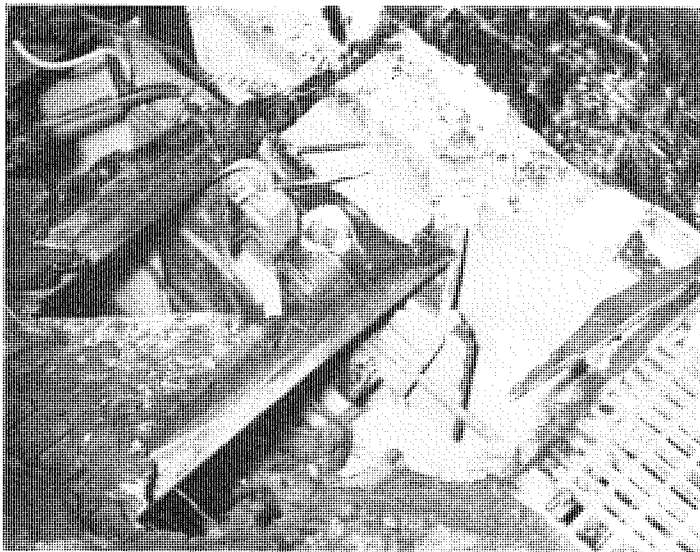
The division handled 122 complaints and 194 fire investigations of which 72 were accidental, 110 were set fires and 6 being undetermined.

Public Education consisted of 370 talks and demonstrations, attracting an audience of 16,773 citizens plus several radio and television appearances.

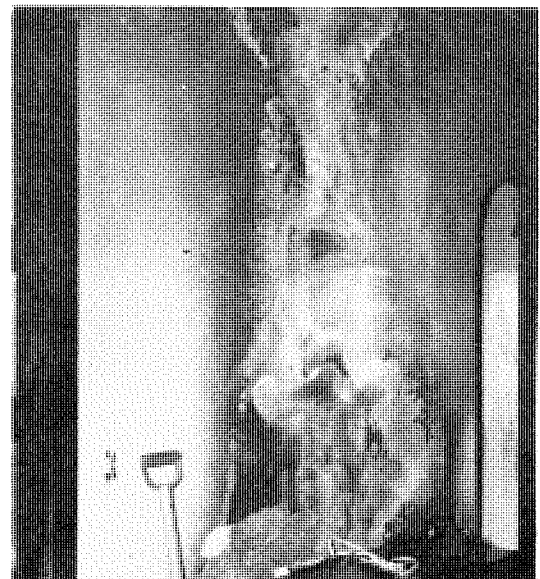
The results achieved by Fire Prevention help promote not only a safer place to live and work, but, also reduces the loss of tax base and materials we have come to know as being in short supply.



**OBTAINING PROOF** in suspicious fires may be impaired by the fact that evidence of crime is destroyed by the fire.



Pinpointing the origin and cause of fires range from slow burning common materials to extremely rapid combustibles. This adds to the burden of the **FIRE PREVENTION DIVISION**.





**THE HOSPITAL FIRE  
SAFETY PROGRAM**  
helps afford a fire safe  
atmosphere for  
residents

**SAFETY VALVE BROKEN  
WHEN GASOLINE PUMP  
STRUCK BY AN AUTO**



**PREPARING VIOLATION NOTICES**

**39 COURT ACTIONS INSTITUTED**

**3,819 NOTICES OF VIOLATIONS ISSUED**



**PLANS MUST BE SUBMITTED FOR REVIEW FOR CONDITIONAL USE, PUBLIC BUILDINGS, AND OCCUPANCIES THAT REQUIRE FIRE PROTECTION EQUIPMENT.**



**ALL OUTDOOR BURNING IS PROHIBITED WITHOUT A PERMIT. VIOLATORS CAN BE FINED UP TO ONE HUNDRED DOLLARS FOR EACH OFFENSE.**



**INSPECTING UNDERGROUND FLAMMABLE  
LIQUID STORAGE SITES.**



**331 PERMITS WERE ISSUED FOR  
PERMISSION TO MAINTAIN,  
STORE OR HANDLE MATERIALS  
THAT MAY CONSTITUTE A HAZARD  
TO LIFE OR PROPERTY.**



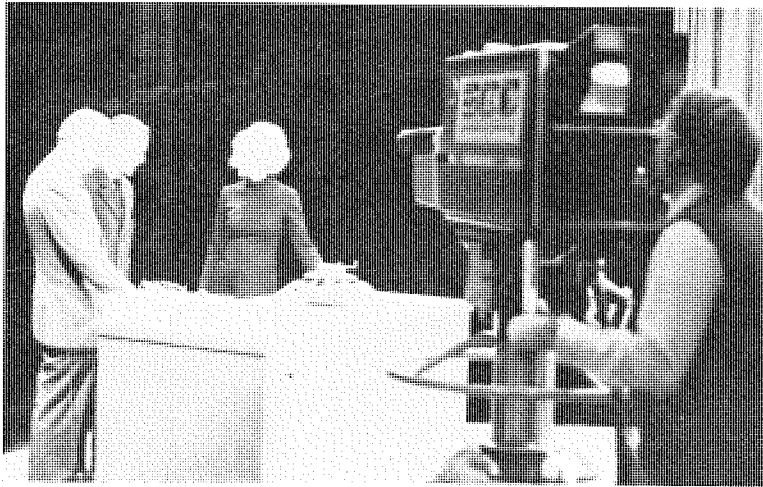


THE GOAL OF FIRE PREVENTION EDUCATION IS TO TRAIN AND EDUCATE CITIZENS ON FIRE SAFETY IN THE HOME, IN BUSINESS, AND IN INDUSTRY.



