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. DEEP SOUTH CRANE & RIGGING CO., Respondent.	OSHRC Docket No. 09-0240

ON BRIEFS:

Gary K. Stearman, Attorney; Heather R. Phillips, Counsel for Appellate Litigation; Joseph M. Woodward, Associate Solicitor of Labor for Occupational Safety and Health; M. Patricia Smith, Solicitor of Labor; U.S. Department of Labor, Washington, DC
For the Complainant

David C. Goff, Esq.; Deutsch, Kerrigan & Stiles, L.L.P., Gulfport, MS
For the Respondent

DECISION

Before: ROGERS, Chairman; ATTWOOD, Commissioner.

BY THE COMMISSION:

On July 18, 2008, four employees of Deep South Crane & Rigging Company ("Deep South") were fatally injured when a Deep South-owned VersaCrane TC-36000 ("Versa 36000"), fell over backwards at the Lyondell-Bassell Refinery in Houston, Texas. After conducting an inspection of the worksite, the Occupational Safety and Health Administration ("OSHA") issued Deep South three citations alleging eleven violations of the Occupational Safety and Health Act of 1970 ("OSH Act"), 29 U.S.C. §§ 651-678. Five of the eleven citation items were settled prior to the hearing presided over by Administrative Law Judge Patrick Augustine, who affirmed four of the remaining six citation items and vacated the rest.

Two of the affirmed citation items are at issue on review. In Serious Citation 1, Item 1, Instance 3, the Secretary alleges that Deep South violated section 5(a)(1) of the OSH Act, 29 U.S.C. § 654(a)(1), also known as the general duty clause, because the company failed to ensure that its site supervisor ensured the crane operator was qualified to operate the crane. In Repeat Citation 2, Item 1, the Secretary alleges that Deep South violated 29 C.F.R. § 1926.20(b)(4) because it allowed an unqualified crane operator to operate the crane. For the reasons that follow, we affirm both items as alleged and assess a total penalty of $40,000.

BACKGROUND

The Versa 36000 is one of the largest cranes in the world. As configured here, it had a lifting capacity of 2,500 tons, a 420-foot long boom on the front-end, and a mast in the back. On July 18, 2008, Deep South was in the final stages of assembling its Versa 36000 at the Lyondell-Bassell Refinery when the crane operator placed the crane into a "backwards overhaul" position, a maneuver that rendered the crane unstable by raising the boom too high and placing too much weight on the backside mast. The crane was still in an overhaul position three hours later when it fell over backwards, killing the operator and three other Deep South employees. The site supervisor responsible for overseeing the crane operator's work was standing behind the crane at the time of the collapse, unaware the crane had been in a backwards overhaul position.

DISCUSSION

I. Serious Citation 1, Item 1, Instance 3

In this instance, the Secretary alleges that Deep South violated the general duty clause by exposing its employees to the hazard of being struck by the boom of a crane or a dropped load due to the company's failure to ensure that its site supervisor ensured that the crane operator was qualified to operate the Versa 36000. *See Otis Elevator Co.*, 21 BNA OSHC 2204, 2206, 2004-2009 CCH OSHD ¶ 32,920, p. 52,545 (No. 03-1344, 2007) (establishing general duty clause violation requires Secretary to show (1) a condition or activity in the workplace presented a hazard to employees, (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 and, in addition, that the employer knew or, with exercise of reasonable diligence, could have known of violative condition).[1]

[1] On review, Deep South does not dispute the seriousness of the alleged hazard, its recognition of that hazard, or the feasibility of abatement.

In affirming this instance, the judge found that the site supervisor "was simply told to 'familiarize'" the operator with the Versa 36000, which he determined was insufficient to ensure the site supervisor verified the operator's qualifications. On review, Deep South claims that its site manager took steps to address the alleged hazard by adequately instructing the site supervisor to verify the crane operator's qualifications to operate the Versa 36000. Deep South also claims that the Secretary did not meet her burden of showing that the cited conduct was foreseeable and, therefore, failed to establish that it had knowledge of the violative condition. For the following reasons, we reject both arguments.

Deep South's Instructions

In assessing the adequacy of instructions an employer provides to its employees, the Commission considers evidence of whether they pertain to the particular jobsite hazards and applicable regulations, and are sufficiently specific. *See Archer-Western Contractors, Ltd*., 15 BNA OSHC 1013, 1020, 1991-1993 CCH OSHD ¶ 29,315, p. 39,381 (No. 87-1067, 1991) (noting that duty to instruct employees on hazard recognition and avoidance is "satisfied when the employer instructs its employees about the hazards they may encounter on the job and about the regulations applicable to those hazards"), *aff'd*, 978 F.2d 744 (D.C. Cir. 1992) (unpublished); *see also Danis Shook Joint Venture XXV*, 19 BNA OSHC 1497, 1500, 2001 CCH OSHD ¶ 32,397, p. 49,864 (No. 98-1192, 2001) (finding that employer failed to provide sufficiently specific instructions based on three brief conversations that occurred by happenstance and failed to make "some effort to assure that employees understood the meager information it did provide"), *aff'd*, 319 F.3d 805 (6th Cir. 2003).

The Secretary alleges numerous shortcomings in the instructions Deep South gave to ensure that the crane operator was qualified to operate the Versa 36000. According to the Secretary, Deep South failed to instruct site supervisor Aydell to ensure that the crane operator could read the load charts, use the correct boom angle to radius chart, and operate and understand the controls. She also contends that Deep South did not instruct Aydell to verify the crane operator had taken and passed written tests for the Versa 36000, and satisfactorily completed a hands-on operational test to determine proficiency. These allegations track the specific requirements for operators and operators-in-training found in section 5-3.1.2 of the American Society of Mechanical Engineering's Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings ("ASME B30.5"). The ASME B30.5 requirements include: (1)

successfully passing a physical examination; (2) satisfactory completion of a written exam covering operational characteristics for the crane type; (3) demonstrated ability to read, write, comprehend, and use arithmetic and load/capacity charts; (4) satisfactory completion of a written and oral test on load/capacity chart usage of various configurations for the crane type; and (5) satisfactory completion of an operation test demonstrating proficiency in handling the specific crane type.

The evidence in the record supports the Secretary's allegations. Specifically, the record shows that Craig Stanford, Deep South's site manager, was familiar with ASME B30.5, and recognized it as the crane standard applicable to the Versa 36000. But at the hearing, Stanford could not remember precisely what he told Aydell, other than instructing him to "familiarize" the crane operator with the Versa 36000.[2] Stanford, therefore, never addressed the specific requirements listed in ASME B30.5.[3] And despite testifying that he knew the operator "never had any practical examination or tests over his skills on the 36000," Stanford did not instruct Aydell to ensure that the crane operator had passed the written test, which was required under ASME B30.5 before the operator could enter the crane's cab even as an operator-in-training. Nor did Stanford instruct Aydell to provide the crane operator with instructions regarding the Versa 36000's load chart usage or ensure his satisfactory completion of a hands-on operational test demonstrating the operator's proficiency in operating the Versa 36000. In fact, Aydell admitted that he did not even know the minimum requirements to operate the Versa 36000, and there is no evidence that his own experience operating the Versa 36000 provided him with knowledge of the specific steps he should take to ensure the operator was qualified.

Deep South argues that Aydell's oversight of the crane operator was adequate which, it claims, shows that Stanford properly instructed Aydell. *See Archer-Western Contractors, Ltd*., 15 BNA OSHC at 1020, 1991-1993 CCH OSHD at p. 39,380 (examining employees'

[2] Stanford testified that he also intended for a lead operator to be inside the cab with the crane operator when he raised and lowered the boom and moved the crane. However, he did not claim to have given such instructions to Aydell.

