United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1120 20th Street, N.W., Ninth Floor
Washington, DC 20036-3457

SECRETARY OF LABOR, Complainant, v. OTIS ELEVATOR COMPANY, Respondent.	OSHRC Docket No. 03-1344

APPEARANCES:

Howard M. Radzely, Solicitor; Joseph M. Woodward, Associate Solicitor; Ann S. Rosenthal, Counsel for Appellate Litigation; Michael P. Doyle, Attorney; U.S. Department of Labor, Washington, DC
For the Complainant

Harold J. Engel, Esq., Paul J. Waters, Esq., and Kurt D. Ferstl, Esq.; Reed Smith LLP, Washington, DC
For the Respondent

DECISION

Before: THOMPSON, Chairman; and ROGERS, Commissioner.

BY THE COMMISSION:

STATEMENT OF THE CASE

Otis Elevator Company ("Otis") constructed elevator units at the Goldman Sachs building in Jersey City, New Jersey on December 23, 2002. An Otis employee was killed when the elevator "car sling" he was riding on fell down the elevator shaft in which it was suspended. As a result of the accident, the Occupational Safety and Health Administration ("OSHA") inspected the worksite and issued a citation to Otis. The citation alleged a serious violation of

section 5(a)(1) of the Occupational Safety and Health Act ("the Act"), 29 U.S.C. § 654(a)(1). The proposed penalty was $7,000.

Otis contested the citation and a hearing was held before Administrative Law Judge Marvin Bober. Judge Bober affirmed the violation and assessed a penalty of $5,500. Former Commissioner James M. Stephens granted Otis' petition for discretionary review.

ISSUES

The Secretary contends that Otis violated the general duty clause, section 5(a)(1). The alleged violation was for the failure to furnish employment and a place of employment free from the recognized hazard of the load free falling to the elevator pit while an employee was riding on the load and the recognized hazard of an employee being struck by recoiling cable.

Otis contends, among other things, that the judge erred in imputing knowledge to Otis and that Otis' safety rules freed the workplace from all alleged recognized hazards.

The issues on review are: (1) Do the cited conditions present a hazard under the general duty clause; (2) Does Otis or the industry recognize the cited hazards; and (3) Did Otis have knowledge of the violative conditions?

For the reasons given below, the judge's decision is reversed and the citation is vacated.[1]

FINDINGS OF FACT

During the construction and installation of elevators at the Goldman Sachs building, Otis employees built several elevator car slings—the frames that carry an elevator—in the hoistways (also known as elevator shafts). A car sling, which resembles an elevator in its infant stages, extends from rail to rail within the hoistways. Each car sling consists of the following items: a safety plank on the bottom, two side columns, an overhead cross beam, and planking on top, which serves as overhead protection for employees.

On the day of the accident, Otis mechanic Daniel McQuillen was assigned to remove "rail bugs" (also known as "Johnson clips") from a hoistway. Rail bugs are devices attached to the rail with a screw to align the rail in the hoistway. Once installation of the rails is complete,

[1] Given the decision to vacate the citation, it is not necessary to reach Otis' claim on review that the alleged general duty clause violation was preempted by specific safety standards promulgated under section 5(a)(2) of the Act.

the bugs must be removed because they obstruct travel along the rails. In removing the bugs, McQuillen was expected to utilize the car sling's safety as well as a ladder. He was also supposed to be tied off to a safety line when he removed the bugs. Instead of following these procedures, McQuillen removed the bugs as he rode up the hoistway while standing on top of the car sling. He was not tied off and fell to his death when the car sling he was riding fell sixty feet down the elevator shaft.

The car sling involved in the accident was suspended in the hoistway by a half-inch cable that ran up the hoistway through rigging equipment on the 43rd floor and back down to a gas-operated hoist machine located on the 23rd floor. The end of the cable attached to the top of the car sling was formed into a lifting eye—i.e., the end was looped back 11 inches, wrapped around a thimble, and then secured with three Crosby Fist Grips ("fist grips"). Fist grips are mechanical devices consisting of two clamps, two threaded studs, and two nuts which are tightened around the cable to secure the lifting eye. The fist grip manufacturer's instruction manual states that the nuts on a fist grip should be tightened evenly "until reaching the recommended torque" and the user should "check and retighten [the] nuts to recommended torque." The manual includes a chart with the amount of torque (in foot pounds) based upon the clip size, rope size, number of clips and amount of rope to turn back. According to Compliance Officer ("CO") Louis G. Murphy, it is not possible to accurately ascertain the torque on a fist grip without using a torque wrench. Otis employees used a large socket wrench to tighten the nuts on the three fist grips attached to the cable suspending the car sling in question.

In the citation, OSHA alleged that Otis violated section 5(a)(1) of the Act because "employees were exposed to the hazard of a load free failing to the elevator pit while an employee was riding the load and/or struck by recoiling cable."

