

TRANSACTIONS

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VOLUME I

Part II

Industrial Sessions

VOLUME I, Part I, contains the General Subject Sessions and begins the Industrial Sessions.

VOLUME II contains the Traffic, Commercial Vehicle, Transit, School and College, Home, Farm and Women's Activities Sessions.

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have no medical setup there, but we do. I said they should call the Henry Street nurse, and they will do that. He said they can't do that because the union would get mad. If we spent two hours there in the day shift, the twilight shift and the midnight shift would want two hours, too. What's the answer to that?

MISS HARMON: That's a real problem. We are constantly being faced with it. It goes back to management's fear that what is given to one group of workers, if it is not given to all groups, will cause more disruption in labor relations.

We have gone on the premise that whenever possible, and when the individual nurse is willing to work at odd hours, we will supply as much nursing service on the other shifts as we do on the daytime shift. That is only possible when your nurse is willing to do it. We have had nurses go

out at five o'clock in the morning, for instance. Right now we have one who works from six-thirty in the morning until eight, although our regular working hours are from eight-thirty until five. We have one nurse who has gone out at eleven o'clock in the evening to cover the change of shifts.

I don't think that is a solution for the problem at all. It is merely an attempt on our part to give as much service for each group of workers as the group during the day is getting. But I am afraid that it will become increasingly difficult for us to do that, as time goes on, and certainly, where you have only a small group of workers on any one shift, it isn't possible to employ a full-time nurse for each shift. The solution to the problem depends upon how willing your nurse is to sacrifice her working hours, and probably very few of them would be.

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a lot of latitude. Assistant superintendents and the superintendents themselves, were given the same duties in somewhat more general language. Well, that put the all-important matter of safety and the enforcement of safety regulations right up to the supervisors, or rather, they put it up to themselves. The safety rules and regulations were one thing, but the supervisors went further than that. They set up their own rules for enforcement and took over the job as their full responsibility. To me, that assures success.

At the end of the manual this recommendation appears: "The Supervisors' Advisory Committees recommend that in order to most effectively present this Manual to all supervisors in their departments, that they be required to attend a training course to familiarize themselves with the contents herein."

At the very end is this remark: The Safety Department acts in an advisory capacity to production. It is production's responsibility to carry out and enforce safe practices.

Safety Education—Manual Material Handling

By HERMAN J. NORDSTROM

Safety Eng., Newport News Shipbuilding and Dry Dock Co.

The safety program will crash just as fatally as Humpty Dumpty's great fall unless there is constant safety educational work to train the new employee and refresh the experienced employee. By definition, education means discipline of the mind and character through study or instruction. Of the three main phases of the safety program which are, namely: 1. fact finding; 2. creating and maintaining interest; and 3. corrective action, education embraces the first two. We can successfully instill safety discipline in the mind only by constant educational effort.

Before it is possible to educate employees in proper material handling habits, it is necessary to know what specific departments and hazards need to be stressed because safety messages of general nature have proven to be of only limited usefulness. Several analysis methods should be used so that the problem will be examined in complete perspective.

Frequency, the number of lost time accidents per million man hours worked, is the reliable accident index indicating where accidents are occurring. Severity, the number of days lost from lost time accidents per thousand hours worked, is of more limited value because each accident can result in any degree of severity. One cannot be "choosy" about the kind of accident he is going to have. In our shipbuilding operations our Steel Hull Division normally realizes the highest frequency index.

We must now know how many of the above accidents involve material handling. It has been found convenient to use a modified form of the American Standards Association Cause Code to determine the cause of each accident. The causes are divided into the following general classifications:

1. Observing necessary precautions when in zones potentially dangerous;
2. Material handling;
3. Safety protective equipment;
4. Use of tools and equipment;
5. Discouraging jokes and horse play;
6. Giving proper warning signals;
7. Better housekeeping;
8. Better examination, placement and supervision of men with bodily defects;
9. Miscellaneous;
10. Engineering revision, inspection and supervision.

Analysis of the accidents in this manner reveals that our material handling accidents constitute the following degrees of experience in the various divisions: Store-rooms 40 per cent; Foundry 30 per cent; Hull Outfitting 20 per cent; Machinery Installation 20 per cent; and Steel Hull 10 per cent. Further study reveals that additional accidents involve material handling but are directly caused by other contributing factors such as unnecessary exposure to falling or sliding objects; not wearing safety protective equipment such as gloves

and goggles, and poor housekeeping. With information of this nature it is possible to plan a safety educational program dealing in the specific problems of divisions and departments.

It is well to consider the importance of common sense psychology in planning the material handling accident prevention program. Although educated men can be taught by studying the safety rule book, more interesting methods must be devised to hold the interest of the lesser educated men who are more directly involved in handling materials.

We operate on the assumption that the supervisors have direct control of and therefore are responsible for safe and healthful working conditions. Maintaining these safe working conditions and practices which have been brought about by business and national organizations are a production problem and cannot be delegated to any department, to the exclusion of the production personnel. The good examples set by supervisors and leading men of proper material handling are the best every day education media.

Our material handling educational program consists of:

1. Supervisors conferences;
2. Employees training classes; and
3. Cartoons and posters.

Supervisors conferences are conducted on company time to emphasize the importance of safety to the company. Foremen, Staff Supervisors and Quartermen attend these classes. Subjects for study are selected in advance of each meeting and plans are formulated for the leadership of discussion and for encouraging participation by the individual members. The conference is built around: 1. the principle of industrial accident prevention; 2. the causes of departmental accidents; and 3. recommendations for corrective action are compiled. This course is of a refresher nature.

Employees material handling training classes of approximately 12 hours per person are conducted for new employees. Three hours are devoted to becoming familiar

with the plant and equipment and the balance of the time consists of learning knots, rope and chain inspection and rigging. Other safety considerations are stressed, such as definite orders to never adjust any valves or switches on anyone's orders other than the immediate supervisor, and not indulging in horseplay.

A jingle contest cartoon, for which the best completed jingle receives twenty-five dollars in cash, is published in the company magazine each month. Some specific unsafe act is pictured in a manner which is adaptable to all divisions. The cartoon is accompanied by an uncompleted jingle and a short discussion of several specific causes of this accident. While the employee studies the various causes to complete the jingle, he unconsciously becomes safety minded. Families of employees are also eligible and the resulting safety discussion within each family has been found to further encourage a safety state of mind. This fact is proven because we are now receiving over 100 per cent more safety suggestions in our suggestion system than we did previous to the jingle contests.

Material handling, which costs industry approximately 22 per cent of every dollar, is of such great import, that its problem can best be analyzed by considering its three main phases, namely: 1. plant movements when material is moved from one place to another; 2. processing operations such as painting, heat treating, etc.; and 3. subassembly and assembly operations.

Broadly speaking, manual material handling is a factor in the greatest number of accidents. This outstanding problem can only be met in making employees alert to this source of accident danger by constant safety education which applies psychological methods to forewarn them of causes and enlighten them on methods of proper handling of materials. These accident causes will vary in importance in every plant. If the above methods of analysis are used, a constantly changing and interesting educational program that will properly discipline the mind and character of our employees will be developed.