[3] We note that Deep South owner Mitchell Landry testified that the company has a training program that includes classroom instruction and operational training on the specific equipment the employee is being trained to operate. Not only it is unclear whether this program met the requirements of ASME B30.5 for crane operators, but there is also no indication that Stanford ever instructed Aydell to ensure the operator completed the program.

performance as evidence of training). Even if we were to accept the principle that Aydell's actions could establish the adequacy of Deep South's training, we find his oversight deficient. *See N & N Contractors, Inc.*, 18 BNA OSHC 2121, 2127, 2000 CCH OSHD ¶ 32,101, p. 48,241 (No. 96-0606, 2000) (noting that employees' failure to tie off was evidence of employee *practices*, not employer training, and did not show whether training was deficient), *aff'd*, 255 F.3d 122 (4th Cir. 2001). Before the accident, Aydell spoke with other Deep South supervisors who had previously supervised the crane operator on other cranes, but Aydell never determined—from them or anyone else—whether the crane operator was specifically qualified to operate the Versa 36000. Nor did Aydell ensure that the operator took and passed the required written and oral tests before entering the cab to operate the crane. And although Aydell instructed the crane operator to go inside the cab of the Versa 36000 with another experienced crane operator, he told neither one what instructions were to be given or received during that time. In addition, the record shows that on the morning of the collapse Aydell reviewed the load charts and controls with the crane operator on two separate occasions—once while they were outside of the cab and later, while they were inside the cab. But Aydell never took the opportunity while he was inside the cab to verify that the operator knew how to use the cab's "Cranesmart™" electronic display, which provides the operator with a number of vital details about the crane's functions. With only brief instructions, Aydell allowed the operator to operate the Versa 36000 alone while he stood outside in an area from which he could not even see that the crane was in an overhaul position.

Accordingly, we find that Deep South failed to properly instruct site supervisor Aydell to ensure that the crane operator was qualified to operate the Versa 36000.

Knowledge /Foreseeability

To prove a violation of the general duty clause, the Secretary must show that the employer had knowledge of the hazard. *Otis Elevator*, 21 BNA OSHC at 2207, 2004-2009 CCH OSHD ¶ 32,920, p. 53,546. Under Commission precedent, a supervisor's knowledge of his own misconduct may be imputed to his employer, but in the Fifth Circuit, to which this case could be appealed, the Secretary must also show that the supervisor's misconduct was foreseeable. *W.G. Yates & Sons Constr. Co., Inc. v. OSHRC*, 459 F.3d 604, 608-09 (5th Cir. 2006) ("a supervisor's knowledge of his own malfeasance is not imputable to the employer where the employer's safety policy, training, and discipline are sufficient to make the supervisor's conduct in violation of the

policy unforeseeable") (emphasis omitted).[4] Where, as here, our decision could be appealed to a particular circuit, we will apply the law of that circuit even though its precedent differs from ours. *See, e.g., D.M. Sabia Co.,* 17 BNA OSHC 1413, 1414, 1995-1997 CCH OSHD ¶ 30,930, p. 43,058 (No. 93-3274, 1995), *rev'd on other grounds*, 90 F.3d 854 (3d Cir. 1996); *Kerns Bros. Tree Serv.*, 18 BNA OSHC 2064, 2067-68, 2000 CCH OSHD ¶ 32,053, p. 48,003 (No. 96-1719, 2000) (applying Third Circuit precedent requiring Secretary to show foreseeability of supervisor's misconduct).

The judge found here that Deep South had knowledge of the failure to ensure that the crane operator was qualified based on Aydell's knowledge of his own failure to ensure the crane operator's qualifications. But in imputing Aydell's knowledge to Deep South, the judge did not determine whether the Secretary met her burden of proving foreseeability as required by the Fifth Circuit's decision in *Yates*. On review, the Secretary acknowledges that she carries this burden in the Fifth Circuit and maintains that she has shown the violation was foreseeable based on the deficiencies in Stanford's instructions, which were delivered to Aydell orally, on only one occasion, and several weeks before the crane operator entered the cab for the first time.[5]

We find the Secretary has established that the violation was foreseeable. As noted in more detail above, the instructions Stanford gave Aydell were insufficient and did not address many of the specific safety-related requirements listed in ASME B30.5. The key deficiency here is Stanford's failure to explain to Aydell that the crane operator would have to demonstrate a number of proficiencies in crane operation, which specifically included passing written and oral tests, before being qualified to operate the Versa 36000. Indeed, under ASME B30.5, passing the written test is a prerequisite for operating the crane, even as an operator-in-training. Under these circumstances, we find that Stanford's instructions to Aydell were completely inadequate.

And we also find that Stanford's inadequate instruction made it foreseeable that Aydell would fail to ensure that the crane operator possessed the requisite qualifications. *Cf. Manganas*

[4] This case arose in Texas, which is within the jurisdiction of the Fifth Circuit.

[5] We reject the Secretary's claim that the issue of foreseeability is not appropriate for Commission review because it was not "sufficient[ly]" raised before the judge. Foreseeability is part of the Secretary's required knowledge showing in this relevant circuit. *Yates*, 459 F.3d at 608-09; *see Trinity Indus. Inc.*, 206 F.3d 539, 542 (5th Cir. 2000) ("[k]nowledge is a fundamental element of the Secretary's burden of proof") (*citing Carlisle Equip. Co. v. Sec'y of Labor*, 24 F.3d 790, 792-93 (6th Cir. 1994)).

Painting Co., v. Sec'y, 273 F.3d 1131 (D.C. Cir. 2001) (rejecting employer's claim that it lacked knowledge of violation, as employer taught employees to use particular form of noncompliant fall protection, and cannot now argue that it was unaware employees followed its directions).[6] We also find that the context in which Stanford gave these instructions to Aydell—orally and on only one occasion weeks ahead of time—made it all the more necessary that he follow up to ensure that Aydell fully understood and would implement the instructions. *See Danis Shook*, 19 BNA OSHC at 1499, 2001 CCH OSHD at p. 49,864 (finding failure to provide required instructions where cursory information was provided through "chance conversations that failed to convey critical information"). For these reasons, we conclude that Aydell's violative conduct was foreseeable and his knowledge is, therefore, imputable to Deep South.

Accordingly, we affirm Citation 1, Item 1, Instance 3.[7]

II. Repeat Citation 2, Item 1

Under this item, the Secretary alleges that the crane operator was not "qualified by training or experience to operate" the Versa 36000 as required by § 1926.20(b)(4). The term "qualified" is defined in 29 C.F.R. § 1926.32(m) as "one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the product."

In affirming the citation, the judge determined that the crane operator was not qualified to operate the Versa 36000 by either training or experience. On review, Deep South contends that the operator was qualified by both training and experience to operate the Versa 36000 under the direct supervision of the site supervisor. For the following reasons, we affirm the judge.

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[6] Based on our determination that the Secretary has shown that the violation was foreseeable, Deep's South's allegation of unpreventable supervisory misconduct fails. *See Danis Shook*, 19 BNA OSHC at 1503, 2001 CCH OSHD at p. 49,867 (finding that unpreventable supervisory misconduct defense fails "here largely for the same reasons upon which we base our finding of constructive knowledge"); *Yates*, 459 F.3d at 609 n.7 (noting considerations for affirmative defense "closely mirror the foreseeability analysis required to determine if a supervisor's knowledge of his own misconduct . . . can be imputed to the employer").

[7] The parties do not dispute the serious characterization of the violation, and we find no basis to depart from the proposed characterization. *See KS Energy Servs. Inc.*, 22 BNA OSHC 1261, 1268 n.11, 2004-2009 CCH OSHD ¶ 32,958, p. 53,925 (No. 06-1416, 2008) (affirming judge's serious characterization where parties did not dispute characterization on review).