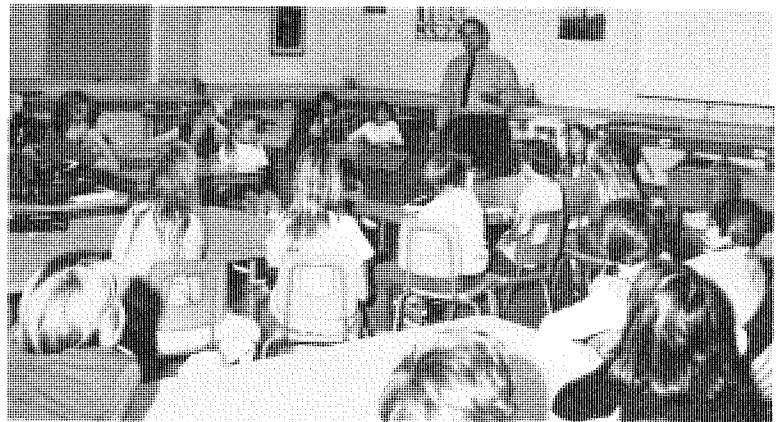
PHOTO BY: L. ROGER TURNER

PROPERLY TRAINED AND EQUIPPED, these people can hold fires in check with extinguishers until firemen arrive.

