THIS CASE IS NOT A FINAL ORDER OF THE REVIEW COMMISSION AS IT IS PENDING COMMISSION REVIEW Some personal identifiers have been redacted for privacy purposes.



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.

HENKELS & MCCOY, INC. Respondent. OSHRC Docket No. 18-1864

DECISION AND ORDER

Attorneys and Law firms

Charna C. Hollingsworth-Malone, Attorney, Office of the Solicitor, U.S. Department of Labor, Atlanta, GA, for Complainant.

Carol A. Field, Morgan, Dennis J. Morikawa, Attorneys, Lewis & Bockius, LLP, Miami, FL, Philadelphia, PA, for Respondent.

JUDGE: John B. Gatto, United States Administrative Law Judge.

I. INTRODUCTION

This case involves a tragic accident that occurred on May 2, 2018, when an employee of Henkels & McCoy, Inc. ("H&M") was injured while attempting to remove a utility pole and later died from his injuries. The United States Department of Labor, through its Occupational Safety and Health Administration ("OSHA"), investigated the accident and subsequently issued¹ a

¹ The Secretary of Labor has assigned responsibility for enforcement of the Act to OSHA and has delegated his authority under the Act to the Assistant Secretary for Occupational Safety and Health, who heads OSHA. See Order No. 4–2010 (75 FR 55355), as superseded in relevant part by 1–2012 (77 FR 3912). The Assistant Secretary has redelegated his authority to OSHA's Area Directors to issue citations and proposed penalties. *See* 29 C.F.R. §§ 1903.14(a) and 1903.15(a). The terms "Secretary" and "OSHA" are used interchangeably herein.

serious² citation under the Occupational Safety and Health Act of 1970 (the "Act"), 29 U.S.C. §§ 651-678.³ The citation alleged a violation of section 5(a)(1) of the Act, commonly known as the "general duty clause" and proposed a penalty of \$12,934.00. After H&M timely contested the citations, the Secretary of Labor filed a formal complaint with the Commission seeking an order affirming the citation and proposed penalty.⁴ A bench trial was held in Jacksonville, Florida, and in Phoenix, Arizona.

The Court finds that at all relevant times H&M was engaged in a business affecting commerce and was an employer within the meaning of sections 3(3) and 3(5) of the OSH Act. (Stip. $\P E(1)$.)⁵ Further, the Court concludes the Commission has jurisdiction over the parties and subject matter in this case. (*Id.* $\P E(2)$.) Pursuant to Commission Rule 90, after hearing and carefully considering all the evidence and the arguments of counsel, the Court issues this Decision and Order as its findings of fact and conclusions of law.⁶ All arguments not expressly addressed have nevertheless been considered and rejected. For the reasons indicated *infra*, the Court **VACATES** the citation without a civil penalty assessment.

II. BACKGROUND

H&M is part of the utility industry and its employees perform general utility line maintenance, including storm restoration and utilizes derrick diggers, among other things, to conduct its work. (Tr. at 831, 1219.) A digger derrick is a specialized type of equipment designed to install utility poles and typically comes equipped with augers to drill holes for the poles, and with a hydraulic boom to lift the poles and set them in the holes. (Cranes and Derricks in Construction: Revising the Exemption for Digger Derricks, 78 Fed. Reg. 32110-01 (May 29,

² The Act contemplates various grades of violations of the statute and its attendant regulations— "willful"; "repeated"; "serious"; and those "determined not to be of a serious nature" (the Commission refers to the latter as "other-than-serious"). 29 U.S.C. § 666. A serious violation is defined in the Act; the other grades are not.

³ Although the citation initially included a second item alleging a personal protective equipment violation under 29 § CFR 1926.28(a), it was withdrawn by the Secretary prior to trial.

⁴ Attached to the Complaint and adopted by reference was the citation at issue (Compl., Ex. A). Commission Rule 30(d) provides that "[s]tatements in a pleading may be adopted by reference in a different part of the same pleading or in another pleading or in any motion. A copy of any written instrument which is an exhibit to a pleading is a part thereof for all purposes." 29 C.F.R § 2200.30(d). Although the Secretary's original citation included a second item alleging a violation of 29 C.F.R § 1926.28(a), OSHA's personal protective equipment standard, the Secretary withdrew that item prior to trial.

