Aerospace Testing Alliance, an aerospace engineering company, contracts with the U.S. Air Force to operate a sheet metal shop at Arnold Air Force Base in Tullahoma, Tennessee. In May 2016, the tip of an ATA employee’s finger was crushed while operating a power shear in the metal shop. Following the accident, the Occupational Safety and Health Administration conducted an inspection and issued ATA a one-item serious citation alleging a violation of 29 C.F.R. § 1910.212(a)(1) for failing to properly guard the power shear’s hold-down pistons. Following a hearing, Administrative Law Judge Heather A. Joys affirmed the citation and assessed the proposed $6,300 penalty. For the reasons discussed below, we reverse the judge and vacate the citation.
BACKGROUND

ATA’s employees are journeymen sheet metal workers hired out of a union hiring hall who have decades of experience with the equipment at the Air Force metal shop. Various pieces of equipment are available to cut metal in the shop, including a Cincinnati Industries Power Shear, Model 1412. To use this machine, the operator slides a piece of sheet metal by hand across the surface of the shear’s table until it hits the machine’s back stop. The operator then depresses a foot pedal, which causes the shear to cycle. First, “hold-down” pistons lower to secure the metal in position, then the blade cuts or “shears” the metal to the desired length. The shear’s thirteen hold-down pistons sit in front of the blade and a bell-shaped guard completely surrounds each piston up to a “finger” or “rake” guard, which prevents access to the blade.

On the day of the accident, an ATA employee with over 20 years of experience was cutting a three-inch piece of metal from a six-inch-long piece. Because the piece the employee was using was so small, it had to be held in place during the cutting operation to ensure it did not fall off the back of the shear’s table surface. The employee intended to hold it by placing another piece of metal on top of it, but he initially used his finger to hold the piece in place under one of the hold-down pistons. Because he was wearing gloves and his fingers would not fit under the hold-down piston’s guard with them on, he removed one of the gloves and circumvented the guard surrounding the hold-down piston by placing his finger underneath the guard and piston and on top of the piece he was cutting. Before he could put the second piece of metal on top of the first piece and remove his finger, the employee inadvertently pressed the shear’s foot pedal, causing the hold-down piston to lower and crush the tip of one of his fingers.

DISCUSSION

The Secretary alleges a violation of § 1910.212(a)(1), claiming that ATA “employees were exposed to crushing/amputation hazards when guarding was not provided on the hold-down pistons.” Section 1910.212(a)(1), in relevant part, states:

One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.

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1 The back stop, which is set behind the shear’s blade, is adjustable via a wheel with increments on it in inches. Adjusting the backstop allows an operator to cut a piece of metal to a specific length.
To establish a violation, the Secretary must prove that the cited standard applies, there was a failure to comply with the standard, employees were exposed to the violative condition, and the employer knew or could have known of the violative condition with the exercise of reasonable diligence. See Briones Utility Co., 26 BNA OSHC 1218, 1219 (No. 10-1372, 2016); Astra Pharm. Prods., Inc., 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), aff’d in pertinent part, 681 F.2d 69 (1st Cir. 1982). Because we find that the Secretary failed to establish ATA’s noncompliance with the cited standard, we confine our analysis to that element of the Secretary’s case.2

The judge concluded that ATA violated the guarding standard. She found that, because § 1910.212(a) is a performance standard, “the Secretary must establish that the hazard addressed by the standard existed” and “must establish employee exposure to the hold-down piston.” Crediting the testimony of the injured employee that there was nothing unusual about the way he operated the shear on the day of the accident, and interpreting another operator’s testimony as proof he operated the shear with his hand “inches from the hold-down piston,” the judge concluded that “[e]mployee exposure to the hazard is established.” And because she found that the guard “did not prevent entry of an operator’s finger under the hold-down piston, whether intentional or inadvertent,” she concluded that it did not comply with the standard’s requirement.

Compliance with § 1910.212(a)(1) is framed by the fact that, as the judge acknowledged, it is a performance standard, which means “it states the result required . . . , rather than specifying that a particular type of guard must be used.” Diebold, Inc., 3 BNA OSHC 1897, 1900 (No. 6767, 1976) (consolidated), rev’d on other grounds, 585 F.2d 1327 (6th Cir. 1978). Performance standards “require an employer to identify the hazards peculiar to its own workplace and determine the steps necessary to abate them.” Thomas Indus. Coatings, Inc., 21 BNA OSHC 2283, 2287 (No. 97-1073, 2007).

Here, ATA does not dispute that the hold-down pistons present a crushing hazard that requires guarding, and the Secretary acknowledges that the pistons were equipped with guards. The question, therefore, is whether the Secretary has established that the guards installed on the pistons were inadequate to “protect” employees from the crushing hazard. See 29 C.F.R. § 1910.212(a)(1). To determine adequacy, and therefore compliance, we consider whether, given “the manner in which the machine functions and how it is operated by the employees,” they are

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2 ATA does not dispute the cited standard’s applicability.
exposed to a hazard. *Rockwell Int'l Corp.*, 9 BNA OSHC 1092, 1097-98 (No. 12470, 1980). In other words, for the Secretary to establish the exposure to a hazard required for noncompliance, he “must show that it is reasonably predictable either by operational necessity or otherwise (including inadvertence), that employees have been, are, or will be in the zone of danger.” *Fabricated Metal Prods.*, 18 BNA OSHC 1072, 1073-74 (No. 93-1853, 1997) (emphasis added). Therefore, the occurrence of the injury in this case does not, by itself, establish that the guard was noncompliant with § 1910.212(a)(1)—although there is no dispute that the guard’s design did not prevent the injured employee from intentionally circumventing it, the guard would nonetheless be compliant if the operator’s actions were not reasonably predictable given the machine’s normal operation. In other words, in a case such as this one, a compliant guard may not always, nor does it need to, prevent intentional exposure to the hazard.3