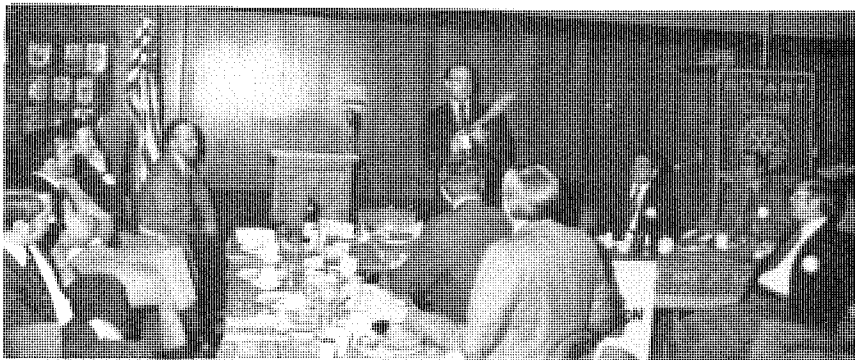


INFORMING CITIZENS OF THE  
HAZARDS THAT CONFRONT  
THEM DAILY

BY MEANS OF  
RADIO AND  
TELEVISION



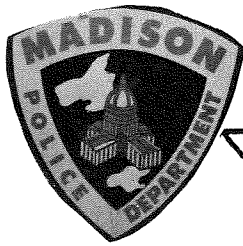
LECTURES  
IN SCHOOLS



CIVIC AND SOCIAL  
ORGANIZATIONS



DISPLAYS AT  
SHOPPING CENTERS



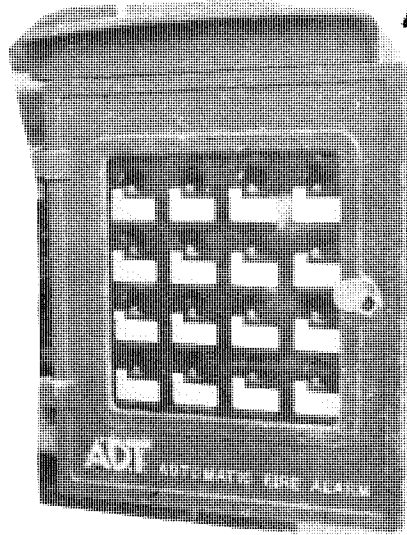
857

71  
OTHER

## ALARMS HOW RECEIVED

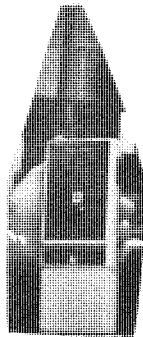


164

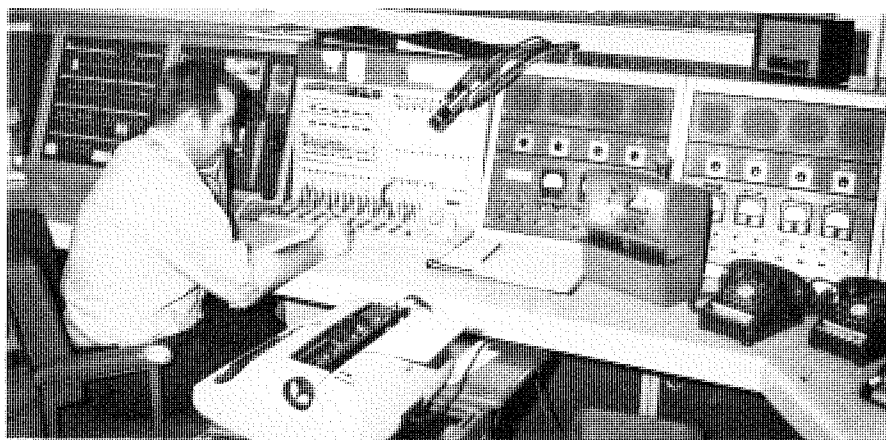


42

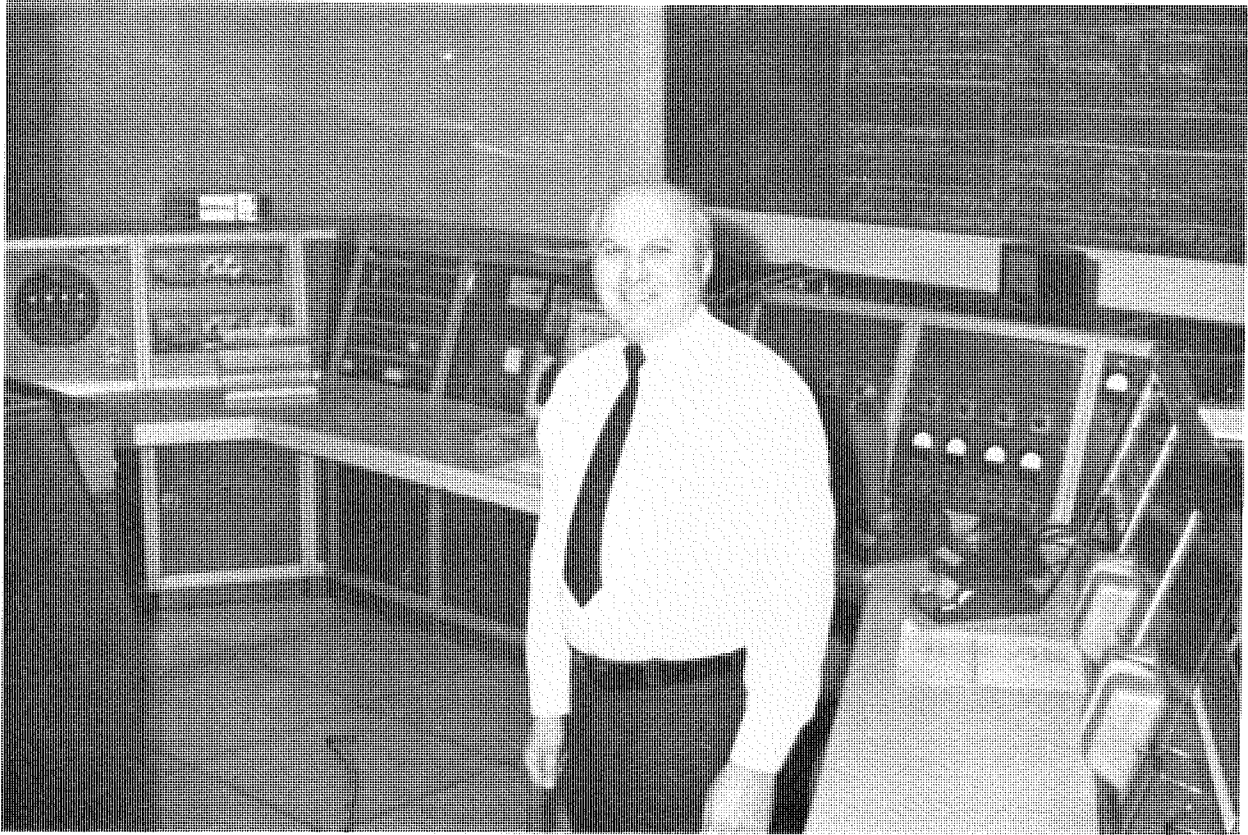
86



6,069



**MADISON FIRE DEPARTMENT ANSWERED  
7,289 ALARMS IN 1973.**



**DON OLSON, CHIEF OF COMMUNICATIONS  
MADISON FIRE DEPARTMENT**

There is no doubt that activity on the Madison Fire Department has increased considerably in the last few years and the Communication Division is no exception.

Since 1967 there has been an increase of approximately 50% in emergency runs and a 400% increase in base station radio transmissions.

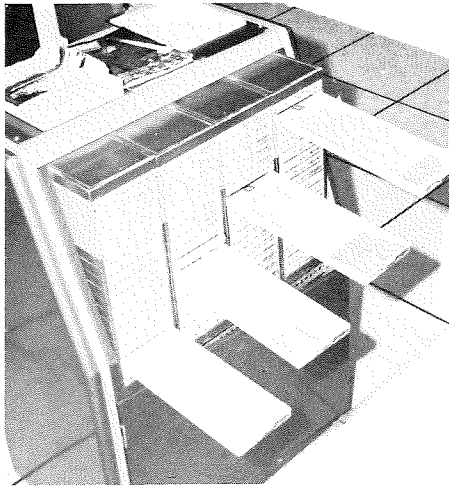
	Emergency runs	Radio Transmissions
1967	4,754	40,000
1973	7,289	164,687

In addition to handling emergency ambulance and fire calls for the City of Madison, our dispatchers received 370 emergency calls for other municipalities which were promptly referred to the proper agency.

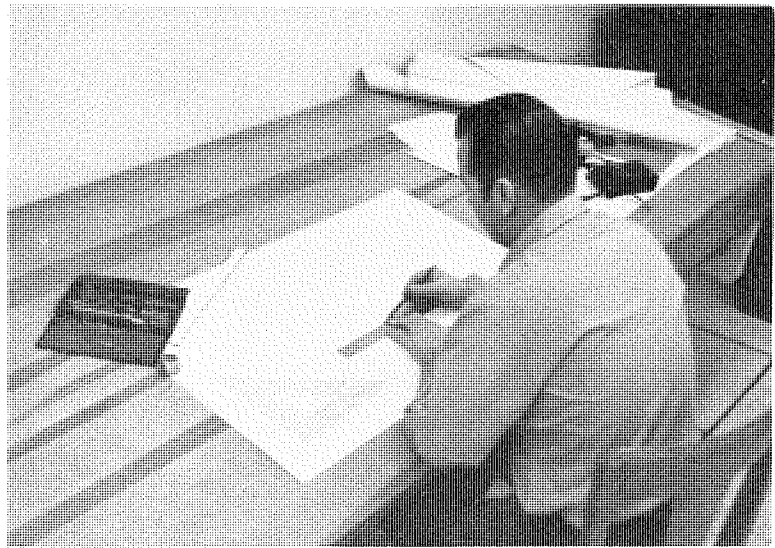
The necessary action was taken in 1973 to implement civil service people into the position of alarm operator after an unsuccessful attempt to recruit uniformed personnel.