Crane Operator's Training

The Secretary contends the crane operator was not qualified to operate the Versa 36000 because he was not properly trained pursuant to the requirements of ASME B30.5. Deep South contends that because the crane operator held a certification from the National Commission for the Certification of Crane Operators ("NCCO") he was qualified to operate the crane by virtue of his training. The judge found that the crane operator's training fell short when measured against the qualifications set out in ASME B30.5, and that his NCCO training was insufficient in light of the characteristics of the Versa 36000.

As a threshold matter, we reject Deep South's claim that the requirements in ASME B30.5 should not be a basis for evaluating its compliance with the cited standard, § 1926.20(b)(4). Expert witnesses for both parties testified that the crane industry recognizes ASME B30.5 as an industry standard for crane operator qualifications. The Secretary's expert witness, Bradley Clossen, explained that the ASME standard is the source of the NCCO criteria, and the ASME "is the only recognized set of criteria or steps to become qualified." Deep South's expert witness, Ronald Kohner, a member of the ASME B30.5 subcommittee and a commissioner for the NCCO, agreed that the crane industry recognizes the operator qualification standards reflected in ASME B30.5. And Deep South has conceded that the crane operator did not meet the requirements of ASME B30.5. Indeed, as discussed above, the crane operator had not taken and passed the necessary tests or demonstrated comprehension of overhaul prevention, as required by the ASME B30.5 criteria. Thus, we agree with the judge that the crane operator's training did not meet the operator qualifications criteria of ASME B30.5.

We also agree that the crane operator was not qualified by virtue of his NCCO training either. As both expert witnesses explained, the operator had not received critical components of the training specifically required to operate the Versa 36000. For instance, the crane operator had passed the NCCO tests for a lattice boom crawler and large telescopic cranes, but was not NCCO-certified on a lattice boom truck, a test which Kohner conceded would have covered outrigger issues relevant to the Versa 36000. And Clossen, the Secretary's expert, explained that the NCCO is a basic test that does not address crane attachments, such as masts and booms, nor does it cover the "Superlift" configurations—a "configuration that's bigger than what the base crane can do"—used by the Versa 36000. In fact, as the judge noted, there is not a single question on any test provided by NCCO that would have tested the crane operator's knowledge

concerning backwards overhaul limitations on the Versa 36000. Even site manager Stanford and owner Landry agreed that the crane operator's NCCO certification did not fully qualify him to operate the Versa 36000. Under these circumstances, we find that the operator's NCCO certifications did not satisfy the training required under §1926.20(b)(4).

Accordingly, we conclude that the crane operator was not qualified by training to operate the Versa 36000.

Crane Operator's Experience

Deep South claims that the crane operator's prior experience also qualified him to operate the Versa 36000, relying on the twenty-seven days he spent operating the Versa 28000, a large crane with features similar to the Versa 36000, but with less lifting capacity. The judge found that this prior experience was insufficient because of the difference in overhaul risks between the two Versa cranes. We agree.

Deep South's expert Kohner explained that the operator's experience on the Versa 28000, which also had a 420-foot long boom, served only as "partial" qualification for operating the Versa 36000, and both Kohner and Deep South's site manager Stanford conceded that the crane operator was not qualified to operate the Versa 36000 without supervision based on his prior experience. Despite these admissions, Deep South maintains that the crane operator's experience on the Versa 28000 is nonetheless transferable to the Versa 36000 because both cranes require an operator to check the load charts to determine the overhaul limitations of the crane. But the record shows that each crane has different load charts as well as different overhaul risks. Indeed, the crane operator's experience with the Versa 28000 using a 420-foot long boom could not have fully prepared him for the overhaul risk on the Versa 36000 because it is undisputed that, as configured when the crane operator used it, the Versa 28000 could not be put into an overhaul position. Moreover, in claiming that the crane operator's experience on the Versa 28000 qualified him to operate the Versa 36000, Deep South does not suggest, nor does the record show, that the crane operator had ever been trained on or was qualified to operate the Versa 28000. *See Herbert Vollers, Inc.*, 4 BNA OSHC 1798, 1800-1801, 1976-1977 CCH OSHD ¶ 21,230, p. 25,518 (No. 9747, 1976) (finding operator unqualified under § 1926.20(b)(4) due to lack of specific instructions on machine at issue despite years of experience on smaller machines), *aff'd without opinion*, 565 F.2d 151 (3d Cir. 1977).

Accordingly, we find that that the crane operator was not qualified by experience to operate the Versa 36000. Thus, we affirm Citation 2, Item 1.

CHARACTERIZATION

A violation is repeated if the employer was previously cited for a substantially similar violation and that citation became a final order before the occurrence of the alleged repeated violation. *Bunge Corp.,* 638 F.2d 831, 837 (5th Cir. 1981); *Potlatch Corp.*, 7 BNA OSHC 1061, 1979 CCH OSHD ¶ 23,294 (No. 16183, 1979). The Secretary establishes a prima facie case of substantial similarity by showing that the prior and present violations are for failure to comply with the same standard. *Monitor Constr. Co.*, 16 BNA OSHC 1589, 1594, 1993-1995 CCH OSHD ¶ 30,338, p. 41,825 (No. 91-1807, 1994).

The judge affirmed Citation 2, Item 1 as repeat based on a prior citation issued to Deep South for violating the same standard cited here, § 1926.20(b)(4), at a worksite in Coffeyville, Kansas. The Kansas case involved a fatal crane accident with an unqualified crane operator at the controls. The citation became a final order pursuant to a settlement agreement on February 25, 2008, less than six months before the violation here. On review, Deep South disputes the repeat characterization of the violation, claiming that the earlier citation involved a different type of crane and circumstances.

We find no support in the record for Deep South's contention. The same standard was violated in both cases, and the underlying violation became a final order before the instant violation occurred. In addition, the prior violation and the one before us clearly involve substantially similar hazards—a failure to adequately train a crane operator. *See Stone Container Corp*., 14 BNA OSHC 1757, 1762, 1987-1990 CCH OSHD ¶ 29,064, p. 38,819 (No.88-310, 1990) ("the principal factor to be considered in determining whether a violation is repeated is whether the prior and instant violations resulted in substantially similar hazards"). Under these circumstances, we affirm the repeat characterization of Citation 2, Item 1.

PENALTY

Under section 17(j) of the OSH Act, 29 U.S.C. § 666(j), the Commission must give "due consideration to the appropriateness of the penalty with respect to the size of the business of the employer being charged, the gravity of the violation, the good faith of the employer, and the history of previous violations." The principal factor in a penalty determination is gravity, which "is based on the number of employees exposed, duration of exposure, likelihood of injury, and

precautions taken against injury." *Siemens Energy & Automation, Inc.*, 20 BNA OSHC 2196, 2201, 2004-2009 CCH OSHD ¶ 32,880, p. 53,231 (No. 00-1052, 2005).

On review, the parties do not dispute the judge's assessment of a $5,000 grouped penalty for Citation 1, Item 1, Instance 3 and Instance 2, an affirmed violation not on review, and a $35,000 penalty for Citation 2, Item 1. The record reflects that Deep South employs approximately three hundred people and received an OSHA citation within the last three years. On the issue of gravity, Deep South employees at the worksite were exposed to the risk of serious injury or death from an accident involving the super-lift crane. Therefore, we find that the penalty amounts assessed by the judge were appropriate.

ORDER

We affirm Citation 1, Item 1, Instance 3 as serious and assess a $5,000 grouped penalty with Citation 1, Item 1, Instance 2. Also, we affirm Citation 2, Item 1 as repeat, and assess a penalty of $35,000.

SO ORDERED.