We find the judge erred in concluding that it was reasonably predictable that an ATA operator would circumvent the guard. First, the judge failed to consider that the other three operators all testified that normal operation of the shear does not require an operator’s hands to approach the piston guards, let alone demand that he or she place fingers underneath a guard. The judge apparently misunderstood the testimony of one operator who explained how he held pieces of metal between two of the hold-down pistons. That operator testified that to cut a piece of metal that is small, but wide, he could slide the piece against the shear’s back stop and hold it with his hands placed between the pistons without being near the guards: “You can hold that piece of metal safely and cut it at three inches. . . . . You don’t have to get [any]where near those [hold-down pistons].” The judge equated the operator’s action with that of the injured employee and questioned the operator’s belief that placing his hands between the guarded pistons was “‘not a dangerous spot’ despite being inches from the hold-down piston.” But as ATA points out on

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3 We note that the noncompliance element in machine guarding cases overlaps with, but is not identical to, the exposure element of the Secretary’s prima facie case. To establish the exposure element of his prima facie case, the Secretary must prove actual exposure to the violative condition or that access to the violative condition was reasonably predictable. *See Calpine Corp.*, 27 BNA OSHC 1014, 1016 (No. 11-1734, 2018) (citing *Phoenix Roofing, Inc.*, 17 BNA OSHC 1076, 1079 (No. 90-2148, 1995), *aff’d*, 79 F.3d 1146 (5th Cir. 1996) (unpublished)), *aff’d*, 774 F. App’x 879 (5th Cir. 2019) (unpublished); *S & G Packaging Co.*, 19 BNA OSHC 1503, 1506 (No. 98-1107, 2001). Thus, the ATA operator’s injury here is only relevant to assessing actual exposure and would likely satisfy that element of the case if we were to reach that issue—it is not a substitute for establishing noncompliance as a separate element.
review, these two scenarios are not the same. The hold-down pistons are guarded on all sides, so the practice of placing hands in the area between two of the guarded pistons is not the same as intentionally circumventing a piston guard by placing fingers underneath it. Indeed, there is no evidence that this area of the machine presents any sort of hazard (see photo below as annotated by the Commission).

Second, the judge erroneously accorded conclusive weight to the injured employee’s testimony, disregarding inconsistencies in his testimony as well as the fact that it conflicts with the testimony of the other operators. Significantly, the record does not support the judge’s reliance on the injured employee’s testimony that there was nothing unusual about the way he used the shear on the day of the accident. Although the judge found the injured employee to be a credible witness because his demeanor was “calm and unflinching,” and he was “straightforward in his answers,” she failed to account for his internally inconsistent testimony. The injured employee testified: “I’ve done it all the time to cut real small metal. Stick my hand up under there and then pull it out, put another piece of metal on top to hold it, keep my hand out of the way[.]” He also claimed that he had seen other employees place their fingers underneath a hold-down piston guard. But when asked whether there was “[a]nything about watching other folks [that] made [him] think [he was] working unsafely on [the day of the accident],” he replied, “Yes, it could have been . . . . [I]t [is not the] practice all the time to put your hand up under there but it was a small piece and I was just trying to set it up.” Thus, he testified both that it was the practice to put fingers under the guard and that it was not.
The injured employee’s testimony also conflicts with the consistent testimony of the other three operators who all stated they would never use the shear to try to cut a piece of metal as small as the one the injured employee was cutting and would never place their fingers underneath a piston guard. The judge did not make a specific credibility finding with regard to these operators (including a leadman), and did not evaluate their testimony in finding that normal operation of the shear exposed employees to a crushing hazard. However, she appears to have credited their testimony that they had never placed their fingers under the hold-down piston guards or observed anyone else do so in finding that the company lacked actual knowledge of the violative condition. Thus, the judge found that “the [l]eadman testified he had never done so himself and had never seen anyone else do so . . . . Two other experienced sheet metal workers testified they had never done so, nor seen anyone do so in the past.” Indeed, the judge acknowledged that “[o]nly the injured employee testified he placed his finger under the hold-down piston [guard] on occasions other than the day of the accident” and found that the injured employee “did not testify anyone observed him [placing his finger under the guard]. Nor did he testify any supervisor had seen him do so in the past.” This conflict in the judge’s treatment of the four operators’ testimony is unexplained. Furthermore, the other three operators’ testimony is supported by the record, which establishes that the injured employee had several other options available for cutting a piece of metal to the required size—he could have used a longer piece of metal, used another piece of metal, such as a scrap piece, to position the piece he intended to cut, or used another tool, such as a band saw.