Steps were also taken to obtain a communication study and to purchase new equipment in an effort to improve our overall operation.

# COMMUNICATIONS DIVISION ACTIVITIES



**AN UP-TO-DATE STREET CARD  
FILE IS MAINTAINED**

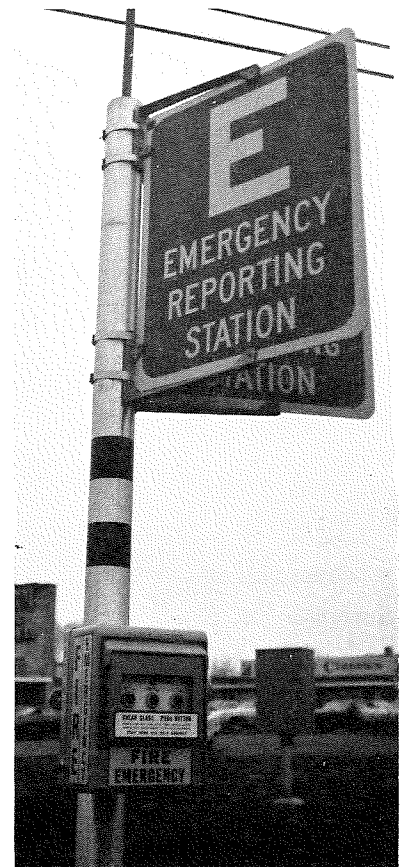


**KEEPING MAPS CURRENT**



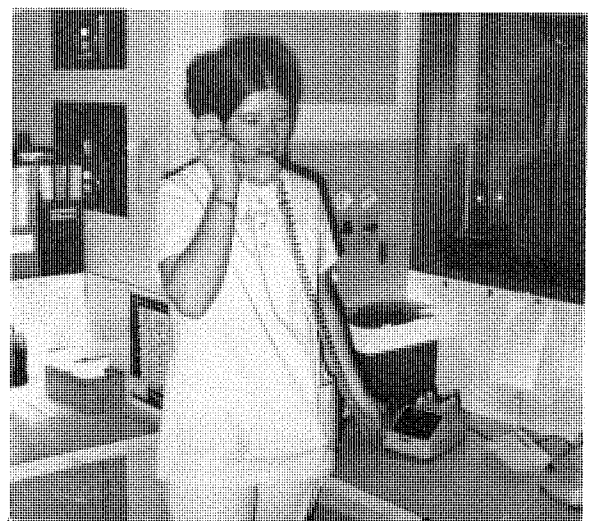
**SCHEDULED 172 STATION VISITS FOR 5,031 PEOPLE**