PRINCIPLES OF LAW

Section 5(a)(1) of the Act states that "each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." 29 U.S.C. § 654(a)(1). To establish a violation of section 5(a)(1), the Secretary must demonstrate that (1) a condition or activity in the workplace presented a hazard, (2) the employer or its industry recognized the hazard, (3) the hazard was likely to cause death or serious physical harm, and (4) a feasible and effective means existed to eliminate or materially reduce the hazard. *Kokosing*

Constr. Co., 17 BNA OSHC 1869, 1872, 1995-97 CCH OSHD ¶ 31,207, p. 43,724 (No. 92-2596, 1996); *see Nat'l Realty & Constr. Co. v. OSHRC*, 489 F.2d 1257 (D.C. Cir. 1973). In addition, the evidence must show that the employer knew or with the exercise of reasonable diligence could have known of the hazardous condition. *Active Oil Serv. Inc.*, 21 BNA OSHC 1184, 1186, 2005 CCH OSHD ¶ 32,803, p. 52,497 (No. 00-0553, 2005); *Danis Shook Joint Venture XXV*, 19 BNA OSHC 1497, 1501, 2001 CCH OSHD ¶ 32,397, p. 49,865 (No. 98-1192, 2001), *aff'd*, 319 F.3d 805 (6th Cir. 2003).

ANALYSIS

I. Definition of the Hazard

As part of her burden, the Secretary must define the cited hazard in a manner that gives the employer fair notice of its obligations under the Act by specifying conditions or practices over which the employer can reasonably be expected to exercise control. *Arcadian Corp.*, 20 BNA OSHC 2001, 2007, 2005 CCH OSHD ¶ 32,756, p. 52,073 (No. 93-0628, 2004), *Inland Steel Co.*, 12 BNA OSHC 1968, 1970, 1986-87 CCH OSHD ¶ 27,647, p. 35,997 (No. 79-3286, 1986); *Pelron Corp.*, 12 BNA OSHC 1833, 1835, 1986-87 CCH OSHD ¶ 27,605, p. 35,872 (No. 82-388, 1986).

The Secretary has had difficulty here in separating the hazards she alleges from the means of abatement she has identified. A workplace hazard cannot be defined in terms of a particular abatement method. *See, e.g., Morrison-Knudsen Co./Yonkers Contracting Co.*, 16 BNA OSHC 1105, 1121-22, 1993-95 CCH OSHD ¶ 30,048, p. 41,279 (No. 88-572, 1993) (holding that a hazard must be defined in terms of a preventable consequence of the work operation, not the absence of an abatement method). Nevertheless, the Secretary has consistently identified the hazards in a manner that apprised Otis of the practices and conditions it was required to prevent under the general duty clause. *See Pelron Corp.*, 12 BNA OSHC at 1835, 1986-87 CCH OSHD at p. 35,872 (holding that a hazard must be defined in a way that apprises the employer of its obligations and identifies conditions or practices over which the employer can reasonably be expected to control). Both the citation and the Secretary's initial complaint state, in relevant part, that "employees were exposed to the hazard of the load free falling to the elevator pit while an employee was riding on the load and/or struck by recoiling cable." Thereafter, the Secretary amended her complaint twice. In her first amendment to the complaint, the Secretary focused on the impact hazard posed by a free falling load being ridden by an

employee. Her second amendment addressed both the impact hazard and recoiling cable hazard. Likewise, in her post-hearing brief, the Secretary described the hazards as "impact injuries as a result of the load free falling to the elevator pit while he was standing on top of the car sling" and "being struck by the recoiling wire rope or flying debris." These descriptions not only informed Otis of the practices alleged to be hazardous, but did so without defining the hazards solely in terms of the means by which they could be abated.

Moreover, both of these hazardous conditions were present at Otis' worksite. Indeed, the record establishes that McQuillen's death was the result of the hazard posed by a load free falling into an elevator pit while an employee is riding the car sling. The record also supports the presence of a recoiling cable hazard at the worksite. According to undisputed testimony from the CO, a recoiling cable could have struck or sliced an employee located in the machine room on the 23rd floor. Foreman Bohlig, who was in the machine room at the time of the accident, testified that he could have been hit and burned by the recoiling cable. Although Otis asserts on review that the alleged recoiling cable hazard was based on "unfounded speculation," the company submitted no evidence to rebut the testimony of either the CO or its foreman.

Under these circumstances, the Secretary has met her burden under the general duty clause of proving the presence of hazardous conditions at Otis' worksite.

II. Recognition of the Hazard

Hazard recognition may be shown by proof that "a hazard . . . is recognized as such by the employer" or by "general understanding in the [employer's] industry." *Kokosing Constr. Co.*, 17 BNA OSHC at 1873, 1995-97 CCH OSHD at p. 43,724. Here, the judge concluded that "Otis recognized the risks of injury that are created by falling loads." We agree. It is undisputed that Otis had a work rule prohibiting its employees from making a lift or moving equipment when any employee is in a position to be injured if the load shifts or falls. Otis also had a work rule prohibiting its employees from riding the load and required employees to tie off before entering the hoistway. This evidence establishes that Otis itself recognized the hazard of a load falling while an employee is riding it.[2] *See Ted Wilkerson Inc.*, 9 BNA OSHC 2012, 2016, 1981 CCH OSHD ¶ 25,551, p. 31,856 (No. 13390, 1981) (employer's work rule establishes recognition of hazard under general duty clause).

[2] The parties do not dispute that this hazard was likely to cause death or serious physical harm.

Nothing in the record, however, supports a conclusion that Otis or its industry recognized the recoiling cable as a hazard. The judge made no separate conclusion that this hazard is recognized. Likewise, the Secretary, in her brief to the Commission, fails to address whether Otis or the industry recognized the recoiling cable hazard. The Secretary relies significantly on the fist grip manufacturer's specifications as evidence the industry recognized that a failure to tighten the fist grips to the proper torque poses a falling hazard. But, she never contends that these same specifications also support industry recognition of the recoiling cable hazard. Finally, the record does not indicate that Otis had a work rule addressing the recoiling cable hazard, or otherwise recognized such a hazard. Under these circumstances, the Secretary has failed to meet her burden of proving Otis recognized the recoiling cable hazard.

