

File
Ford Motor Company

Intra-Company Communication

November 13, 1964

Mr. J. G. Mallaly
World's Fair Program Manager
Public Relations Staff

There is a public address system which may be used during emergencies.
Subject: Fire Protection Survey -
Location: New York World's Fair Exhibit

Mr. P. Gleason, subordinate to Mr. L. Columbus, Maintenance Manager, has been assigned Fire Marshal. Mr. Gleason conducted 100% inspection with Chief O'Brien. The New York World's Fair Exhibit was inspected on November 4, 1964, to review fire prevention and protection. This report makes comment on the basic fire protection items provided for the building and presents recommendations to improve the overall fire control program. An overall floor plan for the Fire Brigade Organization has been prepared.

Automatic Fire Protection

The building is protected by automatic sprinkler protection in a reasonably adequate manner. There are no sprinklers below the ceiling of the Skyway of the Future area. However, there is a relatively small amount of combustible material in this area. There is, however, sprinkler protection beneath the track. The top surface has also been coated with a fire retardant paint. FIRE PROTECTION RECOMMENDATIONS

Standpipe and fire hose have been strategically located throughout all areas of the exhibit. There are also six fire hydrants located on the roof for World's Fair Fire Department use with a biograd cover has been provided for chemical liquids storage. Openings should be provided for water supply for sprinkler systems and standpipes and fire hose is provided by the New York World's Fair, in turn supplied by New York City. A 1,000 gpm automatic electric centrifugal booster fire pump has been provided to increase the pressure of the water supply by 75 psi. with Mr. Gleason.

An automatic fixed pipe carbon dioxide fire protection system has been provided for the cooking range in the kitchen located in the lounge area. actual

Fire-Fighting Equipment

The practice of confining solvents and thinners to safety cans should be observed. No ordinary cans of such flammable liquids should be used. An adequate number of proper type of fire extinguishers have been provided and appear to be properly distributed. Reasonable records of location of fire extinguishers are maintained. The fire extinguishers are serviced as needed by an outside fire extinguisher servicing area. solvents outside of the building. A reasonable fully working supply only should be brought into the building. Flammable solvents and thinners should be confined to safety containers approved by the Underwriters' Laboratories, Inc.

Fire Alarm System - all be labeled with the words "Inoperable - Flammable".

Manual fire alarm boxes are strategically located throughout the premises. The alarms which are coded are received in the constantly attended boiler room. The attendant has the use of a direct line telephone to the World's Fair Fire Department.

Water flow alarms from the sprinkler systems are also received in the boiler room on a coded indicator board for further transmission to the World's Fair Fire Department.

There is a public address system which may be used during emergencies.

Employe Participation - should be stored in a vertical position with chains or springs to prevent the cylinders from falling.

Mr. F. Gleason, subordinate to Mr. L. Columbus, Maintenance Manager, has been designated Fire Marshal. He has established good liaison with Chief O'Brien of the World's Fair Fire Department and has arranged for the personnel attached to the Company exhibit to be trained in the actual use of fire extinguishers by Chief O'Brien and his officers.

An organizational outline for the Fire Brigade Organization has been prepared.

Emergency Evacuation Plan

A detailed building evacuation plan has been prepared and implemented. This planning was very effective during the 1964 season as on at least two occasions visitors were evacuated from the exhibit in an orderly manner.

FIRE PROTECTION RECOMMENDATIONS

- Provide a sub-station of oxygen and acetylene cylinders on the welding cart.

Flammable Liquids

Cutting and Welding

A substantial metal bin with a hinged cover has been provided for flammable liquids storage. Openings should be provided in the side walls of this bin at both the bottom and top levels to afford means of ventilating possible accumulations of flammable vapors. The flammable liquids storage bin should be located outside of the building as discussed with Mr. Gleason.

1. The use of flammable liquids inside of the building should be limited to as small a quantity as is consistent with the actual needs. The practice of confining solvents and thinners to safety containers approved by the Underwriters' Laboratories, Inc. should be continued. No ordinary cans of such flammable liquids should be brought into the building.
2. Painting contractors who will redecorate the building should be instructed to store their supplies of paints and solvents outside of the building. A reasonable daily working supply only should be brought into the building. Flammable solvents and thinners should be confined to safety containers approved by the Underwriters' Laboratories, Inc.

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- to observe all areas
- The bin should be lettered with the words "Danger - Flammable Liquids - No Smoking".

Cylinders of Compressed Gases

The oxygen and acetylene cylinders at the maintenance supply crib are a serious fire potential to the building. The following is recommended to reduce this potential as much as is possible:

- All cylinders of compressed welding and cutting gases should be relocated to the outside of the building as discussed with Mr. Gleason.
- The cylinders should be stored in a vertical position with chains or straps to prevent the cylinders from falling.
- A masonry or steel plate bulkhead should separate the oxygen cylinder from the acetylene cylinders.
- The protective valve caps should be in place over the valves.
- The valves should be closed whether the cylinder is full or empty.
- "No Smoking" signs are to be posted and strictly enforced within 25 feet of the area where the cylinders are stored.

Welding Cart

- Provide a substantial steel baffle between the oxygen and acetylene cylinders on the welding cart.

Cutting and Welding

A procedure should be established whereby a signed permit is obtained from a qualified employe before any maintenance cutting or welding is begun. Permit forms should be obtained from the Factory Insurance Association. A permit is to be issued only for the specific job, after a personal inspection is made by the signed and the following precautions have been taken:

1. Determine that automatic sprinklers and other fire protection in the area is fully operative.
2. Water-type fire extinguishers have been made readily available.
3. Combustible materials have been removed 30 to 40 feet or have been covered with flameproofed tarps if combustibles cannot be removed.
4. Workmen have been instructed as to the location of the nearest fire alarm box and in the use of fire extinguishers.

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- 5. A fire watcher has been provided to observe all areas where the welding or cutting is being done -- particularly below the track area, behind partitions and concealed spaces. He should thoroughly check the areas after the job has been completed.

City Sprinkler Systems

- Fire Pump: The combustible storage in the women's rest room should be maintained at least 18 inches below the sprinkler heads.

Remarks: Sprinkler heads exposed by unit heaters should conform to the following temperature ratings:

Within 7' of the heater - 250° to 286° F

Within 20' of the heater - 212° F

SPRINKLER SYSTEM DRAIN AND ALARM TESTS

Weekly Self-Inspection Program - 6 - 8 Months of Year

A weekly self-inspection to eliminate conditions and practices that create fire hazards and to determine that all fire protection systems and equipment are in operation should be established. An inspection form is attached which is believed to be suitable for the Ford World's Fair Exhibition.

SYSTEM NO.	FLOWING PRESSURE	STATIC PRESSURE	ALARM OPERATING	
			DETECT TEST	INSPECTORS TEST
			<i>G. E. Berglund</i> G. E. Berglund, Fire Control Director Fire Control Section Security Department Personnel and Organization Staff	
Attachment				
cc H. J. Boise				
H. L. Jacobus				

Remarks: