FILE NAME: Hopeman Brothers (HB)

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DOCUMENT DESCRIPTION: Industrial Safety Survey of Bethlehem - Fairfield Shipyard, Inc. with Handwritten Notes

450

Exhibit #431

Read 2 of 13

Read 3 of 14

Depositions are all over the place re:
- knowledge
- Respirators
- warnings.

TO U. S. MARITIME COMMISSION

WASHINGTON, D. C.

31 Recommendations.

Plenty of committees and meetings but a qualified committee with pertinent authority to deal with the prevention of accidents appears to be lacking.

The facts contained in the body of the report - pages 5 to 18 - set forth with real clarity very good reasons for the 31 recommendations made. Emphasizes the importance of establishing a central committee and encouraging the management to take a direct part in a movement to reduce accidents

INDUSTRIAL SAFETY SURVEY

OF

BETHLEHEM - FAIRFIELD SHIPYARD, INC.

BALTIMORE, MARYLAND

FEBRUARY 4, 5, 7, & 8, 1944

This document contains information affecting the national defense of the United States within the meaning of the Espionage Act 50 U.S.C., 31 and 32. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

DECLASSIFIED
EO 12356 Sec 3.3 FMC ltr 10/21/82
By NNRL/Lgm NARS, Date 5/17/83

BY: HARTNETT

REGIONAL CONSULTANT

DIVISION OF LABOR RELATIONS

UNITED STATES MARITIME COMMISSION

CRMC-RUCK-000774

RECOMMENDATIONS

NOTE: The numbers in parentheses following recommendations refer to the pertinent sections of the Minimum Requirements.

1. The Minimum Requirements for Safety in Contract Shipyards should be put into effect. The following items should receive first attention.

2. Top Production Management should participate more fully in the Safety Program by regular attendance at safety meetings, action upon good or bad departmental safety records through personal interviews with department heads, issuing general letters on accident records for bulletin board posting, and setting a good example to supervisors and employees by using the necessary personal protective equipment when exposed to operating hazards. (S-2.26)

3. The Management should instruct all superintendents, foremen, and other supervisors that they are considered responsible for preventing accidents which involve employees working under their direction and require them to comply with all provisions of the accident prevention program. (S-2.25)

4. The Safety Director should prepare a concise monthly report for the Management on the status and progress of safety in the yard and any additional steps considered necessary to improve conditions. (S-5.25(b)

5. A monthly summary of non-disabling injuries showing number and type of accidents by department should be prepared and given to department heads.

6. A Supervisor's Rep[illegible] Accident should be submitted for each disabling injury. (S-

NOTE: A "disabling injury" is one which results in death, permanent impairment (through amputation or loss of use of any body part), or timeloss beyond the day or shift on which the injury occurred.

7. A suitable form should be provided for safety men to submit recommendations to supervisors, copies of which should be used by Safety Department to check corrective action. (S-4.12)

8. A summary of all injuries should be submitted monthly on the U. S. Maritime Commission — U. S. Navy Injury Summary Form provided for that purpose. The statistics submitted should be in accordance with the instructions on the form. A distribution of the disabling injuries, in accordance with the unsafe condition or practice involved, should be shown on the reverse side of this form in the space provided for that purpose. (S-4.13)

9. A Central Safety Committee, to act as a policy forming committee for safety work, should be organized and hold meetings at least once each month. Membership of this committee should include a member of Top Production Management who should act as Chairman, the Safety Director, Medical Director, all superintendents, and if desired, a number of foremen, quartermen or leadermen. (S-5.11)

10. Regular inspection committees should be organized, and function as outlined in Section-5.15 of the Minimum Requirements. Membership should consist of at least two employees and a supervisory employee, and the committee should be accompanied by a safety engineer or inspector on tours of inspection. Inspections should be made at least once [illegible]k. It is suggested that one committee be appointed for each [illegible]ll or other working area. (S-5.15)

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11. All new employees should have the safety policy of the yard explained to them by a safety engineer before starting work. They should also be instructed in the hazards of their specific jobs by their immediate supervisor who should check frequently to see that his instructions are being complied with. (S-6.1 - 6.4)

12. Well-constructed safety bulletin boards with locked glass covers should be provided at each hull and shop and such other locations as may be desirable and safety posters and other safety material posted thereon. These bulletin boards should be lighted at night. (S-6.6, 6.61, 6.62)