⁵ See Jt. Prehearing State.

⁶ If any finding is in truth a conclusion of law, or if any stated conclusion is in truth a finding of fact, it shall be deemed so.

2013)). A digger derrick is about the size of a dump truck, but instead of a dumping mechanism, the digger derrick's flatbed is outfitted with a captain's chair, atop a pedestal, and a boom. (Tr. at 91, 94; *see also* Ex. C-1, p. 15.) A steel pedestal is used to attach the digger derrick to the subframe and chassis. (Ex. R-48, p. 1.) Rotation bearing mounting bolts ("bolts")⁷ were used to secure the pedestal. (Tr. 515-16; *see also* Ex. C-18, p. 2; Ex. R-2, p. 2.)

[redacted], H&M's crew leader at the worksite, died on May 2, 2018 as a result of a tragic accident. (Tr. 88.) On the day of the accident, [redacted] and Ronnie Aldrich, an apprentice, were assigned to a pole-pulling operation as part of H&M's contract with Jacksonville Electrical Authority. (Stip. ¶ D1, D7(a) - D7(f).) [redacted] was sitting in the operator's seat of one of H&M's digger derricks removing an existing utility pole and Aldrich was standing on the ground, when Aldrich heard the digger derrick "creak" and a bolt popped out of the bottom of the pedestal under [redacted]'s captain's chair. (Id. at ¶D7.) [redacted] immediately stopped operations and asked Aldrich to get on the digger derrick to investigate. (Id.) When Aldrich investigated, he told [redacted] there was a bolt on the bed of the digger derrick. (*Id.*) [redacted] told Aldrich to check the rest of the bolts to see if they were tight. (Id.) After checking, Aldrich told [redacted] that none of the remaining bolts were loose. (Id.) [redacted] told Aldrich the bolt had sheared off and they would get it checked "after this pole." (Id.) Aldrich made a final check to see if the boom had lifted off the digger derrick's platform (i.e., to see if there was any space or separation between the boom and the platform) and told [redacted] there was not. (Id.) [redacted] told Aldrich to get down and "keep an eye on it" and as Aldrich turned to get down, [redacted] started to move the boom. (Id.) Aldrich heard sounds and jumped off the digger derrick and as he turned, the boom detached from the platform and fell and [redacted] was launched out of his seat and landed face first on the pavement. (Id.) [redacted] later died as a result of his injuries. (Id.)

III. ANALYSIS

The fundamental objective of the Act is to prevent occupational deaths and serious injuries. *Whirlpool Corp. v. Marshall*, 445 U.S. 1, 11 (1980). Thus, "[t]he Act's purpose is straightforward: 'to assure so far as possible safe and healthful working conditions' for 'every working man and woman in the Nation.' "*Sec'y, U.S. Dep't of Labor v. Action Elec. Co.*, 868 F.3d 1324, 1333 (11th

⁷ Although the parties, witnesses and documentary evidence sometimes referred to the rotation bearing mounting bolts as rotation bearing mounting cap screws, rotation bearing cap screws, or rotation bearing fasteners, the Court uses the term rotation bearing mounting bolts or bolts.

Cir. 2017) (*quotations omitted*).⁸ "The Secretary has rulemaking power and establishes the safety standards; investigates the employers to ensure compliance; and issues citations and assesses monetary penalties for violations." *ComTran Grp., Inc. v. U.S. Dept. of Labor*, 722 F.3d 1304, 1307 (11th Cir. 2013). The Commission, meanwhile, has adjudicative power and serves "as a neutral arbiter and determine whether the Secretary's citations should be enforced over employee or union objections." *Cuyahoga Valley Ry. Co. v. United Transp. Union*, 474 U.S. 3, 7 (1985) (per curiam).