III. Knowledge

As part of the Secretary's *prima facie* case, she must show that the employer had actual knowledge of the violation or could have discovered it with the exercise of reasonable diligence. *NY State Elec. & Gas Co. v. Sec'y of Labor*, 88 F.3d 98, 105 (2d Cir. 1996).[3] Under both Commission precedent and the law of the Third Circuit, a circuit to which either party could appeal this case, knowledge may be imputed to an employer through a supervisory employee. *Aquatek Sys., Inc*., 21 BNA 1400, 1401, 2005 CCH OSHD ¶ 32,794, p. 52,442 (No. 03-1351, 2006); *Penn. Power & Light Co. v. OSHRC*, 737 F.2d 350, 357-58 (3d Cir. 1984). In this case, the only person who had actual knowledge of the violative condition at issue was McQuillen, the employee who rode the load. Based on the record before us, his knowledge would not be imputable to Otis under either Commission or Third Circuit precedent. As such, we need not determine whether McQuillen was in fact a supervisor at this worksite.

Under Commission precedent, we find that the record sufficiently rebuts any imputation of McQuillen's knowledge of his own conduct, in that the company took reasonable measures to prevent its employees from riding the car sling. *Aquatek Sys., Inc*., 21 BNA at 1401, 2005 CCH OSHD at p. 52,442. It is undisputed that Otis' safety program, which the CO described as "well rounded" and "above average," included a work rule prohibiting employees from riding a

[3] *New York State Electric & Gas Co. v. Secretary of Labor* was decided by the United States Court of Appeals for the Second Circuit, a circuit to which either party could appeal this case. In the case at hand, we do not address the burden of proof regarding the element of knowledge.

suspended load and requiring them to tie off before entering the hoistway. In addition, several witnesses, including the CO, stated that Otis had specific procedures in place to remove rail bugs without riding the load. The evidence also establishes that the work rule and specific procedure were adequately communicated to Otis' employees.[4] Indeed, the Secretary makes no claim that Otis' monitoring or enforcement efforts of the work rule and the bug removal procedure were inadequate, nor did the judge make any conclusions in that regard. *Ala. Power Co.*, 13 BNA OSHC 1240, 1245, 1986-87 CCH OSHD ¶ 27,893, p. 36,580 (No. 84-357, 1987) (no evidence monitoring efforts were inadequate or that additional efforts would have been more effective). In fact, the CO testified there was nothing more Otis could have done in this case to prevent McQuillen from riding the load.

Under Third Circuit precedent, the participation of the company's own supervisory personnel in the violative conduct provides evidence of employer knowledge of the violation, but does not end the inquiry. *Penn. Power & Light Co. v. OSHRC*, 737 F.2d at 357. Before a supervisor's knowledge can be imputed, the Third Circuit requires the Secretary to prove that the violation was foreseeable.[5] *Id.* As we discuss above, the record fails to show that Otis could have foreseen its employees would ride the car sling. Otis had a well-communicated work rule addressing the hazard of riding the load and the Secretary found no fault with the way Otis monitored compliance with the rule and enforced violations.

Finally, we find that the Secretary failed to otherwise establish Otis had constructive knowledge that its employees rode car slings. The test is whether the Secretary established that Otis could have discovered the violative condition through the exercise of reasonable diligence. *Pride Oil Well Serv.*, 15 BNA OSHC 1809, 1814, 1991-93 CCH OSHD ¶ 29,807, p. 40,583 (No. 87-692, 1992). For the same reasons that we have found the record rebutted any imputation of McQuillen's knowledge under Commission precedent, we find that the Secretary failed to prove that Otis could have discovered the violations with the exercise of reasonable diligence. *See Danis Shook Joint Venture XXV*, 19 BNA OSHC at 1501-2, 2001 CCH OSHD at p. 49,865.

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[4] Otis spends up to $16 million on its safety program every year.

[5] Chairman Thompson notes this is consistent with his footnote 5 in *Secretary of Labor v. Diamond Installations, Inc.*, 21 BNA OSHC 1688, 1691, 2005 CCH OSHD ¶ 32,848, p. 52,879 (Nos. 02-2080 & 02-2081, 2006).

Accordingly, we find that the record fails to demonstrate that the Secretary established knowledge of the violation and, therefore, vacate the citation.

CONCLUSIONS OF LAW

Under these circumstances, we conclude that the Secretary has failed to establish that Otis violated the general duty clause because she has not shown that Otis had knowledge of the cited condition.[6]

ORDER

For all of the foregoing reasons, we reverse the judge and vacate the citation.

SO ORDERED.

/s/
Horace A. Thompson III
Chairman

/s/
Thomasina V. Rogers
Commissioner

Dated: September 27, 2007

[6] The decision today is limited by the record before the Commission. No conclusion is made regarding the efficacy of the Secretary's proposed means of abatement. In addition, the Commission's decision does not condone Otis' apparent failure to follow manufacturer's specifications regarding the use of fist grips.

However, the gravamen of the Secretary's charge with respect to the load free falling to the elevator pit is that an employee was riding the load—a factual condition of which the employer lacked knowledge. In any event, the record simply does not allow us to make a judgment as to whether a hazard existed in the absence of an employee riding the load.