**36 RADIO ALARM BOXES AT KEY  
INTERSECTIONS THROUGHOUT  
THE CITY**

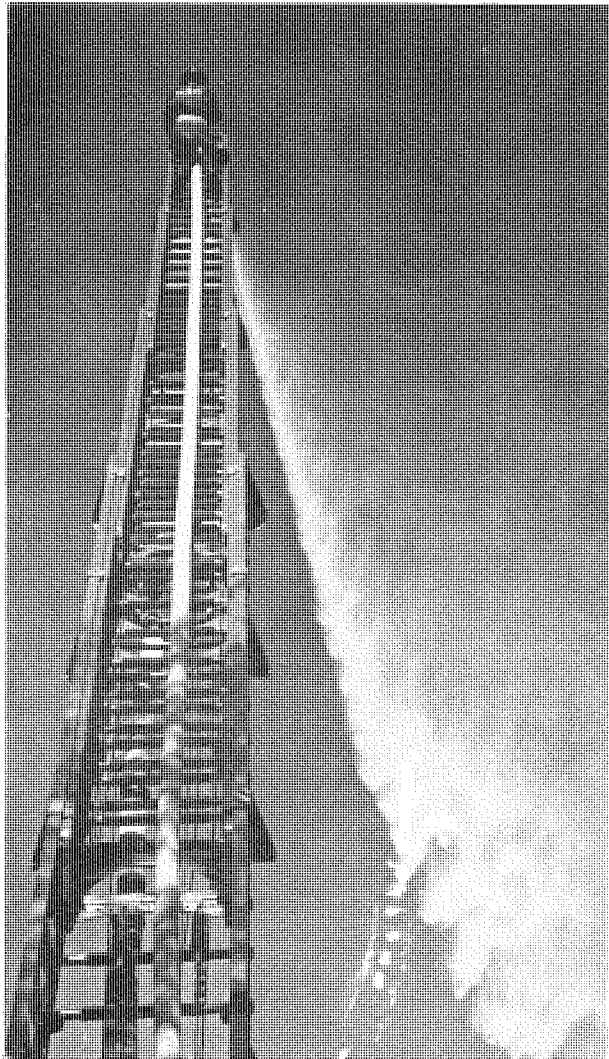




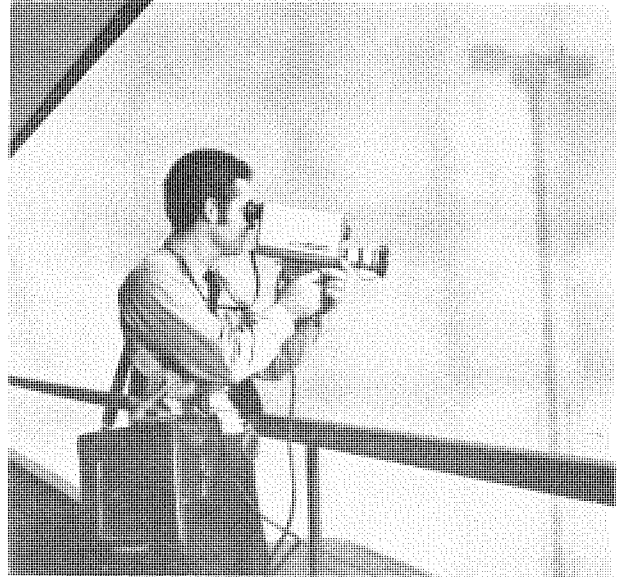
Ambulances were equipped with four channel radios enabling them to communicate with four city hospitals for emergency medical advice. They also have the ability to transmit on either of our fire frequencies.