To implement the purpose of the Act, "Congress imposed dual obligations on employers," "a 'general duty' to free the workplace of all recognized hazards" and "a 'special duty' to comply with all mandatory health and safety standards." *ComTran*, 722 F.3d at 1307. However, under either the general or special duty clause, a hazard does not itself establish a violation. *United States v. Mar-Jac Poultry, Inc.*, 756 F. App'x 856, 862–63 (11th Cir. 2018). "OSHA can only issue general duty clause citations where it has not promulgated a regulation covering a particular situation at an employer's worksite." *Roberts Sand Co., LLLP v. Sec'y of Labor*, 568 F. App'x 758, 759 (11th Cir. 2014). Here, although OSHA has promulgated a regulation covering Cranes and Derricks in Construction, it exempted digger derricks used for augering holes for poles carrying electric or telecommunication lines, placing and removing the poles, and for handling associated materials for installation on, or removal from, the poles. 29 C.F.R. § 1926.1400(c)(4). Thus, the Secretary was authorized to issue general duty clause citation.

A. Alleged General Duty Clause Violation

An employer commits a "general duty" clause violation when he fails to "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). The Secretary alleges H&M violated the general duty clause when it "exposed employees to struck-by and crushing hazards, in that; it did not ensure rotation bearing cap screws

⁸ The employer or the Secretary may appeal a Commission order to the federal court of appeals for the circuit in which the violation allegedly occurred or where the employer has its principal office, and the employer also may appeal to the District of Columbia Circuit. *See* 29 U.S.C. §§ 660(a) and (b). The alleged violation occurred in Florida, which is in the Eleventh Circuit and the company's principal office is in Pennsylvania, which is in the Third Circuit. The Commission has held that "[w]here it is highly probable that a case will be appealed to a particular circuit, the Commission generally has applied the precedent of that circuit in deciding the case— even though it may differ from the Commission's precedent." *Kerns Bros. Tree Serv.*, 18 BNA OSHC 2064, 2067 (No. 96-1719, 2000). This Court applies the precedent of the Eleventh Circuit in deciding the case where it is highly probable that the case will be appealed.

on Altec Digger Derricks (to include but not limited to units 44505; 44474; 44475; 44473) were being properly maintained." (Compl., Ex. A.) The diggers derricks at issue in this case were the Altec DC47 series. (Stip. ¶D9-D12.)

To prove a violation of the general duty clause in the Eleventh Circuit, the Secretary must establish by a preponderance of the evidence "that '(1) the employer failed to render its work place free of a hazard; (2) the hazard was recognized; ... (3) the hazard caused or was likely to cause death or serious physical harm' and '(4) the hazard [was] preventable." *Pepper Contracting Servs. v. Occupational Safety & Health Admin.*, 657 F. App'x 844, 847-48 (11th Cir. 2016) (omission in original) (citation omitted). Further, under binding Fifth Circuit precedent,⁹ the general duty clause "requires the employer to eliminate only 'feasibly preventable' hazards." Champlin Petroleum Co. v. Occupational Safety & Health Review Comm'n, 593 F.2d 637, 640 (5th Cir. 1979) (citation omitted). For the reasons indicated supra, the Court concludes the Secretary has failed to prove three of the four elements of his prima facie case.

Whether Hazard Was Present

Although the term "hazard" is not defined in the Act, the Eleventh Circuit has explained it "refers to the risk of injury as a result of the condition[.]" *Fla. Lemark Corp. v. Sec'y, U.S. Dep't of Labor*, 634 F. App'x 681, 687 (11th Cir. 2015). The Commission has also held "it is the hazard, not the specific incident that resulted in injury or might have resulted in injury that is the relevant consideration in determining the existence of a recognized hazard." Arcadian Corp., 20 BNA OSHC 2001, 2008 (No. 93-0628, 2004) (citations omitted). Here, the Secretary argues the "risk of injury" was being crushed-by or struck-by the boom as a result of H&M's failure to properly maintain the bolts. The Court does not agree with the Secretary's definition of the hazard. As indicated *infra*, the preponderance of evidence establishes that the "condition" was not H&M's failure to properly maintain the bolts, but rather, was a manufacture's defect that existed in the Altec DC47 series diggers derricks. Thus, the Court concludes the Secretary failed to define the