/s/
Thomasina V. Rogers
Chairman

/s/
Cynthia L. Attwood
Commissione

Dated: August 27, 2012

UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

Secretary of Labor, Complainant, v. Deep South Crane & Rigging Co., Respondent.	OSHRC DOCKET NO. 09-0240

Appearances:

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For Complainant

David C. Goff, Esq., Deutch, Kerrigan & Stiles, LLP, Gulfport, Mississippi
For Respondent

Before: Administrative Law Judge Patrick B. Augustine

DECISION AND ORDER

Procedural History

This proceeding is before the Occupational Safety and Health Review Commission ("the Commission") pursuant to Section 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. §651 *et seq*. ("the Act"). The Occupational Safety and Health Administration ("OSHA") conducted an inspection of a Deep South Crane & Rigging Company ("Respondent") worksite in Houston, Texas between July 18, 2008 and January 16, 2009. As a result of that inspection, OSHA issued a *Citation and Notification of Penalty* to Respondent alleging eleven violations of the Act. Before trial, the parties announced and later submitted, a *Partial Settlement Agreement* which fully resolved five of the alleged violations. The *Partial Settlement Agreement* was approved on October 26, 2009. Therefore,

only Citation 1 Item 1 (three remaining instances), Citation 1 Item 3, Citation 1 Item 4, and Citation 2 Item 1 remained in dispute at trial. Citation 1 Item 1 alleges three serious violations of Section 5(a)(1) of the Act (commonly referred to as "the General Duty Clause") with a proposed grouped penalty of $7,000.00. Citation 1 Item 3 alleges a serious violation of 29 C.F.R. §1926.501(b)(6) with a proposed penalty of $7,000.00. Citation 1 Item 4 alleges a serious violation of 29 C.F.R. §1926.550(a)(2) with a proposed penalty of $7,000.00. Lastly, Citation 2 Item 1 alleges a repeat violation of 29 C.F.R. §1926.20(b)(4) with a proposed penalty of $35,000.00. Respondent timely contested the citations and penalties, and the trial was conducted October 20-22, 2009, in Houston, Texas. Both parties filed timely post-trial briefs.

Jurisdiction

Jurisdiction of this action is conferred upon the Commission pursuant to Section 10(c) of the Act. At all times relevant to this action, Respondent was an employer engaged in a business affecting interstate commerce within the meaning of Section 3(5) of the Act, 29 U.S.C. §652(5). *Complaint* and *Answer; Slinghuff v. OSHRC*, 425 F.3d 861 (10th Cir. 2005).

Applicable 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 prima facie violation of Section 5(a)(1), Complainant must prove by a preponderance of the evidence that: (1) a condition or activity in the workplace presented a hazard to employees, (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, 1995-96 CCH OSHD ¶31,207 (No. 92-

2596, 1996). In addition, the evidence must show that the employer knew or with the exercise of reasonable diligence, should have known of the hazardous condition. *Otis Elevator Company*, 21 BNA OSHC 2204, 2007 CCH OSHD ¶32,920 (No. 03-1344, 2007).

To establish a prima facie violation of a specific standard promulgated under the Act, Complainant must prove by a preponderance of the evidence that: (1) the standard applies to the cited condition; (2) the terms of the standard were violated; (3) one or more of the employer's employees had access to the cited conditions; and (4) the employer knew, or with the exercise of reasonable diligence could have known, of the violative conditions. *Ormet Corporation*, 14 BNA OSHC 2134, 1991 CCH OSHD ¶29,254 (No. 85-0531, 1991). In the 5th Circuit, when a supervisor engages in violative conduct, knowledge of the condition is imputable through him to an employer only if his actions were foreseeable based on deficiencies in the employer's safety policies, training, or discipline. *W.G. Yates & Sons Construction Co., Inc.,* 459 F.3d 604, 609 (5th Cir. 2006).

A violation is serious if there is a substantial probability that death or serious physical harm could result from the violative condition. *29 U.S.C. 666(k).* Complainant need not show that there is a substantial probability that an accident will occur; she need only show that if an accident occurred, serious physical harm would result. If the possible injury addressed by the regulation is death or serious physical harm, a violation of the regulation is serious. *Phelps Dodge Corp.* v. OSHRC, 725 F.2d 1237, 1240 (9th Cir. 1984); *Dec-Tam Corp*., 15 BNA OSHC 2072, 1993 CCH OSHD ¶29,942 (No. 88-0523, 1993).

When Complainant alleges a repeat violation, she has the burden of establishing that the violations were substantially similar. *Potlatch Corp*., 7 BNA OSHC 1061, 1063 (No. 16183, 1979).

Complainant makes a prima facie showing of "substantial similarity" by showing that the previous and present violations are for failure to comply with the same standard. The burden then shifts to Respondent to rebut that showing. *Monitor Construction Co*., 16 BNA OSHC 1589, 1594 (No. 91-1807, 1994).

Respondent asserts "unpreventable employee misconduct" and "infeasibility" as affirmative defenses to certain violations. To establish the affirmative defense of "unpreventable employee misconduct", Respondent must show that: (1) it has established work rules designed to prevent the violation, (2) it has adequately communicated those rules to its employees, (3) it has taken steps to discover violations, and (4) it has effectively enforced the rules when violations have been discovered. *W.G. Yates & Sons*, supra. When the alleged misconduct is that of a supervisor, the proof of "unpreventable employee misconduct" is more rigorous and more difficult to establish since it is the supervisor's duty to protect the safety of employees under his supervision. *Archer-Western Contractors Ltd*., 15 BNA OSHC 1013, 1991 CCH OSHD ¶29,317 (No. 87-1067, 1991). The defense of infeasibility requires an employer to prove that: (1) the means of compliance prescribed by the standard are technologically or economically infeasible, or necessary work operations are technologically infeasible after implementation; and (2) there are no feasible alternative means of protection. *V.I.P. Structures, Inc.*, 16 BNA OSHC 1873, 1993-95 CCH OSHD ¶ 30,485 (No. 91-1167, 1994).

Discussion

On July 18, 2008, a TC-36000 super-lift crane ("Versa 36000") collapsed at the Lyondell-Bassell Refinery in Houston, Texas ("Lyondell jobsite"). (Tr. 396, 398, 501). The Versa 36000 has a lifting capacity of 2,500 tons and is one of the largest cranes in the world. (Tr. 175, 398). It is moved

in pieces to various jobsites, and over the course of two to three weeks, assembled on-site. (Tr. 409, 46). The parties generally agreed that the crane was improperly maneuvered into an "overhaul" configuration, caused by excessive weight on the backside mast and an improper angle on the front-side boom, resulting in the crane toppling over backwards. (Tr. 226, 532). The Versa 36000 had been sitting in an overhaul position for a period of three hours. (Tr. 314-315). Four of Respondent's employees were killed as a result of the accident: crane operator Marion "Scooter" Odom, two iron workers/flagmen, and the operator of a nearby assist crane. (Tr. 578, *Complainant's Brief*, p. 2). OSHA initiated an investigation the same day the accident occurred. (Tr. 979).

Numerous witnesses testified at trial: (1) Mitchell Landry (Respondent's President); (2) Carl Stafford (one of Respondent's office-based Site Managers responsible for this Lyondell jobsite); (3) John Hulse (another office-based Site Manager, more senior than Mr. Stafford); (4) Danny Aydell (Respondent's on-site Superintendent and lead operator of the Versa 36000); (5) Troy LeBoeuf (one of Respondent's Versa 36000 crane operators on the Lyondell jobsite); (6) James Harper (Respondent's night-shift Superintendent for the Lyondell jobsite); (7) Jeffrey Johnson (one of Respondent's crane operators who had worked with Mr. Odom on previous jobs), and (8) OSHA Assistant Area Director Kelly Knighton, (lead OSHA investigator). (Tr. 59, 69, 151, 297, 443-444, 532, 609, 630, 979, 1027-1028).