13. A safety supply store should be established in the yard, and safety shoes, safety hats and impact and filter lens goggles made available to employees. Safety shoes may be sold at or near cost, but safety hats and goggles should be issued to employees, but remain the property of the company to be returned when employment is terminated. It would be desirable to have the store handle work clothes and gloves also. (S-7.1)

14. All employees working on ways and hulls or doing any other work where they are in danger of being struck by falling objects should be provided with and required to wear suitable safety hats. These hats should be issued free to employees on check, but remain the property of the company to be returned when the employee ends his employment. (S-7.1)

15. All employees doing work where there is a hazard of flying particles should be required to wear impact-resisting goggles of a type suitable for the particular job and meeting the requirements of the U. S. Bureau of Standards. (S-7.2)

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16. All employees working near arc welding operations should be provided with and required to wear approved goggles with sideshields. (S-8.4)

17. Welders should be required to wear protective leather clothing (S-9.22)

18. All welders should be provided with and required to wear approved goggles under welding hood. (S-9.23)

19. Welding screens should be used to protect the eyes of employees working near welding operations whenever practicable (S-9.5)

20. All welding leads should be coiled back to centrally located stations after the completion of each shift or job. (S-9.5)

21. All women employees, except those working in offices, should be required to have their hair fully enclosed in a cap or other suitable covering at all times while on duty.

22. For the guidance of crane operators, weights of all sections over five tons should be plainly marked on the section in figures at least 12" high. (S-11.1(a)

23. Crane operators should receive a complete physical examination when hired and annually thereafter. Particular attention should be given to eye tests including depth perception. (S-11.8)

24. Warning bells on cranes should be maintained in good operating condition at all times. (S-11.6)

25. Employees should not be permitted to remain under, or pass under, crane loads. (S-11.10)

26. Whenever possible, crane operators should be relieved on the ground and not in the crane cab. (S-11.13(a)

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27. Wide, well-defined aisles should be laid out in the shops and kept clear of obstruction and free from debris. Lines defining these aisles should be repainted at frequent intervals. (S-12.1(a, 12.12)

28. All deck areas on hulls should be kept free of debris and construction material should be stored in an orderly manner, so as not to present a hazard to employees. (S-12.14)

29. All deck openings should, as soon as practicable, be protected with guardrails at least 42" in height, set 12" back from the edge of the opening. For all hatches or other large openings, toe boards also should be provided. When necessary to remove stanchions and guard chains, these should be replaced as soon as possible. Open spaces in rail on boat deck should be guarded until lifeboats are in place. (S-12.15)

30. All machines should be guarded at the point of operation so employees will not be injured while operating the machines. (S-16.2)

31. All interior staging more than twelve feet above the floor or deck or located near a hatch or other opening should be provided with substantial backrails of 2 x 6 stock or material of equal strength. (S-17.2)

PERSONS INTERVIEWED

Mr. Lester L. Voss, Resident Construction Engineer, USMC
Mr. John I. Swarthout, Asst. Resident Construction Engineer, USMC
Mr. J. M. Willis, Vice President and General Manager
Mr. M. G. Hodgkinson, Management's Representative
Mr. Wm. C. Reynolds, Yard Manager
Mr. G. J. McVicar, Yard Superintendent
Mr. Wm. R. Robins, Jr., Safety Engineer

This yard was opened in April 1941. Previous to that time there was a yard with four ways operated on part of the present site. The yard has sixteen building ways and two outfitting piers.

Some changes are planned in connection with the Victory Shipbuilding Program, and there will probably be but fourteen ways after these changes are completed. Two of the ways are equipped with bridge cranes and tower cranes are used on the other ways and the outfitting piers. There is a machine shop, carpenter shop, pipe shop, and a few other small shops in the yard proper, but the fab shop is located some distance away from the yard. This is a very large fab shop and has about 6500 employees on the three shifts. Fabricated sections are shipped from the fab shop to the yard by rail.

There are also two storage yards some distance from the shipyard, one of these being at Wagner's Point about a mile or so away. There are about 200 employees at that location. It is expected that the location will be abandoned in the near future.

Another storage yard is located at Masonville which is also about a mile from the shipyard and has about 150 employees.

There are a number of sub-contractors working in the yard, but they have comparatively few employees. Hopeman Brothers, sub-contractors for joiner work, have probably three or four hundred employees and the other sub-contractors a smaller number.