⁹ The Eleventh Circuit was created when the Fifth Circuit split on October 1, 1981. *See* Fifth Circuit Court of Appeals Reorganization Act of 1980, P.L. 96-452, 94 Stat. 1995. The Eleventh Circuit has adopted the case law of the former Fifth Circuit handed down as of September 30, 1981, as its governing body of precedent. *Bonner v. City of Prichard*, 661 F.2d 1206, 1209 (11th Cir. 1981). This body of precedent is binding unless and until overruled by the Eleventh Circuit en banc. *Id.* Further, the decisions of the continuing Fifth Circuit's Administrative Unit B are also binding on the Eleventh Circuit, while Unit A decisions are merely persuasive. *Dresdner Bank AG v. M/V Olympia Voyager*, 446 F.3d 1377 (11th Cir. 2006).

hazard in a way that apprised H&M of its obligations and identified conditions or practices over which H&M could reasonably be expected to exercise control. Therefore, the Court concludes the Secretary has failed to establish the existence of a hazard.

The Secretary's expert, Phillip Toone,¹⁰ explained:

Fasteners are used to assemble [the] components. When forces are subjected to the resulting assembly, [the] fasteners must remain intact for the assembly to remain integral. Forces subjected to an assembly, and consequently the fasteners that hold it together, can be classified as either static or dynamic. Static forces are straight forward in that they can be subjected to an assembly in a single test to demonstrate that the assembly is capable of withstanding the static force. In the case of dynamic loading, materials can and will fatigue causing them to fail after an unknown number of cycles.

Engineers take advantage of this and specify torque parameters to protect fasteners from destructive dynamic loading. Torque specifications are typically communicated to those responsible for repair and maintenance of equipment through owner[']s manuals and/or maintenance/repair manuals. Failure to heed these requirements will subject the fastener to dynamic loading and eventual fatigue failure. Engineers may identify a particular connection in an assembly that warrants extra attention to ensure protection against dynamic loading. Periodic torque testing of the fasteners for such a connection may be required to ensure safe operation of the assembly. A torque test will often be as straight forward as simply applying a specified torque to the fastener to ensure it is tight enough to protect it from dynamic loading. Alternatively or in addition to torque testing fasteners may be marked to provide visual confirmation that the fastener has been torqued and that it has not rotated after being torqued.

(Ex. C-18, pp. 4-5, 6.)¹¹ Mr. Toone opined the bolts "failed through the mechanism of fatigue." (Tr. 551, 552-53.) As Mr. Toone explained, "it's important that fasteners are torqued to a proper specification because doing so reloads the fastener with tensile stress as it's compressing the material that it's clamping down on." (Tr. 529.) Put another way, "the primary purpose for doing that" is "that the torquing process stretches the bolt in tension, which applies a pre-loaded tension

¹⁰ Mr. Toone has been an engineer since 2003 and has been an engineer with OSHA's Salt Lake Technical Center since 2010. (*See* Ex. C-18; *see also* Ex. R-7.) He has a Master of Science degree in mechanical engineering and in aerospace engineering. (*Id.*; *see also id.*) He has never previously testified as an expert. (*Id.*) He has experience in ensuring bolted connections (or fasteners) maintain their structural integrity by understanding their strength, resistance to corrosion, assembly, and problems with use. (*See* Tr. 515.) He testified as a mechanical engineer with a focus on fastener integrity. (*Id.* 522.)

¹¹ Mr. Toone uses the term "fastener" when referencing the rotation bearing mounting bolts. (Tr. at 515-516.) "A fastener, in a very generic broad sense, is anything that fastens parts of an assembly together ... it applies to both bolts and screws" (*Id.*)

to that fastener, which protects it from fatigue failure." (Tr. 537.) "Doing this protects the fastener against cyclic or dynamic loading, which can result in fatigue failure." (Tr. 529.) By way of example, Mr. Toone explained that fatigue failure could be compared to bending a piece of wire until it eventually breaks. If you bend wire once, it may not break. But after five, ten or a thousand bends, it will. (*Id.* 538.) Thus, fasteners, when used and loaded as part of a bolt assembly, would be compared to bending a wire. (*See generally, id.*)

Mr. Toone also opined that "there is an additional benefit to torquing these fasteners, in addition to helping protect against fatigue, that because these fasteners had experienced some damage due to microcracks and corrosion that they were going to fail at a lower threshold than they would if there were no damage." (*Id.*; *see also* Tr. 532) Thus, torque testing of these bolts "would have provided an opportunity for them to fail in a safe and controlled environment revealing that they were no longer fit for service. This would have prompted the replacement of all of the ... [bolts]." (Ex. C-18, p. 6, ¶ G.) Mr. Toone opined that failing to follow the manufacturer's instructions, including torque testing the bolts to the manufacturer's prescribed torque values, created a hazard. (Tr. 537; *see also* Ex. C-18, p. 6, ¶ D.v.)