Each party also offered expert witness testimony on the subjects of crane industry practices and crane operator qualifications. Complainant's expert, Bradley Closson, possesses an undergraduate degree in naval sciences, worked in the crane industry from 1979 until 1992, at which time he joined North American Crane Bureau - one of the largest crane and rigging consulting companies in the U.S. at the time. (Tr. 651-652; Ex. C-31). In 2004, Mr. Closson formed Craft Forensic Services which

focuses on crane accident investigations and litigation consultation. (Tr. 652). He has also been a volunteer member of the ASME B30.5 committee since 1988. (Tr. 653). Respondent's expert, Ronald Kohner, possesses a civil engineering degree and worked as a testing engineer for crane manufacturer American Hoist & Derrick starting in 1970. (Tr. 882-883). In 1987, Mr. Krohner formed Landmark Engineering Services, which focuses on crane-related consultation, accident investigations, and safety seminars. (Tr. 884). He also is a commissioner on the ASME B30.5 subcommittee and a member of the NCCCO practical examination committee. (Tr. 884-885, 888-889).

Citation 1 Item 1 (Instance No. 1)

Complainant alleges Respondent violated Section 5(a)(1) of the Act as follows:

> *The employer does not ensure the controls of the TC36000 Versacrane, Serial # D/S004, are labeled. This violation was most recently observed on July 18, 2008, at the Lyondell Bassell Refinery where the TC36000 Versacrane's controls such as but not limited to the drum hoists, swing brake, tag line hoist, boom limit by-pass switch, gauges and the horn were not labeled to identify their function. ABATEMENT NOTE: Among other procedures, one feasible and acceptable method to correct the hazard is for the employer to comply with International Standard - ISO 9942-1, Crane - Information Labels, Part 1, paragraph 3.1, Control installations and indicating devices.*

The record establishes that there was some labeling of controls and gauges in the cab of the Versa 36000 at the time of the accident. (Ex. R-10). Therefore, the issue is not as simple as complete

failure to label controls. Rather, it is a question of whether the amount of labeling that was present in the cab was sufficient. Complainant's position on this issue was less than clear. First, the language of the citation itself alleges a failure to label "the drum hoist, swing brake, tag line hoist, boom limit by-pass switch, gauges, and horn." Complainant's brief, however, argues there was a failure to label the drum activation key, whip line, and luffing jib. (*Complainant's Brief, p. 21).* Second, the parties' expert witnesses agreed that the American Society of Mechanical Engineering's ("ASME") Safety Standard B30.5 for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings, ASME B30.5(2004) represents the applicable industry standard for crane operations in this case. (Tr. 717; *Resp. Brief,* p. 8; Ex. C-4). The 2004 version of the standard did not mandate specific methods for control labeling. Amendments to ASME B30.5 regarding specific labeling requirements were not approved until 2009 and do not become effective in the industry until 2010. (Tr. 959-960). Lastly, and most likely in recognition that there was no applicable ASME standard at the time, the citation identifies abatement of this hazard through compliance with ISO 9942.1, an international crane standard which Complainant's own witnesses testified does not apply to cranes operated in the United States. (Tr. 853-854, 1007-1008). The court finds that Complainant failed to establish: (i) what standard was specifically violated, (ii) which controls lacked sufficient labeling, (iii) that the labeling in the cab of the Versa 36000 constituted a hazard to employees, and (iv) an appropriate method of abating the condition. Accordingly, Citation 1 Item 1 (Instance No. 1) is VACATED.

Citation 1 Item 1 (Instance No. 2)

Complainant alleges Respondent violated Section 5(a)(1) of the Act as follows:

> *The employer does not ensure that the site supervisor ensures the TC36000 Versacrane, Serial# D/S004 safety devices and operational devices are functioning properly and are calibrated. This violation was most recently*

observed on July 18, 2008, at the Lyondell Bissell Refinery where the boom limit switch and the Cranesmart A2B system were not checked prior to the start of daily operations to ensure they were functioning properly and calibrated. ABATEMENT NOTE: Among other procedures, one feasible and acceptable method to correct the hazard is for the employer to comply with ASME B30.5-2007, Mobile and Locomotive Cranes, section 5-3.1.3.2.1, paragraph (a), Responsibility of Site Supervisor and Lift Director.

President Landry identified Mr. Odom as an operator-in-training who should have been under the direct supervision of Superintendent Aydell at all times while operating the Versa 36000. (Tr. 297-298, 464). President Landry, Site Manager Hulse, and even Superintendent Aydell himself, acknowledged that one of Aydell's responsibilities was to ensure that the Boom Limit Switch and other alarms were properly set. (Tr. 186, 303, 577). Superintendent Aydell conceded that he did not verify how, or even if, the alarms and limit switches had been set on the day of the accident. (Tr. 577-578). Aydell's failure to do so created a hazard for the operator, Mr. Odom, as well as other employees working near the crane.

President Landry, Site Manager Stafford, and Mr. Closson also agreed that if the boom limit switch and other alarms had been properly set on the day of the crane collapse, Mr. Odom would have been warned that he was putting the Versa 36000 into an overhaul configuration. (Tr. 183, 304, 763-764, 767-768). The hazards of failing to do so are known in the industry and specifically by Respondent. (Tr. 186). Such a hazardous condition could, and did in this instance, result in a fatal accident.

Mr. Aydell's knowledge of his own failure to check and properly set the alarms in the Versa

36000 is imputed to Respondent because his inaction was foreseeable as discussed below. *W.G. Yates & Sons Construction Co., Inc.*, supra; *A.P. O'Horo Co.*, 14 BNA OSHC 2004, 1991 CCH OSHD ¶29,223 (No. 85-0369, 1991). Abatement of this condition could have been achieved by simply setting the boom limit switch and Cranesmart computer to sound an alarm when Mr. Odom approached a crane configuration that risked overhaul. (Tr. 769). Complainant established all the necessary elements for a prima facie violation of Section 5(a)(1) of the Act in this instance.

Respondent argued that this violation was a result of Superintendent Aydell's unpreventable employee misconduct. However, a supervisor's participation in a violation is strong evidence that an employer's safety program is lax. *Archer-Western Contractors*, supra. Respondent points to President Landry's testimony that Respondent's policy was to "verify everything" as well as the fact that some safety discussion topics had included "preventing crane tipovers." (*Respondent's Brief*, pp. 9-10). Respondent's policy was to check Cranesmart information against physical tape measurements. (Tr. 591-592). Superintendent Aydell testified that he had performed such a check during a test lift days before the accident. (Tr. 592). These facts are insufficient to establish that there was a specific work rule designed to prevent the violation alleged which was adequately communicated to employees.

The available alarm systems in this instance were contained in the boom limit switch and the Cranesmart in-cab computer system. (Tr. 182-183, 763-764). However, Superintendent Aydell admitted (1) that he did not know how to operate the Cranesmart computer program without the manual, (2) did not review the manual with Mr. Odom before allowing him to operate the crane, (3) could not remember the positions of the Versa 36000 controls without the manual, and (4) did not use the Versa 36000 manual when discussing the controls with Mr. Odom. (Tr. 567-568, 571-572). Furthermore, any training by Respondent on the use of these alarm systems to prevent an overhaul

configuration is questionable since neither Respondent's training documents or operating manual for the Versa 36000 explain overhaul situations or how to avoid them. (Tr. 384-385, 474-475; Ex. R-5).

Respondent failed to establish that it had specific work rules designed to ensure that supervisors verify the proper setting and calibration of safety alarms and switches, or that any such rules were adequately communicated to its employees. Given these deficiencies in Respondent's safety program, Superintendent Aydell's failure to check the alarm settings on the day of the accident was foreseeable. *W.G. Yates & Sons*, supra. Therefore, Respondent failed to establish the defense of unpreventable employee misconduct. Citation 1 Item 1 (Instance No. 2) is AFFIRMED.