The yard is now building Liberty Ships and works three shifts a forty-eight hour week. There is a total of about 45,000 employees including the fab shop and the storage yards. Approximately fifty per cent of the force works the day shift, thirty per cent the afternoon, and twenty per cent the third shift. There is a total of about 4,000 women employees. Few of these work on the ways. The IUMSWA-CIO Labor Union is the collective bargaining agency. The Maryland Casualty Company is the compensation insurance carrier and keeps a full time safety engineer and a claim adjuster in the yard.

COMMENTS

A survey was made of the shipyard, fab shop, and the storage yard at Wagner's Point to check application of the Minimum Requirements for Safety in Contract Shipyards. The survey disclosed that some sections of the Minimum Requirements are being followed but several other sections are not in effect. These were discussed in detail with Mr. Robins, Safety Engineer; and the more important items were discussed during an interview which Mr. Voss, Resident Construction Engineer, and the writer had with Mr. Reynolds, Yard Manager. The following comments refer to the safety section of the Minimum Requirements:

S-2, MANAGEMENTS PART

2.1 Top Yard Management, with the exception of the Plant Superintendent and the Fabricating Superintendent, do not take an active part in the safety work or closely supervise the safety program. The Plant Superintendent in the Shipyard and the Fab Superintendent in the Fab Shop are active to some extent, but the General Manager and the Yard Manager do not take an active part in the safety work. No Central Safety Committee has been set up. If such a committee were in operation, it would provide a medium through which these officials could take a more active part and place the prestige of their positions behind the safety work.

2.21 The working environment is reasonably safe.

2.22 There is little training of employees for safety. Some Craft Classes are operated [illegible] the number of trainees at present

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is very small. Some training of supervisors in safety has been recently instituted and will be commented on more fully later in this report.

2.23 An accident record and reporting system tying into nationally uniform reporting, recording and statistical requirements has not been established. Only compensible accidents are reported.

2.24 A A Safety Engineer and staff have been appointed.

2.25 Supervisors have been verbally instructed on their responsibility for the prevention of accidents, but this does not appear to be very effective. It would be well to have these instructions reissued in writing and a copy given to each supervisor.

2.26 Only the two superintendents actively participate in safety. They attend some of the safety committee meetings.

S-3. SAFETY DIRECTOR AND STAFF

3.1 A full time Safety Engineer and staff have been appointed. The Safety Engineer reports to Mr. Hodgkinson, Management's Representative.

3.2 - 3.24 The staff of the Safety Department, in addition to the Safety Engineer, consists of one Assistant Safety Engineer and 34 safety inspectors. Six of the safety inspectors are located at the Fab Shop. The safety inspectors are assigned to the various shifts in accordance with the number of employees and the hazards involved. There is one girl clerk-stenographer on each shift at the Shipyard and one at the Fab Shop.

3.25 These items are being carried out with the following exceptions:

(a) The Safety Program has not yet been fully correlated with the minimum safety standards of the U. S. Navy Department and Mari-Commission.

(b) No report, other than accident statistics, on the status of safety is submitted to the General Manager. It would be well to have such a report prepared by the Safety Department at least monthly giving the status of safety in the yard and showing the progress or lack of progress and the additional steps necessary to improve conditions.

(d) Information available from Dispensary records of non-disabling injuries is not being used for accident prevention purposes. Most yards make use of this information by making up a monthly summary of non-disabling injuries by department so that information can be given to each department head with respect to the number and type accidents occurring in his department. This also shows the department head and Yard Management the departments that are having high accident frequencies as well as the predominating types of accidents and thus enables preventative efforts to be concentrated where most needed.

(n) The required reports are not submitted to the interested government agencies.

S-4. ACCIDENT PREVENTION FORMS AND REPORTS

4.11 The Maritime Commission--Navy Department Supervisor's Report Form is not used. The Yard uses the Bethlehem Steel Company's Foreman's Accident Report for its own records. This does not give the information required.

4.12 No safety engineer's recommendation form is in use.

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4.13 U. S. Navy—Maritime Commission Monthly Injury Summaries are submitted, but the accident statistics shown are not in accordance with the Minimum Requirements as only compensible accidents are included instead of all accidents causing loss of time beyond day or shift on which the injury occurred. These reports, therefore, are of no value in comparing the experience of this yard with other yards.