Because the injured employee’s testimony is internally inconsistent and contrary to the testimony of all three other operators, we set aside the judge’s credibility determination and find that a preponderance of the evidence shows that it was not normal practice for operators to place their fingers underneath the hold-down piston guards while operating the shear. See Beta Constr. Co., 16 BNA OSHC 1435, 1442-43 (No. 91-102, 1993) (citing Asplundh Tree Expert Co., 7 BNA OSHC 2074, 2078-79 (No. 16162, 1979) (disregarding judge’s credibility findings that were not supported by the record)), aff’d, 52 F.3d 1122 (D.C. Cir. 1995) (unpublished). Accordingly, we conclude the Secretary has not shown that, as the shear functions or is operated, it is reasonably predictable that employees will intentionally place their fingers underneath the guards.4

4 In support of his argument that the guard must physically prevent access to the hazard, the Secretary cites several cases that state an employer must eliminate employee access to the hazard
Finally, we find that the judge erred in concluding the hold-down piston guards are inadequate because they do not prevent an employee’s fingers from inadvertently slipping underneath a guard during normal operation. It is undisputed that the injured employee had to first take off his glove before intentionally placing his fingers underneath the piston guard. Moreover, there is no evidence that an employee’s finger could fit underneath the guard while he or she was wearing gloves. In fact, one of the operators testified that it would be impossible to place a finger under the guard while wearing gloves, and another agreed it would be hard to squeeze a finger under the guard while wearing them. The second operator also testified that he could not conceive of any scenario in which an employee’s fingers would accidentally slip underneath the guard—rather, an employee would have to physically attempt to push his or her finger under the guard.

The judge gave no credit to this testimony, instead stating “[t]he record is silent on whether employees consistently wear protective gloves.” It is not ATA’s burden, however, to prove its employees consistently wore gloves. Rather, the Secretary has the burden to prove a violation and therefore would have to prove that ATA’s employees failed to consistently wear gloves. See Astra Pharm., 9 BNA OSHC at 2129. The record not only lacks such evidence, but the Job Safety Analysis for this project lists “Work Gloves” under “Hand Protection” as part of the “Required PPE” for the project. In addition, the OSHA compliance officer testified that she had determined that ATA had “an adequate safety and health program.” Consequently, the record does not support a finding that the machine functions or is operated in a way that would allow an employee’s fingers to inadvertently slip underneath a hold-down piston guard.

by installing physical guarding that does not rely on employee behavior for its effectiveness. See Gen. Elec. Co., 10 BNA OSHC 1687, 1690 (No. 77-4472, 1982); George C. Christopher & Sons, Inc., 10 BNA OSHC 1436, 1444 (No. 76-647, 1982); H.B. Zachry Co. (Int’l), 8 BNA OSHC 1669, 1674 (No. 76-2617, 1980); Pass & Seymour, Inc., 7 BNA OSHC 1961, 1963 (No. 76-4520, 1979); B.C. Crocker Cedar Prods., 4 BNA OSHC 1775, 1777 (No. 4387, 1976). We agree with ATA that these cases are inapposite. In each of the cases cited by the Secretary, there was no physical guard in place at all. The Commission consistently stated in those cases that employers cannot rely on employee behavior for safety, but also referenced the possibility that an employee could put a finger or hand in the unguarded point of operation due to fatigue or inattention. See Gen. Elec., 10 BNA OSHC at 1690; George C. Christopher, 10 BNA OSHC at 1444; H.B. Zachry, 8 BNA OHSC at 1674; Pass & Seymour, 7 BNA OSHC at 1963; B.C. Crocker, 4 BNA OSHC at 1777. None of these cases dealt with employees intentionally putting themselves in harm’s way. Here, the injured employee intentionally circumvented the piston guard and the record lacks evidence, as discussed below, that it was possible for an employee’s finger to inadvertently slip under a guard.
In summary, the Secretary failed to establish that the piston guards are noncompliant given “the manner in which the machine functions and how it is operated by the employees.” See Rockwell, 9 BNA OSHC at 1097-98. Accordingly, we reverse the judge and vacate the citation.

SO ORDERED.

/s/
James J. Sullivan, Jr.
Chairman

/s/
Cynthia L. Attwood
Commissioner

/s/
Amanda Wood Laihow
Commissioner

Dated: September 21, 2020

5 Workplace safety is a shared responsibility and therefore § 1910.212(a)(1) only requires a guard to protect against reasonably predictable exposure to the hazards present. See generally 29 U.S.C. § 654(b).
On May 2, 2016, an employee of Aerospace Testing Alliance (ATA) was injured when his finger was crushed by a hold-down piston on a power squaring shear in ATA’s sheet metal shop on the Arnold Air Force Base in Tullahoma, Tennessee. ATA notified the Nashville Area Office of the Occupational Safety and Health Administration (OSHA) following which Compliance Safety and Health Officer Michelle Sotak (CSHO Sotak) of that office conducted an inspection of ATA’s sheet metal shop. Based on CSHO Sotak’s findings during that inspection, the Secretary issued ATA a serious citation alleging a violation of 29 C.F.R. § 1910.212(a)(1) for failure to properly guard the hold-down piston on the shear, exposing ATA employees to a crushing hazard. ATA timely contested the citation, bringing the matter before the Occupational Safety and Health Review Commission pursuant to § 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651-678 (2014) (the Act).
I held a hearing in this matter on April 18, 2017, in Nashville, Tennessee. The parties filed post-hearing briefs on June 12, 2017.\(^6\)

For the reasons discussed below, the citation is **AFFIRMED** and a penalty of $6,300.00 is assessed.

**JURISDICTION**

At the hearing, the parties stipulated jurisdiction of this action is conferred upon the Commission pursuant to § 10(c) of the Act (Tr. 8). The parties also stipulated at the hearing that at all times relevant to this action, ATA was an employer engaged in a business affecting interstate commerce within the meaning of § 3(5) of the Act, (Tr. 8). Based on the parties’ stipulations and the facts presented, I find ATA is an employer covered under the Act and the Commission has jurisdiction over this proceeding.