SECRETARY OF LABOR, Complainant, v. OTIS ELEVATOR COMPANY, Respondent.	OSHRC DOCKET NO. 03-1344

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Before: G. MARVIN BOBER
Administrative Law Judge

DECISION AND ORDER

Background and procedural history

This proceeding arises under the Occupational Safety and Health Act of 1970, 29 U.S.C. §§651-678 (1970) ("the Act"), to review (1) citations issued by the Secretary of Labor pursuant to section 9(a) of the Act, and (2) proposed assessments of penalty issued pursuant to section 10(a) of the Act.

On December 23, 2002, Dan McQuillen, an employee of Respondent Otis Elevator Company (Otis), fell to his death when the "car sling" upon which he was working fell 60 feet down the elevator shaft in which it was suspended. As a result of that fatality, the Occupational Safety and Health Administration (OSHA) conducted an inspection of Otis' worksite at 30 Hudson Street in Jersey City, New Jersey. On June 20, 2003, OSHA issued to Otis a citation alleging a "serious" violation of §5(a)(1) of the Act, with a proposed penalty of $7,000.00. By filing a timely notice of contest Otis brought this proceeding before the Occupational Safety and Health Review Commission (Commission). On September 20-21, 2004 an administrative trial was held in Newark, New Jersey. Both parties filed post-trial briefs on December 10, 2004. Training records submitted by Otis after the hearing are hereby admitted and marked as exhibit R-10.

Jurisdiction

Otis admits that Otis is an employer engaged in interstate commerce within the meaning of section 3(5) of the Act, and that the Occupational Safety and Health Review Commission ("the Commission") has jurisdiction over this case.

The Citation

Serious Citation 1, Item 1 alleges:

> Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to the hazard of the load falling to the elevator pit while an employee was riding on the load and/or struck by recoiling cable:
>
> (a) HOISTWAY #14, 30 Hudson St., Jersey City, NJ:
>
> The employer did not insure, by providing and requiring the use of a Torque wrench, that the fist grips which were used to form the lifting eye on the portable hoist rope were properly installed to safely hold the load. The Crosby fist grip clips, model G-429 manufacturers application instructions & warning are printed on the packaging in which fist grips are received. i.e., torque the nuts to 65 foot pounds as instructed in table #1 of the package as well as insuring employees follow the instructions on pages 81, 88, 91 & 93 of the Otis Employee Safety Handbook, (7/00 edition).
>
> "Among other methods, the following feasible and acceptable abatement methods to correct this hazard are:
>
> 1) Prepare and provide to employees a Standard Operating Procedure for the Safe Installation of Traction Elevators. Procedures should include instructions for clearing obstructions in a safe manner to eliminate employees riding the load to clear obstructions from hoist ways under construction as recommended in the "Installation Manual, Basic Field Practices For Installation of Elevator Equipment", published by the National Elevator Manufacturing Industry in 1970 which recommends in chapter 2, page 27, "Never let anyone "ride the ball" or ride with a load of material on a hoist", and also chapter 3, page 51, para. 4, "No men should be permitted to "ride the ball" or a load of material!"
>
> These recommendations are also contained in the 2001 edition of Installation Manual, Basic Field Practices for Installation of Elevators, in chapter 2, page 27 and also in chapter 3, page 51 which is published by Elevator World Magazine.
>
> 2) Provide and enforce the use of Torque wrenches to follow the manufacturer's instructions and warnings to install wire rope clips properly for safe lifting."

The Accident

On December 23, 2002, Otis employees Joseph Stivale and Dan McQuillen were rigging an unfinished elevator car, or car sling, in hoistway number 14 at the 30 Hudson Street site (Tr. 17-18, 131). Prior to hoisting the car sling, McQuillen set about removing "bugs" which had been left on the rails inside the elevator shaft on one of the upper floors (Tr. 183-84). Bugs are small metal clips that are used to align the rails vertically in the hoistway (Tr. 30, 183). Once installation of the rails is complete, the bugs must be removed, as they obstruct travel along the rails (Tr. 134, 183). McQuillen had already removed bugs from hoistways 12 and 13 while working atop the suspended car sling (Tr. 184). Stivale testified that he held a ladder for McQuillen allowing him to climb on top of the car sling (Tr. 190). The car sling was raised with ½ inch wire rope that ran through rigging on the 43rd floor, then down to a winding drum located in a motor room on the 23rd floor (Tr. 17-18, 136). Stivale was standing in the lobby, watching the ropes from the bottom of the sling pull through reels in the bottom of the hatchway when the hoist cable failed and the car sling fell (Tr. 187-88).

Compliance Officer (CO) Louis Murphy testified that he determined the accident occurred when the lifting eye on the end of the hoist cable failed. The lifting eye was formed by turning the end of the wire rope back upon itself and securing the two strands with three Crosby Fist Grips (Tr. 18, 22). A fist grip is a clamp fastened with two threaded studs secured by nuts which are tightened to a prescribed torque as specified in the manufacturer's recommendations (Tr. 21-23; Exh. C-1, R-1). CO Murphy stated that Otis required Crosby fist grips to be torqued to the manufacturer's specifications (Tr. 90, 95). However, CO Murphy stated, the fist grips on the failed hoist cable were applied with a socket wrench rather than a torque wrench (Tr. 28). Thus there was no way of ascertaining whether the fist grips were torqued to 65 foot pounds as recommended by the manufacturer (Tr. 29, 75, 121-22). CO Murphy stated that fist grips may also be affected by wear and misuse, overloading, corroding, deformation, or intentional alteration, and that damage to the fist grips could have caused them to fail (Tr. 84-85). CO Murphy could not say

whether the fist grips in hoistway 14 had been torqued to more or less than 65 foot pounds at the time of the accident (Tr. 92-94, 103).