4.14 Minutes of General Safety Committee meetings are kept.

S-5. SAFETY COMMITTEES

5.11 No Central Safety Committee has been set up.

5.12 No Supervisors' Safety Committee as outlined in the Minimum Requirements has been established, but there has recently been instituted meetings of supervisors in each of the four yards into which the Yard itself is divided. The Assistant Superintendent in charge of each of these yards acts as Chairman of the meeting which is held once a month and all foremen in that yard attend. This would make a total of about 25 at each meeting. The meeting lasts for a half-hour or longer. This is being further extended at the present time so that each forman will hold a meeting of his leaders. This is considered an excellent method of training supervisors in safety and it is urged that it be continued and extended so that all leaders in the yard will attend at least one meeting a month.

These meetings can be considered as complying fully with Section 5.12 of the Minimum Requirements.

5.13 No regular inspection committees have yet been set up, but plans are now underway for [illegible] these committees, and it is expected

that they will be operating about March 1.

5.14 Special Inspection Committees

(c-1) Each yard has an Assistant Carpenter Foreman, and there is a carpenter leader on each way. There are also supposed to be 17 carpenters on a way, but this number is cut down at times due to a shortage of carpenters. There is a continuous inspection of staging and on the whole the staging is in good condition.

(c-2) The Engineering Department makes a weekly inspection of cranes for physical and structural defects. The Electrical Department also makes a weekly inspection of electrical equipment. The Erectors Maintenance Department makes a complete inspection of each crane (except those used by the riggers) monthly. In addition, cables are inspected before every heavy lift.

5.15 Safety Committees—General

There is a General Safety Committee composed of hourly men on each shift in each yard. Each of these committees holds a meeting every two weeks. There are about 25 or 30 committee members of each committee, and they serve for a six month period.

It is also planned to have a monthly meeting of leaders of all crafts on each hull headed by the Boat Foreman for the particular hull. It is planned to hold these meetings once a month.

S-6. EMPLOYEE SAFETY TRAINING

6.1 In the past an Induction Program for all new employees was conducted every Wednesday for about four hours, approximately 1 1/2 hours of which was used by the Safety Department for safety instructions. Due to the small number of new hires at present this is not used a great deal.

6.2 - 6.5 These items are in effect and are being fairly well carried out except that there is considerable room for improvement in the enforcement of safety rules.

6.6 - 6.63 Suitable bulletin boards are not provided. The Safety Department had some very good safety bulletin boards, but these have been taken over by Management for official bulletins and safety posters are now placed on ordinary flat general bulletin boards along with numerous other posters so that it is doubtful if they do much good. Since posters are only a medium of selling safety to employees, they are valueless unless they attract attention, and in order to do this, it is necessary that suitable bulletin boards such as those formerly in use be provided and properly maintained.

6.7 There is no house organ.

6.8 Sound film strips and motion pictures are used to some extent. The public address system is used for safety messages occasionally, but at present it is not in very good operating condition.

S-7. SAFETY SUPPLY STORE

No safety supply store has yet been established in the yard. Safety hats are issued free on check through No. 16 Tool Room, but enforcement of the wearing of these hats is lax, and many men were noted working on ways and mulls not wearing them.

A recent fatal accident was caused by an employee being struck on the head by a piece of falling plank.

Ration stamps are issued for safety shoes, but there is no way

of controlling the use made of these stamps. Employees in many cases do not wear suitable clothing. These matters could be much better controlled if a safety supply store were in operation.

S-8. GOGGLES

8.1 - 8.4 Goggles are issued free on check, and those that are returned are repaired if necessary and sterilized before being reissued. Enforcement of rules requiring the wearing of goggles when exposed to eye injuries appears to be lax. Many employees were noted working in the vicinity of welders without wearing goggles.

S-9. WELDING--ARC

9.1 - 9.24 New welders are instructed in the hazards of the work.

Welders' hoods are supplied free on check. No.10 and 12 shade filter lenses are used.

It was noted that a number of welders are not using leather garments to protect against burns. Many of them also do not wear goggles under the welding hood.

9.3 Welding screens are used in the Pipe Shop only.

9.4 Welding leads are not inspected on the job, but cable boys pick up the dead cables and return them to the shop where they are inspected and repaired.

9.5 Welding leads are not coiled back at the end of the shift.

9.6 Welding rod tips are saved and turned in at the end of the shift.

9.7 - 9.85 These items are fairly well complied with.

