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SECRETARY OF LABOR, Complainant, v. OCEANIC STEAMSHIP CO. & OCEANIC STEVEDORING, INC., Respondents.	OSHRC DOCKET NO. 91-476

DECISION

BEFORE: WEISBERG, Chairman; FOULKE and MONTOYA, Commissioners.

BY THE COMMISSION:

The issue in this case is whether the Respondents, Oceanic Steamship Co. & Oceanic Stevedoring, Inc. ("Oceanic"),[1] violated the marine terminal provision at 29 C.F.R. § 1917.71(f)(1)(i)[2] by using a four-legged bridle to hoist loaded intermodal containers that

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[1]The original respondent was Oceanic Steamship Co. The judge granted the Secretary's pre-hearing motion to add Oceanic Stevedoring, Inc. as a respondent, based on information gathered after the citation was issued, indicating that the latter company might have been the actual employer of some or all of the employees involved.

[2] **PART 1917 -- MARINE TERMINALS**

. . . .

Subpart D -- Specialized Terminals

. . . .

§ 1917.71 Terminals handling intermodal containers or roll-on roll-off operations.

. . . .

(f) Containers shall be handled using lifting fittings or other arrangements suitable and intended for the purpose as set forth in paragraphs (i)(1) through

(continued...)

were 20 and 40 feet in length. Oceanic operates a marine terminal at the Port of Miami, Florida. Its employees were hoisting (or "lifting") the containers between a ship and the dock using a shore-based mobile crane (or "stick crane"). The lifting forces were non-vertical: the four legs of the bridle extended from the top corners of the container to the crane's boom in the center, and each leg was 25 feet long. The angle formed between each leg and the container top was about 35° in the case of the 40-foot containers. As set forth below, we affirm the judge's finding that Oceanic's lifting method violated the cited provision.

The key issue in this case is whether Oceanic's non-vertical lifting method was, in the words of the cited provision, a "means which will safely" lift loaded intermodal containers 20 feet or more in length by their top fittings "without damage to the container."[3] In finding that Oceanic's lifting method was unsafe, we rely on container specification standards developed by transportation standard-setting groups and introduced in evidence. Those standards indicate that the containers at issue are not designed to withstand the external compressive forces imposed by non-vertical lifting devices such as Oceanic's. We reject Oceanic's interpretation of the standard, under which the Secretary must show actual or "probable" damage to the containers due to its lifting method. We find that the Secretary

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[2](...continued)

> (i)(3) of this section, except when damage to an intermodal container makes special means of handling necessary.
> (1) *Loaded intermodal containers of 20 feet (6.1 m) or more in length shall be hoisted as follows:*
> (i) *When hoisting by the top fittings, the lifting forces shall be applied vertically from at least four (4) such fittings or by means which will safely do so without damage to the container*, and using the lifting fittings provided.

(Emphasis added).

[3]The Secretary recently proposed revisions to the container hoisting provisions of the marine terminal standard (29 C.F.R. Part 1917) and the longshoring standard (29 C.F.R. Part 1918). *Longshoring and Marine Terminals: Proposed Rule*, 59 Fed. Reg. 28,594 (June 2, 1994). Included is a proposed requirement that loaded intermodal containers 20 feet or more in length be hoisted by vertical forces. *Id.* at 28,648, 28,662 (proposed sections 1917.71(f)(1)(i), 1918.85(f)(1)(i)). Those proposals do not affect the outcome of this case, however.

established prima facie, through the container specification standards, that Oceanic's lifting method is unsafe. We further find that Oceanic did not rebut the evidence that its lifting method was unsafe.[4]

BACKGROUND

Intermodal containers are the kind of standardized containers that are pulled by trucks on American highways. As used here, the term "container" refers only to such containers. They are designed to transport goods "by water and one or more other transport modes without intermediate cargo handling." Section 1917.2(s). Generally, they are 8½ feet high, 8 feet wide, and either 20 feet or 40 feet long. There are several million such containers in international trade--about 75 percent of international bulk shipments are made by container, excluding bulk shipment of liquids. Of the millions of container lifts made each year, most are made with vertical lifting forces, but perhaps as many as one million lifts were made by non-vertical means in 1991.

Vertical lifting forces are applied to containers by devices such as "spreaders." Oceanic had rectangular "box" spreaders, constructed of heavy steel beams equal in length and width to the container, with a twist lock at each corner that attached to a top corner fitting.[5] Spreaders absorb the non-vertical lifting forces that otherwise would exert external compressive forces on the container's top side rails.[6] Oceanic used the 40-foot spreader to lift weaker containers such as the 40-foot-long aluminum and refrigerator containers. However, it objects to being required to use spreaders for stronger containers, arguing that spreaders are inefficient and even create safety hazards to employees.

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[4]The judge found that one of Oceanic's lifts on the date of the inspection exceeded the safe working load of the four-legged bridle. The Secretary argues that the Commission should find a violation on that basis. Oceanic argues that no violation may be found on that basis because the cited provision does not address the safe working load of the lifting device. In light of our disposition of this case, we need not address that issue.

[5]The top corner fittings are standardized structures containing apertures into which the hooks or other attaching devices of the lifting apparatus fit.

[6]A top side rail is a metal piece approximately 2½ inches square in cross section. One spans the length of the container on each side of its top and attaches to the corner fitting at each end on that side. The top side rails of a 20-foot container are roughly 19 feet long.

