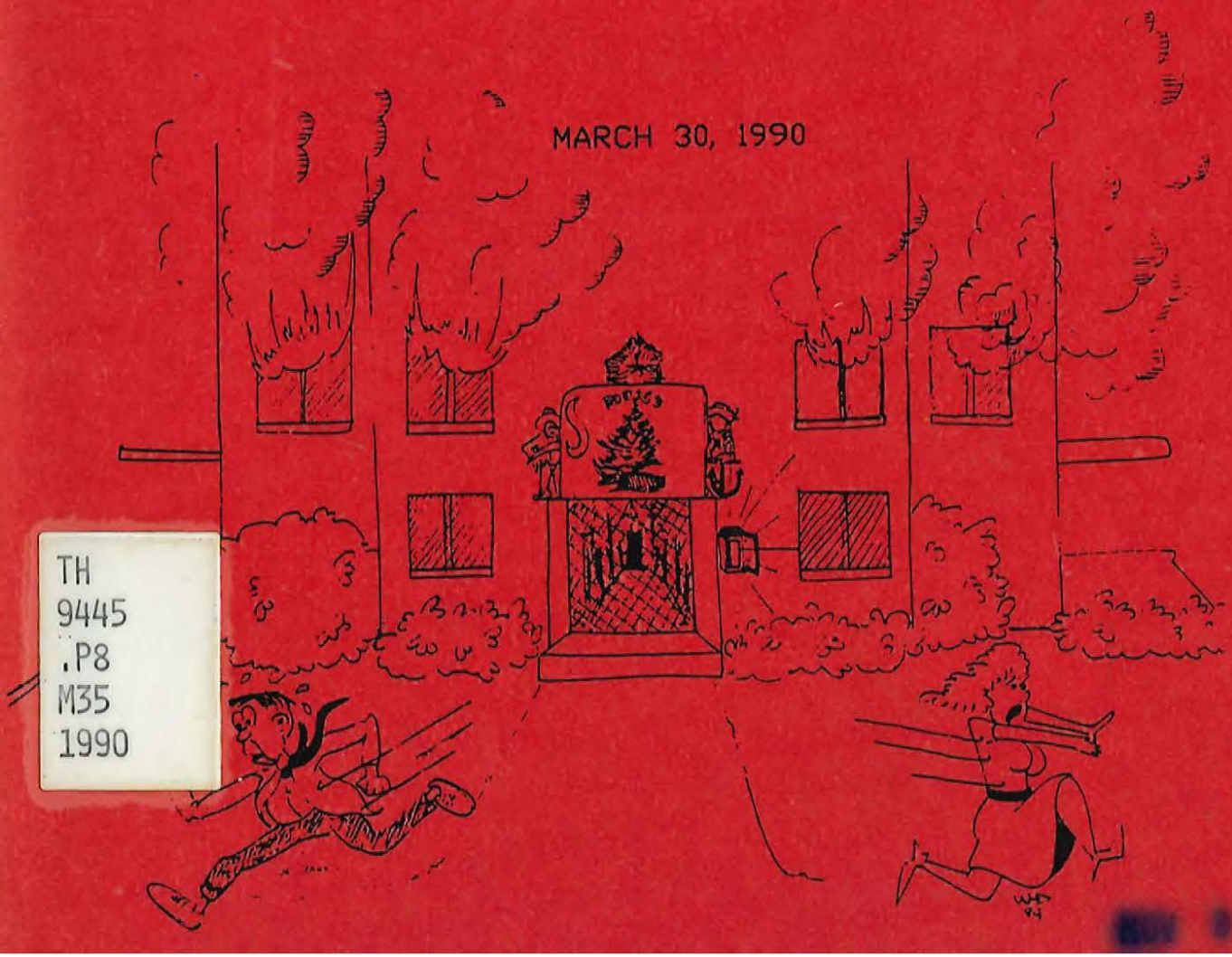
REPORT TO
JOINT COMMITTEE ON STATE AND LOCAL GOVERNMENT
ON
FIRE SAFETY STANDARDS IN BUILDINGS OCCUPIED
BY STATE WORKERS

FIRE

PREPARED BY
DIVISION OF SAFETY AND ENVIRONMENTAL SERVICES

HENRY E. WARREN, DIRECTOR

MARCH 30, 1990



John R. McKernan, Jr.
Governor

Charles A. Morrison
Commissioner

DEPARTMENT OF ADMINISTRATION

Telephone (207) 289-4505

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April 5, 1990

Senator Georgette Berube, Chair
Representative Ruth Joseph, Chair
and Members of the Joint Committee
on State & Local Government
114th Maine State Legislature
State House
Augusta, Maine 04333

RE: Fire Safety

Dear Legislators:

I am pleased to transmit to you an interim report in response to the 1989 Resolution entitled "Resolve, to Provide for the Evaluation of Fire Safety Standards in Buildings Occupied by State Workers."

As indicated in my January 25, 1990 letter on this subject, the process of responding to that Resolution became more complex and lengthy than anticipated. We are referring to this as an interim report because a continuation of the data gathering and consultation process is needed. However, this need not delay implementation of many of the recommendations.

It is clear that fire safety in employee occupied spaces needs substantial attention from all responsible parties. Structural, management, and employee awareness deficiencies exist in far too many areas. Your continuing support for a program which can correct these deficiencies is needed.

If we can answer any questions, please let me know.

Sincerely,

Charles A. Morrison
Commissioner

CAM:lck
cc: John R. McKernan, Governor
Beverly Bustin, Senator

EXECUTIVE SUMMARY

Passage of a 1989 Resolution by the Legislature was the basis for an evaluation of fire safety conditions in State employee occupied spaces. Lacking the capability to visit each of more than 1000 buildings, 825 fire safety questionnaires were sent to building occupants around the state, representing both management and labor perspectives. The 309 returns provide a good cross section view of fire safety conditions generally, but significant additional effort will be needed to get information on every building.

The Resolution sparked a new cooperative effort to focus attention on fire safety and has already led to some new activities and educational effort. However, the survey results indicate the need for much additional effort, particularly on the part of management at all levels. This is reflected in the lack of basic information and training in such areas as fire drills and egress plans. It is also reflected in the improper use of fire doors, inadequate testing of alarm systems and sprinklers, and inadequate escape routes.

In some cases the State is saddled with older facilities whose structural design does not meet current fire codes. Often little can be done about this without the expenditure of substantial funds. However, management and employee attention to this issue is a matter of continuous training and adequate

support for planning and testing, and these can be conducted at little cost.

The report recommends that the Governor consider the issuance of standard fire safety requirements for all facilities by Executive Order. All State agencies, with particular support from the Department of Administration, should insure that managers at all levels assume proper responsibility for fire safety and that employees receive proper and continuous training.

Input on this report will be sought from a number of State and local agencies whose assistance can be valuable. Regular reports on progress will be provided to the Governor and the Legislature.

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BACKGROUND

During the 1989 Regular Session the 114th Legislature passed L.D.1645, "A Resolve to Provide for the Evaluation of Fire Safety Standards in Buildings Occupied by State Workers". A report on the results of this analysis was required by January 31, 1990.

An interim report was filed prior to that date (see Appendix B) and this report is the second in a series which will be filed with the Joint Committee on State and Local Government.

A series of reports is needed because the subject matter is so complex and the number of parties involved requires an extensive review process. The method used to develop the resolution drew attention to employee concerns about fire safety in some of our facilities and final language made the review process a cooperative one. The resolution itself directed the Labor Management Committee on Safety to take a leadership role. This Committee is chaired by the Director of Safety and Environmental Services in the Bureau of Public Improvements and staffed by that Division. Consequently, the Division began to develop a new role as a contact for concerns about fire safety and to seek ways to identify and resolve these types of concerns. Given that neither staff nor funding was provided, this process has moved steadily, if slowly, forward.

A number of activities have developed as a result of the resolution:

1. discussion of the issue regularly in the Labor Management Committee and the development of a strategy to gather information for State facilities;
2. the planning and conducting of the first fire drill in five years within the State Office Building, a process that identified several flaws in the system which are now being corrected;
3. the development of a system for preparing fire emergency egress plans for State workplaces using the computer plans developed in the asbestos survey (Appendix G);
4. responding to requests for assistance by jointly conducting fire inspections with the State Fire Marshal's Office and arranging for follow-up action where apparent problems are found; and
5. requesting assistance from the Bureau of Human Resources in devising a program to insure that fire safety and other safety issues are paramount in all orientation programs for new or relocated employees.

Development of the report required by the resolution has turned out to be a more difficult process than anticipated. It was clear that a building-by-building inspection was impractical, as neither the funds nor the staff exists within the Fire Marshal's Office or the Division of Safety and Environmental Services. After struggling with this problem for some time, it was

determined that a simple survey conducted by employees, labor and management, at the facility level, was the only practical method. Considerable time was spent by the Division and the other participants in developing a questionnaire which would be informative and yet within the capabilities of the untrained person. The end result accomplished that goal, provided that it is seen as a screening effort only. Problems which are identified by the survey will require follow-up visits by trained personnel from a State or local agency.

Approximately 825 survey questionnaires were sent out to building managers, health and safety representatives, and Division contact persons. The return of only 309 of these, representing 268 buildings, limits the ability to make building-specific judgements in a large number of facilities. This is a gap which will have to be filled in other ways, such as visits by local fire departments and by Division staff. An additional effort to get more survey returns will also be made.

However, the returns available do enable conclusions to be drawn about key problem areas and the need for the direction of resources in response. Thus this report provides an overview of the fire safety problem in State facilities, but will require significant amendment if it is to be a corrective action tool for specific facilities.

The Division will continue to work in that direction.

METHOD AND LIMITATIONS

The method used in this study was a forty-five question "multiple-choice" questionnaire(See Appendix C). Questions were actually in a "Yes/No" form with "Not Required" (implying some knowledge of the Fire Safety Code), "Does Not Apply", and "Unable to Answer" as optional answers. Computer-readable answer forms were used in order to facilitate data manipulation. Questionnaires were direct-mailed to respondents and postage-paid return envelopes were supplied for return of answer sheets.

The questionnaire was mailed to a list of local management personnel believed to provide coverage of all State workplaces and to volunteer Health and Safety Representatives identified by employee unions. These were all people relatively untrained in fire safety and response was voluntary. Because of the combination of the two target populations, some duplicate response was expected, allowing a check on the variation in response due to individual knowledge/effort. This initial mailing list contained about 700 names.

Since the State has 1300 - 1400 "routinely occupied" (heated) buildings, potential respondents were asked to request forms for any additional buildings for which they might be responsible. Such requests brought the total number of questionnaires sent out to approximately 825. Of those, 309 were returned in time to be included in this report, representing 286 buildings, or something less than 20% of all heated State buildings. While this is not a

truly random sample, it appears representative in that the full variety of State workplaces seems to be included in the returns.

The low return may have been due to the fact that the questionnaire was lengthy and somewhat technical and response was voluntary. This means that the results presented here cannot be used with great precision to predict exact numbers of occurrences of particular situations. They can, however, be used to assess the relative frequency of occurrence quite reliably. It is not likely that the low return represents self-selection for problem buildings (that is, contains a disproportionately high level of "complaints"), since buildings with overall "good" responses are well represented.

Since all potential respondents had to be considered fire safety lay people, questions were limited to those answerable by direct observation or simple inquiry. This means that answers do not define specific fire code violations, but only provide indications of problem areas in a given building. That is, a completed questionnaire is <u>not</u> equivalent to a formal fire safety inspection but constitutes a lay person's observations which might guide an inspector to problems. Use of lay observers means that variation between observers is expected to be higher than for experts, but the presence of duplicate observations in the available data provides an opportunity to assess this in detail. At this time, such variation appears relatively unimportant since duplicate responses from any given building provided consistent answers.

RESULTS AND DISCUSSION

For the purpose of discussion, the questions have been divided into eight topical areas. For reference, the text of the questionnaire is located in Appendix C and a full results table in Appendix D.

FIRE DRILLS

This first area (Questions 1 - 4, Appendix C) can be considered most important in the saving of human life. Efficient, practiced evacuation is what removes people from the hazard. The purpose of alarm and suppression systems is tto provide extra time for safe evacuation and property protection. The State Fire Marshal's Office has said that four drills per year should be a minimum for State offices (one per quarter), and twelve per year a desirable maximum, given standards applied to other institutional settings.

Accordingly, it is not too strong a statement to say that the responses in this area are frightening. Only 94 (31%) of respondents said their workplaces ever have fire drills and only 52 (17%) more than once a year. This data may be optimistic because of the inclusion of mental health and correctional insutitions which generally have formal fire safety programs. We can eventually assess this in more detail, but there is clearly a need to focus attention on the fire drill program.

ESCAPE PLAN

While written escape plans (Questions 5 - 9) are required by O.S.H.A. regulations (29 CFR 1910.38), they have been implemented in few areas. The process of writing a plan forces the occupants to think through emergencies in advance, and this alone can save both lives and property. Since escape planning is closely related to drills in being a matter of personnel preparedness, similar results might be expected -- and occur. Only slightly more (112 or 36%) respondents indicate the existence of escape plans for their buildings, and not all of these are current or familiar to employees. Only a little more than half of existing plans account for handicapped or non-employee evacuation.

ESCAPE ROUTES

While overall this area (Questions 10 - 19) appears more positive, even those questions with the highest level of positive response (No. 11, condition of exits; and No. 13, exit doors opening outward) have significant numbers of negative responses. Some (No.12, pushbar latches on exits; No. 14, upper-floor access to outside escape routes) actually have higher negative than positive responses. No. 19, provision for handicapped evacuation, has more than 6.5 times as many negative responses as positive and more than two times as many "Does Not Apply" responses! Inclusion of the handicapped in fire safety considerations appears totally inadequate from this questionnaire.

While both the kind and extent of escape route problems vary considerably, many of them can be attributed to use of older space and space not originally designed for office use. Further analysis will tell if there are significant differences in these areas between leased and State-owned facilities. It seems likely that leased space is more often in or near compliance with Code, and therefore safer. While "building structure" matters, many of these items do not involve major capital expenditures (doors opening the wrong way or having improper latches, for example) in correction. In fact, the presence of these items on the questionnaire has prompted some interest in correcting specific items at the local level. Simple lack of awareness, both management and employee, appears to be an important underlying factor in these problems.

EXTINGUISHERS

Timely and correct use of fire extinguishers (Questions 20 - 24) evaluates employee knowledge of extinguishers. The response indicates that most employees do know the location and the basic operation of their extinguishers, but it is unclear if they know how to effectively fight fires with them. Unfortunately, that question does not lend itself to further examination by this instrument. Nonetheless, it seems safe to say that extinguishers are not the area of greatest concern in State workplace fire safety.

ALARMS

Timely warning of building occupants is critical to evacuation effectiveness and efficiency. Responses to Questions 25 - 30 do not paint an optimistic picture of this aspect of fire safety in State workplaces. Fully 48% of responses indicated a lack of an internal alarm system in the building, with a further 5% indicating "Not Required" or "Does Not Apply". Additionally, only 16% indicated that employees were familiar with outside alarm systems. Low levels of annual testing and familiarity with internal alarm systems were also indicated. 74% indicated that employees knew how to use the phones to report an emergency but 17% said they did not. While the presence and condition of a mechanical alarm system may be seen as a facilities issue and can involve considerable capital, testing is a management issue and an awareness problem. Employee training and planning remain the keys to improvement in this area of fire safety.

FLAMMABLES

Questions 31 - 36 look at the matter of incompatible uses and storage, insofar as a lay observer may do so. While only 6% of responses indicate inappropriate handling of fuel items in the workplace in general, about 10% indicate this is true for boiler rooms. This is a positive picture overall, better than anticipated, and again a matter of management/employee awareness.

SPRINKLERS

Question 37 indicates that only 24% of State workplaces have sprinkler systems. This is to be expected, as sprinklers are neither required nor appropriate for many buildings. However, Question 38 indicates that only 53% of existing systems are tested annually. This is a serious management problem. An untested system can be worse than none at all, because it can provide a false sense of security.

FIRE DOORS

There is some question as to the value of including Questions 39 - 45 because fire doors are one of the more complicated and confusing areas of the Fire Code. There is reason to doubt, for instance, that the 168 (55%) respondents indicating absence of fire doors in their buildings are all correct, since such doors are not necessarily marked in any obvious fashion. It can be taken from Questions 41 - 44 that nearly half of recognized fire doors are routinely kept open. About one quarter of those are closed by fusible links (no longer permitted) and a further quarter lack automatic closers and should not be kept open. Question 45 indicates that about 46% of stairwell doors are not kept closed at all times. An open fire door, of course, is of no value.

Because of the confusion regarding fire doors, it is difficult to say how widespread problems arising from them are in State workplaces. However, it is clear that management/employee awareness provides a solution to those identified here. Even the issue of fusible links is simply a matter of removing the links and keeping the doors closed, hardly a capital item.