**BACKGROUND**

At the time of the accident, ATA contracted with the Air Force to operate the sheet metal workshop at the Arnold Air Force Base (AAFB) in Tullahoma, Tennessee (Tr. 16).\(^7\) It employed sheet metal workers out of a union hiring hall. These individuals were journeymen sheet metal workers, often with decades of experience with the equipment at the workshop.

Among the equipment used at ATA’s workshop is a Cincinnati Mechanical Shear which is a power squaring shear (Tr. 16). It is used to cut various sizes of sheet metal stock to specific sizes used for patching. Each of the ATA employees who testified at the hearing had many years of experience using this type of shear.

The shear, which is depicted in Exhibit J-1, cuts sheet metal with a blade activated by an operator (Tr. 50). The operator feeds the material into the shear by hand (Tr. 108-09, 145, 150, 165, 169, 193). He then depresses a foot pedal which causes the shear to cycle and activate the blade (Tr. 50; Exh. C-2 p. 36). The sheet metal is held in place during the cutting operation by a

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\(^6\) To the extent either party failed to raise any other arguments in its post-hearing brief, such arguments are deemed abandoned.

\(^7\) ATA no longer has the contract to perform this work at AAFB (Tr. 106).
The hold-down piston. The hold-down piston sits in front of the blade. The hold-down piston is also activated by depression of the foot pedal.

The shears have two guards. The operator is protected from the blade by a “finger guard” (Tr. 165-66; Exh. J-2). The distance between the table on which the sheet metal sits and the bottom of the finger guard is approximately .24 inches (Exh. J-3). A bell-shaped guard is attached to the front of the hold-down piston (Tr. 42, Exhs. J-2; J-3). This is an adjustable guard in that it can be raised and lowered (Tr. 86; Exh. C-3). The edge of the guard extends approximately 1.875 inches in front of the hold-down piston (Exh. J-3). The distance between the table on which the sheet metal sits and the hold-down piston is approximately .615 inches and the distance between the table and the guard is approximately .625 inches (Exh. J-3).

On May 2, 2016, the injured employee was using the Cincinnati Shear to cut 3-inch pieces of sheet metal. The injured employee was a journeyman sheet metal worker with over 20 years’ experience in the field (Tr. 105-07). He was cutting the 3-inch pieces from a piece of stock that was 6 inches long (Tr. 108). Because the stock was small, the injured employee needed to hold it in place during the cutting operation or it would have fallen off the back of the table (Tr. 130, 132). He intended to hold it in place with another piece of stock (Tr. 109). He initially placed the stock under the hold-down piston, holding it in place with his hand (Tr. 108-09). To get his hand under the hold-down piston, the injured employee removed his glove (Tr. 111). Before he had an opportunity to place the second piece of stock and remove his hand, he inadvertently hit the foot pedal causing the hold-down piston to lower, crushing his middle finger (Tr. 109, 129).

CSHO Sotak was assigned to conduct an inspection of ATA’s workshop on May 3, 2016, after the OSHA Nashville Area Office received notice of the injury (Tr. 17). CSHO Sotak went to the facility where she inspected the shear, took photographs, and talked with employees (Tr. 18). During her inspection, CSHO Sotak reviewed measurements provided by ATA and the

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8 Operators also referred to the hold-down piston as “the dog.” (Tr. 113).
9 Operators also referred to this guard as a “rake guard,” and a “blade guard.” (Tr. 37, 114).
10 ATA provided CSHO Sotak these measurements during the inspection. Although ATA made much of the fact CSHO Sotak did not take any measurements and relied upon those provided by ATA, it did not deny the measurements contained in Exhibit J-3 were those it provided CSHO Sotak or present any evidence suggesting they were inaccurate. The diagram does state the measurements are “rough.” I accept the measurements as approximations.
operator’s manual for the shear (Tr. 19-31). Based upon the information she gathered, CSHO Sotak recommended the Secretary issue ATA a citation for failure to properly guard the hold-down piston in violation of 29 C.F.R. § 1910.212(a)(1) (Tr. 29). Respondent timely contested the citation, bringing the matter before the Commission.

DISCUSSION

The Citation

The Secretary has the burden of establishing the employer violated the cited standard. To prove a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that (1) the cited standard applies; (2) the employer failed to comply with the terms of the cited standard; (3) employees had access to the violative condition; and (4) the cited employer either knew or could have known with the exercise of reasonable diligence of the violative condition. *JPC Group, Inc.*, 22 BNA OSHC 1859, 1861 (No. 05-1907, 2009).

The cited standard at 29 C.F.R. § 1910.212(a)(1) reads,

One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are barrier guards, two-hand tripping devices, electronic safety devices, etc.

The citation alleges “On or about May 2, 2017, employees were exposed to crushing/amputation hazards when guarding was not provided on the hold-down pistons.”11 The Secretary contends the guarding on the hold-down piston was inadequate in that an employee can place his finger under it and activate the hold-down piston, exposing that employee to a crushing hazard that could result in an amputation.

Applicability of the Standard

Section 1910.212(a)(1) is found in Subpart O—Machinery and Machine Guarding. Section 1910.212 is captioned “General requirements for all machines.” This standard applies to all machines not covered by a more specific standard. ATA did not dispute the applicability of

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11 The date in the violation description was amended by Order of January 6, 2017.
the standard (Tr. 8). To the extent employees are exposed to injury from the hold-down piston, it must be guarded under § 1910.212(a)(1). The standard applies to the cited conditions.