# TRAINING EXERCISES



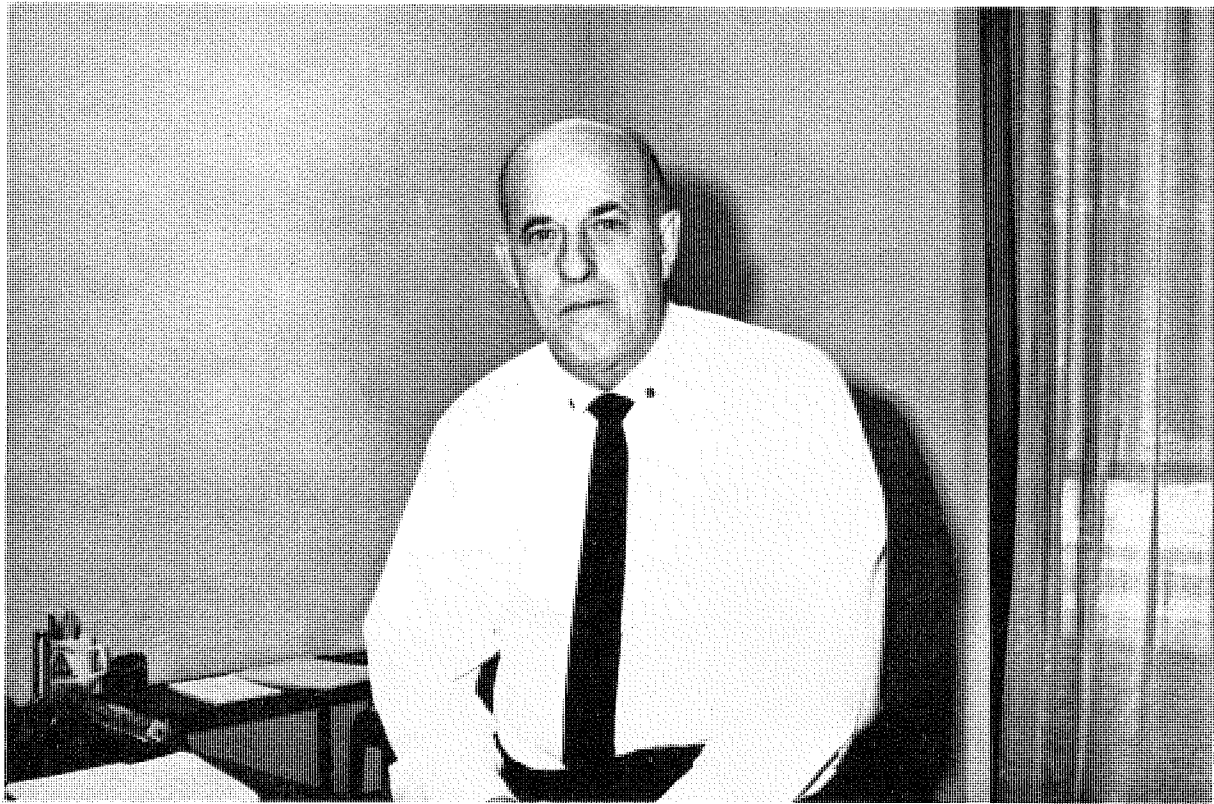
**WATER TOWER  
OPERATIONS**



**VIDEO EQUIPMENT USED IN  
EVALUATING TRAINING PROGRESS**

**AIRPORT FLAMMABLE  
LIQUID SPILLS**

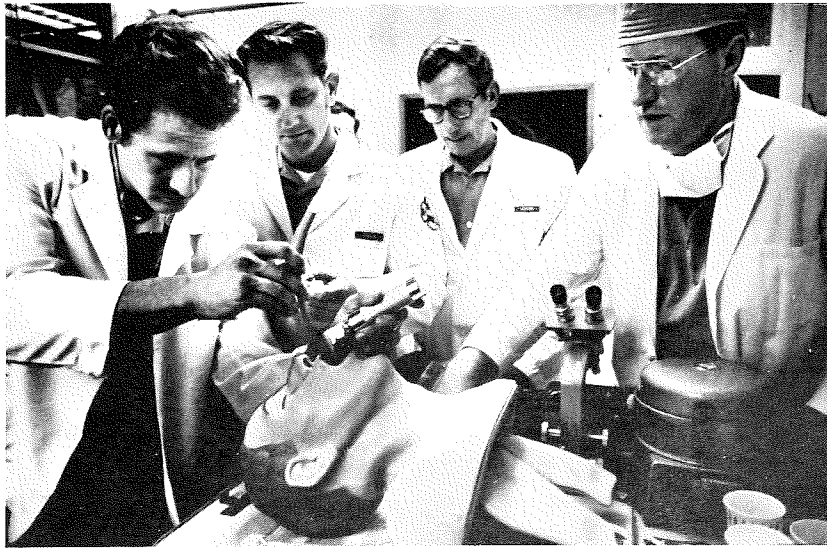




**VINCENT J. GEIER, CHIEF OF TRAINING  
MADISON FIRE DEPARTMENT**

One of the main accomplishments of the Training Division in 1973 was the development of programs to increase the knowledge of the firefighter concerning fire prevention inspections. The programs relate to the National Electrical Code and the Wisconsin State Fire Code. Interrelated guidelines and slide-tape programs were developed and presented to all members of the department.

Another large project during the year concerned the emergency medical services. Some of the accomplishments were: the design of the interior cabinets and equipment location for the new van-type ambulances, the evaluation and purchase of paramedical equipment and the development of a more complete records system which is filed monthly and breaks down into categories the types of emergencies responded to and the equipment and medication used.



**PARA-MEDICS RECEIVE 768**  
hours of intensified emergency  
medical training enabling them  
to better provide ambulance  
service to the citizens of  
Madison.

PHOTO BY:  
EDWIN STEIN

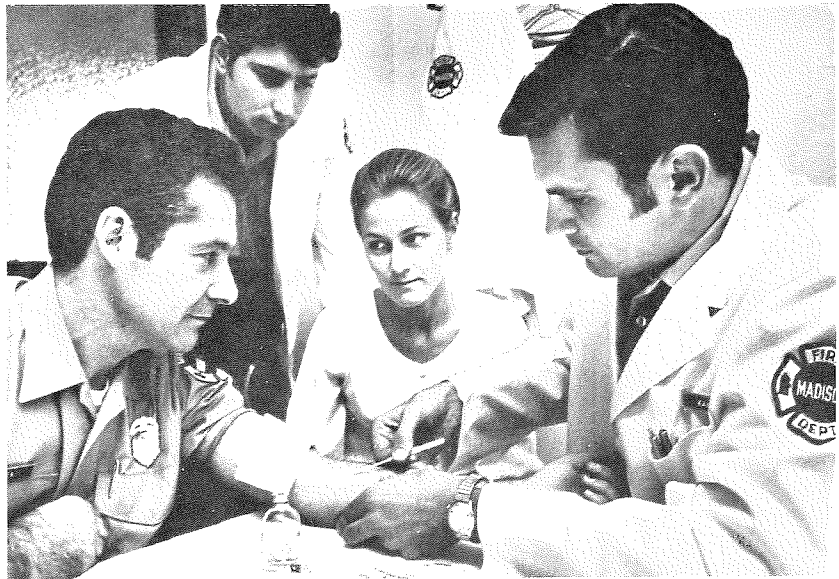
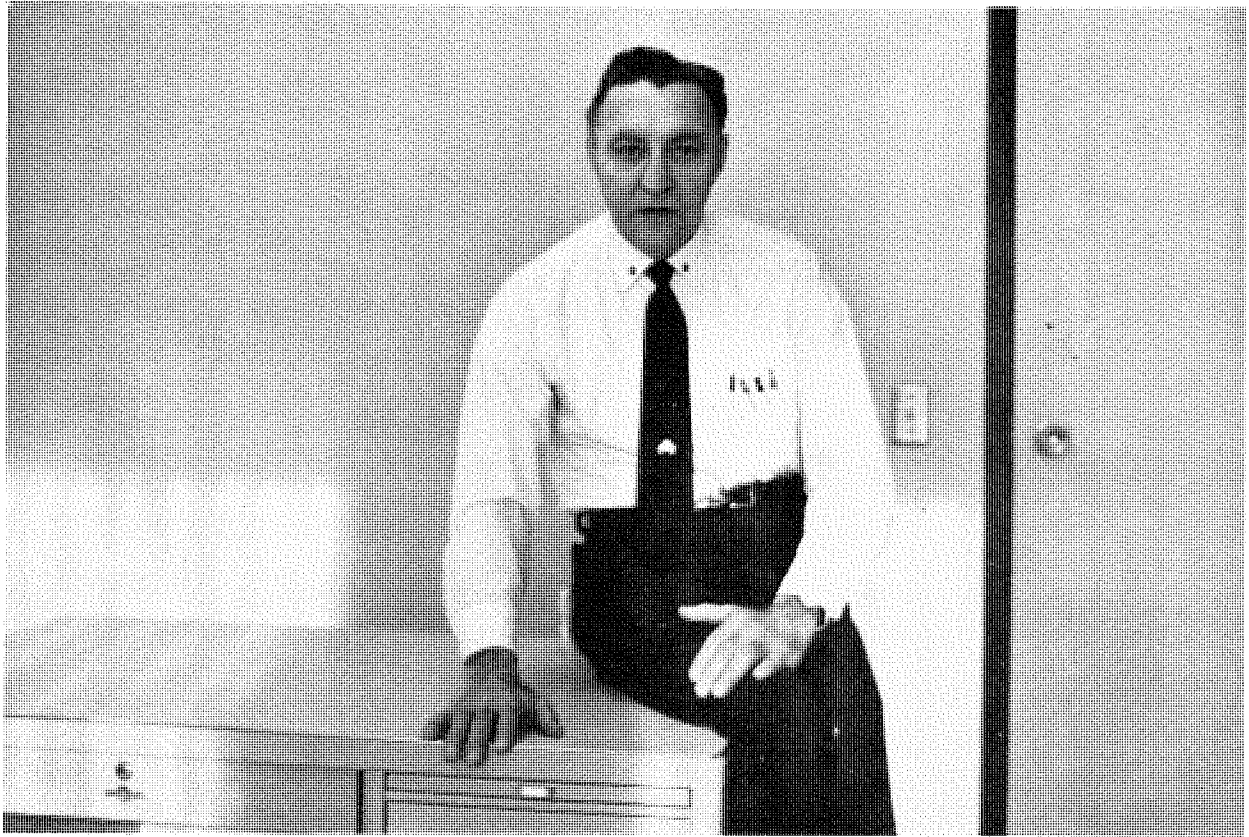