However, H&M's expert, Dr. Glen Stevick,¹² disagreed with Mr. Toone's conclusions, and opined "the torque evidence found in the sister units 44474 and 44475 (they were tight and at specification) and Altec's use of a patch thread lock indicate the subject bolts were almost certainly tight and at specification. ... There is no evidence to support a theory of loose bolts. Rather, the available evidence suggests the bolts were tight." (Ex. R-2, p. 2.) In Dr. Stevick's expert opinion, the loss of torque and preload in the bolts *could* result in a fatigue failure of the bolts *if* separation of the components being bolted together occurred because the cyclic load that would normally be transferred through the components would then be transferred through the bolts. (Ex. R-2, p. 5) (emphasis added). Thus, Dr. Stevick opined the available evidence indicated that separation did not occur. (*Id.*) The Court credits Dr. Stevick's expert opinion, which is consistent with Aldrich's

¹² Dr. Stevick is Mechanical Engineer, Principal, with a Ph.D. in Mechanical Engineering. (*See* Ex. R-2.) He has been an engineer since 1981 and has been a Principal, Consultant with Berkeley Engineering And Research, Inc. since 1986 and has over 35 years of experience in failure analysis, design, damage mechanics (corrosion, fracture, fatigue, creep, etc.) and risk assessment of: structures; stadium roofs; industrial equipment; medical devices such as aortic stents, hip and knee implants and spinal rod implants; exercise equipment; turbines and reciprocating engines; automotive and aircraft components; offshore platforms for wind generation and oil exploration; pressure vessels and piping systems; blowdown, blowout and breakaway systems; heat exchangers, boilers and furnaces; and electronic controls and interlocks for battery systems, consumer products and industrial equipment. (*Id.*)

statement, the only eyewitness, that after the bolt broke, the boom had *not* lifted off the digger derrick's platform (i.e., there was no space or separation between the boom and the platform). Therefore, the Court concludes the Secretary has failed to establish the existence of a hazard resulting from improper maintenance of the bolts.

Further, even assuming the Secretary's is correct that the "condition" was H&M's failure to properly maintain the bolts, the Court nonetheless concludes he has failed to show employees were exposed to a significant risk of harm. "To prove that a condition presents a hazard under the general duty clause, the Secretary is required to show that ... employees [were exposed] to a "significant risk' of harm." *Sci. Applications Int'l Corp., d/b/a Saic*, 2020 WL 1941193, at *4 (No. 14-1668, 2020) (*quoting A.H. Sturgill Roofing, Inc.*, 27 BNA OSHC 1809, 1810-11 (No. 13-0224, 2019) (*quoting Beverly Enters., Inc.*, 19 BNA OSHC 1161, 1170-72 (No. 91-3144, 2000) (consolidated)). As indicated *supra*, the Court credits Dr. Stevick's expert opinion and concludes H&M's employees were not exposed to a significant risk of harm from improper maintenance of the bolts since "the available evidence suggests the bolts were tight."

Significantly, Dr. Stevick further opined "the failure was primarily due to an underdesigned (pedestal/ring gear) bolted connection that subjected the rotation bearing mounting cap screws ('bolts') to excessive cyclic tensile and bending stresses." (Ex. R-2, pp. 2, 8; *see also* Tr. 951-52.) As Dr. Stevick explained, "the highest tensile stress is on the outer surface," and when the bolt circle was bent from the boom falling, "the failure was on the inside of the bolt instead of the outside relative to the center of the bolt circle." (Tr. 902-03.) "That means that those flanges were pried and not stiff enough in design. And sure enough that's what the calculations showed." (Tr. 903.) Dr. Stevick explained:

[T]he fatigue crack initiation and growth has occurred on the inner side of the bolts. In other words, the side toward the center of the gear ring and bolt circle. If the bolted connection halved (gear ring and pedestal flange) were adequately stiff, crack initiation would occur at the furthest point from the center of the gear ring and bolt circle, or at least exhibited cracking all the way around. Instead, flexing of the pedestal flange is causing the bolt to bend[.] This opinion is based on my detailed stress analysis of several similar crane and man lift pedestal/ring gear failures using finite element analysis (FEA) and experience in bolted connections consulting with Bigge Crane and Rigging, the Golden Gate Bridge and numerous other clients that are heavy users of bolted connections.