"PROBLEM" BUILDINGS

Survey design began with the subjective impression that a building which has one problem with fire safety will have others. In order to evaluate the accuracy of this impression, eight questions (Nos. 3, 5, 10, 11, 13, 28, 30, and 45) were used as "indicator" questions. These eight questions cover a variety of fire safety issues, and a negative answer to any one constitutes a significant fire safety problem.

Some 62% of respondents answered two or more of these questions negatively. 28% answered four or more negatively. This confirmed the original impression and indicated that the majority of State workplaces have multiple fire safety problems.

CONCLUSIONS AND RECOMMENDATIONS

STRUCTURAL DEFICIENCIES

Aspects of building structure which affect fire safety vary considerably with building design, construction, use, occupancy, and age. Detailed evaluation, as previously mentioned, is beyond the capability of the lay observer. Questions 10 - 19, particularly 14 - 16, all bear to some extent on the area of structural deficiencies. None, however solicit detailed, specific information.

To the extent that structural deficiencies are indicated, there is reason for concern. Question 14 indicates that the majority of upper-floor occupants in the workplaces represented do not have access to external escape routes. This presumably includes the unusable fire escapes indicated in No. 15. While basement occupants seem somewhat better off, there is still a significant number of negative answers to Question 16. Matters such as overcrowding, width of exits and corridors, numbers of exits, etc., would require interpretation of the Fire Code and were not included in the questionnaire. Written comments were solicited from respondents, but only nine provided any (Appendix E), showing a concern for adequacy of exits. Therefore, while the survey information does not give significant detail on the problem of structural deficiencies, there are some useful conclusions that can be drawn.

Many State-owned facilities are very old, and built at a time when fire code requirements and knowledge of fire safety procedures were different than they are today. In many cases efforts have been made to modify these old structures to improve compliance with today's codes, but success is limited by funds and original designs.

A prominent example of this problem is the State Office Building, built in 1952-54. Exit stairs start and end at interior locations well away from perimeter exits. Therefore, hundreds of occupants must leave the stairwells and go to perimeter exits by way of corridors that are not fire-rated. This structural deficiency could be corrected by building stair towers at the north and south ends of the building. Such construction would be extremely expensive and very difficult to blend in with the building's architecture.

Additionally, a recent fire drill in the building showed that occupants at the extreme ends of the building could not hear the fire alarm on a number of floors. Modifications have been made to extend the system and it is expected that reception problems will be eliminated at the next drill.

The Education Building is another nearby example of a facility with structural problems. The building has been modified extensively over the years so as to present a maze of corridors to the person trying to exit in an emergency situation. Short of a major renovation it is unlikely that a significant improvement could be made in the situation. Clearly, evacuation planning and fire drills are therefore extremely critical in such buildings.

Recently a fire in waste bins stored in the alley way entrance to the Education Building spotlighted a structural and operational deficiency. The need for recycled paper storage overnight was created by lack of storage space in the building. Had the fire not been observed by Capitol police the building might have received more damage than it did. Construction of a permanent covered storage bin enabled control over the recycled paper at modest cost.

Some type of structural deficiency appears to be present in over one-third of the 268 facilities surveyed. Given the lack of expertise held by the respondents it is possible that the share could be higher. It will only be possible to accurately assess structural deficiencies by training management personnel to a level adequate to recognize them, or by arranging for inspection by fire safety professionals. The latter is clearly the more cost-effective and is recommended.

While this will be a substantial undertaking in itself, correction of other fire safety deficiencies need not wait for this to be completed, and substantial gains in fire safety can be made without it. When it is feasible to correct fire and life safety code problems, they are always rated at the top in the capital budget planning process. Recent budget cuts seriously limited the ability of the Bureau of Public Improvements to address even those, however.

MANAGEMENT DEFICIENCIES

To address the issue of management deficiencies the survey focused on planning, personnel management, and facilities management. Limits on the ability to correct structural deficiencies places an even higher priority on the need to reduce management deficiencies. All planning questions received very high rates of negative response, as did all employee training/equipment and practice questions. Even questions of facilities management in the area of "housekeeping" (e.g., Nos. 10 and 11 and the "Flammables" questions) have significant rates of negative responses. Those such as 12, 13 and 17, regarding minor facility modification or equipment, are strongly negative. These negative responses point to errors in operational controls or housekeeping methods which can most likely be corrected by alertand diligent managers and employers.

Again using the State Office Building as an example, the most recent fire inspection report resulted in numerous violations attributable to improperly located extension cords. In some cases the relocation of outlets can correct this, but even the use of cord channels on the floor can reduce both a safety and fire hazard. Improperly stored chemicals, placement of waste containers near heat sources, fire doors propped open for air circulation, and blocked exit corridors are other examples of easily resolved problems. However, maintaining the corrective action requires significant management effort.

Recently, in a leased facility, a walk-through inspection revealed a large waste paper container being used to prop open a fire door at the base of the exit stairwell. Several months of prodding and a citation from the Bureau of Labor Standards was needed to get corrective action.

A similar problem occurred in a leased facility where flammable materials were stored next to the furnace and the fire exit was partially blocked with boxes of copy machine paper. A real effort over several weeks was required to get landlord action.

A recent inspection of a work facility for disabled clients revealed housekeeping problems with regard to exits being partially blocked by waste paper. When combined with structural deficiencies, situations like this one present a high level of risk due to the limited mobility of the occupants.

A glaring management deficiency is the absence of a consistent policy in statute or policy directive for State employee occupied facilities. Management attention to such issues as fire drills and fire inspections varies widely with Department and location. Clear minimum standards should be established in the near future.

Perhaps the major deficiency in the management aspect of fire safety is a lack of attention. Regular fire drills should be a given for any public facility and regular inspections by both management and trained inspectors should be routine. Exit signs and emergency egress lights require regular maintenance, as do fire extinguishers. Fire alarms and emergency lights should

be tested frequently, and adjustments to fire exit plans should be made to reflect structural or operational changes in the facility.

Because even the "low cost" aspects of management attention to fire safety seem neglected, it is likely that the single biggest contributing cause to this situation is lack of management awareness/training. This can be addressed by management education and by making expert assistance available to management, particularly in the development of building-specific fire safety plans. Both should be undertaken as part of a coherent statewide fire safety program. This can be undertaken concurrently with a facilities survey -- even a structurally poor building can be rendered significantly safer.

DEFICIENCIES IN EMPLOYEE KNOWLEDGE

All questions regarding employee training or assessing employee familiarity with fire safety systems had significant negative responses, many highly negative. This is particularly significant since it is employees, collectively and individually, whose behavior is primary in saving both life and property in an emergency. The high numbers of inappropriate "Not Required" and "Does Not Apply" responses and the low overall response to the questionnaire suggest that employee awareness of fire safety and concern for it are very low. Before questions of specific deficiencies in knowledge can be effectively addressed, both employees and management must be made to understand the importance of fire safety.

The lack of fire drills is clearly not a "structure" problem, but it is difficult to say whether it is primarily "management" or "employee" based. In some cases, fire drills fall into disuse because management becomes discouraged with employee resistance. In others, management objects to the loss of work time. These are indications that both management and employee components are involved. The number of "Not Required" and "Does Not Apply" responses seem to reinforce the idea of a general lack of awareness as underlying cause.

Beyond this basic awareness level, employee training must be largely specific to the facility, and should be designed as part of a facility-specific fire safety plan. Therefore, a state-wide employee awareness program incorporated into the initial orienta-

tion program and directed at all levels of State government is needed. This should be designed to provide a sound foundation for facility-specific training to follow.

RECOMMENDED PROGRAM

Based on present knowledge and the need for additional data, a state-wide fire safety program with the following components is recommended:

1. Professionally conducted building surveys focused on facility deficiencies, but encompassing all fire safety issues. This element will take considerable time for completion, and the correction of structural deficiencies discovered will also require time for correction, since both are heavily dependent on limited resources. However, surveys can be conducted by trained members of local fire departments at little or no cost if their cooperation can be gained. In smaller communities this approach can substitute for more costly methods.
2. State-wide fire safety awareness training for all State employees. Such a program is yet to be developed, but is considered the single most important element in a successful program.
3. A program of technical assistance to local management in planning and implementation of fire safety programs at all State workplaces. This is already in early stages of development by the Division of Safety and Environmental Services.
4. Execution of an Executive Order requiring the development and implementation of a fire safety program specific to each State workplace including regular fire

drills and equipment tests. This would include provision for regular review and update of all such programs, and facility-specific fire safety training for all state employees.

Progress can be made on all these points concurrently, and all such progress adds to State workplace safety.

APPENDIX A

L.D. 1645

A RESOLVE TO PROVIDE FOR THE EVALUATION OF FIRE SAFETY STANDARDS IN BUILDINGS OCCUPIED BY STATE WORKERS

STATE OF MAINE

IN THE YEAR OF OUR LORD
NINETEEN HUNDRED AND EIGHTY-NINE

S.P. 583 - L.D. 1645

Resolve, to Provide for the Evaluation of Fire Safety Standards in Buildings Occupied by State Workers

Emergency preamble. Whereas, Acts and resolves of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, the Commissioner of Administration, in conjunction with the Interdepartmental Committee on Safety in the Workplace and the Labor Management Committee on Building Safety are directed by this resolve to evaluate fire safety standards in buildings occupied by state workers and report their findings and recommendations, including any necessary implementing legislation, to the Second Regular Session of the 114th Legislature; and

Whereas, this evaluation must be initiated prior to the effective date of legislation enacted by the First Regular Session of the 114th Legislature; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore, be it

Sec. 1. Evaluation of fire safety standards. Resolved: That the Commissioner of Administration, working with the Interdepartmental Committee on Safety in the Workplace and the Labor Management Committee on Building Safety, shall evaluate the effectiveness and implementation of fire safety standards in buildings occupied by state workers including state-owned and leased facilities. Facility areas to be evaluated shall include,

but not be limited to, exit doors, fire escapes, upper floor exits, basements, incompatible uses, sprinklers, fire drills and emergency lights; and be it further

Sec. 2. Consultation with other interested parties. Resolved: That the Commissioner of Administration shall consult with the Department of Public Safety, the Maine Fire Chiefs Association, an organization representing municipal code enforcement officers and an organization representing landlords who lease facilities in which state employees work, with respect to the evaluation required in this resolve; and be it further

Sec. 3. Report. Resolved: That the Commissioner of Administration shall report the findings of the required evaluation, along with recommendations for implementation, and, if possible, estimated costs of these recommendations to the Joint Standing Committee on State and Local Government no later than January 31, 1990.

Emergency clause. In view of the emergency cited in the preamble, this resolve shall take effect when approved.

APPENDIX B

INTERIM REPORT

John R. McKernan, Jr.
Governor

Charles A. Morrison
Commissioner

DEPARTMENT OF ADMINISTRATION

Telephone (207) 289-4505

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January 25, 1990

Senator Georgette Berube, Chair
Representative Ruth Joseph, Chair
and Members of the Joint Committee
on State & Local Government
114th Maine State Legislature
State House
Augusta, Maine 04333

RE: Fire Safety

Dear Legislators:

During the first session this Legislature passed a resolution in which the problem of fire safety in State facilities was identified as a concern. The resolution directed an analysis of a series of issues by the Department of Administration in concert with employee representatives and other qualified and interested parties. I want to report to you on our progress in this area and ask your support for an extension of the January 31st deadline established in the resolution for a formal report.

The process of developing the resolution drew attention to employee concerns about fire safety in some of our facilities and language was agreed to which made the review process a cooperative one. The resolution itself directed the Labor Management Committee on Safety to take a leadership role. This Committee is chaired by the Director of Safety and Environmental Services in the Bureau of Public Improvements and staffed by that Division. Consequently, the Division began to develop a new role as a contact for concerns about fire safety and to seek ways to seek out and resolve these types of concerns. Given that neither staff nor funding was provided, this process has moved steadily, if slowly, forward. Examples of activity in the fire safety area include:

1. discussion of the issue regularly in the Labor Management Committee and the development of a strategy to gather information from our facilities;

2. meetings with staff at the University of Maine to develop a survey instrument which would enable us to gather useful information from employees (copy attached);

3. meetings with the Fire Marshall's staff to develop the questionnaire;

4. the planning and conduct of the first fire drill in five years within the State Office Building, a process that identified several flaws in the system which are now being corrected;

5. the development of a system for preparing escape route plans for various locations in a building using the computer plans developed in the asbestos survey (copy attached);

6. responding to requests for assistance by conducting fire inspections and arranging for follow up actions where apparent problems are found; and

7. requesting assistance from the Bureau of Human Resources in devising a program to insure that fire safety and other safety issues are paramount in all orientation programs for new or relocated employees.

During this process we have concluded that fire safety problems fall into three broad categories:

1. structural deficiencies in the facility which can be corrected only with significant capital investment;

2. management deficiencies in housekeeping or operational controls which can be corrected with cooperation, training and vigilance; and

3. deficiencies in employee knowledge, which can be corrected with constant training and heightened awareness.

One goal for this effort will be the development of an Executive Order for approval by the Governor establishing clear State policy for the conduct of fire drills, the training of employees and the operation of facilities in a safe manner. While all of these activities exist in varying degrees within the departments and their facilities, there is no standard to which all are held.

Development of the report required by the resolution has turned out to be a more difficult process than anticipated at the last session. It is clear that a building by building inspection was impractical, as neither the funds nor the staff exist within the Fire Marshall's Office or the Division of Safety and Environmental Services. After struggling with this problem for some time, it was determined that a simple survey conducted by employees, labor and management, at the facility level was the only method. Considerable time was spent by the Division and the other participants in developing a questionnaire which would be informative and yet within the capabilities of the untrained person. The end result should accomplish that goal, provided that it is seen as a screening effort only. Problems which are identified by the survey will require follow up visits by trained personnel from a State or local agency.

As a result of the difficulties noted, the survey has yet to be completed. It is our intent to distribute the questionnaire in early February, with the goal of getting all returns in by the end of that month. Allowing time for clarification and analysis should result in a report to your Committee no later than March 31st. Of course, follow up visits and inspections will require an unknown amount of additional time. However, I will keep the Committee informed regularly as we move ahead.

Please contact me if you have any questions.

Sincerely,

Charles A. Morrison
Commissioner

CAM:sjd

cc: Senator Beverly Bustin
Governor John R. McKernan, Jr.

Attachments (3)

APPENDIX C

QUESTIONNAIRE

FIRE SAFETY QUESTIONNAIRE

Labor-Management Committee on Building Safety

This questionnaire is designed for use by MSEA Health and Safety Representatives. It is intended to identify specific points of fire safety which can be improved in State workplaces and the results will be part of a report required by the Legislature. Your cooperation in careful and complete evaluation of fire safety in your building will benefit all State employees. This requires gathering information from both co-workers and building management. Use this as an opportunity to introduce yourself as HSR to your supervisor(s), coworkers, and any other HSR's in your building. Cooperation and teamwork are the keys to reliable information.

Instructions: Use a sharp Number 2 pencil only, and do not write or make any extra marks anywhere on the answer sheet. Mark your answers by completely filling in the small circle indicating your answer. If you make an error or change your mind, erase the incorrect mark completely.

Begin by encoding your workplace number, _____, in the IDENTIFICATION NUMBER block on the answer sheet. First, write the number, one digit per box, in the row of boxes at the top of the block, starting at the LEFT. Next, mark the matching digit in the column under each box.

Mark only one answer per question. Do not guess at an answer -- ask whomever you need for the information. However, if you CANNOT find the answer to any question, indicate this by marking "E", "Unable To Answer", on the answer sheet. Comments are welcome on any question or on fire safety at your facility in general. Please use a separate sheet of paper, and indicate the question(s) commented on. Place the answer sheet and any comments in the envelope provided and mail.

The Committee greatly appreciates your help in this. We are depending on you for this information -- many thanks!

ANSWER VALUES

A = YES B = NO C = Not Required

D = Does Not Apply E = Unable To Answer

QUESTIONS

FIRE DRILLS.

1. Are fire drills performed twice a year or more in your building?
2. Are fire drills performed at least once a year?
3. Are fire drills ever performed?
4. Is EVERYBODY evacuated?

ESCAPE PLAN.

5. Does your building have a written escape plan?
6. Are employees familiar with it?
7. Does the plan reflect the current use and layout of the building?
8. Does it provide for handicapped employees?
9. Are employees trained/assigned for evacuation of non-employees?

ESCAPE ROUTES.

10. Are routes posted, clear and usable?
11. Exits plainly marked, clear and usable?
12. Do all exit doors have pushbar latches?
13. Do all exit doors open outward?
14. Do ALL occupied floors above the ground floor have direct access to escape routes OUTSIDE the building (fire escapes, outside stairways)?
15. If your building has fire escapes, are they sound and usable?
16. If your basement is routinely occupied, does it have direct access to outside escape routes?
17. Do all escape routes have emergency lighting?
18. Is emergency lighting regularly tested?
19. Is special equipment/employee training provided for evacuation of handicapped individuals?