Riding the Load

Peter Bohlig testified that he was a "super foreman," a step above foreman, on the 30 Hudson Street site in December 2002 (Tr. 128). He was responsible for all trucking, off-loading trucking, materials storage, and rigging and hoisting; he assigned work associated with those activities to other Otis employees (Tr. 128-29). Bohlig was supervising eight employees, including Dan McQuillen, at the time of the accident (Tr. 129-30, 134). He testified that he assigned McQuillen the job of removing the rail bugs (Tr. 132). According to Bohlig, he and McQuillen discussed the proper method of removing the bugs before McQuillen began work on the number 12 hoistway (Tr. 132, 136). The car sling was to be hoisted to the point where the rail bugs blocked its progress, and then lowered down the hoistway until its safeties engaged (Tr. 132, 136). McQuillen was then to lower a ladder onto the top of the car from the floor above and climb down to the bugs while wearing a safety lanyard (Tr. 132, 136; *see also*, testimony of CO Murphy, Tr. 113-15). Bohlig did not directly supervise McQuillen's performance of his assigned task, as McQuillen was himself a foreman with a crew consisting of a mechanic and two helpers (Tr. 134).

Bohlig testified that the car sling is not designed to be ridden (Tr. 155). Otis specifically prohibits riding loads, including car slings (Tr. 156). In riding the load, McQuillen violated Otis' safety rules (Tr. 162). Bohlig stated that he did not know, and had no reason to know that McQuillen was riding the sling as it was being hoisted (Tr. 157, 162-63). According to Bohlig, McQuillen had an excellent safety record (Tr. 162; *see also* testimony of Sean Murphy, Tr. 227). Had he known, Bohlig would have stopped McQuillen (Tr. 157).

Bohlig testified that he reported to Sean Murphy, the lead foreman, who was in charge of everybody on the job (Tr. 129-30, 175; *see also,* testimony of Joseph Stivale, Tr. 183). Sean Murphy testified that he was the mechanic-in-charge at 30 Hudson Street (Tr. 205). Sean Murphy testified that he oversaw all

the men below him, giving out the work orders, assuring the job stayed on schedule and keeping track of the men's time (Tr. 205). Sean Murphy tried to walk the job every day, but relied on five or six other mechanics-in-charge to run the crews he assigned them to accomplish particular tasks (Tr. 207-08). Dan McQuillen told Sean Murphy that rail bugs had been left in some of the hoistways (Tr. 212, 214). McQuillen and Sean Murphy discussed removing the bugs (Tr. 213). Sean Murphy understood that McQuillen intended to lower the car onto its safeties below the area where the bugs were located, and lower a ladder to the top of the car (Tr. 213). McQuillen would then tie off, enter the hoistway, and remove the bugs (Tr. 213).

Edward Ahrens, a mechanic foreman with Otis, was responsible for job planning and coordination of materials coming onto the job site (Tr. 364). Ahrens learned of McQuillen's accident when he arrived at work on December 23, 2002 (Tr. 357-58). He did not know, prior to that time, that McQuillen had been riding the car sling (Tr. 359). Ahrens testified that Otis recognizes that riding the load is hazardous; the practice is prohibited in its employee safety handbook (Tr. 361; Exh. C-2, Rev. 07/00). The prohibition against riding the load was covered during safety training meetings held at the 30 Hudson Street site (Tr. 362).

Lou Deloreto, Otis' manager of safety environment, testified that Dan McQuillen violated Otis' safety rules by riding the load on December 23, 2002 (Tr. 300). Specifically, Otis' rules on rigging and hoisting caution: "Never attempt to make a lift or move equipment when anyone is in a position to be injured if the load shifts or falls." (Tr. 299-300; Exh. C-2, Rev. 07/00, p. 78), and "All personnel shall be kept clear of suspended loads." (Tr. 300; Exh. C-2, Rev. 07/00, p. 82).

Crosby Fist Grips

Fist grips are used for multiple purposes in elevator construction, *i.e.*, to form slings, and as tie backs (Tr. 139). Otis employees were required to install the fist grips according to the manufacturer's specifications. Otis' safety manual, Section 25.3 **Rigging**, ¶ B states:

> Manufacturer's recommended load capacities on rigging hardware (e.g., turnbuckles, shackles, hooks, eyebolts, wire rope clips/clamps) *shall* not be exceeded. Application of these devices *must* be in accordance with manufacturer's recommendations. . . .

(emphasis added). Employees, however, were never specifically trained to use a torque wrench to achieve the recommended torque (Tr. 26-29, 140-42; Exh. C-2, Rev. 07/00, p. 81, 88). CO Murphy stated that without using a torque wrench it was impossible to accurately ascertain the torque on a fist grip (Tr. 122-23)

Peter Bohlig testified that Crosby's were routinely tightened with box or break-a-bar wrenches, which could not measure whether the proper torque had been achieved (Tr. 142). Bohlig testified that he never saw a torque wrench being used on the 30 Hudson Street site (Tr. 144). The fist grips on the hoist cable that failed on December 23, 2002 were tightened with a socket wrench (Tr. 91). Bohlig testified that the fist grips were not torqued to the required foot pounds before the sling was used (Tr. 141). However, Bolig testified, in his 30 years in the elevator industry he had never heard of an accident like this taking place (Tr. 166-67).