Citation 1 Item 1 (Instance No. 3)

Complainant alleges Respondent violated Section 5(a)(1) of the Act as follows:

> *The employer does not ensure that the site supervisor ensures the operator of the TC36000 Versacrane, Serial# D/S004 is qualified to operate this specific type of crane. This violation was most recently observed on July 18, 2008, at the Lyondell Bissell Refinery where the supervisor did not ensure the operator could read the load charts, ensure the operator was using the correct boom angle to radius chart, ensure the operator could operate and understand the controls in the cab which were not labeled, did not ensure the operator had taken and passed written operational tests for the TC36000 Versacrane and did not ensure satisfactory completion of an operational test was performed to determine proficiency in operations such as but not limited to lowering, booming and swinging functions at various radii. ABATEMENT NOTE: Among other procedures, one feasible and acceptable method to correct the*

hazard is for the employer to comply with ASME B30.5-2007, Mobile and Locomotive Cranes, section 5-3.1.3.2.1, paragraph (g), Responsibilities of Site Supervisor and Lift Director.

President Landry and Site Manager Stafford, acknowledged that Respondent had a duty to have on-site supervisors, like Superintendent Aydell, ensure that crane operators, like Mr. Odom, are qualified to operate their assigned crane. (Tr. 69, 326). They also recognized that an on-site supervisor's failure to ensure the crane operator's qualifications creates a hazardous condition which could result in serious injury or death. (Tr. 70-71, 326).

This jobsite was the first occasion for Superintendent Aydell to meet and work with Mr. Odom. (Tr. 548-549). Superintendent Aydell did not know how long Mr. Odom had been employed by Respondent, which cranes Mr. Odom had operated previously, or Mr. Odom's qualifications to operate the Versa 36000. (Tr. 548-549). A group of senior managers, not including Superintendent Aydell, made the decision to assign Mr. Odom to this project with the understanding that Mr. Odom would operate the Versa 36000. (Tr. 63, 151). Superintendent Aydell was simply told to "familiarize" Mr. Odom with the Versa 36000. (Tr. 66-67).

Before Mr. Odom assumed the controls of one of the largest cranes in the world, Superintendent Aydell spent only *fifteen minutes* with him explaining the controls and reviewing applicable charts. (Tr. 551, 562-563, 565-566). President Landry identified Mr. Odom as an operator-in-training who should have been under the direct supervision of Superintendent Aydell at all times while operating the Versa 36000. (Tr. 298, 464). In direct contradiction to President Landry's testimony, Superintendent Aydell testified that he: (1) did not consider himself a trainer of other crane operators, (2) did not know what Respondent's policies were for minimum qualifications to operate

the Versa 36000, (3) did not verify that Mr. Odom knew how to utilize Cranesmart, an electronic display in the cab which indicates such things as load weight, boom angle, and wind speed, before turning the Versa 36000 over to him, and (4) never verified any of the crane position information Mr. Odom provided to him by radio. (Tr. 540-541, 556-557, 598-599). In fact, at the time of the accident, Superintendent Aydell was passing out employee paychecks and was not in a position to observe that the crane had been placed in an unsafe condition. (Tr. 533-534).

Additionally, Superintendent Aydell did not physically enter the Versa 36000 cab with Mr. Odom when he first began operating the crane. (Tr. 549). Superintendent Aydell did not enter the cab with Mr. Odom until later in the day when a lever was malfunctioning and needed to be replaced. (Tr. 563-564). Even then, Superintendent Aydell was only in the cab with Mr. Odom for fifteen to twenty minutes. (Tr. 565-566). In contrast, one of Respondent's other Versa 36000 crane operators on this jobsite, Troy LeBoeuf, testified that when he was first trained to operate the Versa 36000, *a trainer spent two weeks in the cab of the crane with him before he was allowed to operate it alone*. (Tr. 627). Superintendent Aydell testified that "I felt like he had enough knowledge to, you know, operate the controls [of the Versa 36000] because he told me." (Tr. 551).

Superintendent Aydell's failure to verify Mr. Odom's qualifications to operate the Versa 36000 could have, and did in this instance, result in a fatal accident. Abatement of the condition could have been accomplished through the verification of Mr. Odom's qualifications and/or prevention of Mr. Odom to assume control of the crane. As discussed below, Superintendent Aydell's failure to verify Mr. Odom's qualifications was foreseeable. Therefore, his knowledge of his own inaction is imputable to Respondent. *W.G. Yates & Sons*, supra. Complainant established the elements necessary for a prima facie violation of Section 5(a)(1) of the Act in this instance.

In a one sentence argument in its post-trial brief, Respondent submits, alternatively, that the employee misconduct defense shields Respondent from liability with regard to this item. (*Resp. Brief*, p. 18). Respondent's argument is rejected. Respondent failed to establish that it had a work rule designed to prevent this condition or that the work rule was adequately communicated to Superintendent Aydell. Internal miscommunication on this issue is revealed by the fact that Respondent's senior management considered Mr. Odom to be an operator-in-training under the immediate supervision of Superintendent Aydell, while Superintendent Aydell testified that he does not train operators and does not know what Respondent's minimum qualifications were to qualify as a Versa 36000 crane operator. (Tr. 556-557).

Based on the facts that Mr. Odom was directed to this jobsite by Respondent's senior management with their approval to operate the Versa 36000, and instructions to Superintendent Aydell to simply "familiarize" Mr. Odom with the crane, Superintendent Aydell's failure to independently verify Mr. Odom's qualifications to operate the crane was foreseeable and preventable. Accordingly, Respondent failed to establish the affirmative defense of unpreventable employee misconduct. Citation 1 Item 1 (Instance No. 3) is AFFIRMED.

Citation 1 Item 3

Complainant alleges in Citation 1 Item 3 that:

> *29 C.F.R. §1926.501(b)(6): Each employee on ramps, runways, and other walkways were not protected from falling 6 feet above the lower level:*
>
> *(a) The employer does not ensure employees are protected from falling while walking on the outriggers of the Versacrane TC-36000. This violation was most recently discovered on July 18, 2008, where each employee was using the*

outriggers as runways to travel from the ladder attached to the outrigger to the cab of the crane, thereby exposing the employees to a fall hazard of greater than 14 feet.

The cited standard provides:

Ramps, runways, and other walkways. Each employee on ramps, runways, and other walkways shall be protected from falling 6 feet (1.8 m) or more to lower levels by guardrail systems.

It is undisputed that 29 C.F.R. §1926.501(b)(6) applies to the Versa 36000. (Tr. 330). To enter the cab of the Versa 36000, operators climb a ladder to the top of the outrigger, walk a few feet along the top of the outrigger with no fall protection until they reach a railed area in front of the cab entry. (Tr. 445, 572; Ex. R-19). Respondent acknowledged that the outrigger surface is higher than six feet above the ground and that a fall from such a height could result in serious injuries or death. (Tr. 327-328). President Landry knew, prior to the accident, that operators were required to walk on a section of the outrigger without fall protection when entering and exiting the Versa 36000 cabs. (Tr. 328-329, 507-508). Accordingly, Respondent does not dispute the prima facie elements of the violation alleged in Citation 1 Item 3.[8] Respondent's primary argument is that abatement of this condition was infeasible. (Tr. 573-574).

Complainant's expert witness agreed that guardrails running the length of the outriggers would not be feasible because they would impede the rotation of the crane. (Tr. 840). After the accident, Respondent moved the ladder closer to the cab and installed a "yo-yo" restraint system on the

[8] Since Complainant established all of the elements necessary for a prima facie violation of the original cited regulation, the alternative alleged violation of 29 C.F.R. §1926.550(a)(13)(ii) or (iii) will not be addressed.

outrigger walkway for operators to tie-off. (Tr. 329, 446, 506). President Landry testified that there was no reason why some method of fall protection could not have been used on the outriggers prior to this inspection. (Tr. 329). Post-inspection correction of a hazardous condition is persuasive evidence that abatement was feasible at the time. *Pitt-Des Moines, Inc*. 16 BNA OSHC 1429, 1993 CCH OSHD ¶30,225 (No. 90-1349, 1993). Mr. Closson also identified the possibility of using man-lifts to enter and exit the cab of the Versa 36000 as an alternative means of abatement. (Tr. 773).