EXTINGUISHERS.

20. Are your building's extinguishers accessible?

21. Are your building's extinguishers well marked?
22. Are your building's extinguishers properly inspected (check tags)?
23. Are your building's extinguishers the correct type?
24. Do employees generally know where they are and how to use them?

ALARMS.

25. Does your building have an inside alarm system?
26. Is the system tested at least once a year?
27. Does the system include smoke detectors or heat sensors?
28. Do most employees know how to use the system?
29. Do most employees know where the nearest outside alarm is?
30. Do most employees know whom to call, and <u>at what number(s)</u> in an emergency?

FLAMMABLES.

Are the following materials stored/used away from ignition sources:

31. burnable trash (cardboard, styrofoam, etc.)?
32. flammable liquids (paint, solvents, etc.)?
33. other burnable/flammable materials?

Is the boiler room used for storage of:

34. burnable trash (cardboard, styrofoam, etc.)?
35. flammable liquids (paint, solvents, etc.)?
36. other burnable/flammable materials?

SPRINKLERS.

37. Does your building have a sprinkler system?
38. Is the system tested at least once a year?

FIRE DOORS.

39. Does your building have fire doors?
40. Are they so marked?
41. Are they kept closed?
42. If kept open, are they held so by fusible links?
43. If kept open, are they closed automatically by alarm?
44. If kept open, are they closed automatically by heat/smoke detectors?
45. Are stairwell doors kept closed <u>at all times</u>?

APPENDIX D

TABLE I - RESULTS

FIRE SAFETY QUESTIONNAIRE RESPONSES

TABLE 1

QUESTION	YES		NO		NOT REQ'D		NOT APP'BLE		UNABLE/ANSWER		TOTAL
1	52	17%	225	73%	19	6%	9	3%	2	1%	307
2	80	26%	193	63%	16	5%	10	3%	7	2%	306
3	94	31%	181	59%	14	5%	12	4%	5	2%	306
4	94	31%	71	23%	10	3%	84	27%	47	15%	306
5	112	36%	165	54%	8	3%	8	3%	14	5%	307
6	98	32%	89	29%	23	8%	61	20%	35	11%	306
7	108	35%	63	21%	24	8%	72	24%	38	12%	305
8	58	19%	119	39%	19	6%	74	24%	35	11%	305
9	67	22%	156	51%	13	4%	50	16%	18	6%	304
10	173	57%	100	33%	11	4%	14	5%	6	2%	304
11	243	80%	48	16%	7	2%	6	2%	1	0%	305
12	106	35%	169	55%	16	5%	13	4%	1	0%	305
13	229	75%	71	23%	0	0%	3	1%	2	1%	305
14	76	25%	93	30%	12	4%	117	38%	7	2%	305
15	40	13%	14	5%	25	8%	207	68%	19	6%	305
16	84	28%	17	6%	11	4%	176	58%	17	6%	305
17	134	44%	126	41%	13	4%	18	6%	14	5%	305
18	101	33%	66	22%	9	3%	82	27%	47	15%	305

FIRE SAFETY QUESTIONNAIRE RESPONSES

TABLE 1 -- CONTINUED

QUESTION	YES		NO		NOT REQ'D		NOT APP'BLE		UNABLE/ANSWER		TOTAL
19	28	9%	184	60%	16	5%	61	20%	16	5%	305
20	282	93%	17	6%	0	0%	2	1%	3	1%	304
21	239	79%	55	18%	1	0%	3	1%	6	2%	304
22	250	83%	32	11%	0	0%	3	1%	17	6%	302
23	236	78%	10	3%	0	0%	3	1%	54	18%	303
24	208	68%	59	19%	1	0%	2	1%	35	11%	305
25	134	44%	147	48%	9	3%	6	2%	10	3%	306
26	99	33%	55	18%	16	5%	104	34%	30	10%	304
27	115	38%	96	32%	12	4%	56	18%	25	8%	304
28	90	30%	59	20%	15	5%	111	37%	27	9%	302
29	50	16%	95	31%	11	4%	96	32%	52	17%	304
30	227	74%	52	17%	0	0%	4	1%	23	8%	306
31	265	87%	17	6%	1	0%	6	2%	17	6%	306
32	239	78%	16	5%	1	0%	26	8%	24	8%	306
33	237	78%	20	7%	1	0%	21	7%	26	9%	305
34	27	9%	179	58%	1	0%	63	21%	36	12%	306
35	29	9%	177	58%	1	0%	63	21%	36	12%	306
36	33	11%	171	56%	1	0%	63	21%	36	12%	304

FIRE SAFETY QUESTIONNAIRE RESPONSES

TABLE 1 -- CONTINUED

QUESTION	YES		NO		NOT REQ'D		NOT APP'BLE		UNABLE/ANSWER		TOTAL
37	72	24%	215	70%	5	2%	7	2%	7	2%	306
38	38	12%	49	16%	22	7%	163	53%	33	11%	305
39	104	34%	168	55%	9	3%	12	4%	12	4%	305
40	48	16%	94	31%	10	3%	136	45%	16	5%	304
41	64	21%	58	19%	12	4%	151	50%	20	7%	305
42	14	5%	59	19%	12	4%	193	63%	26	9%	304
43	17	6%	61	20%	13	4%	189	62%	24	8%	304
44	14	5%	65	21%	14	5%	186	61%	24	8%	303
45	79	27%	66	23%	13	4%	123	43%	8	3%	289
TOTALS	5187	38%	4242	31%	447	3%	2869	21%	958	7%	13703

APPENDIX E

WRITTEN COMMENTS

The following written comments were submitted in response to the fire safety questionnaire. The comments have been edited for spelling.

"Smoking inside the building most offensive to those who work here."

"State-owned alarm system disabled by landlord in leased space."

"I'm concerned with having just 1 exit in my work place. Is there a way this can be resolved?"

"Question #4 -- Is everyone evacuated? Note: Exception 1989 - small fire on 2nd floor - only portion of the building notified.
Escape Routes. Question #14 -- inside stairwell only. Question #16 -- access to outside only by inside stairwell to the ground floor.
Alarms. Question #27 -- Lab has heat sensors only - no smoke detectors.
Sprinklers. Question #38 -- Note: cannot test sprinkler systems due to lab equipment."

"#12) All our outside doors have pushbars, but not exits into interior stairwells.
#18) Need BPI to inform us if the emergency lighting is tested and when & how often.
#22) They are checked annually - last checked 3/16/89 - should be checked at least twice a year.
#26) Am not aware of anyone testing the system since it was installed.
#28) To what system are you referring to - the smoke detector/heat sensor system, or the fire alarm system, or a combined system.
#31-36) The only source of ignition in this building is the boiler room. Since it is kept under lock by BPI, I can only assume its condition and whether there are burnable or flammable materials stored there."

"#5. While our building has no designated escape plan, it is a new structure with at least one large window in each office & on a ground floor. Getting out through a window could be quick and easy."

"At this time the old District Ranger house is being used for an office and is not set up as a permanent office space. Plans are made for a new office area by summer of 1990. It may be better to send the questionnaire at a later date after that time."

"Escape Routes -- #14) All escape routes are through interior stairways.

#17) No emergency lights in bathrooms.

Alarms -- #25) Alarms cannot be heard in bathrooms."

"This office building is actually a former home with a complete kitchen and a separate furnace room in the cellar. It has nine (9) rooms on the main floor. The cellar has an overhead door so vehicles/snowmobiles are sometimes worked on in the cellar.

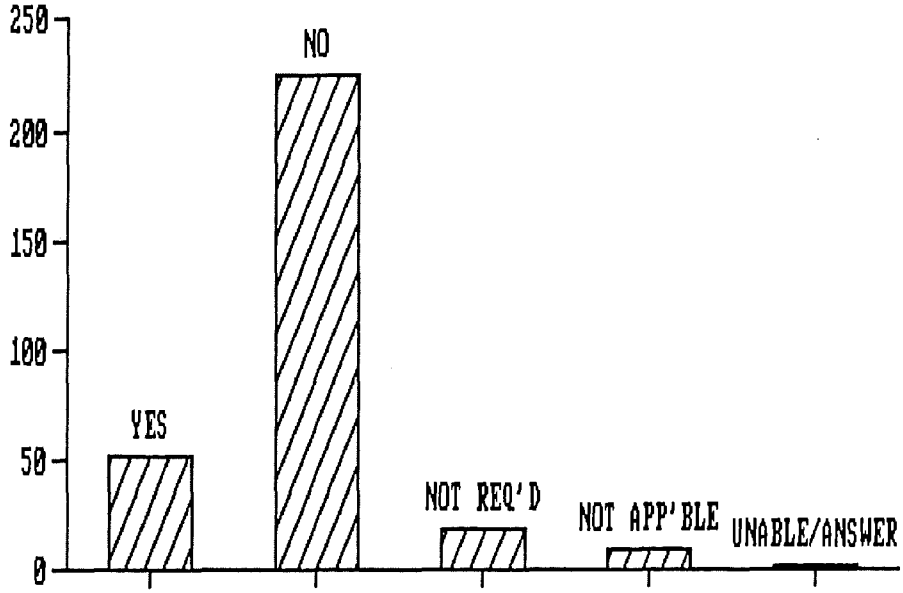
A main concern of mine is a dead end room off the cellar. There is only one door to this office with no other way of escape if the cellar was burning. (1) One person occupies this room. The cellar area has no smoke alarms and usually has gas containers sitting around.

The smoke alarm on the main floor was lying on a desk with no battery in it."

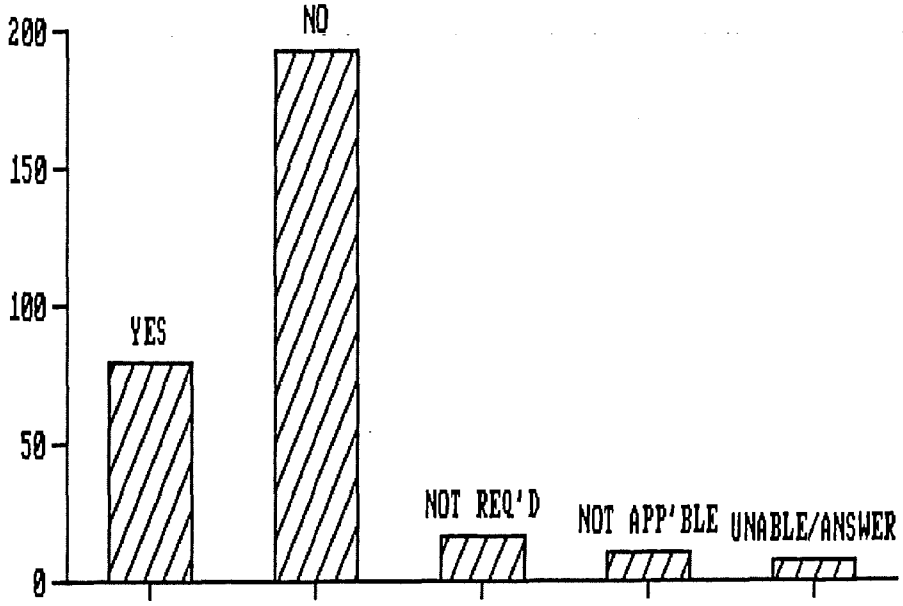
APPENDIX F

GRAPHS

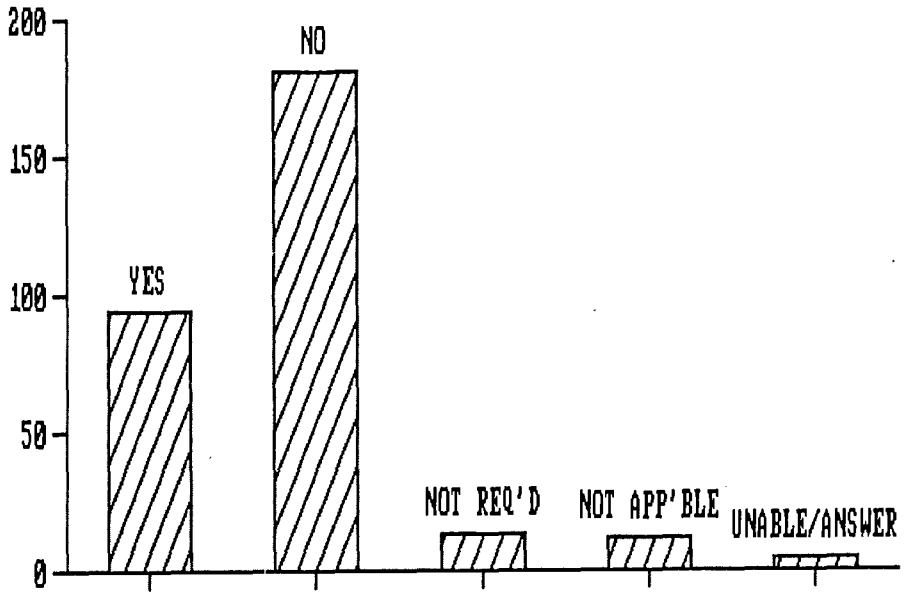
FIRE SAFETY QUESTION #1
Are drills performed twice a year?



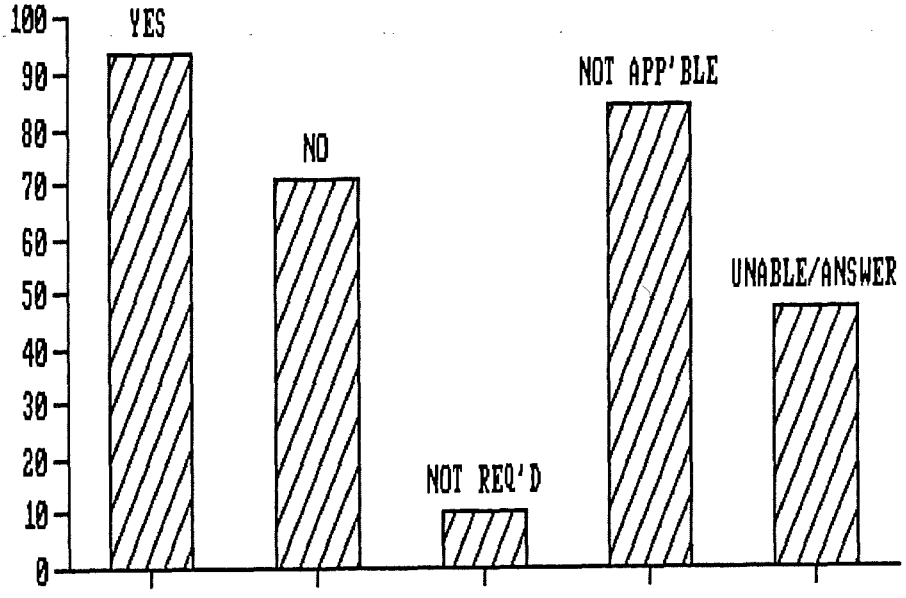
FIRE SAFETY QUESTION #2
Are drills performed once a year?



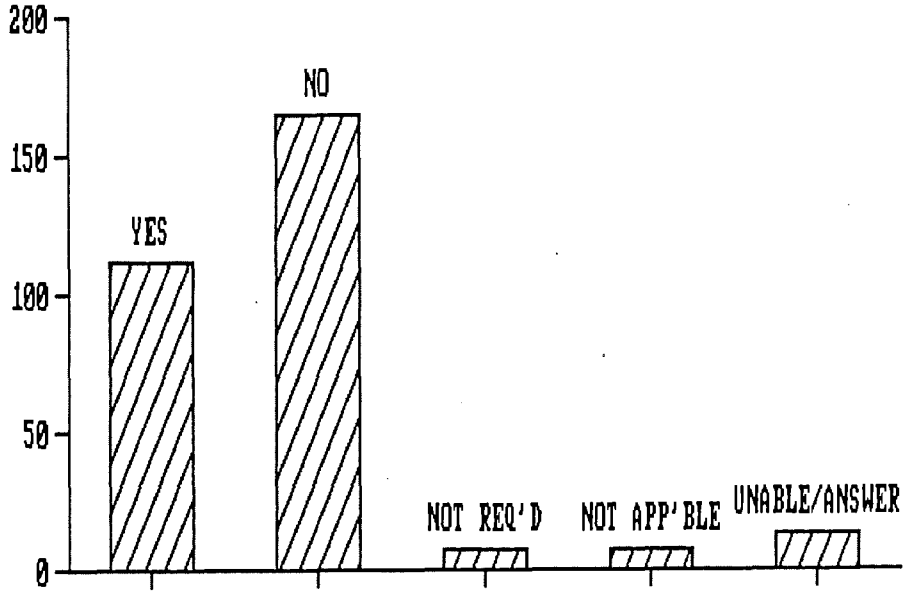
FIRE SAFETY QUESTION #3
Are fire drills ever performed?