(Ex. R-2, p. 3; see also id. Fig 2, Fig 3.) Dr. Stevick further explained:

[I]f the pedestal flange was adequately stiff, the Bolts would experience their maximum stress at the first thread of engagement with the threads of the ring gear,2 and would have fatigued and failed at that location. However, the Bolts failed outside the thread engagement with the ring gear. This clearly indicates the maximum stresses were outside the thread engagement area and due to local bending of the Bolts caused by excessive pedestal flange flexing.

(*Id.* p. 4.) The Secretary's expert, Mr. Toone, admitted he had called Altec and confirmed the tensile strength of the bolts were "akin to something over a Grade 8," which "tend to be more brittle than a lower grade bolt." (Tr. 567-68.) The Court credits Dr. Stevick's expert opinion, which was not refuted by Mr. Toone. Thus, the Court concludes the preponderance of evidence shows the bolt failure was primarily due to a design defect.

Whether Hazard Was Recognized

"[A] 'recognized hazard' is a condition that is 'known to be hazardous." *Georgia Elec. Co. v. Marshall*, 595 F.2d 309, 321 (5th Cir. 1979) (citation omitted). "This element can be established by proving that the employer had actual knowledge that a condition is hazardous." *Id.* "It may also be shown by proving that the condition is generally known to be hazardous in the industry." *Id.* "It does not depend upon whether the particular employer appreciated that the [condition] was a recognized hazard in the industry." *Id.*

Altec issued a recall notice on October 26, 2018, almost six months *after* the fatality occurred, which indicated that a defect existed in the DC47 units that had "rotation bearing fasteners that can break" and "possibly cause uncontrolled movement resulting in death or serious injury." (Ex. R-48, p. 4.) The Secretary failed to proffer any evidence that either H&M or the industry was aware of the manufacture's defect prior to Altec's issuance of its recall notice. Therefore, the Secretary has failed to establish the condition was generally known to be hazardous to H&M or in the industry at the time of the accident.

Whether Hazard Was Preventable

The Secretary has the "burden to show that demonstrably feasible measures would materially reduce the likelihood that such injury as that which resulted from the cited hazard would have occurred." *Champlin Petroleum*, 593 F.2d at 640 (citation omitted). Thus, the Secretary "must specify the particular steps the employer should have taken to avoid citation, and he must demonstrate the feasibility and likely utility of those measures." *Id.* The Secretary asserts one feasible and acceptable method of abatement would have been "to ensure that the ALTEC derrick

digger being used had the bearing bolts tested according to the ALTEC's maintenance and parts manual." (Compl., Ex. A.)

The Court concludes the Secretary failed to establish the likely utility of those measures since he failed to establish that ensuring the bolts were tested in accordance with the manufacturer's maintenance manual "would be effective in materially reducing the incidence of the hazard," A.H. Sturgill Roofing, Inc., 2019 WL 1099857, at *8 (No. 13-0224, 2019), since the risk of injury was a result of the manufacturer's defective bolts. Put another way, even if H&M had ensured the bolts were tested in accordance with the manufacturer's maintenance manual, the Secretary failed to establish it "would effectively reduce the hazard," i.e., effectively reduce the risk of injury as a result of the manufacturer's defective bolts. Champlin, 593 F.2d at 641.

For the reasons indicated *infra*, the Court concludes the Secretary has failed to prove all of the elements of his prima facie case. Accordingly,

IV. ORDER

IT IS HEREBY ORDERED THAT Citation 1 Item 1 is VACATED and no civil penalty is assessed.

SO ORDERED.

/s/ First Judge John B. Gatto

Dated: November 2, 2020 Washington, D.C.