**Employee Exposure**

Because § 1910.212(a) is a performance standard, the Secretary must establish the hazard addressed by the standard existed. Con Agra Flour Milling Co., 16 BNA OSHC 1137, 1147 (No. 88-1250, 1993). In this case, the Secretary must establish employee exposure to the hold-down piston.

In Fabricated Metal Products, Inc., 18 BNA OSHC 1072 (No. 93-1853, 1997), the Commission considered the question of employee exposure to the hazards posed by inadvertent contact with rotating machine parts. The Commission considered its prior holding in Gilles & Cotting, Inc., 3 BNA OSHC 2002 (No. 504, 1976), and Rockwell Inter’l Corp., 9 BNA OSHC 1092 (No. 12470, 1980). In Gilles & Cotting the Commission addressed the general question of employee exposure to hazards. The Commission set forth a test for employee exposure based on the principle of “reasonable predictability.” 3 BNA OSHC at 2003. The Commission held that the Secretary bore the burden of proving “that employees either while in the course of their assigned working duties, their personal comfort activities while on the job, or their normal means of ingress-egress to their assigned workplaces, will be, are, or have been in a zone of danger.” Id. at 1097-98. Based on these two prior holdings, the Commission concluded,

The mere fact that it was not impossible for an employee to insert his hands under the ram of a machine does not itself prove that the point of operation exposes him to injury. Whether the point of operation exposes an employee to injury must be determined based on the manner in which the machine functions and how it is operated by the employees.

Id. at 1097-98. Based on these two prior holdings, the Commission concluded,

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12 Both parties addressed the applicability of § 1910.212(a)(3). Both take the position it does not apply. The applicability of the standard is not in dispute.
in order for the Secretary to establish employee exposure to a hazard she must show that it is reasonably predictable either by operational necessity or otherwise (including inadvertence), that employees have been, are, or will be in the zone of danger. We emphasize that, as we stated in *Rockwell*, the inquiry is simply not whether exposure is theoretically possible. Rather, the question is whether employee entry into the danger zone is reasonably predictable.

*Fabricated Metal Products*, 18 BNA OSHC at 1074 (citations omitted).

The question before me is whether entry of an operator’s hand under the hold-down piston during the operation of the sheer was reasonably predictable. I find it was. All of the sheet metal workers who testified described the process of operating the sheer in the same manner. The operator feeds the stock into the sheer by hand. He pushes it until it hits the back stop behind the blade (Tr. 145, 150, 165, 169, 193). The injured employee testified there was nothing unusual about the manner in which he operated the sheer on the day of the accident (Tr. 109, 127-28). One sheet metal worker testified he had seen operators get their hands close to the hold-down pistons (Tr. 166, 170). Given the “manner in which the machine functions and how it is operated by the employees” it was reasonably predictable that an operator may have his hand in proximity to the hold-down piston.

The injured employee intentionally placed his hand under the hold-down piston to temporarily hold the stock in place because of the small size of the stock. ATA gives sheet metal workers discretion to perform their jobs in the manner they chose (Tr. 212). The injured employee testified there was nothing unusual about the manner in which he was performing this task (Tr. 116). Cutting pieces of stock of the size used by the injured employee was not uncommon (Tr. 109, 163, 165). Nor was using scrap to hold a small piece of stock in place (Tr. 167). No hand tools were available for operators to use to hold the stock in place (Tr. 113, 151). The injured employee credibly testified he had done the operation in the same manner previously and had observed others so do as well (Tr. 109, 111). Although the other sheet metal workers denied having done so or seen others doing so, one testified to holding small pieces of stock with his hand between the two hold-down pistons (Tr. 165). He believed this was “not a dangerous spot” despite being inches from the hold-down piston (Tr. 165). The preponderance of the

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13 I found the injured employee to be a credible witness. His demeanor was calm and unflinching. He was straightforward in his answers.
credible evidence establishes entry of an operator’s hand into the zone of danger under the hold-down piston was reasonably predictable.

ATA notes the area under the hold-down piston was so small the operator had to remove his glove to fit under it. The record contains no evidence of prior injuries associated with using the shear in this manner. This evidence weighs in favor of a finding it was not reasonably predictable for an operator to be in the zone of danger. It does not necessitate such a finding. Both the manufacturer and the industry recognize the hazard posed by the hold-down piston. Admonitions about the hazard posed by the hold-down pistons are contained in the 1984 operator’s manual at ATA’s worksite (Exh. C-3) and the American National Standards Institute’s publication B11.4-2003 American National Standard for Machine Tools – Safety Requirements for Shears (ASNI B11.4) (Exh. C-4). 14 The record is silent on whether employees consistently wear protective gloves. In light of the recognition of the hazard and the manner in which the shear was operated, it was reasonably predictable that an operator would be exposed to the crushing hazard posed by the hold-down piston.

ATA relies on Stacey Manufacturing Company, Inc., 10 BNA OSHC 1534 (No. 76-1656, 1982), in which the Commission vacated a citation alleging a violation of § 1910.212(a)(1) for failure to guard a shear similar to the shear at issue. In Stacey, the Commission addressed the question of whether employees were exposed to hazards presented by the blade and the hold-down bar. Id. at 1537. The Commission found they were not. The steel plates being cut by the shear in Stacey were described in the decision as “up to twelve feet square and may weigh over a ton” and were lifted with a crane. Id. at 1535. In finding employees were not exposed to a hazard, the Commission noted “Here, the material to be cut is not hand-held, the employees have no reason to put their hands under the blade or the hold-downs.” Id. In the instant case, there is

14 ANSI standards are published by the American National Standards Institute (Exh. C-4 p. ii). They are developed through a consensus process and are considered voluntary. Id. ANSI B11.4 was “processed and approved” by the Accredited Standards Committee on Safety Standards for Machine Tools. (Exh. C-4 p. v). Organizations represented on that committee are manufacturers, labor organizations, industry groups, and government agencies, including the Aerospace Industries Association of America and Sheet Metal & Air Conditioning Contractors Nat’l Assn. The Commission has recognized such voluntary industry standards as “admissible and probative evidence of industry recognition of hazards.” Cargill, Inc., 10 BNA OSHC 1398, 1402 (No. 78-5705, 1982).
no dispute the material is small and hand held. ATA contends this is a distinction without a difference. (Respondent’s Brief at p. 17). To the contrary, how the machine was operated was decisive. The Commission’s holding in Stacey is not dispositive.

Where, as here, the preponderance of the evidence establishes a machine poses a hazard recognized by the industry to which employees are exposed during normal operation, the Secretary has met his burden. Employee exposure to the hazard is established.

Violation of the Standard

The Secretary contends the hold-down piston guard did not comply with § 1910.212(a)(1) because it did not prevent entry into the zone of danger. The Commission has long recognized the cited standard “requires physical guarding of hazards.” B.C. Crocker Cedar Products, 4 BNA OSHC 1775, 1777 (No.4387, 1976); see also Slyter Chair, Inc. 4 BNS OSHC 1100, 1113 (No. 1263, 1976); and Western Steel Manufacturing Co., 4 BNA OSHC 1640, 1643 (No. 3528, 1976).

This requirement implicitly recognizes that human characteristics such as skill, intelligence, carelessness, and fatigue, along with many other qualities play a part in an individual’s job performance, and it avoids dependence on human conduct for safety.

B.C. Crocker, 4 BNA OSHC at 1777. Although a guard was affixed over each hold-down piston, that guard did not prevent entry of an operator’s finger under the hold-down piston, whether intentional or inadvertent. According to the diagram provided to CSHO Sotak by ATA, the guard was higher off the table surface than the hold-down piston (Exh. J-3). Nor did it extend out far enough to prevent an operator’s hand from reaching a point under the hold-down piston. The guard did not comply with the requirements of § 1910.212(a)(1).

Employer Knowledge

ATA argues it cannot be held to the specifications found in ANSI B11.4 because § 1910.212(a)(1) neither references nor incorporates the ANSI standard. To require it to comply with the ANSI standard, ATA contends, would deprive it of fair notice. (Respondent’s Post Hearing Brief at p. 23) I need not reach that issue. The Secretary does not contend compliance with § 1910.212(a)(1) requires ATA comply with ANSI B11.4. The citation makes no mention of the ANSI standard. Although CSHO Sotak testified ATA was not in compliance with the ANSI standard, she testified the guard on the shear did not comply with § 1910.212(a)(1) because “It did not prevent the point of operation hazard to the employee.” (Tr. 101).
To establish employer knowledge of a violation the Secretary must show the employer knew, or with the exercise of reasonable diligence could have known of a hazardous condition. *Dun Par Engineered Form Co.*, 12 BNA OSHC 1962, 1965-66 (No. 82-928, 1986). Because corporate employers can only obtain knowledge through their agents, the actions and knowledge of supervisory personnel are generally imputed to their employers, and the Secretary can make a prima facie showing of knowledge by proving a supervisory employee knew of or was responsible for the violation. *Todd Shipyards Corp.*, 11 BNA OSHC 2177, 2179 (No. 77-1598, 1984); *see also Dun Par Engineered Form Co.*, 12 BNA OSHC 1962 (No. 82-928, 1986) (the actual or constructive knowledge of an employer’s foreman can be imputed to the employer). Actual knowledge refers to an awareness of the existence of the conditions allegedly in noncompliance. *Omaha Paper Stock Co.*, 19 OSHC 2039 (No. 01-3968, 2002). An employer is chargeable with knowledge of conditions which are plainly visible to its supervisory personnel. *A.L. Baumgartner Construction Inc.*, 16 BNA OSHC 1995, 1998 (No 92-1022, 1994).

The evidence does not support a finding ATA had actual knowledge of the violative condition. The Secretary contends he has established actual knowledge because supervisory employees were aware employees fed stock by hand. Simply put, this is not enough. The gravamen of the violation is that the guards failed to prevent an operator from putting his finger under the hold-down piston. To establish actual knowledge, the Secretary would have to establish ATA was aware the guards were set at a height that allowed access. He did not. Only the injured employee testified he placed his finger under the hold-down piston on occasions other than the day of the accident (Tr. 109-111). He did not testify anyone observed him doing this. Nor did he testify any supervisor had seen him do so in the past. To the contrary, the Leadman testified he had never done so himself and had never seen anyone else do so (Tr. 143 – 49). Two other experienced sheet metal workers testified they had never done so, nor seen anyone do so in the past (Tr. 166, 185). Having a guard that was a fraction of an inch lower would have prevented operator access to the hold-down piston. It is unlikely this difference could be seen with the naked eye. Under the circumstances, the Secretary would need to show a supervisory employee observed employees place their fingers under the guard to prove actual knowledge. He did not.