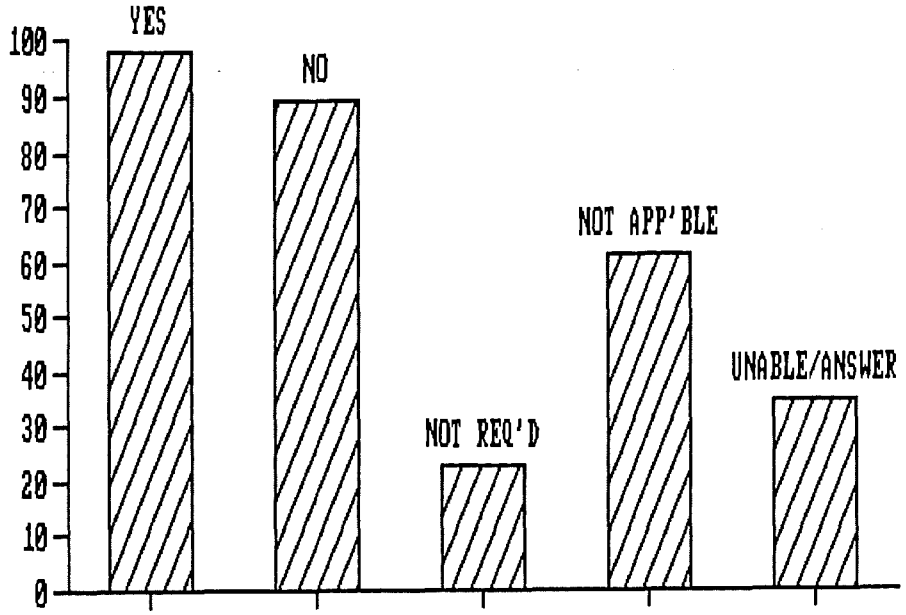
FIRE SAFETY QUESTION #4
Is everybody evaucated during drills?



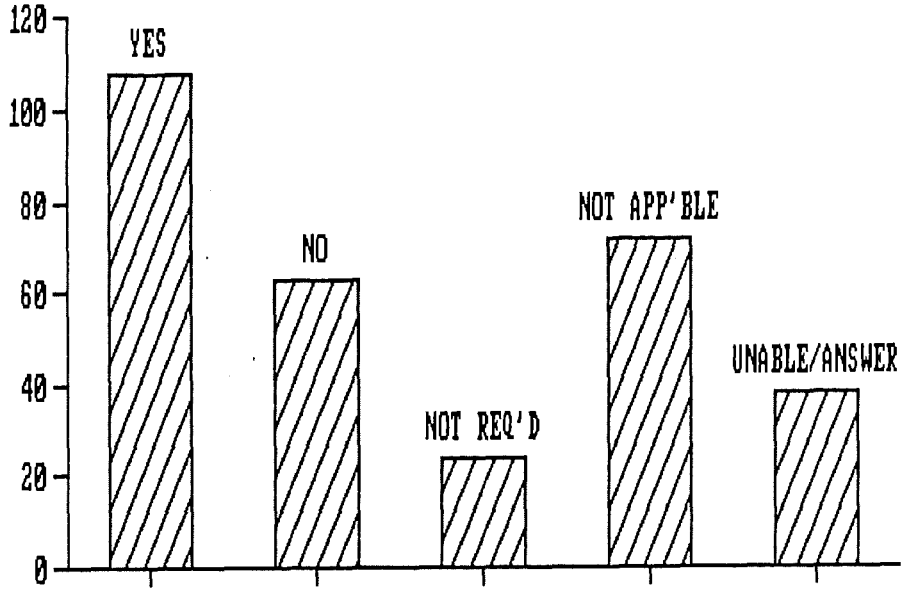
FIRE SAFETY QUESTION #5
Does your building have an escape plan?



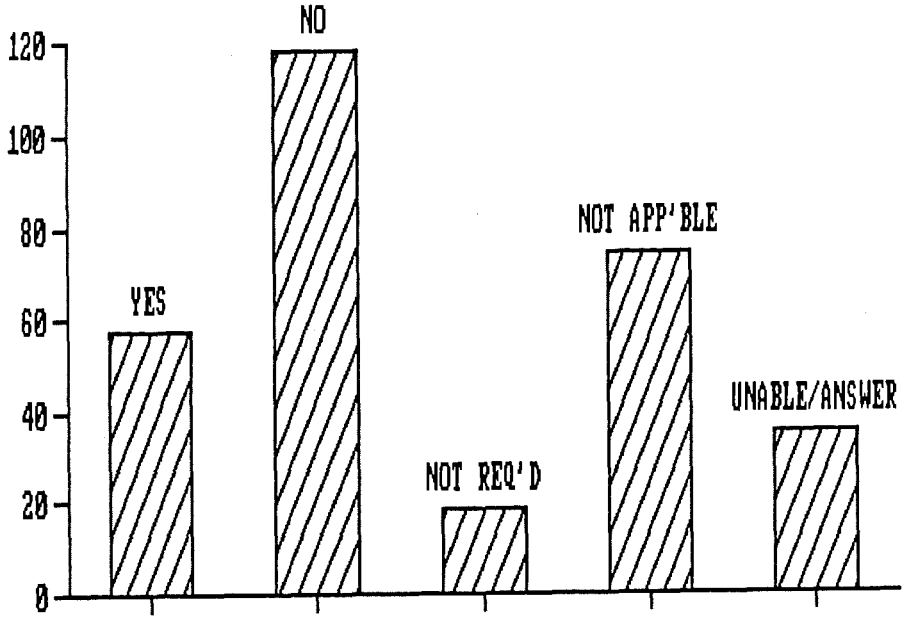
FIRE SAFETY QUESTION #6
Are employees familiar with escape plan?



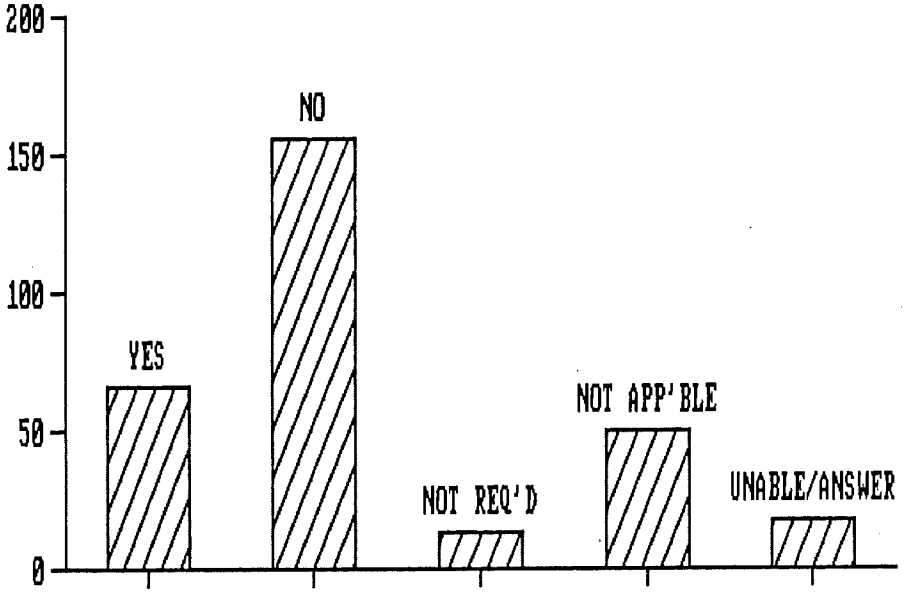
FIRE SAFETY QUESTION #7
Is the escape plan current?



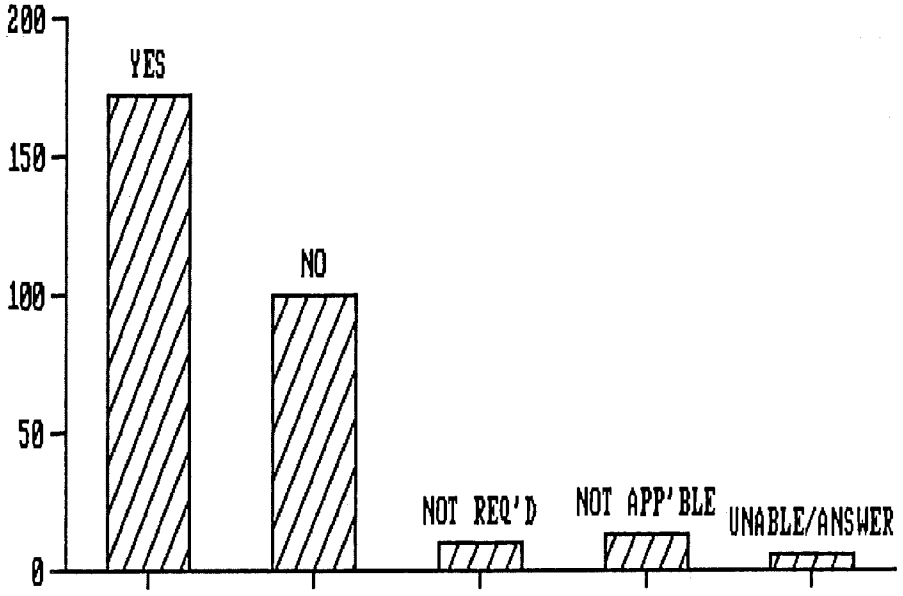
FIRE SAFETY QUESTION #8
Does plan include handicapped employees?



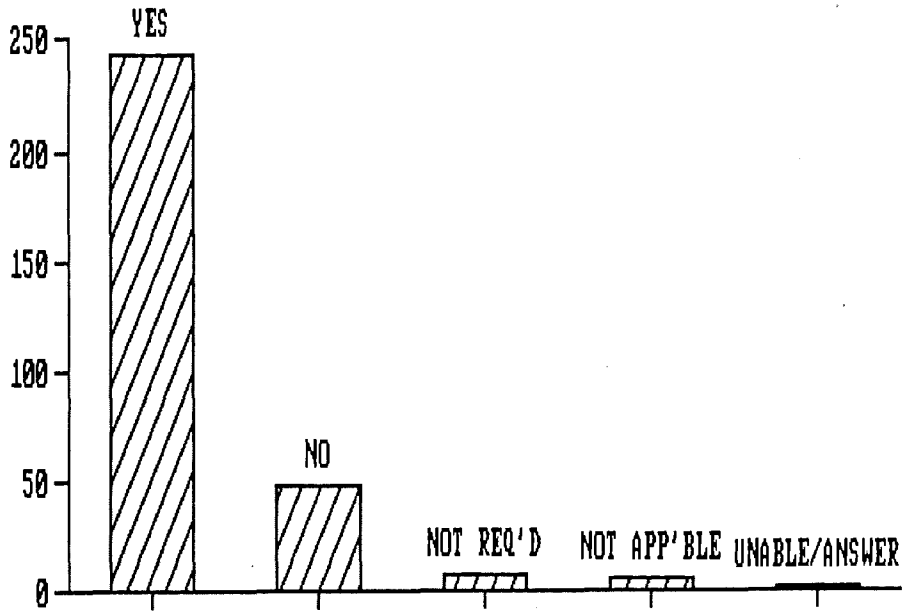
FIRE SAFETY QUESTION #9
Emp. trained to evacuate non-employees?



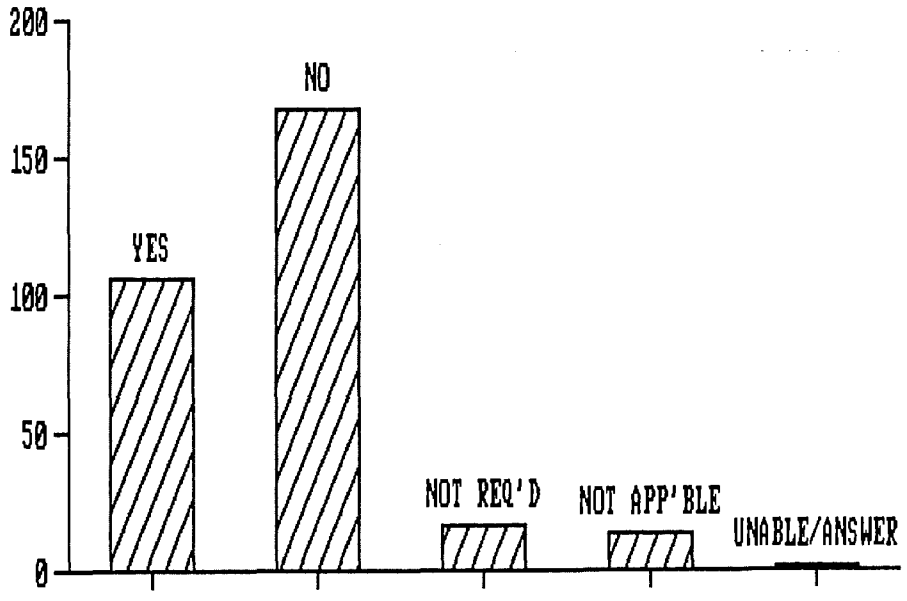
FIRE SAFETY QUESTION #10
Are routes posted, clear, and usable?



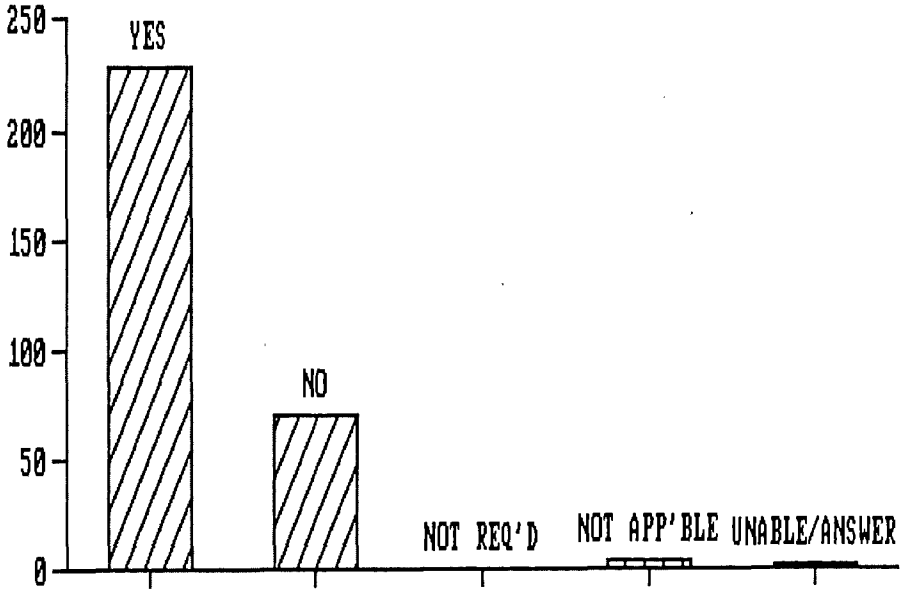
FIRE SAFETY QUESTION #11
Are exits marked, clear, and usable?



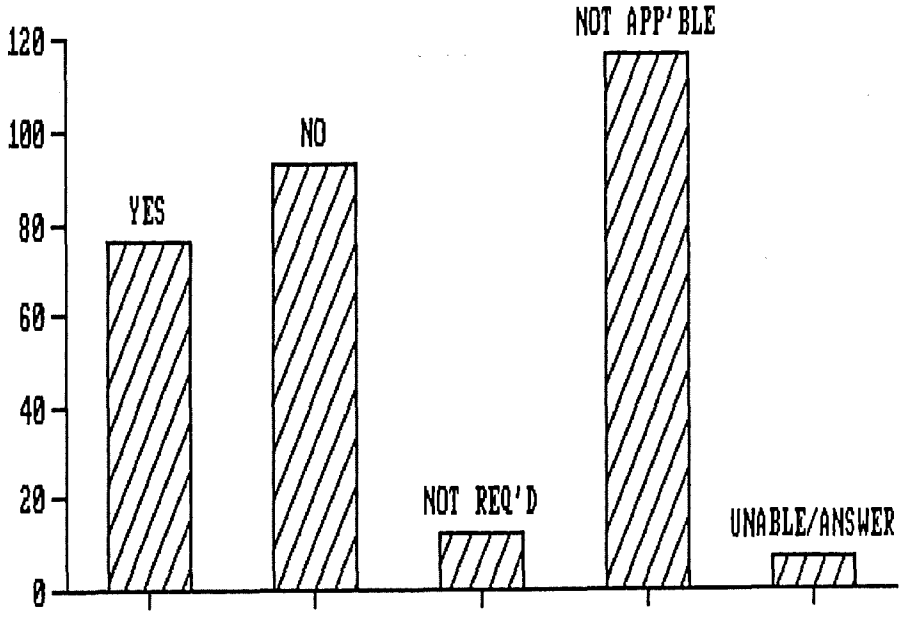
FIRE SAFETY QUESTION #12
Do all exit doors have pushbar latches?