PHOTO BY:  
EDWIN STEIN



**HUMAN LIFE** is given top  
priority. This must be re-  
emphasized in training, as well  
as in actual operation.

PHOTO BY:  
L. ROGER TURNER



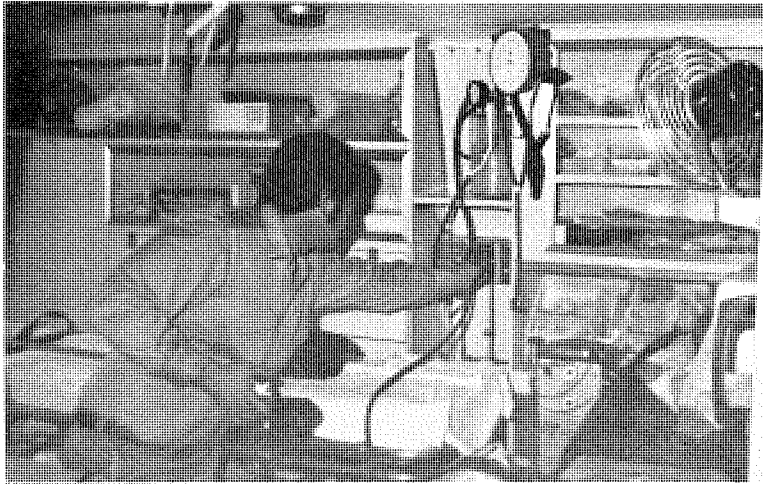
**JAMES C. OLSON, CHIEF OF MAINTENANCE  
MADISON FIRE DEPARTMENT**

The maintenance division has the responsibility of maintaining buildings, grounds, fire apparatus, and equipment, which includes twelve major physical plants and thirty-nine vehicles.

In order for stations to conform to state code, necessary repairs were made to buildings. This and regular ground and building maintenance help keep the fire station an attractive part of the neighborhood.

With proper maintenance, pumps and aerials have a life expectancy of twenty years for the first line service, and another five years as reserve equipment. This means a depreciation rate of 4½% for the first twenty years, and 2.0% for five additional years, whereas light vehicles will last eight years and depreciate at 12% per year of the original cost.

Regular scheduled maintenance means that breakdowns at the time of an emergency will be kept to a minimum.



Three new Ambulances were purchased and equipment mounted this year

Annual service test on pumpers and hoses were completed



A Dodge light vehicle for Truax Field



Two new station wagons for District Chiefs

THE TRADITIONAL RED COLOR is being replaced with a high visibility lime yellow

# FIRE STATIONS AND EQUIPMENT

## STATION NO. 1

316 West Dayton Street

- 1 ..... 1250 Gallon Pumper, 1970 Ward LaFrance
- 1 ..... 100 Ft. Aerial Ladder Truck, 1949 Pirsch
- 1 ..... 85 Ft. Snorkel, 1970 Pirsch
- 1 ..... Ambulance, 1973 Chevrolet Van
- 1 ..... Chief's Car, 1973 Chevrolet
- 1 ..... Grass Fire Truck, 1966 International
- 1 ..... Foam Engine, 1948 American LaFrance

## STATION NO. 3

1217 Williamson Street

- 1 ..... 1250 Gallon Pumper, 1968 Pirsch
- 1 ..... Chief's Car, 1974 Chevrolet

## STATION NO. 4

1329 West Dayton Street

- 1 ..... 1250 Gallon Pumper, 1970 Ward LaFrance
- 1 ..... Special Equipment Truck, 1960 International

## STATION NO. 5

4418 Cottage Grove Road

- 1 ..... 1250 Gallon Pumper, 1962 Pirsch
- 1 ..... 85 Ft. Aerial Ladder Truck, 1950

## STATION NO. 6

957 South Park Street

- 1 ..... 1250 Gallon Pumper, 1962 Pirsch
- 1 ..... 85 Ft. Aerial Ladder Truck, 1960 Seagrave

## STATION NO. 7

5029 Raymond Road

- 1 ..... 1000 Gallon Pumper, 1959 Four Wheel Drive

## STATION NO. 8

407 North Street

- 1 ..... 1250 Gallon Pumper, 1968 Pirsch
- 1 ..... 85 Ft. Aerial Ladder Truck, 1959 Pirsch
- 1 ..... Ambulance, 1973 Chevrolet Van

## STATION NO. 9

201 North Midvale Boulevard

- 1 ..... 1000 Gallon Pumper, 1959 Four Wheel Drive
- 1 ..... 85 Ft. Aerial Ladder Truck, 1958 Seagrave
- 1 ..... Ambulance, 1973 Chevrolet

## STATION NO. 10

1517 Troy Drive

- 1 ..... 1000 Gallon Pumper, 1958 Pirsch

## STATION NO. 11

Building No. 403 Truax Field

- 1 ..... Airport Vehicle, 1974 Dodge
- 1 ..... Foam Tanker\*
- 2 ..... 0-11-A\*

\*Denotes property of U.S. Air Force, operated by Madison F. D.

## RESERVE EQUIPMENT

Station	Assigned No.	Size	Year	Make
1	Engine 40	1250 GPM	1956	Pirsch
4	Engine 41	1250 GPM	1956	Pirsch
7	Engine 42	1250 GPM	1948	LaFrance
7	Engine 45	3" Hose Eng.	1948	LaFrance
10	Aerial 46	85 Ft.	1950	Pirsch

### OTHER EQUIPMENT

#### ADMINISTRATIVE PREVENTION MAINTENANCE TRAINING

1 ..... 1972 Chevrolet Ambulance  
 2 ..... 1970 Chevrolet  
 1 ..... 1969 Chevrolet Van  
 1 ..... 1969 Chevrolet  
 1 ..... 1968 Dodge  
 2 ..... 1965 Fords



**MAINTAINING VEHICLES, BUILDINGS AND  
EQUIPMENT FOR OUR EXPANDING CITY**

On April 14, 1856 the new city authorized the forming of two volunteer fire companies of thirty men each. The first was the "Mendota" Company, located on Webster Street where the new First Wisconsin Bank Building is located. Mendota Company was comprised of "Yankee Americans", mostly fourth-ward Irish. The second was the Monona Company, German immigrants, and their name was soon changed to the "Madison Company". Their fire station still stands at 125 State Street, and is used today as offices for Castle & Doyle.

In 1857, a sack company was formed for the purpose of saving people's possessions. The City Council granted this company police powers, and each man was responsible for providing a sack to haul out valuables, a hatchet and a screwdriver to take furniture apart for easy removal from a burning house.

The need for a ladder truck was realized by area business men, so in September 1867 they bought their own equipment and housed it at Number One Fire Station on Webster Street. They named it the "Capital Hook and Ladder Company". The truck was built in New York by James A. Smith at the cost of \$685.00. At that time it was one of the longest in the country, being 50 feet from tongue to tiller, carrying five ladders, the longest being 48 feet.

Steam pumpers came to Madison in the fall of 1867. Because of larger buildings, the old hand pumpers could no longer supply adequate water to cope with the fires in our growing city.

Prior to 1870, before the first horses were obtained for the fire service, the firemen would pull their equipment to the fire, unless James Conlin, a local dairyman, got to the station before the firemen left; then his horses were used so as to conserve the men's energy for fire-fighting.

Though still a volunteer department between 1881 and 1883, the water utility laid 11½ miles of water mains providing 84 hydrants in the now central part of the city.

Up to this time a bell, atop city hall, was used to summon firemen. With the installation of a steam engine to provide pressure in the water mains, a steam whistle was then put into service.

These volunteer efforts did not go unnoticed by the city fathers, and on April 9, 1884 the Madison Fire Department was formed, uniting all volunteer groups into one department. These men were to receive compensation of \$30.00 a year for each member who attended three-fourths of the fires and alarms during the year.

The "Gay Ninety" era came to Madison and was reflected by the social record of firemen attending balls attired in their dress uniform. The highlight of the year was the "Annual Firemen's Ball". In a dash of uniform and the swirl of silk, fire laddies and ladies danced to the tune of a waltz and the tempo of a skating Schottische.

The turn of the century saw many changes in the city's fire service. By 1901 the city boasted of ten full-paid men. An alarm system and switchboard was purchased that had been used at the St. Louis Exposition in 1904.

Continued growth of the city provided for a fully paid fire department in 1908. These men worked six straight 24-hour days, with one off. In 1912 this rapid expansion created a need for motorized vehicles, the first being a 1912 Seagrave pumper, housed at Number 2 station on State Street. Records show the operating costs were \$1.30 a month compared to \$30.00 monthly for horses.

As the city grew, so did the Fire Department, to meet the ever-changing needs of the city. Today the Fire Department consists of six divisions: Administration, Prevention, Training, Suppression, Communications, and Maintenance. All divisions work together under the leadership of Chief Ralph A. McGraw to provide an efficient Fire Department to protect the residents in the City of Madison, both in the extinguishment and prevention of fire.

The volunteers provided fire protection until 1898, and since that time, under six progressive chiefs, the Fire Department has grown. Today 265 personnel provide protection for 178,300 residents, covering an area of 50.4 square miles, with ten pumpers, five aerials, five ambulances and one Snorkel, and special equipment at the airport.

Our goal today is to prevent fires through an intensified inspection program, but once the fire alarm is sounded the Fire Department stands ever-ready to meet any challenge with unselfish duty. The knowledge of a job well done carries the spirit of "Semper Paratus" from the "bucket rack" days through Nineteen Hundred Seventy-three.

### TABLE OF CONTENTS

Administrative .....	3
Fire Control and Rescue Operations .....	4
Fire Prevention .....	13
Communications .....	20
Training .....	24
Maintenance .....	27

### PHOTO CREDITS

Captain A. Kaltenberg  
Lieutenant K. Vodak  
Lieutenant K. Niebuhr  
Lieutenant J. Gschwend

1973 ANNUAL REPORT—Compiled and edited by Lieutenant J. Gschwend  
Printed in Madison, Wisconsin, by Littel Printing Company