Although the cited standard calls for guard rails, and witnesses agreed that guardrails were infeasible, the second prong of an infeasibility defense requires an employer to establish that alternative means of protection were unavailable. In this instance, alternative methods of protection were available, with one actually having been implemented. The court finds that Respondent failed to establish the defense of infeasibility. Citation 1 Item 3 is AFFIRMED.

Citation 1 Item 4

Complainant alleges in Citation 1 Item 4 that:

> *29 C.F.R. §1926.550(a)(2): Rated load capacities, recommended operating speeds, special hazard warnings, or instructions, were not conspicuously posted on equipment:*
>
> *(a) The employer does not ensure load rating charts for the Versacrane TC-36000, Serial D/S-004, are securely fixed to the cab. This violation was discovered most recently on July 18, 2008, where load charts located in a binder, and a boom angle-to-radius conversion chart was inserted on a*

clipboard, which were both located on the ground after falling out of the cab.

The cited standard provides:

> *Rated load capacities, and recommended operating speeds, special hazard warnings, or instruction, shall be conspicuously posted on all equipment. Instructions or warnings shall be visible to the operator while he is at his control station.*

Complainant clarified the vague language in the citation by arguing that Respondent failed to have the appropriate 420-foot boom conversion chart conspicuously posted in the cab on the day of the accident. (*Complainant's Brief*, pp. 32-33). The cited standard clearly applies. Respondent's policy mirrored 29 C.F.R. §1926.550(a)(2) in that it required load capacities, operating speeds, special warnings, and instructions to be conspicuously posted and visible to crane operators while in the cab. (Tr. 127-128; Ex. C-17). Superintendent Aydell provided undisputed testimony that he reviewed the 420-foot boom chart with Mr. Odom on the day of the accident and that the chart was in the cab of the Versa 36000. (Tr. 584, 600). President Landry testified that approximately one week after the accident, he observed the 420-foot boom angle radius chart for the Versa 36000 on the ground near the wreckage. (Tr. 334, 457-458). Complainant's expert confirmed that various papers were scattered on the ground near the wreckage for days after the accident. (Tr. 796).

Mr. Closson used these facts to speculate about whether the 420-foot boom radius chart had been conspicuously posted inside the cab prior to the accident. (Tr. 805, 853). Unfortunately, the only person with direct knowledge of whether or not the 420-foot boom radius chart was conspicuously posted prior to the collapse is the deceased, Mr. Odom. It is abundantly clear from the testimony and post-accident photographs that papers from inside the cab were scattered throughout the site when the crane collapsed, then rained on and allowed to sit in the mud and wind for days after the incident. No

witness had direct knowledge of the specific location of the chart while Mr. Odom was operating the crane on July 18, 2008. Complainant failed to establish that the appropriate load rating chart was not conspicuously posted in the Versa 36000 on the day of the accident. Citation 1 Item 4 is VACATED.

Citation 2 Item 1

Complainant alleges in Citation 2 Item 1 that:

> *29 C.F.R. §1926.20(b)(4): The employer did not permit only those employees who were qualified by training and experience to operate equipment and machinery:*
>
> *(a) The employer does not ensure employees operating the TC-36000 Versacrane, D/S004, are trained to operate the crane. This violation was most recently violated on July 18, 2008, where the employer instructed the crane operator to operate the TC-36000 Versacrane and did not provide specific training on the crane's operation, controls, load charts and safety device which resulted in the crane being placed in a position to over-haul which resulted in four fatalities.*

The cited standard provides:

> *The employer shall permit only those employees qualified by training or experience to operate equipment or machinery.*

The focus of the violation is the qualification of Mr. Odom to operate the Versa 36000 on July 18, 2008. The cited standard applies. The term "qualified" is defined in the regulations as "one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve

problems relating to the subject matter, the work, or the project." 29 C.F.R. §1926.32(m). The court notes that President Landry claimed to be able to watch a crane operator maneuver a crane for *five minutes* and determine whether he is qualified to operate the machine. (Tr. 417).

The court finds that the regulatory definition of "qualified" is general and broad. When regulatory language is not specific enough, as in this determination of what constitutes a "qualified" Versa 36000 crane operator, industry sources may be considered. *Corbesco, Inc.*, 926 F.2d 422, 427 (5th Cir. 1991). In this case, both experts agreed that the American Society of Mechanical Engineering's ("ASME") Safety Standard B30.5 for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings, ASME B30.5, is the industry standard for crane operator qualification criteria in the United States. (Tr. 717; *Resp. Brief*, p. 8).[9]

ASME B30.5-3.2(b) (2004) "Qualifications for and Conduct of Operators and Operating Practices" provides:

> *(b) Operator requirements shall include, but not be limited to, the following:*
>
> *(1) evidence of successfully passing a physical examination as defined in para.5-3.1.2(a);*

[9] There was some dispute as to whether the 2004 or 2007 version of ASME B30.5 applied to the crane on the date of the accident. However, Mr. Closson confirmed that the 2007 version did not become effective, and thus a requirement in the industry, until March 2009. (Tr. 672-673; Ex. C-6, pp. ii & ix). Therefore, the 2004 version is the recognized industry standard in this instance. (Tr. 675).

(2) satisfactory completion of a written examination covering operational characteristics, controls, and emergency control skills, such as response to fire, power line contact, loss of stability, or control malfunction, as well as characteristic and performance questions appropriate to the crane type for which qualification is being sought;

(3) demonstrated ability to read, write, comprehend, and use arithmetic and a load/capacity chart, in the language of the crane manufacturer's operation and maintenance instruction manuals;

(4) satisfactory completion of a combination written and verbal test on load/capacity chart usage that covers a selection of the configurations (the crane may be equipped to handle) for the crane type for which qualification is being sought;

(5) satisfactory completion of an operation test demonstrating proficiency in handling the specific crane type, including both prestart and poststart inspection, maneuvering skills, shutdown, and securing procedures... (Ex. C-5)

Respondent argues that Mr. Odom was qualified to operate the Versa 36000. (*Resp. Brief,* pp. 23-26). In support of its argument, Respondent points out that Mr. Odom had been working for Respondent for approximately 2 years, possessed an NCCCO certification card for Large Hydraulic

and Lattice Boom Crawler cranes, and had operated other cranes, including the Versa 28000, on other jobsites. (Tr. 88, 141-142, 433-434, 441-442; Ex. R-12).

In direct contradiction to Respondent's position, Site Manager Stafford testified that Mr. Odom had not been trained to operate the Versa 36000 in accordance with OSHA regulations, Respondent's own policies, or ASME Safety Standard B30.5. (Tr. 61-63, 93-95). Site Manager Stafford, Site Manager Hulse, and others made the decision to have Mr. Odom operate the Versa 36000 at the Lyondell site even though they knew he had never operated the Versa 36000 before, had not received any classroom training on the Versa 36000, nor any practical training on the Versa 36000, and that Mr. Odom had never completed any examination or test concerning the Versa 36000. (Tr. 63-64, 89, 93, 151-153, 156, 380). Unlike Respondent's other Versa 36000 operators, Mr. Odom had nothing in his personnel file which indicated he was qualified to operate the Versa 36000. (Tr. 122-124, 371). Mr. Odom was also the least experienced crane operator employed by Respondent at the time of the accident. (Tr. 316). Respondent's "Lifting and Mobile Equipment Program," in effect at the time, stated that "[u]nder no circumstances shall an employee operate a vehicle until he/she has successfully completed this company's training program or has been certified by the site manager." (Tr. 86-88; Ex. C-17).