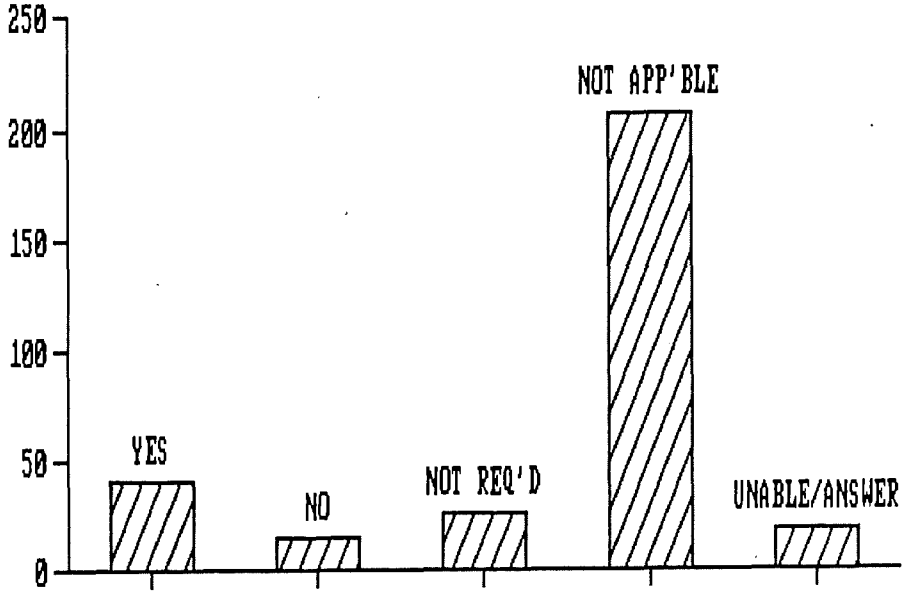
FIRE SAFETY QUESTION #13
Do all exit doors open outward?



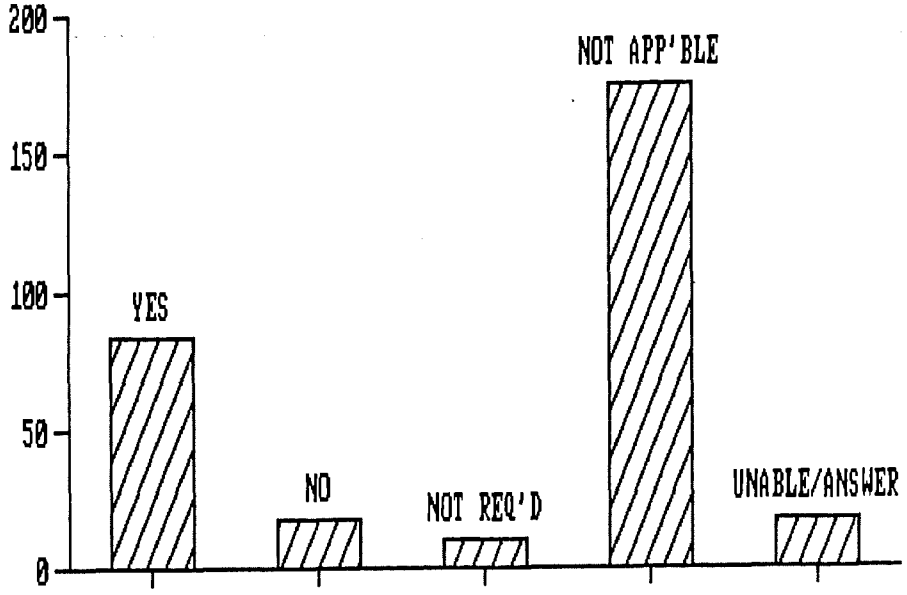
FIRE SAFETY QUESTION #14
Do upper floors have outside exits?



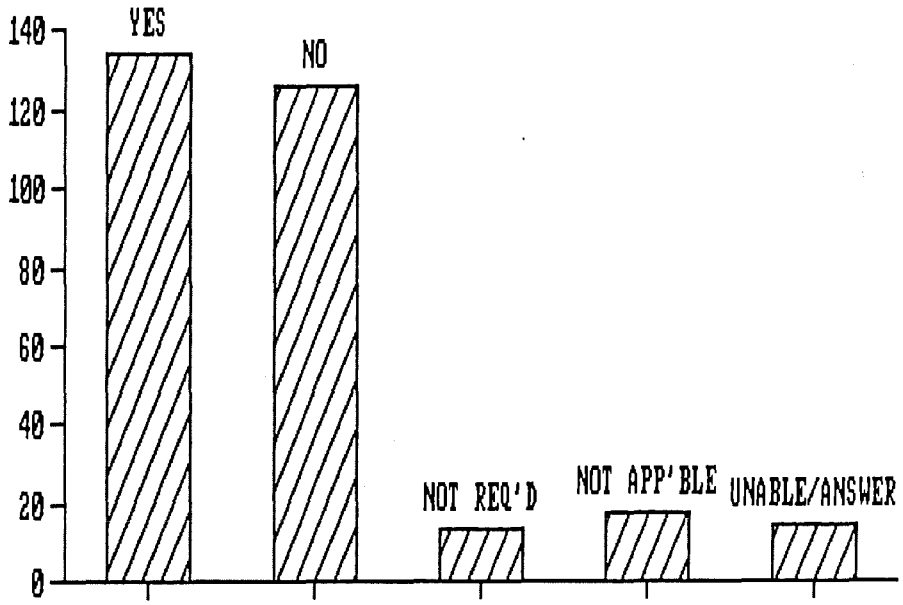
FIRE SAFETY QUESTION #15
Are fire escapes sound and usable?



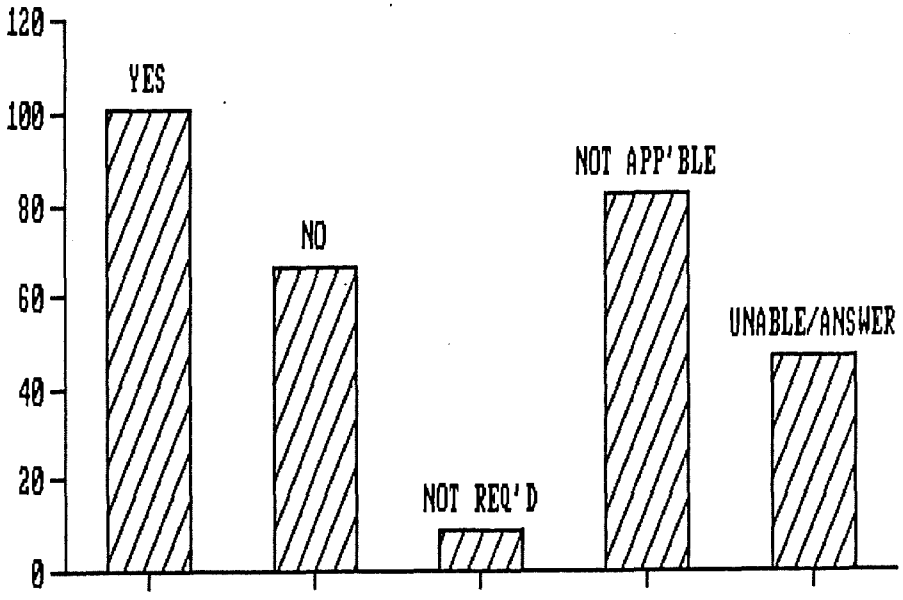
FIRE SAFETY QUESTION #16
Does basement have direct outside route?



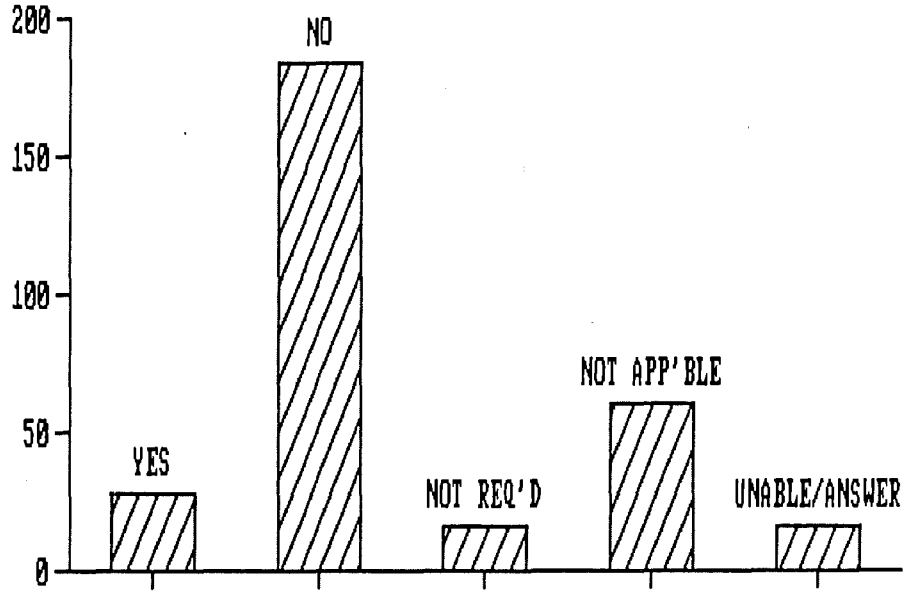
FIRE SAFETY QUESTION #17
Do routes have emergency lighting?



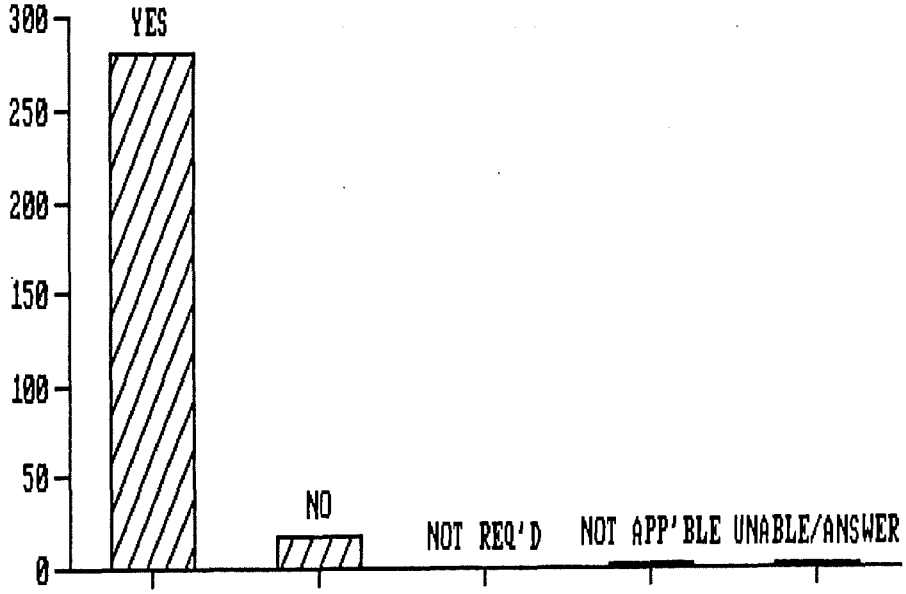
FIRE SAFETY QUESTION #18
Is emergency lighting regularly tested?



FIRE SAFETY QUESTION #19
Equip/Training to evacuate handicapped?

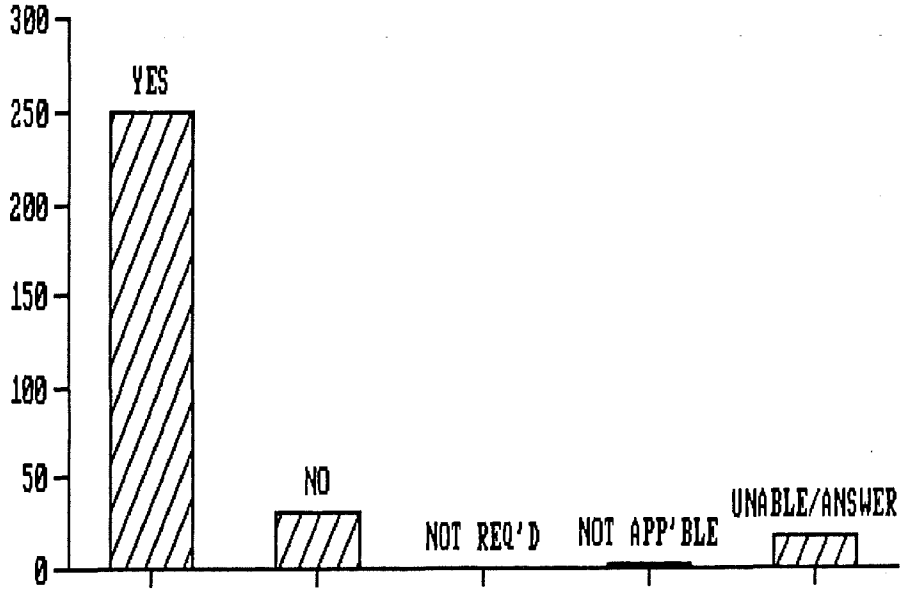


FIRE SAFETY QUESTION #20
Are fire extinguishers accessible?

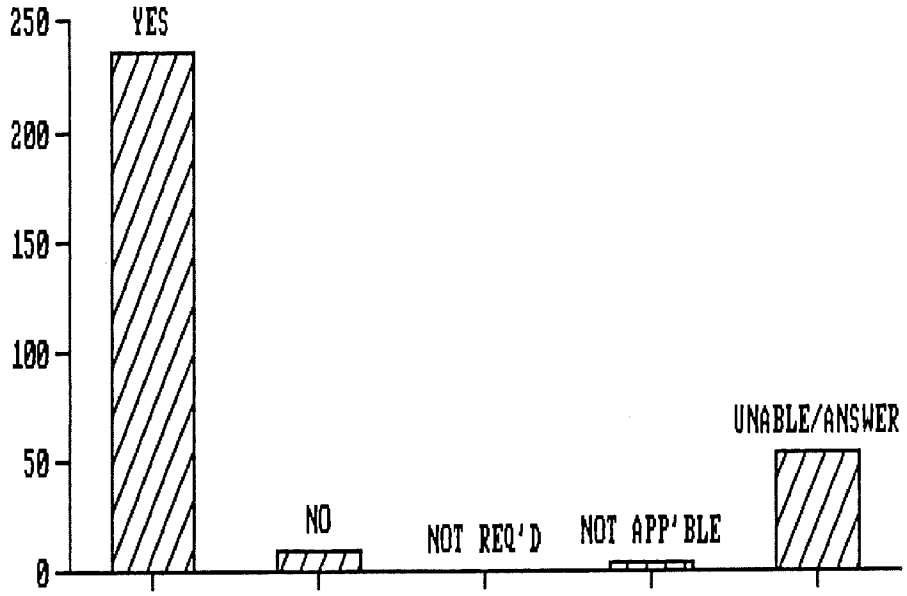


FIRE SAFETY QUESTION #21
Are fire extinguishers well marked?

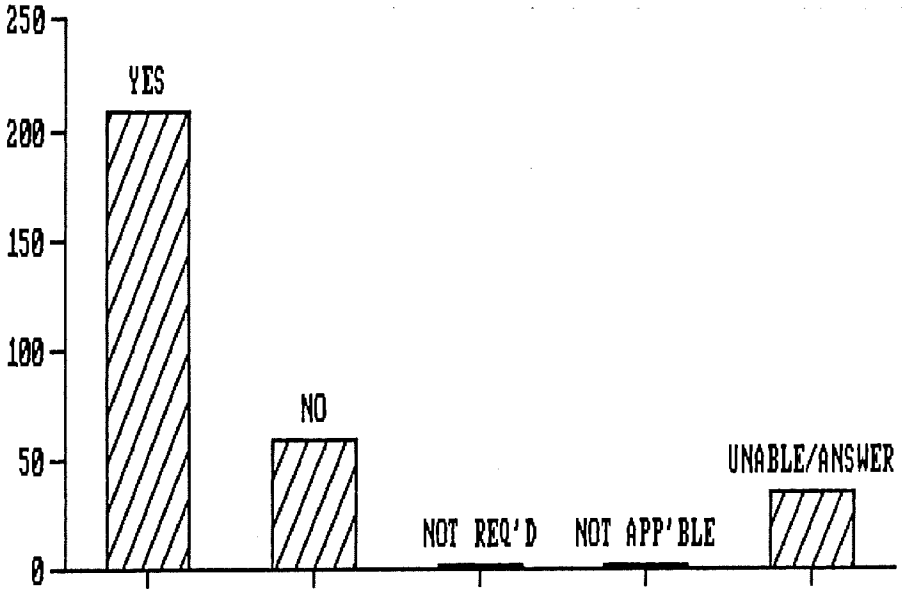
FIRE SAFETY QUESTION #22
Are the extinguishers inspected?