Sean Murphy stated that prior to the accident he was not fully familiar with the manufacturer's instructions for installing Crosby fist grips, in that he did not realize that they had to be installed with a torque wrench (Tr. 218). Sean Murphy was not trained to apply Crosby fist grips with a torque wrench, and never saw one used prior to the accident (Tr. 217). Nothing in Otis' safety handbook requires that the fist grips be tightened with a torque wrench (Tr. 230). Sean Murphy was unaware of any other company in the elevator industry that requires the use of a torque wrench (Tr. 231). After the accident he and Ed Vialonga went around the site and tightened every fist grip on the job (Tr. 219). Though some of the ½" grips were over 65 foot pounds, quite a few, perhaps half, were not adequately torqued (Tr. 219-20, 234-35,

237-38). Sean Murphy tightened one himself "[j]ust to see how much it took to get it to 65" (Tr. 237). He concluded that the foot pounds on a fist grip could not be determined without using a torque wrench (Tr. 219-20). Sean Murphy also testified that in his 20 years in the business he had never heard of the occurrence of another accident like that which took place on December 23, 2002 (Tr. 231).

Deloreto testified that although Otis requires its employees to follow the manufacturer's recommendations in regards to the use of fist grips, *i.e.*, a ½ inch wire rope should be torqued to 65 foot pounds, it did not require that the fist grips be applied with a torque wrench (Tr. 309, 331-32, 343-45). Employees were not provided with any instruction telling them how to achieve the recommended 65 foot pounds of torque (Tr. 334). Though Deloreto was not aware of any means, other than a torque wrench, of ascertaining whether a torque wrench was tightened to 65 foot pounds, neither he, nor anyone else at Otis was aware that a torque wrench was required to comply with the manufacturer's recommendations (Tr. 311, 335). Deloreto maintained that he did not know of any company in the elevator industry that required the use of a torque wrench prior to December 2002 (Tr. 309).

Edward Ahrens, who has 23 years of experience in the elevator industry (Tr. 358), believed that he could come "very close" to tightening a fist grip to 65 foot pounds with a rachet wrench (Tr. 371, 377). In addition, Robert Rodgers, an Otis branch manager, when asked to tighten a fist grip as much as he could with a regular socket wrench, tightened the grip to 68 foot pounds (Tr. 389-90). After tightening the fist grip with all his strength, Rodgers used a torque wrench to measure the foot pounds on the fist grip (Tr. 390).

The General Duty Clause

In order to prove a violation of section 5(a)(1) of the Act, the Secretary must show that: (1) A condition or activity in the workplace presented a hazard to an employee; (2) The hazard was recognized; (3) The hazard was likely to cause death or serious physical harm; and (4) A feasible means existed to eliminate or materially reduce the hazard. The evidence must show that the employer knew, or with the

exercise of reasonable diligence could have known, of the violative conditions. *Tampa Shipyards, Inc.*, 15 BNA OSHC 1533, 1991-93 CCH OSHD ¶29,617 (Nos. 86-360, 86-469, 1992).

Recognition of a Hazard Likely to Cause Serious Harm

The "recognized hazard" may be a practice, procedure or condition under the employers' control that is known to be hazardous either constructively, i.e. by the industry in general, or actually, by the cited employer in particular. *Pelron Corporation*, 12 BNA OSHC 1833, 1986 CCH OSHD ¶27,605 (No. 82-388, 1986). The condition named in the citation in this matter is the danger of "the load falling to the elevator pit while an employee was riding on the load and/or struck by recoiling cable." While clumsily drafted, it is clear that the hazard with which OSHA is concerned is the danger to employees posed by falling loads, including the danger of falling with the load, and/or being struck by the recoiling cable as the load falls.[1]

The evidence clearly establishes that if an accident involving a falling load were to occur, serious injuries would likely result. CO Murphy testified that, when the accident occurred, even if Dan McQuillen had been tied off in the shaft, standing on a ladder on the car sling, as he discussed with his supervisor, Sean Murphy, he would likely have been struck by the wire rope as it whipped around in the shaft (Tr. 42; *see also* testimony of Peter Bohlig, Tr.135-36). According to the CO an employee struck by the recoiling rope would suffer severe lacerations which could result in amputation or death (Tr. 41-42). In addition, the CO testified, employees standing in the motor room on the 23rd floor could have been struck by the cable (Tr. 42). Peter Bohlig, who was checking the pulleys in the motor room at the time of the accident,

[1] In her brief, the Secretary suggests that the failure to apply the fist grips in accordance with manufacturer's specifications constitutes a "recognized hazard." It is clear, however, that under Commission precedent a hazard cannot be defined as the absence of the abatement method; the hazard is the preventable consequence of the work operations. *Sec'y of Labor v. Morrison-Knudsen Co./Yonkers Contr. Co.*, 16 BNA OSHC 1105, 1121, 1993 CCH OSHD ¶30,048 (No. 88-572, 1993). The citation in this matter specifically distinguishes between the consequence to be prevented, *i.e.*, the load falling to the elevator pit, and the means of abating the hazard, which include the use of torque wrenches to follow the manufacturer's instructions for installing wire rope clips.

testified that the runaway cable came "ripping though the motor room" (Tr. 42, 136-37, 158-59). Employees standing at the bottom of the elevator shaft could have been struck by flying debris (Tr. 77, 138, 187-88).