In addition to this being Mr. Odom's first time to operate the Versa 36000, the crane had never been configured in the manner it was on the day of the accident. (Tr. 214-215). The crane normally operated with an 85-95 foot rear mast. (Tr. 214). On the day of the accident, it was operating with a 105 foot mast. (Tr. 215, 606). The Versa 28000, on which Mr. Odom had previously worked, was *never* configured with a 105 foot mast. (Tr. 224).

One aspect of Respondent's argument is that Mr. Odom's NCCCO certification, in light of a 1999 cooperative agreement between OSHA and NCCCO, establishes his qualifications to operate the Versa 36000. (Tr. 239-240). The National Commission for the Certification of Crane Operators ("NCCCO") is a nationally recognized non-profit organization which certifies crane operators as qualified for particular types of cranes. (Tr. 98-99). NCCCO has four crane categories for which it certifies operators: Small Hydraulic Cranes, Large Hydraulic Cranes, Lattice Boom Crawler Cranes, and Lattice Boom Truck Cranes. (Tr. 890). The cooperative agreement states, *inter alia*, that NCCCO certification provides evidence that crane operators meet OSHA's training requirements as well as the ASME B30.5 standards. (Ex. R-22). However, the agreement between OSHA and NCCCO was negotiated prior to the existence of the first Versa 36000. (Tr. 252-253). Additionally, the Versa 36000 is not one of the cranes tested in the NCCCO process. (Tr. 383, 483, 948). It is a hybrid, with characteristics of multiple types of cranes. (Tr. 729-730, 831-832, 890-891, 950). Even Respondent's own internal employee training materials for NCCCO certification tests make no reference to operating Versacranes. (Tr. 114-115). Site Manager Stafford, President Landry, and Mr. Closson all agreed that Mr. Odom's NCCCO certification did not qualify him to operate one of Respondent's Versacranes. (Tr. 109, 485, 679-680). Ultimately, the record established that "there is not a single question on any test provided by [NCCCO] in any of the categories that would have tested Mr. Odom's knowledge concerning backwards overhaul limitations on the 36000." (Tr. 938). Respondent's argument that Mr. Odom's NCCCO card qualified him to operate the Versa 36000 is rejected.

Since the Versacranes are specifically produced by and for Respondent, they are not generally available for use in the industry by other manufacturers or operators. Therefore, Respondent should have developed a specifically tailored training program for Versacrane operators that meets ANSE

B30.5-3.2(b) qualification requirements, especially subparagraphs (b)(2) through (b)(5). The record failed to establish that such a program was established or implemented.

Respondent also points to a Letter of Interpretation issued by OSHA in 1990 stating that an operator does not have to be re-examined when operating the same type of crane with a heavier lifting capacity as long as the increased lifting capacity is not a result of attachments with which the operator has no experience. (Tr. 435; Ex. R-24). Mr. Odom had twenty-seven days of experience operating the Versa 28000 on prior jobs. (Tr. 728). Respondent argues that Mr. Odom's experience on the Versa 28000 translates to qualification on the Versa 36000. While it is true that the Versa 36000 has a heavier lifting capacity than the Versa 28000, they are vastly different with regard to overhaul hazards and limitations. (Tr. 930-931). Both experts agreed that, unlike the Versa 36000, it is *not possible* to maneuver the Versa 28000 *with the same 420 foot boom* into a configuration in which backwards overhaul is a risk. (Tr. 685-688, 926-927; Ex. C-35). Even Mr. Kohner acknowledged that Mr. Odom's prior experience on the Versa 28000 only established *partial* qualification to operate the Versa 36000. (Tr. 911). Since it was Mr. Odom's first day to operate the Versa 36000, Mr. Kohner conceded that he would not have been comfortable allowing Mr. Odom to operate the crane alone. (Tr. 973). Site Manager Stafford also agreed that Mr. Odom's prior experience on the Versa 28000 was not sufficient training to operate the Versa 36000. (Tr. 96).

Additionally, as Mr. Closson pointed out, there was no evidence that Mr. Odom was ever properly trained or qualified to even operate the Versa 28000 on previous jobsites. (Tr. 685, 709, 735, 737). The fact that Mr. Odom had operated the Versa 28000 previously without experiencing an accident does not necessarily mean he was qualified to do so. (Tr. 685). Ultimately, the manner in which Mr. Odom operated the Versa 36000 on this jobsite, resulting in catastrophic collapse, can be

considered in determining whether or not he was a qualified operator. *Herbert Vollers, Inc.*, 4 BNA OSHC 1798, 1976-1977 CCH OSHD ¶21,230 (No. 9747, 1976). The facts presented in this case convince the court that Mr. Odom was *not* qualified to operate the Versa 36000 on July 18, 2008. Complainant established that the standard was violated, the four deceased employees were exposed to the condition, and Respondent had knowledge of Mr. Odom's lack of qualification to operate the Versa 36000.

Respondent experienced a previous crane-related inspection in 2007 at a jobsite in Coffeyville, Kansas. (Tr. 74, 78, 462-464). The Kansas case also involved a fatal crane accident with an unqualified crane operator at the controls. (Tr. 389). OSHA issued a *Citation and Notification of Penalty* to Respondent for regulatory violations as a result of that investigation as well. (Ex. C-26). One of the citation items accepted by Respondent as part of that settlement alleged a violation of 29 C.F.R. §1926.20(b)(4), the same standard at issue here. (Ex. C-27). That Settlement Agreement was approved and became a Final Order of the Commission on February 25, 2008. (Ex. C-28, C-29).

"A violation is repeated under Section 17(a) of the Act if, at the time of the alleged repeated violation, there was a Commission final order against the same employer for a substantially similar violation." *Potlatch Corp.*, 7 BNA OSHC 1061 (No. 16183, 1979). "In cases where the Secretary shows that the prior and present violations are for an employer's failure to comply with the same specific standard, it may be difficult for an employer to rebut the Secretary's prima facie showing of similarity." *Id*. Respondent failed to rebut Complainant's prima facie showing of similarity. Therefore, Citation 2 Item 1 is AFFIRMED as a repeat violation.

Penalties

In calculating the appropriate penalty for affirmed violations, Section 17(j) of the Act requires

the Commission to give "due consideration" to four criteria: (1) the size of the employer's business, (2) the gravity of the violation, (3) the good faith of the employer, and (4) the employer's prior history of violations. *29 U.S.C. §666(j)*. Gravity is the primary consideration and is determined by the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood of an actual injury. *J.A. Jones Construction Co.*, 15 BNA OSHC 2201, 1993 CCH OSHD ¶29,964 (No. 87-2059, 1993). In calculating the proposed penalties, Complainant provided no reduction for size or history due to the fact that Respondent employs three hundred people and received a safety citation within the last three years. (Tr. 989-990).

The court finds that all of the employees working onsite for Respondent were exposed to the hazards identified in Citation 1 Item 1 and Citation 2 Item 1 for the entire day because an accident involving this super-lift crane could have injured or killed all of them. Each operator of the Versa 36000 was exposed to the fall hazards identified in Citation 1 Item 3 every time they entered or exited the cab of the crane. Based on these facts and the totality of the circumstances described herein, the court assesses the penalties for the items being affirmed as set out below.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, it is ORDERED that:

1. Citation 1 Item 1 (Instance No. 1) is hereby VACATED;

2. Citation 1 Item 1 (Instance No. 2) is hereby AFFIRMED and a penalty of $5,000.00 is ASSESSED;

3. Citation 1 Item 1 (Instance No. 3) is hereby AFFIRMED and the penalty is grouped with Citation 1 Item 1 (Instance No. 2) above;

4. Citation 1 Item 3 is hereby AFFIRMED and a penalty of $7,000.00 is ASSESSED.

5. Citation 1 Item 4 is hereby VACATED;

6. Citation 2 Item 1 is hereby AFFIRMED and a penalty of $35,000.00 is ASSESSED.

__/s/_____
PATRICK B. AUGUSTINE
Judge, OSHRC

Date: March 18, 2010
Denver, Colorado