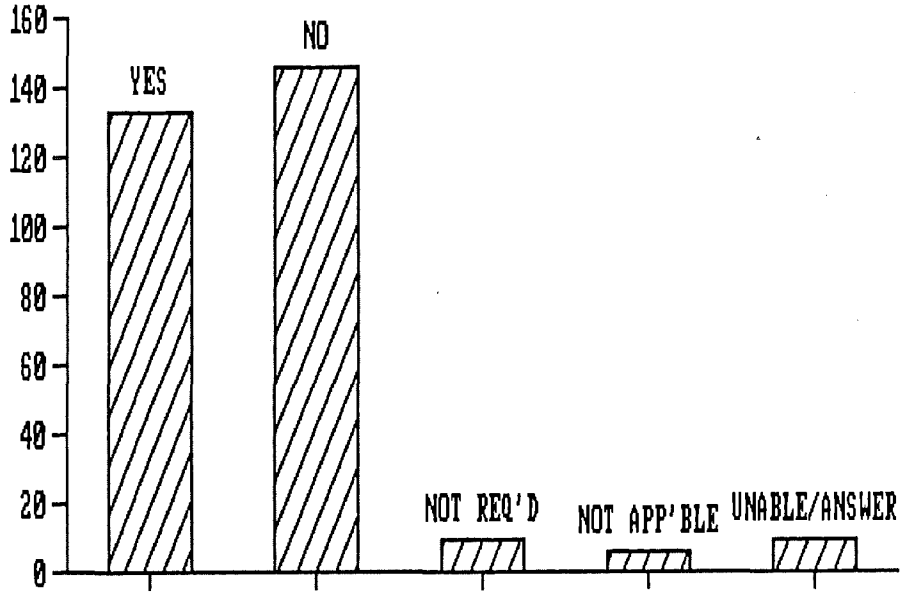
FIRE SAFETY QUESTION #23
Are extinguishers the correct type?



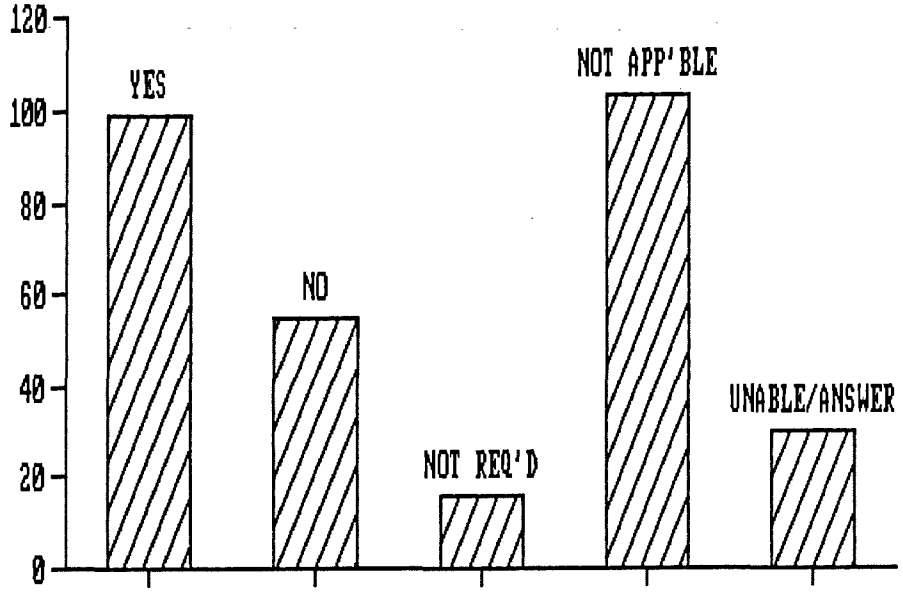
FIRE SAFETY QUESTION #24
Do employees know where/how to use them?



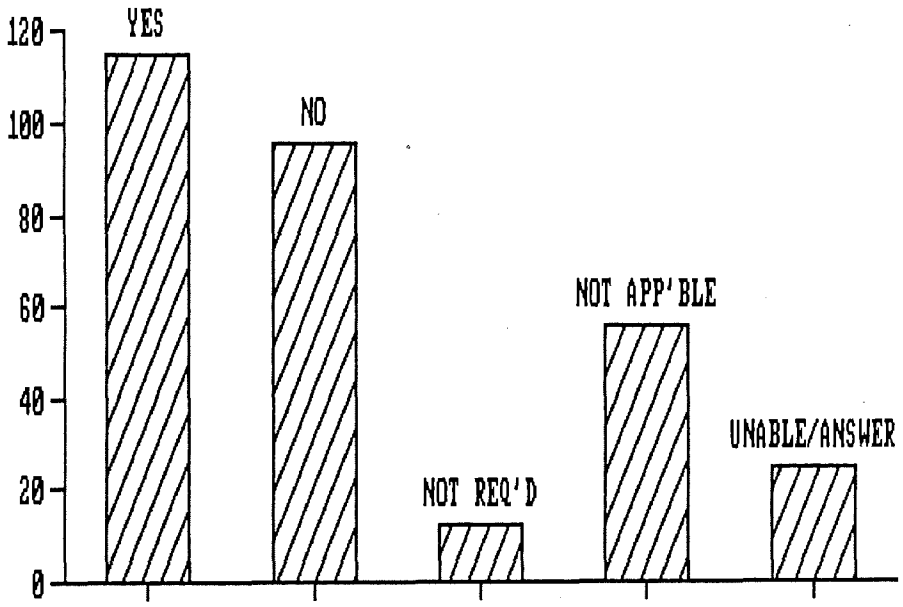
FIRE SAFETY QUESTION #25
Does your building have an alarm system?



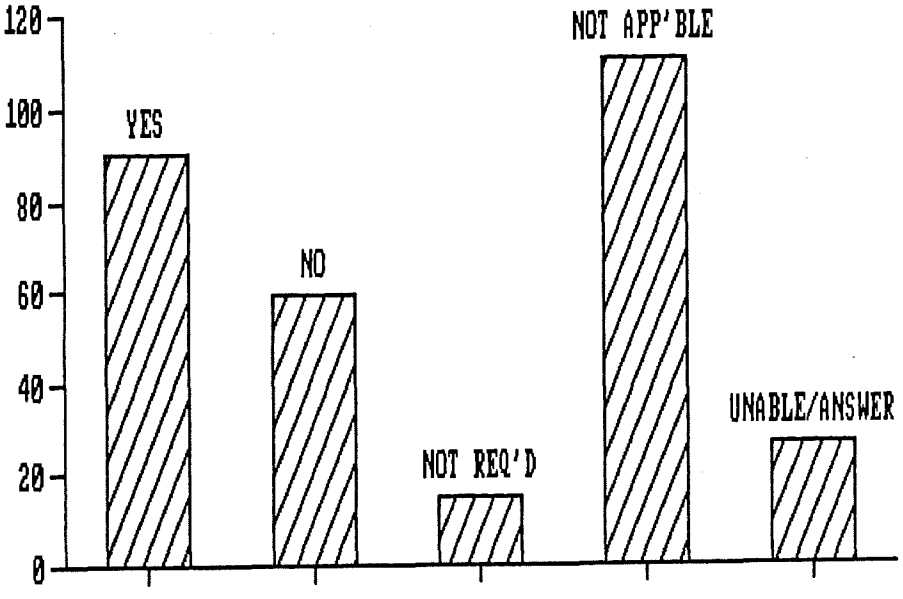
FIRE SAFETY QUESTION #26
Are alarms tested once a year?



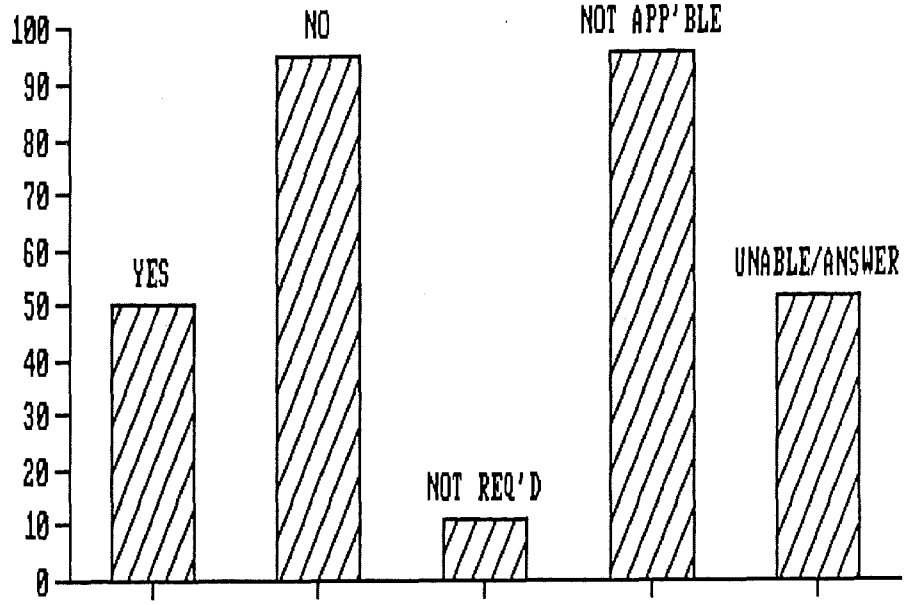
FIRE SAFETY QUESTION #27
Does the system include smoke detectors?



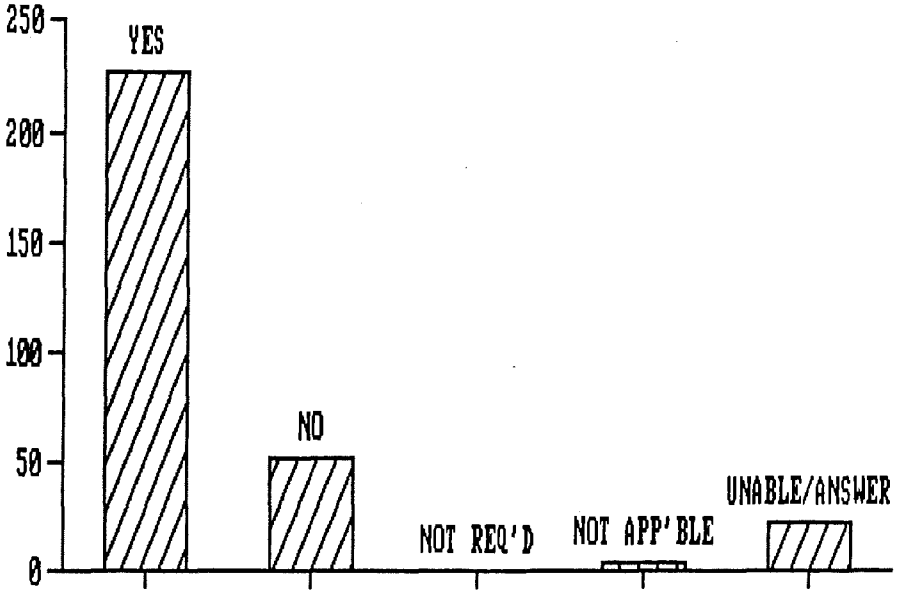
FIRE SAFETY QUESTION #28
Do employees know how to use the system?



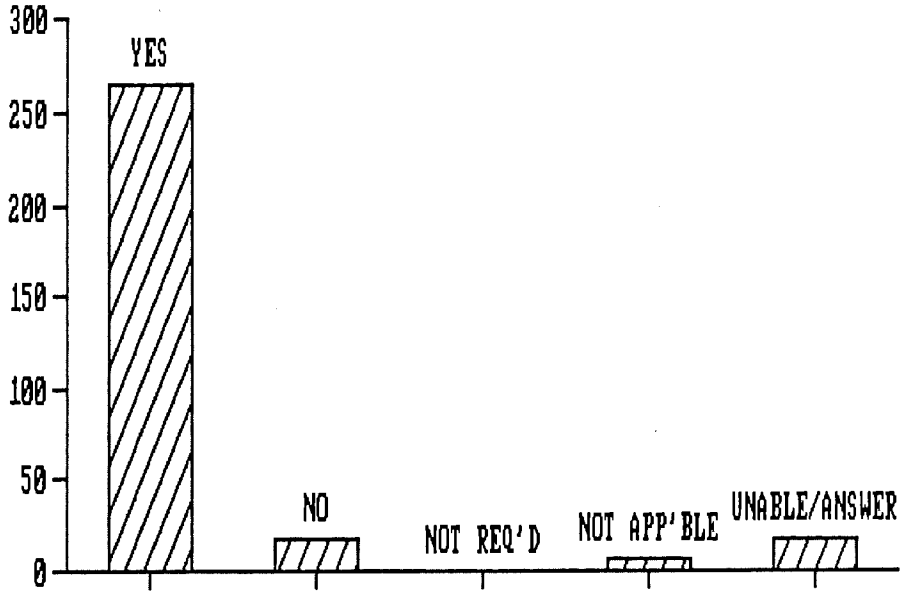
FIRE SAFETY QUESTION #29
Employees know where outside alarms are?



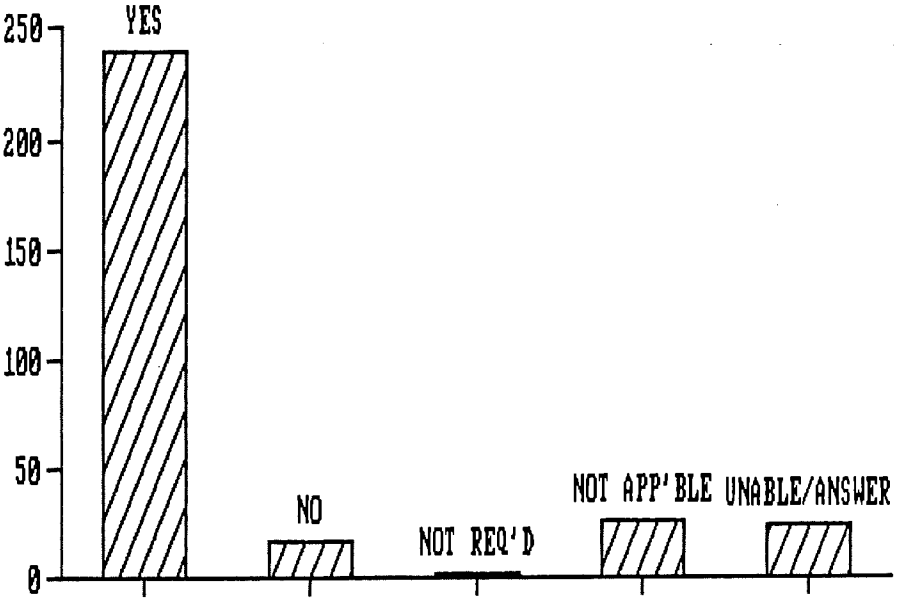
FIRE SAFETY QUESTION #30
Do employees know whom to call?



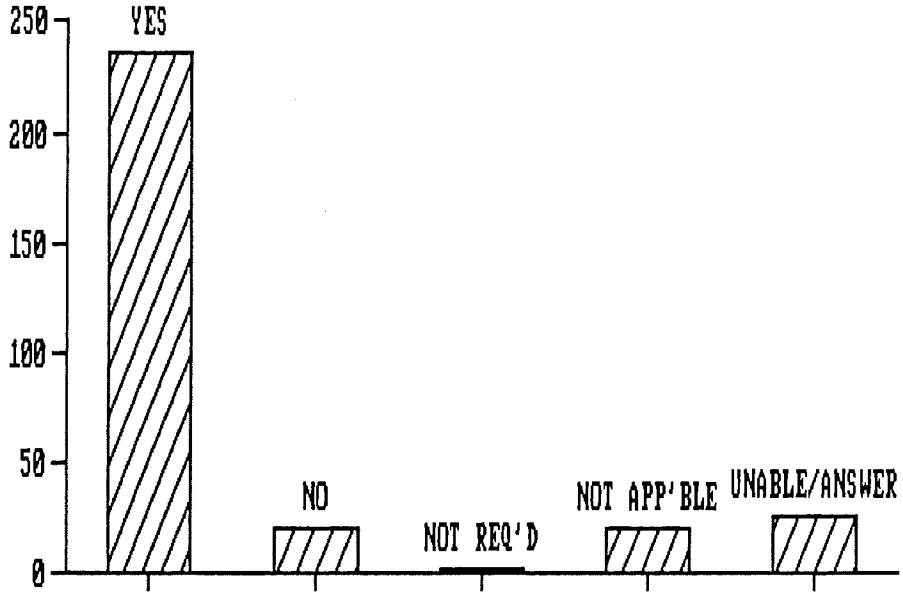
FIRE SAFETY QUESTION #31
Is burnable trash stored properly?