Moreover, Otis specifically recognizes that falling loads may injure employees (Respondent's post-hearing brief, p. 17, 19). In *Wiley Organics, Inc.*, 17 BNA OSHC 1586, 1996 CCH OSHD ¶31,035 (No. 91-3275, 1996), the Commission noted that "the risk of injury to employees, not the specific incident or accident that results in injury, is the relevant consideration in determining the existence of a recognized hazard." *Id.* at 1594. It is, therefore, no defense to the §5(a)(1) citation, that none of Otis' employees had ever heard of an accident like the one which occurred on December 23, 2002.

Nonetheless, Otis argues, the hazards posed by falling loads are addressed by specific standards, including **§1926.251 Rigging equipment for material handling**, **§1926.552 Material hoists, personnel hoists, and elevators**, and **§1926.554 Overhead hoists**. Otis maintains that §5(a)(1) is, therefore, preempted.

Preemption

The purpose of §5(a)(1) is to provide protection against recognized hazards where no duty under a specific standard exists. Specific promulgated standards will preempt the general duty clause, but only with respect to conditions or practices expressly covered by the specific standards. *Con Agra, Inc.*, 11 BNA OSHC 1141, 1983 CCH OSHD ¶26,420 (No. 79-1146, 1983). Where the abatement required by specific standards does not eliminate the hazard addressed by the citation, and where meaningful abatement beyond that required by specific standards is proposed by the Secretary, no preemption will be found. *Coleco Industries, Inc.*, 14 BNA OSHC 1961, 1991 CCH OSHD ¶29,200 (No. 84-546, 1991).

In this case, the evidence establishes that the car sling is neither a material hoist, a personnel hoist, nor an elevator (Tr. 10, 16-17, 169). Section 1926.552 is therefore not applicable. Section 1926.554 does prohibit riding the load, and none of the rigging standards at §1926.251 *et seq.* expressly require the

abatement proposed by the Secretary, *i.e.*, the use of a torque wrench to ascertain that fist grips have been adequately tightened. Because the citation in this matter proposes meaningful protection in addition to that required under the listed standards, Otis' citation under the general duty clause is appropriate.

Feasible Means of Abatement

In order to show an abatement measure's feasibility, the Secretary must show that the proposed precautions are recognized by knowledgeable persons who are familiar with the industry as necessary and valuable steps for a sound safety program in the particular circumstances existing at the employer's worksite. *Cerro Metal Products Division, Marmon Group, Inc.*, 12 BNA OSHC 1821, 1986 CCH OSHD ¶27,579 (No. 78-5159, 1986). The Secretary need not prove that the measures recommended are actually employed by Respondent's industry. *Chevron Oil Company, California Company Division*, 11 BNA OSHC 1329, 1983 CCH OSHD ¶26,507 (No. 10799, 1983). Moreover, the Secretary need only show that the abatement method would materially reduce, not eliminate, the hazard. She need not prove, therefore, that the abatement method's absence was the sole likely cause of the accident. *Sec'y of Labor v. Morrison-Knudsen Co./Yonkers Contr. Co.,* 16 OSHC at 1122.

Riding the Load

It is undisputed that Otis recognized the need to prevent employees from riding the load, and so, implemented a work rule prohibiting the practice as part of its safety program (Tr. 104-05). CO Murphy admitted at trial that Otis had a good program which it adequately communicated to its employees (Tr. 106). There is no evidence that any of Otis's supervisory personnel were aware that McQuillen was riding the car sling in contravention of Otis' safety rules (Tr. 100, 193). According to the CO, Otis did all it could to prevent Dan McQuillen from riding the load (Tr. 108-09).

The Secretary failed to address this means of abatement in her post-hearing brief, and the issue is deemed abandoned. This judge notes, however, that though McQuillen's misconduct may have contributed to the December 23, 2002 accident, it does not dispose of the citation. As the CO testified, employees

properly tied off in, or standing outside of the shaft would likely have been injured in the event that the car sling fell.

The Crosby Grips

Crosby fist grips contain instructions for their proper application on their packaging (Exh. C-1). The packaging contains a section titled "WARNING," which states, *inter alia*, "Failure to read, understand and follow these instructions may cause death or serious injury . . . Apply first load to test the assembly. This load should be of equal or greater weight than load expected in use. Next, check and retighten nuts to recommended torque (See Table 1)." Table 1 on the packaging describes the clip size, rope size, minimum number of clips needed, amount of rope to turn back in inches and the recommended torque (Exh. C-1). As noted above, Otis's employee safety handbook *requires* that the application of wire rope clamps be in accordance with manufacturer's recommendations (Tr. 173-74; Exh. C-2, Rev. 07/00, p. 81). Specifically, employees are instructed to "tighten all the nuts evenly on all the clips to the recommended torque" (Exh. C-2, Rev. 07/00, p. 88). The CO, and Otis employees Bohlig and Sean Murphy all agreed that it was impossible to judge whether the recommended torque had been achieved without using a torque wrench. Their conclusion is supported by Sean Murphy's finding that approximately half of the fist grips he and Vialonga checked after the accident were not adequately torqued (Tr. 219-20, 234-38). The testimony of Robert Rodgers, who stated that he was able to tighten a fist grip to 68 foot pounds with a socket wrench, is notable mainly because Rodgers was only able to ascertain the torque on the fist grip by afterwards measuring it with a torque wrench (Tr. 390). Nonetheless, Otis failed to require employees to use torque wrenches on fist grips, or to instruct them in any other method of ascertaining that the recommended torque had been achieved (Tr. 167, 217, 230, 334).