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S-10. BURNERS

10.1 - 10.9 These items are fairly well complied with except that women's hair coverings do not fully enclose the hair.

S-11. CRANES

11.1 - 11.2 The rated capacity of the crane in some cases has to be exceeded in handling of loads and when the building of Victory Ships is started, still larger loads will have to be handled. It is planned to reenforce the cranes and increase the capacity to take care of this situation.

11.1 (a) Weights of sections over five tons are not marked on the sections for the guidance of crane operators.

11.3 Crane operators are supposed to be examined every six months, but this has not been done recently. At the time this survey was made, however, steps were being taken to have these examinations made.

11.5 Cranes are provided with bumper guards.

11.6 Tower cranes are equipped with automatic bells, but some of these were found to be out of order.

11.7 Hook tenders wear identifying arm bands.

11.9 This rule is in effect.

11.10 This rule is in effect but is not fully enforced.

11.11 - 11.13 These items are in effect.

11.15 (a) Crane operators are not relieved on the ground.

11.14 - 11.17 These items are in effect.

11.18 Chain and cable slings are inspected by both the Erection Department and the Safety Department.

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11.19 Bridge cranes are equipped with limit switches, but electrical tower cranes are not. I was advised by the Plant Engineering Department and the Crane Department that many of the cranes are not equipped with magnetic brakes, and consequently, it would be inadvisable to equip them with limit switches.

S-12. HOUSEKEEPING

12.1 Housekeeping in the yard and craneways is good, but housekeeping on the hulls and in some of the shops is poor.

12.1 (a) and 12.12 Housekeeping in the shops could be improved considerably by laying out proper aisles.

12.13 Staging platforms and walkway surfaces on shipways in general are kept fairly clean, but more general use of pails for nuts, bolts, etc. on staging would improve the condition.

12.14 There is a great deal of room for improvement of housekeeping conditions of deck areas on hulls. Provision of sufficient boxes in which to store debris and prompt removal of same would be very helpful. Several cases were noted where debris had been gathered in a pile on the deck and then had been scattered around again by men walking over it. A more orderly arrangement of construction material, welders leads, and hoses also would improve the condition.

12.15 Deck openings are fairly well guarded except small manholes and tween deck hatch openings where the stanchions and chains are frequently removed and left down. No guardrails have been used on boat decks while davits were being installed, and during this survey a worker in the Salvage Department while walking along the deck near one of these openings was drowned. It is believed that he slipped on

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some oil on the deck near the opening. It would be advisable to provide some sort of protection even a chain or line in front of these openings until the lifeboats are installed.

12.16 - 12.21 These items are fairly well carried out.

S-13. LIGHTING

Lighting in general is satisfactory.

S-14. HAND TOOLS

Tools are inspected and repaired in the Tool Room before being reissued.

S-15. HANDLING MATERIAL

Employees are instructed in proper method of lifting and posters illustrating this are displayed from time to time.

S-16. MACHINE GUARDING

16.1 - 16.12 Guarding of belts, pulleys, and dangerous moving parts is fair.

16.2 Point of operation guards have been provided on some machines, but several others are still unguarded or guarded sub-standard. Among the latter are band saws and planer in the Carpenter Shop and a number of guillotine shears in the Fab Shop. The planer could be partially guarded at the point of operation by suitable hoods, but standard guarding would entail the installation of an exhaust system. If such a system is installed, it would be desirable to have the other machines in the Carpenter Shop connected with it, particularly the band saw where asbestos boards are cut. Until this

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is done, employees cutting asbestos board on the band saw should wear respirators approved for Type A dust.

S-17. STAGING AND LADDERS

Staging and ladders for the most part are well constructed except that interior stagings are not provided with backrails.

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The accident experience of the yard is poor, and the over-all trend for the year 1943 has been upward. The frequency rate for January was 26.86 and for December 53.41. The yearly frequency for the year 1943 was 36.85. These are the yard's own records, and while they indicate an upward trend they do not give a true picture of the accident frequency for comparison with records of yards reporting in accordance with the Minimum Requirements, as these figures take into account compensible accidents only, and it is estimated that these account for only about fifty per cent of all disabling injuries; therefore, the actual frequency rate of the yard is much higher than indicated by the rates shown above. It is essential, therefore, that the safety work in the yard be intensified, and it is believed that this can best be done by Top Yard Management participating more actively and supervising the work more closely to see that consistent and steady progress is being made from month to month in controlling accident occurrence.

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