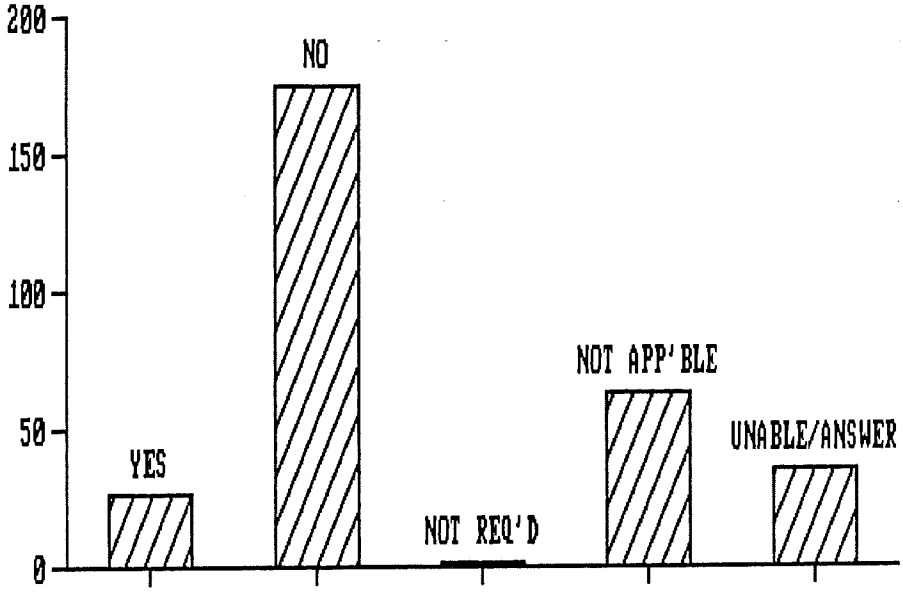
FIRE SAFETY QUESTION #32
Are flammable liquids used properly?



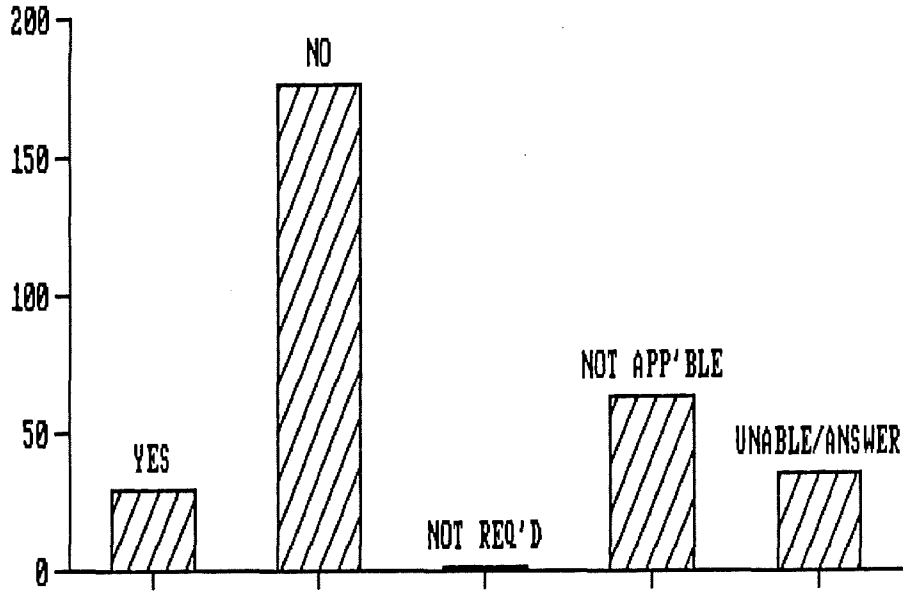
FIRE SAFETY QUESTION #33
Are other burnables stored properly?



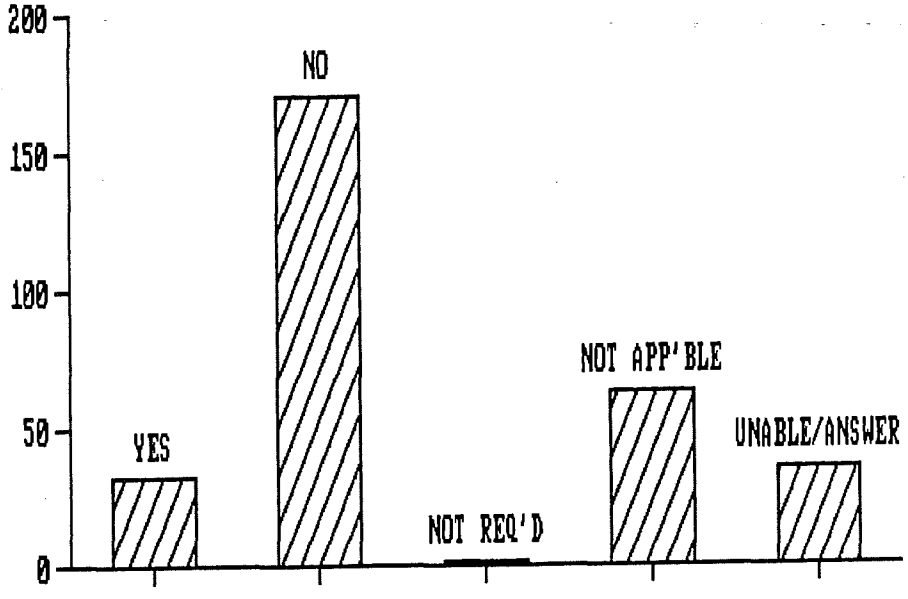
FIRE SAFETY QUESTION #34
Is burnable trash stored in boiler room?



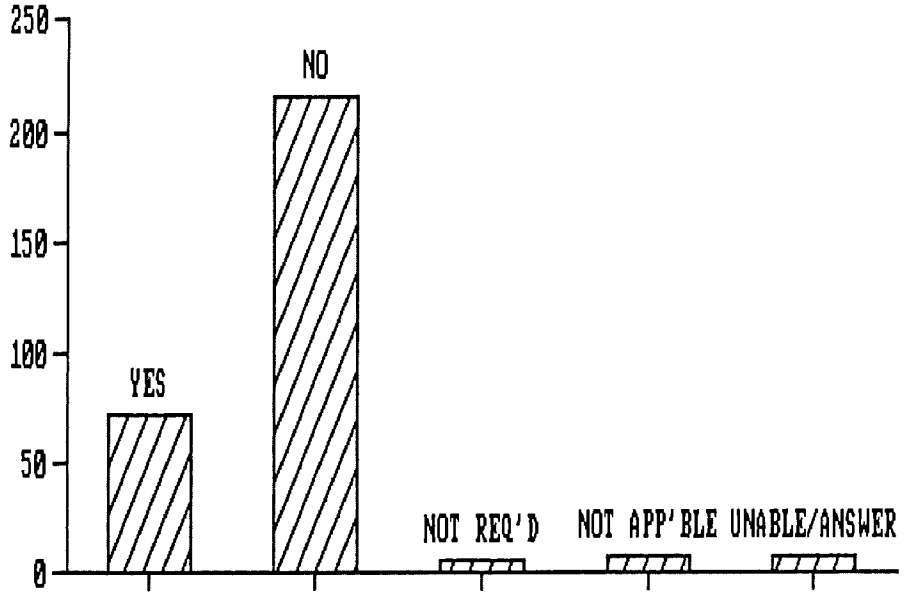
FIRE SAFETY QUESTION #35
Are flammables stored in boiler room?



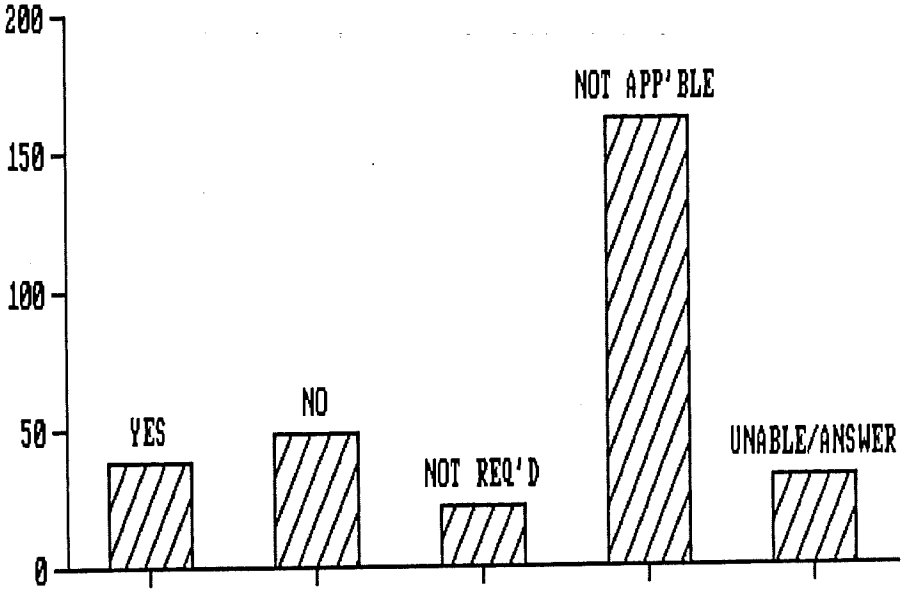
FIRE SAFETY QUESTION #36
Other burnables stored in boiler room?



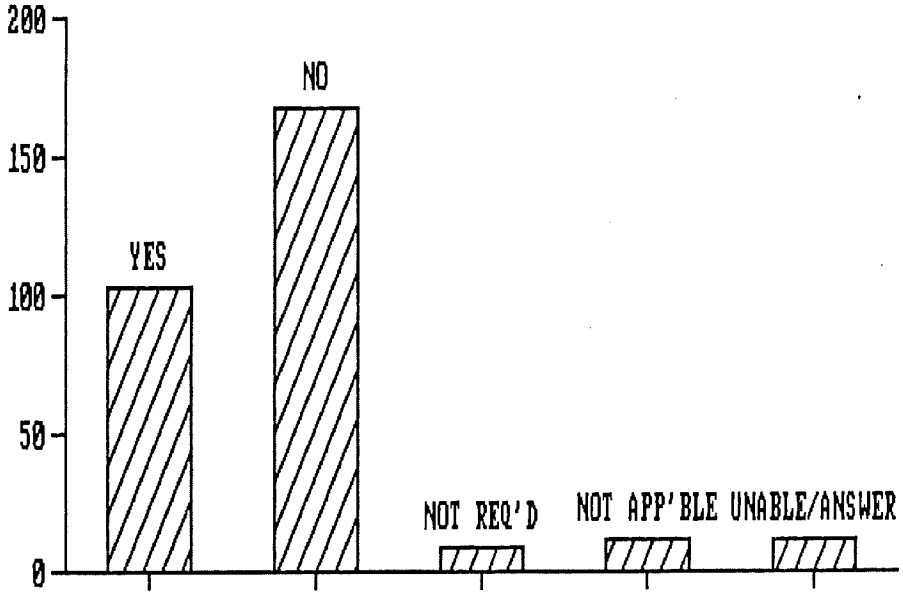
FIRE SAFETY QUESTION #37
Does building have a sprinkler system?



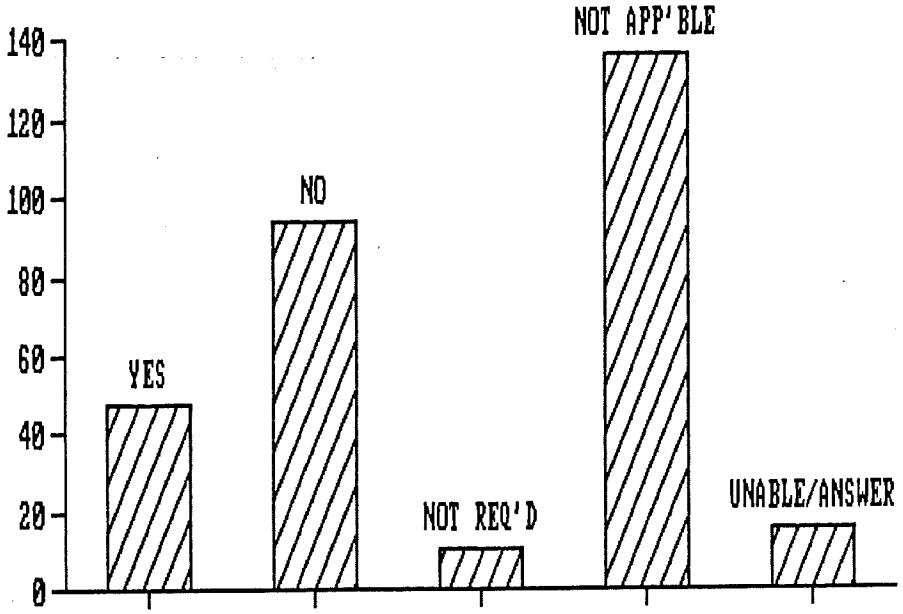
FIRE SAFETY QUESTION #38
Is sprinkler system tested once a year?



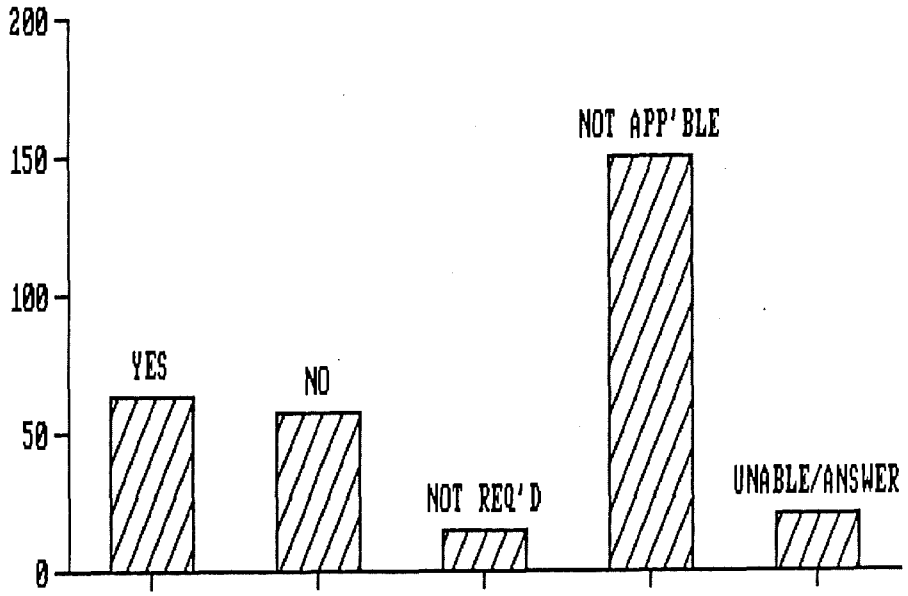
FIRE SAFETY QUESTION #39
Does your building have fire doors?



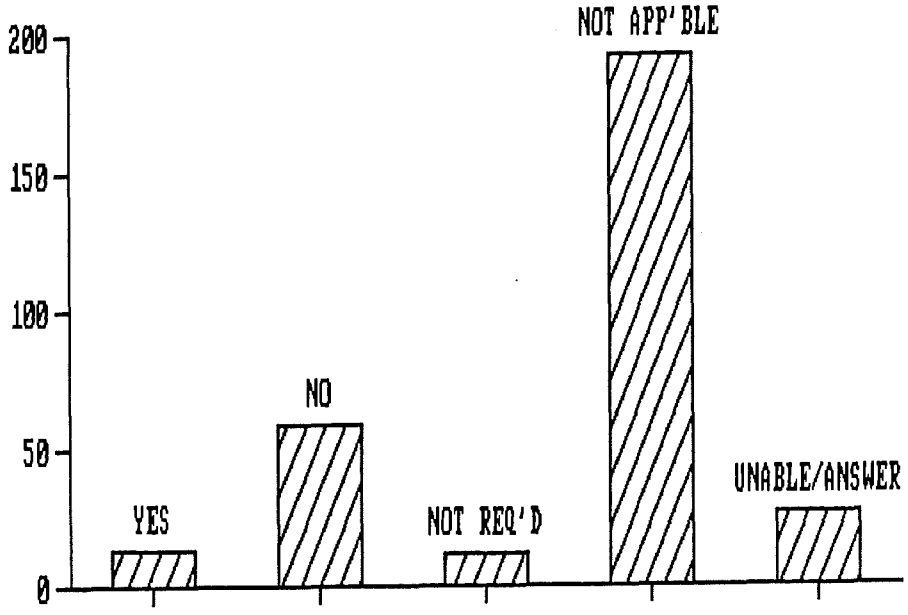
FIRE SAFETY QUESTION #40
Are the fire doors so marked?