In defense of its policy Respondent maintains that the amount of torque set forth in its safety handbook and on the packaging for the Crosby fist grips is merely that, a recommendation, not a requirement. Otis argues that there is no evidence in the record suggesting that failing to properly torque

the fist grips would reduce their effectiveness. This judge disagrees. The manufacturer's instructions contain a warning that failure to follow its instructions may cause death or serious injury. Moreover, the Commission has, in cases involving the general duty clause, found that manufacturer's warnings are probative evidence, not only of the existence of a recognized hazard, but of required means of abating such hazards. *See, Young Sales Corp.,* 7 BNA OSHC 1297, 1979 CCH OSHD ¶23,768 (No. 8184, 1979); *C.T. Taylor Co.,* 20 BNA CCH 1083, 1086, 2003 CCH OSHD ¶32,659 (Nos. 94-3241 & 94-3327, 2003) (ignoring manufacturer's specifications constitutes willful disregard of industry practice). In this case it is clear that Otis actually intended it's employees to follow the manufacturer's recommendations; compliance with the manufacturer's torquing instructions was required by the Otis safety manual. What Otis did not do was instruct its employees to use a torque wrench, the only tool capable of accurately measuring the number of foot pounds on a fist grip. As a result none of Otis' employees could tell how tightly a fist grip was torqued.

On this record, this judge cannot find that the December 23, 2002 accident was caused by Otis' failure to ensure that its fist grips were adequately torqued. The record does establish, however, that the use of a torque wrench to tighten fist grips to the manufacturer's recommended foot pounds is the only means ensuring that fist grips are torqued to the recommended foot pounds, and that a reasonable person familiar with the elevator industry would have recognized the need to use a torque wrench to ensure that fist grips are securely fastened. By ensuring that fist grips effectively secure the slings used to hoist loads, employers can materially reduce the risk of sling failure, thus reducing the hazard posed by falling loads.

Employer Knowledge

The knowledge, actual or constructive, of an employer's supervisory personnel will be imputed to the employer. *Ormet Corp.,* 14 BNA OSHC 2134, 2138-39, 1991-93 CCH OSHD ¶29,254, p. 39,203 (No. 85-531, 1991). An employee who has been delegated authority over other employees, even if only temporarily, is considered to be a supervisor for the purposes of imputing knowledge to an employer.

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The evidence establishes that Dan McQuillen's work was directed by Peter Bohlig. Bohlig reported to Sean Murphy. Sean Murphy reported to Ed Ahrens and Nicole Boone. Nicole Boone testified that though she was the project manager at the 30 Hudson Street site, she had no hands-on experience constructing elevators (Tr. 243). She did not assign specific tasks to employees responsible for elevator construction, and relied largely on the foremen on the job site and the mechanics-in-charge, including Ed Ahrens, Sean Murphy, Pete Bohlig and Dan McQuillen, to keep the job on schedule as well as to let her know what materials were needed (Tr. 244-47, 257-58). Sean Murphy, for instance, did not need her specific approval to assign work to his crews on a day to day basis (Tr. 245, 258).

It is clear that for purposes of establishing employer knowledge Peter Bohlig and Sean Murphy both held supervisory positions. Both Bohlig and Murphy knew that torque wrenches were not used to apply fist grips. Employer knowledge is, therefore, established.

Penalty

In determining the penalty the Commission is required to give due consideration to the size of the employer, the gravity of the violation and the employer's good faith and history of previous violations. The gravity of the offense is the principle factor to be considered. *Nacirema Operating Co.*, 1 BNA OSHC 1001, 1972 CCH OSHD ¶15,032 (No. 4, 1972). In determining gravity, the factors to be considered include: (1) the number of employees exposed to the risk of injury; (2) the duration of exposure; (3) the precautions taken against injury, if any; and (4) the degree of probability of occurrence of injury. *Kus-Tum Builders, Inc.* 10 BNA OSHC 1049, 1981 CCH OSHD ¶25,738 (No. 76-2644, 1981).

The record establishes, that the probability of an accident occurring is low in this instance, no previous instances were cited in the industry. Employees in the shaft, the motor room and in the lobby were exposed to the hazard, and the probable injuries include death. The CO correctly found that the

gravity of the violation was high (Tr. 41-42). The CO improperly failed to consider Otis' good faith, however. *S. Zara & Sons Constr. Co.*, 10 BNA OSHC 1334, 1982 CCH OSHD ¶25,892 (No. 78-2125, 1982), *aff'd without published opinion*, 697 F.2d297 (2d Cir. 1982). The CO testified that Otis' safety program was excellent. In addition, the violation was immediately abated. Taking into account the relevant factors, a penalty of $5,500.00 is deemed appropriate and will be assessed.

ORDER

1. Citation 1, item 1, alleging violation of Section 5(a)(1) is AFFIRMED and a penalty of $5,500 is ASSESSED.

/s/
G. Marvin Bober
Judge, OSHRC

Dated: February 3, 2005