# QUALITIES OF SAFE SUPERINTENDENTS

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### INTRODUCTION

Most of the literature on industrial safety stresses the importance of the role played by the foremen. While it is true that the foremen are instrumental to the success of a safety program, the importance of the superintendent, particularly in a construction setting, must not be ignored.

Only a small amount of research on construction safety has focused on the role of the project superintendent. It has been found that job pressures imposed on or by a superintendent are associated with poorer safety performances (Hinze and Parker 1978). It has also been shown that a rigid style of management when dealing with conflicts is associated with poorer safety performances (Hinze and Gordon 1979). In addition, research has shown that superintendents with better safety records maintain low turnover on their jobs and are sensitive to the changing needs of the workers (Hinze 1978).

If the superintendent is considered to be an integral part of the safety program, it is worthwhile to devote some energy to establishing characteristics that will have a positive influence on the job site. This can be accomplished through an effective training program and/or through an efficient screening procedure when supervisory personnel are hired. But what characteristics should a "safe superintendent" possess? The answer to this may be quite simple. A "safe superintendent" possesses the qualities of a good manager.

Good managers generally are considered to exhibit certain characteristic behavior patterns. A good manager is one who is a leader, a planner, an organizer, and a good role model. Such a person will be sensitive to the personal needs and feelings of workers. A good manager in construction will also be very knowledgeable about the progress on the job site.

Those superintendents who do not possess these traits would not be regarded as good managers in most cases. Poor managers might be described as autocratic, dogmatic, insensitive, manipulative, and aloof. By their nature, they are forced to manage construction projects by constantly "fighting fires." They may even feel threatened by the knowledge exhibited by others instead of viewing it as an attribute to be used for the good of the project.

## CAN SAFE SUPERINTENDENTS BE IDENTIFIED?

The foregoing characteristics of managers are not easy to identify in a quantitative sense. Obviously they can only be measured in a subjec-

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tive manner. The following is a discussion of how such a subjective measure was actually tested.

As part of an extensive study on how superintendents manage their projects, the writer interviewed numerous superintendents. These interviews covered a wide spectrum of topics. After each interview, a brief annotated description of each superintendent was made which consisted of the writer's own general perceptions of each superintendent. Initially, this was done only as a means of providing a mechanism by which the uniqueness of each superintendent could be recalled.

After the study was completed, the annotated descriptions were simply filed away. Later, a research associate asked to see these brief informal descriptions. In reading over these files, she recognized that the descriptions described elements of both good and poor managers. With this in mind, she developed a rating scheme by which to evaluate each superintendent; this was a subjective rating that was performed very simply. For each attribute considered to be demonstrative of a good manager, a positive point was assigned. Examples of typical characteristics of the superintendents that were considered to be indicative of good managers included the following: the superintendents are open with their workers; they try to get along with their workers; they may be firm but can still remain friendly; they recognize and try to develop the strengths of their subordinates; they are fair in their expectations of their workers; they are flexible when addressing problems; they stay in close "touch" with the job site operations; they give clear and detailed explanations; and they are good planners, etc. Conversely, attributes that were considered to be demonstrative of poor managers were given a negative point. Examples of characteristics that were considered to be indicative of poor managers included the following: the individuals do not relate well with their workers; they are remote from their workers; they try to manipulate people; they prefer to spend their time in the comfort of their offices; they are constantly "fighting fires" on their jobs; they have antagonistic attitudes toward unions; they give abrupt answers to questions; they have a hard-nosed attitude about production; and they are weak on self-initiative, etc. Through the process of rating the superintendents, each "management" characteristic was given either a positive or a negative value of one. All characteristics were given equal weights.

With this procedure, each superintendent gained some combination of positive and negative points. The algebraic sum of these points then resulted in either a positive or negative number. These ratings were tallied and sent to the writer for further analysis. Specifically, these ratings were compared to the corresponding safety records of each of the superintendents. A total of 35 comparisons were made.

Since this was a subjective analysis, it was decided to make the analysis in a very simple manner. This was done by splitting the entire sample of superintendents into two categories which were based on the safety records established on their respective projects. Superintendents that were rated as being either good managers (positive rating sum) or as poor managers (negative rating sum) were in each of these categories.

As can be seen from the results shown in Table 1, the subjectivelydetermined manager ratings appear to be related to the safety records

TABLE 1.—Managerial Rating versus Safety Performance

	Manager Rating				
Safety record	Excellent +5 to +12 (2)	Good +1 to +4 (3)	Weak (0 to -4) (4)	Poor (-5 to -10) (5)	Total (6)
Good Poor Total	7 0 7	6 8 14	3 7 10	1 3 4	17 18 35

Note: Value of Chi-Square = 9.86; Level of Significance = 0.02.

of the superintendents. This is most clearly noted for those superintendents who were evaluated as "excellent" (value of +5 to +12) managers. All of these superintendents had good safety records. It can also be observed in the results that the superintendents with overall negative manager ratings had disproportionately poorer safety records. In general, most superintendents with positive ratings have good safety records and most of those with negative ratings have poor safety records.

As mentioned earlier, this has been a subjective analysis. It is difficult to accurately quantify such a complex topic as managerial characteristics. It is worthwhile to note that the ratings of each superintendent were performed without the research associate's knowledge of their corresponding safety records. This minimized any bias potential in conducting this analysis.

## GOOD SAFETY IS THE RESULT OF GOOD MANAGEMENT

Every company should strive to employ superintendents who have good management skills. This is essential if the firm is to maximize profits. An interesting and beneficial by-product of such traits is, as the evidence suggests, that the safety performance will also be good. It stands to reason that a superintendent who is behind schedule and is totally absorbed in "fighting fires" will not be able to maintain effective performance on the project. The safety on the job will also suffer. A superintendent who has a carefully-planned and smoothly-coordinated project, on the other hand, has established an excellent forum for a good, safe environment. Simply stated, good management practices are essential for good safety performance.

#### ACKNOWLEDGMENT

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# APPENDIX.—REFERENCES

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