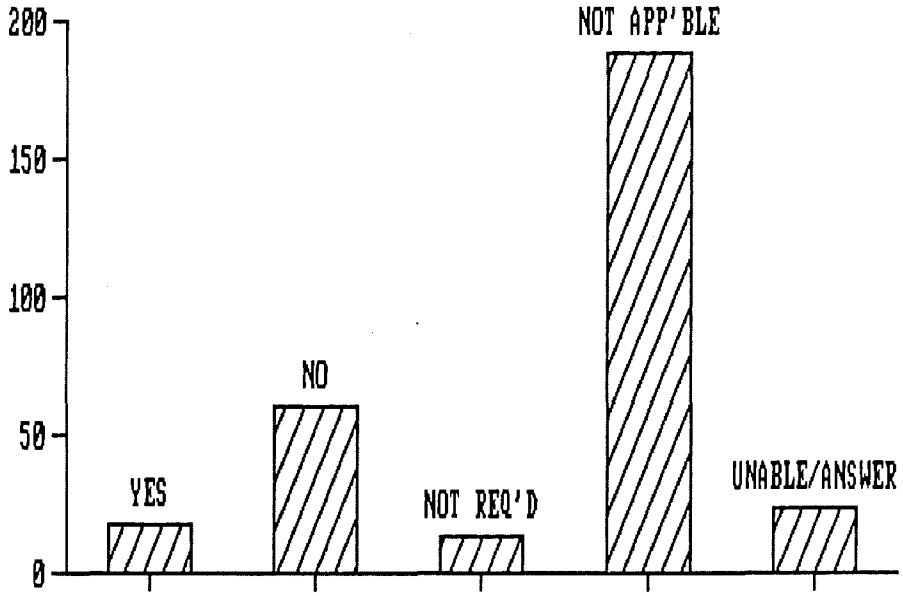
FIRE SAFETY QUESTION #41
Are the fire doors kept closed?



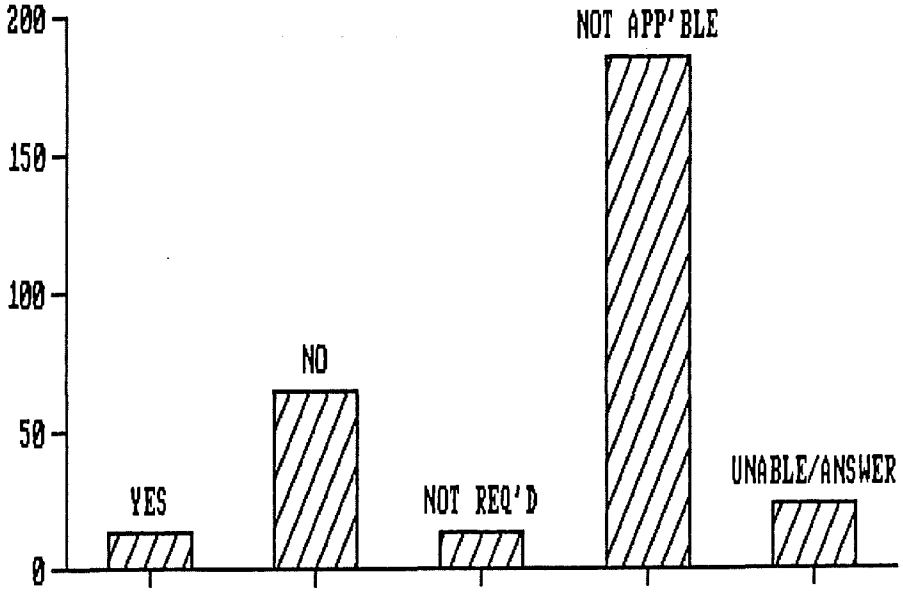
FIRE SAFETY QUESTION #42
If kept open, is it so by fusible links?



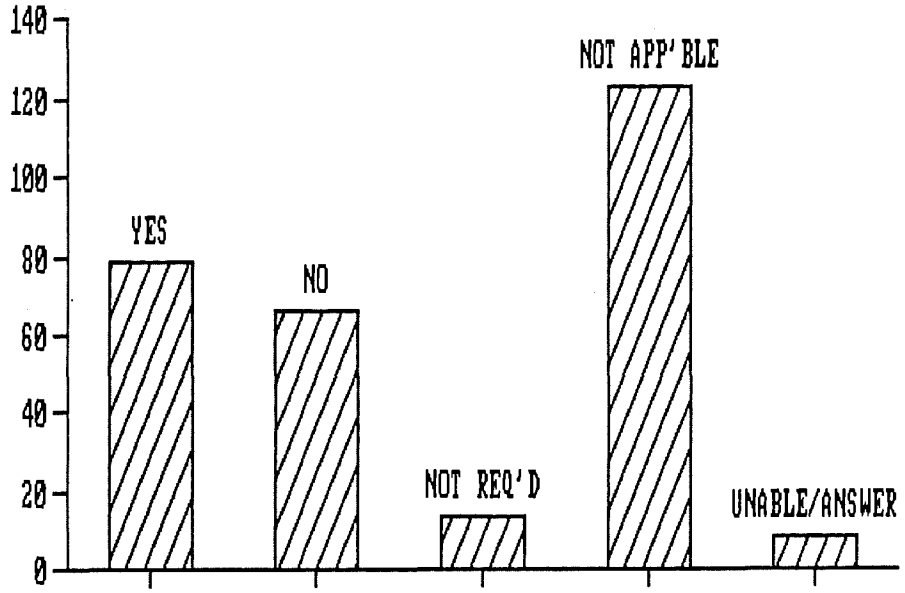
FIRE SAFETY QUESTION #43
If kept open, does the alarm close them?



FIRE SAFETY QUESTION #44
If kept open, do detectors close them?



FIRE SAFETY QUESTION #45
Are stairwell doors kept closed?



APPENDIX G

EGRESS PLANNING PACKAGE

* * * * * D R A F T * * * * *

GUIDELINES FOR BEGINNERS IN FIRE SAFETY PLANNING

The following guidelines were prepared from notes and experience gained through fire safety planning in the State Office Building in Augusta. Although no other state-owned building is as large or holds as many employees, the fundamental process remains the same. Specific suggestions have also been given in some areas for occupants of leased space. If you have specific comments about these guidelines or suggestions for improvement, please contact the Division of Safety and Environmental Services at the address on the last page.

Why Plan?

Most people say, "Fire? Never in this building. Besides, I could get out if I had to." It's that apathetic approach that leads to carelessness, and occasionally, even to death.

But knowing how to get out alive is only one aspect of fire safety planning in an office building. Many offices have cash, checks, or records that need to be secured before employees leave the area. Some offices also have complex machinery or computer equipment that has no easy shut off. Are employees familiar enough with standard procedures to perform then when the fire alarm sounds? Visitors, unfamiliar with the building layout, and handicapped individuals require additional, pre-planned assistance to evacuate safely.

Fire safety planning is important not only to your employees but to everyone who has contact with your building. Good pre-planning, therefore, is essential.

Where to Begin

As a supervisor or Director, you're probably familiar with your office, maybe even your floor. But what about the rest of the building? Probably not.

The first step is to assemble key people from your building and the municipality in which your building is located to serve as the Planning Committee. Members of the Planning Committee should include:

- Building Security
- Custodial Services
- Department Health & Safety Representatives
- State Fire Marshall's Office
- local fire department

If the building or office space is leased, it is strongly recommended that the building owner and/or building manager be included on the Planning Committee.

The Planning Committee is charged with identifying areas of concern within the building that will require special planning, conducting fire drills, developing the evacuation plans, and creating the written, fire evacuation and prevention plan.

Identify Areas of Concern

As a group familiar with the operations and occupants of the building, the Planning Committee needs to address areas that require special evacuation planning.

These areas include:

- Identification of disabled or limited mobility persons
- Security for agencies with cash or confidential records
- Shut down/lock up procedures for equipment that cannot be left unattended
- Offices with a large number of visitors from the public or meeting rooms

As a group, you may be able to address many of the above points, but you may also wish to informally survey resident departments or agencies on these points. A sample questionnaire is included. You may also wish to find out if there is a particular day or time in which one of these areas presents a greater problem.

Fire Drills - Part 1: Announced

In buildings where there has been no fire drill for some time, an announced, walk-through, fire drill will start people thinking about fire safety and the procedures that before they may have taken for granted. Procedures and policy on the evacuation of handicapped individuals can be tested, and through the use of fire drill monitors, the Planning Committee can gain an understanding of what happens in the building when the alarm sounds.

Resident departments and agencies should be alerted to the fire drill about two weeks before the appointed date. At that time, you should encourage pre-planning on areas of concern earlier identified. The Division of Safety and Environmental Services recommends a "buddy system" be developed for handicapped and limited mobility persons. Procedures for the securing of valuables should be discussed with department heads.

There may be resistance to total evacuation by some departments or agencies. <u>It is up to the Planning Committee to</u>

determine if the walk-thru fire drill will include everyone, or if some offices will be allowed to keep persons behind to watch over valuables and equipment. If people are allowed to be left behind, their names and locations should be submitted in advance of the fire drill to the Planning Committee.

Three to four days before the drill, post signs throughout the building announcing the drill. Be sure to post the signs in areas well trafficked by the public, so as to alert them to the drill. Sample signs are included in this packet as well.

Monitors

Monitors are the eyes and ears of the Planning Committee during the fire drill. They identify problem areas and provide a record of what happened in every area of the building.

You should have at least one monitor posted by each stairwell on each floor and additional ones in the stairwells near the exit level. Additional monitors may also be posted near elevators and even outside the building to observe where people go once they are out of the building.

Monitors should record activity, not assist with occupant response to the drill. Once evacuation begins, monitors should walk through their assigned area and note what they see and hear. For example:

Could the alarms be heard everywhere?

Did people hide out in the rest rooms?

Were valuables left in the open?

Did anyone try to use the elevators?

Were the stairwells congested?

A monitor checklist has been included which you may use or adapt as needed.

Monitors should be briefed before the drill on how to use the evaluation sheets and on what they should be looking for. There should also be a debriefing following the drill. Although the monitors will turn in their evaluation sheets to the Planning Committee, the open discussion after the drill generates observations and comments not listed on the sheets. The monitor comments now become a body of information on the status of fire evacuation readiness. Action can now be taken on specific areas the need correction and procedures can be rethought and improved. A successful walk-thru is not measured by its smoothness, but by the information it uncovers.

Fire Evacuation Plans

One of the things your monitors will observe is the traffic flow in the building during emergencies, without a plan imposed. Do people favor one exit over another? Does everyone know how to exit the building? Using what you have learned about traffic flow and building population, you are now ready to design fire evacuation plans.

Included in this packet are the floor plan drawings for your building and the model on which to design your evacuation plans. You will probably need to update the drawings, including some walls and natural barriers. Note the location of fire extinguishers. When dividing the floor into sections, be sure to evaluate occupancy. Your fire evacuation plans should be reviewed by either the State Fire Marshall's Office or your local fire department for consistency with state fire code. This is also an excellent time to work with them on identifying other possible fire code violations that may exist.

Once you've made your changes and additions to the original drawings, return them to the Division of Safety and Environmental Services and we will prepare the final drawings for you. The completed ones will be returned to you for displaying. The fire evacuation plan should be displayed in one or more highly trafficked areas in that section. If you need additional drawings of a particular section, please note that when you send us the drafts.

Fire Drills-Part 2: Unannounced

Once the evacuation plans are in place and deficiencies noted on the walk-thru drill are corrected, it's time to have the real thing: an unannounced fire drill. Members of the Planning Committee will serve as the monitors for this drill, as it is nearly impossible to keep a drill unannounced when involving a large number of monitors.

Again, observation is the key. You'll want to evaluate the effectiveness of the evacuation plan and any new shut-down/lock-up procedures in place. With a regular schedule of fire drills, problems can be corrected and new solutions tried with each new drill. Four fire drills a year are recommended, although it is realized it may be difficult to accomplish that number. A drill scenario where one exit pathway is blocked should be tried occasionally. Exiting the building during emergencies should become a learned procedure for employees, not a flight in panic.

The Written Plan

The last step in successful fire safety planning is a written plan for the building. Too often there is turnover or

retirement and valuable information leaves with the employee. The outline for an Emergency Action and Fire Prevention Plan has been included to assist you in your efforts. The plan addresses not only fire, but other natural and technological disasters that occupants of the building may face. So much, though, of what is learned during fire evacuation planning, can be easily adapted and applied to other potential disasters. It will be up to the Planning Committee to judge what hazards they might be exposed to and what actions are feasible.

Etc.

There are many useful sample and guidance documents in this packet to help you with fire evacuation and emergency planning in your building.

In 1988, the Labor Management Committee on Safety published a booklet called "HELP!: Health and Safety Services Plan for State Facilities". In it, you'll find important guidance in the development of your building-specific plan. Additional copies are available upon request.

The Division of Safety and Environmental Services is available to answer and questions you may have in this area. Our address is:

BPI-Division of Safety and Environmental Services
State House Station #77
Augusta, ME 04333

Telephone: (207)289-4509

Thank you for your efforts in fire safety.

FIRE SAFETY SURVEY

In an effort to improve fire safety in this building, a Planning Committee has been formed to identify areas in the building that require special planning in the event of a fire. Please take a minute to answer the following questions. Thank you.

Department/Agency: _____

Floor/Room No.: _____

Contact Person: _____

1) Are there any handicapped or limited mobility persons in your department? _____Yes _____No

   If Yes, have procedures been developed to assist with their evacuation? _____Yes _____No

   Have they been assigned a "buddy" is case of emergency? _____Yes _____No

2) Does your department handle cash or checks that would require lock-up before evacuation? _____Yes _____No

   If Yes, are there procedures in place for such lock-up? _____Yes _____No

3) Is there complex machinery or computer equipment that cannot be left unattended in your office? _____Yes _____No

   If Yes, are there procedures in place for a quick and efficient shut down? _____Yes _____No

4) Does your department have a large number of visitors from the public? _____Yes _____No

   If Yes, are your employees instructed on assisting them with evacuation? _____Yes _____No

5) Is there a particular time of the day/week/year in which one of the above items may present a greater problem than in normal times? Please specify.

6) Are there any other items that you feel the Planning Committee should be aware of? Please specify.

(building name)
MONITOR CHECKLIST

Thank you for agreeing to serve as a monitor during the upcoming fire drill in (building name). Please complete the questionnaire below and return it to the Planning Committee at the monitor debriefing meeting following the drill at (time) in (place). Feel free to provide additional comments.

Your location was: _____

1) Can alarms be heard? [ ] Yes [ ] No

2) Are all exits free and clear? [ ] Yes [ ] No

3) Did any stairwell seem congested? [ ] Yes [ ] No

4) Did people leave in an orderly fashion? [ ] Yes [ ] No

5) Were there people left behind? [ ] Yes [ ] No

6) Were any valuables left in the open? [ ] Yes [ ] No

7) Were handicapped people assisted properly? [ ] Yes [ ] No

8) Were the elevators used? [ ] Yes [ ] No

9) Were members of the public assisted properly?
[ ] Yes [ ] No

* * * * * D R A F T * * * * *

EMERGENCY ACTION AND FIRE PREVENTION PLAN OUTLINE

I. Purpose

II. General Information
  A. Functional Use of Building
  B. Geographic and Physical Location
    1. Bordering Streets
    2. Physical Barriers
  C. Description
    1. Layout of Building
    2. Locations of Exterior Exits
    3. Locations of Stairwells within Building
  D. Occupancy
    1. Days
    2. Nights
    3. Weekends

III. Hazard Identification
  A. Fire
    1. Description of Hazard
    2. Location
    3. Names/Title of Persons who Work with It
    4. Proper Handling/Storage/Maintenance Procedures
    5. Type of Equipment/Systems Available to Control Fires Caused by It
  B. Natural/Technological Disasters
  C. Bomb Threats

IV. Alerting & Warning for Fire and Other Emergencies
  A. Fire Notification Procedures
  B. Medical and First Aid Notification Procedures
  C. Existing Alarm System

V. Evacuation
  A. Types of Evacuation
    1. Localized
    2. Full
  B. Emergency Evacuation Procedures
    1. Personnel
    2. Visitors
    3. Handicapped Persons
  C. Emergency Escape Route Assignments
  D. Personnel Accounting Procedures

VI. Critical Plant Operations
   A. Type
   B. Location
   C. Names and/or Titles of Personnel Responsible for Shutdown/Lockup
   D. Shutdown/Lockup Procedures

VI. Emergency Rescue & Medical Duties

VII. Fire Protection Systems
   A. Fire Extinguishers
   B. Sprinklers
      1. Water
      2. Chemical
   C. Other Methods of Containment & Extinguishment

VIII. Fire Prevention Methods
   A. Housekeeping
   B. Maintenance
   C. Safe Storage of Flammable Materials
   D. Lifestyle

IX. Training
   A. Supervisors
   B. Employees

X. Mitigation
   A. Fire Drills
   B. Building Maintenance