The Secretary also contends ATA had constructive knowledge of the violation. Constructive knowledge is shown where the Secretary establishes the employer could have

Whether an employer was reasonably diligent involves a consideration of several factors, including the employer’s obligation to have adequate work rules and training programs, to adequately supervise employees, to anticipate hazards to which employees may be exposed, and to take measures to prevent the occurrence of violations.

*Id. citing Precision Concrete Constr.* 19 BNA OSHC 1404, 1407 (No. 99-707, 2001).

“Reasonable diligence implies effort, attention, and action not mere reliance upon the action of another.” *Carlisle Equipment Co. v. Secretary of Labor*, 24 F.3d 790, 794 (6th Cir. 1994). The Secretary has met his burden to establish ATA failed to exercise reasonable diligence.

Both ATA and the industry recognize the hold-down pistons pose a hazard for operators of the shear. ANSI B11.4 identifies two points of operation that require safeguarding (Exh. C-4 pp. 32, 50). The manufacturer’s manual for the shear provided to CSHO Sotak by ATA during the inspection notes the hazard the hold-down pistons pose. It reads: “The shear is also equipped with powerful hold-downs which exert tons of force, clamping material or anything else in the work area while the ram is cycled.” (Exh. C-3 p. 15). ATA requires its sheet metal workers sign off each day on a job safety analysis (JSA) for the job they are performing. The JSA for the job being performed by the injured employee at the time of the accident noted the existence of pinch point hazards and the need for guarding (Exh. R-7). Given this recognition, it was incumbent on ATA to ensure employees were not exposed to this hazard. It did not.

The guards on the hold-down pistons are adjustable. ATA did not provide sheet metal workers with any training, relying on their years’ of experience. None of the sheet metal workers who testified knew the proper adjustment for the hold-down piston guard (Tr. 126-27, 170, 194). Although each testified if he needed a guard adjusted he would call maintenance, none would know when to do so (Tr. 128, 195). At least one sheet metal worker admitted he signed off on ATA’s JSAs without knowing whether the guards were properly adjusted (Tr. 195).

Lynn Moran, Director of ATA’s Test, Asset, and Support Department, testified ATA performed a comprehensive inspection of its facility to determine whether machines were properly guarded in 2011 (Tr. 199). The inspection was conducted by a third party. The report generated as a result of the inspection did not note any deficiencies with the shear at issue (Exh.
ATA relies on this evidence to establish it could not have known the guards on the hold-down pistons were inadequate. I find this argument unavailing. Ms. Moran could not testify regarding the qualifications of the individual responsible for the inspection or report, and admitted she did not accompany the individual on the inspection (Tr. 207). ATA did not establish the shear was in the same condition at that time as at the time of CSHO Sotak’s inspection.

ATA has a “preventative maintenance program” to which Ms. Moran also testified. Ms. Moran’s testimony regarding the program provided little detail. She stated preventive maintenance was performed on the equipment in the machine shop, including “checking for any safety features, to be sure that they were there and guarding is considered usually.” (Tr. 203). She testified this is done every 200 hours of operation of the machine (Tr. 210). The cited shear had last had its preventive maintenance done on June 20, 2013 (Tr. 210-11; Exh. C-2 p. 5). According to Ms. Moran, ATA sets the guards according to manufacturer’s specifications (Tr. 203, 210). However, the manufacturer has, since at least 1984, recommended the guards on the shear be replaced. The operator’s manual for the shear states, “The guards shown in “B” and “C” do not meet ANSI B11.4 Standard. They should be replaced.” (Exh. C-3 p. 48). The guards depicted in the photograph marked “B” are identical to those on the cited shear. Any claim ATA’s preventive maintenance program met the standard for reasonable diligence is belied by the fact ATA provided no explanation why it had failed to follow the manufacturer’s recommendation to replace these guards.

Nor did ATA present evidence it consulted or relied on any industry recommendations for adjustment of the guards. Had ATA done so, it would have found the guards did not meet the recommendations contained in the industry consensus standard (Exh. C-4). For a gap under the hold-down piston of the size on the cited shear, ANSI B11.4 recommends the guard be placed 3.5 inches in front of the hold-down piston, or 1.5 inches further out than the guard on ATA’s shear (Tr. 48; Exh. C-4 pp. 40-41).16

16 This is not to say ATA was required to follow the recommendations of the ANSI standard. Had the hold-down piston been guarded in a way that did not meet the specifications of the ANSI Standard, but nevertheless prevented employee entry into the zone of danger, ATA would have been in compliance with § 1910.212(a)(1).
It was incumbent on ATA to ensure adjustable guards on the shear were properly adjusted to prevent employees entering the zone of danger. A reasonably diligent employer would have consulted the operator’s manual or industry recommendations. Had ATA done so, it would have recognized its guards were inadequate. The Secretary has established ATA had constructive knowledge of the violation.

Unpreventable Employee Misconduct

ATA has raised the affirmative defense of unpreventable employee misconduct. It contends the violation was the result of the injured employee’s intentional act, in violation of ATA’s rule prohibiting employees from circumventing guards. To prevail on the affirmative defense of unpreventable employee misconduct, an employer must show that it has (1) established work rules designed to prevent the violation, (2) adequately communicated those rules to its employees, (3) taken steps to discover violations, and (4) effectively enforced the rules when violations have been discovered. See, e.g., Stark Excavating, Inc., 24 BNA OSHC 2218 (Nos. 09-0004 and 09-0005, 2014), citing Manganas Painting Co., 21 BNA OSHC 1964, 1997 (No. 94-0588, 2007). The affirmative defense of employee misconduct applies in situations in which the behavior of the employee, not the existence of the violative condition, is at issue. As previously noted, the Commission has held OSHA’s machine guarding standards were designed to protect employees from common human errors such as “neglect, distraction, inattention or inadvertence of an operator[.]” Slyter Chair, Inc., 4 BNA OSHC at 1113. “The plain purposes of the standard are to avoid dependence upon human behavior and to provide a safe environment for employees in the machine area from the hazards created by the machine’s operation.” Akron Brick & Block Co., 3 BNA OSHC 1876, 1878 (No. 4859, 1976). Here, the violative conduct alleged is the inadequacy of the guard on the shear, not the circumventing of the guard.

Even if the affirmative defense were available to ATA, it has failed to present evidence sufficient to support it. Although ATA sheet metal workers testified they would not have intentionally placed their hand under the piston, circumventing the guard, none testified to a rule specifically prohibiting them from doing so that had been communicated to them by ATA (Tr. 169, 187). ATA presented none. Other than toolbox talks, each testified they had received no training from ATA on company policies or safe operation of the machines at the workshop (Tr.
150-51, 171). None could testify to the specific contents of any of the tool box talks.\textsuperscript{17} ATA apparently relied on the operators’ many years of experience as journeyman sheet metal workers to ensure they worked safely. Although it may have been reasonable for ATA to rely on prior training, ATA presented no evidence upon which I can reach such a conclusion. Nor did it offer any evidence of efforts to detect violations of safety rules, or enforcement efforts should violations be found. ATA’s failure to present evidence defeats its affirmative defense.

\textbf{Characterization}

The Secretary alleges the violation was serious. A violation is serious when “there is a substantial probability that death or serious physical harm could result” from the hazardous condition at issue. 29 U.S.C. § 666(k). The Secretary need not show that there was a substantial probability that an accident would occur; only that if an accident did occur, death or serious physical harm would result. As demonstrated by the injured employee’s partial amputation, the likely injury should an employee be in the zone of danger when the shear cycled is serious physical harm. The violation is serious.

\textbf{PENALTY}

The Commission is the final arbiter of penalties. \textit{Hern Iron Works, Inc.}, 16 BNA OSHC 1619, 1622, (No. 88-1962, 1994), \textit{aff’d}, 937 F.2d 612 (9th Cir. 1991) (table); \textit{see Valdak Corp.}, 17 BNA OSHC 1135, 1138 (No. 93-0239, 1995) (“The [OSH] Act places limits for penalty amounts but places no restrictions on the Commission’s authority to raise or lower penalties within those limits.”), \textit{aff’d}, 73 F.3d 1466 (8th Cir. 1996). In assessing a penalty, the Commission gives due consideration to all of the statutory factors with the gravity of the violation being the most significant. OSH Act § 17(j), 29 U.S.C. § 666(j); \textit{Capform Inc.}, 19 BNA OSHC 1374, 1378 (No. 99-0322, 2001), \textit{aff’d}, 34 F. App’x 152 (5th Cir. 2002)

\textsuperscript{17} The Leadman testified these toolbox talks were “[n]ot exactly safety training…” (Tr. 147). When prompted for more, he testified “There might be out there, you know guarding, make sure guarding is in place and you know always watch your machines for moving parts and stuff like that.” (Tr. 148). When asked “does ATA remind the employees not to reach around or under machine guards?” another sheet metal worker testified “I don’t remember exactly but I mean, yes. Yes I – you know, when they talk about them, you’re not supposed to remove them, yeah.” (Tr. 169). The inability of these employees to definitively state they had received instructions not to circumvent guards, even when prompted, undermines ATA’s claim it communicated any such work rule to its employees.
(unpublished). “Gravity is a principal factor in a penalty determination and is based on the number of employees exposed, duration of exposure, likelihood of injury, and precautions taken against injury.” Siemens Energy and Automation, Inc., 20 BNA OSHC 2196, 2201 (No. 00-1052, 2005). Section 17(j) of the OSH Act, 29 U. S. C. § 666(j), requires the Commission to give due consideration to the gravity of the violation and the employer’s size, history of violation, and good faith.” Burkes Mechanical Inc., 21 BNA OSHC 2136, 2142 (No. 04-0475, 2007).

The gravity of the violation was high. Employees testified the foot pedal was not fully guarded and subject to being accidently depressed (Tr. 112, 172). One sheet metal worker testified employees were aware of this and were cautious around the pedal for that reason (Tr. 172). ATA gave the journeymen sheet metal workers discretion to perform the jobs as they saw fit, using the equipment the employee chose (Tr. 212). It did little to ensure they were trained on safe operation of the shear. These factors increased the likelihood of injury. The record does not contain information regarding ATA’s size. ATA has no history of prior violations. ATA timely reported the accident and was cooperative in the inspection. ATA is entitled to some reduction in the gravity based penalty for its lack of prior violations and good faith. A penalty of $6,300.00 is warranted.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Rule 52(a) of the Federal Rules of Civil Procedure.

ORDER

Based upon the foregoing decision, it is ORDERED that:

(1) Item 1 of Citation No. 1, alleging a serious violation of § 1910.212(a)(1), is

AFFIRMED as a serious violation and a penalty of $6,300.00 is assessed.

SO ORDERED.

Date: July 21, 2017

/s/ HEATHER A. JOYS
Administrative Law Judge
Atlanta, Georgia