Oceanic was discharging containers from, and loading them onto, the vessel *M/V Katrine* on September 26, 1990, when Camille Villanova, a compliance officer for the Occupational Safety and Health Administration ("OSHA"), inspected the worksite. As a result of that inspection, OSHA issued a citation alleging unsafe container hoisting practices. The hoisting provision originally cited was 29 C.F.R. § 1918.85(c), a subsection of the longshoring standard.[7] The judge granted the Secretary's prehearing motion to amend the citation to charge instead a violation of section 1917.71(f)(1)(i), a provision under the marine terminals standard, 29 C.F.R. Part 1917. The judge affirmed a serious violation and assessed a $300 penalty.

DISCUSSION

I. Issue on review

In order to prove a violation of a standard, the Secretary must show that: (1) the standard applies to the cited conditions; (2) the employer failed to comply with its terms; (3) employees had access to the resulting hazards; and (4) the employer knew or with the exercise of reasonable diligence could have known of the violative conditions. *E.g., Gary Concrete Prods., Inc.*, 15 BNA OSHC 1051, 1052, 1991-93 CCH OSHD ¶ 29,344, p. 39,449 (No. 86-1087, 1991). Oceanic does not dispute the judge's findings that the standard applies here, that employees had access to the alleged hazards, and that Oceanic had the requisite

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[7]That section provides:

> No container shall be hoisted if its actual gross weight exceeds the weight marked as required in paragraph (a)(3) of this section, or if it exceeds the capacity of the crane or other hoisting device intended for use, under the conditions in which said crane or other hoisting device is used. *All hoisting of containers shall be by means which will safely do so without probable damage to the container*, and using the lifting fittings provided.

(Emphasis added.)

knowledge of the cited conditions.[8] Thus, the issue to be resolved is whether Oceanic's lifting method complied with the terms of the cited provision.

II. Provisions of container specification standards regarding lifting forces

The chief evidence supporting the Secretary's claim that Oceanic's lifting method failed to comply with the cited provision is the testimony of Vincent Grey. Grey was the president of a transportation consulting firm that specializes in container construction and testing, as well as intermodal operations. He had been the Chairman of the Technical Committee on Freight Containers of the International Organization for Standardization ("ISO") since 1978. Forty-five nations, including the United States, participate in formulating safety standards for intermodal containers through that committee. Further, Grey had been a member of the technical committee on containers of the American Bureau of Shipping ("ABS") since its inception in 1967. The ABS is the national classification society in the United States for the certification and approval of containers.

Grey testified that most containers 20 feet or more in length are not designed to withstand the non-vertical lifting forces imposed by four-legged bridles and other types of top lift slings. Grey testified specifically about the design provisions of numerous container specification standards developed by American and international transportation safety groups.

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[8]The judge held that the marine terminal standard applies to work on docks, including the land-based crane operations at issue here. He noted that the preamble states:

> The coverage of Part 1917 includes all shoreside activities within a marine terminal -- except those which are specifically exempted in the standard. . . . [T]he Agency has set the foot of the gangway to mark the limit to which Part 1918 [longshoring] may be applied landward. Similarly, Part 1917's jurisdiction extends out to the ship no further than this point of the gangway.

48 Fed. Reg. 30,886, 30,891 (1983). As to employee access to the hazards, the judge found that employees working on the dock under Oceanic's control and direction were exposed to the hazard of falling cargo due to the cited conditions. Oceanic does not dispute that finding. There also is no dispute that Oceanic knew about the cited conditions.

For example, he testified that under the International Convention for Safe Containers ("CSC"), a treaty to which the United States is a party, containers more than 10 feet long are not designed to withstand non-vertical lifting forces when being lifted by their top corner fittings. Nor are such containers tested for their ability to withstand such forces under the CSC's approval procedures.[9] Further, the CSC states that *"it is implicit that in all phases of the operation of containers the forces* as a result of motion, location, stacking and weight of the loaded container and external forces *will not exceed the design strength of the container."* (Emphasis added).

Thus, the CSC makes clear that containers are approved on the understanding that they will not be subjected to lifting forces that exceed those for which they are designed. The CSC safety approval plate, which Grey described as "essential for free movement of containers throughout the world," is affixed to approved containers. The United States Department of Transportation is required to "enforce and carry out the provisions of the Convention." International Safe Container Act, 46 U.S.C. § 1503(a), (b).[10]

Grey also testified that the design provisions of the relevant standards issued by the American National Standards Institute ("ANSI") do not contemplate that containers 20 feet or more in length will be subjected to non-vertical lifting forces, when being lifted by their top corner fittings. The standards are "Basic Requirements for Cargo Containers," ANSI MH 5.1-1971, and "Requirements for Closed Van Containers," ANSI MH 5.1.1-1971. (The

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[9]Under the CSC criteria, the lifting forces shall be applied vertically when containers greater than 10 feet in length are tested for structural safety by lifting from their top corner fittings. Those testing requirements are found in Annex II to the CSC ("Structural Safety Requirements and Tests"). Every new container must comply with the requirements of Annex II to qualify for approval under the Convention. Annex I, Regulation 3. *See* CSC Article III. The United States ratified the treaty in 1978. *See* 49 C.F.R. § 450.3(3).

[10]The Transportation Department's regulations are found at 49 C.F.R. Parts 450-53. If a container owner elects to have it approved in the United States, the procedures found in Part 451 must be followed. Those regulations do not require that containers more than 10 feet long be designed to withstand non-vertical lifting forces.

containers at issue here are "closed van" containers because they have a roof.)[11] In discussing permissible loads on containers in terminal operations, ANSI specifically states:

> *Containers are subject to being lifted by the top corner fittings, with lifting forces applied vertically* by use of hooks, shackles, twist locks, or equivalent means. *The bridle legs shall be in the same plane as the end of the container.*

ANSI MH 5.1-1971, section 6.3.2 (emphasis added). Thus, ANSI expressly calls for vertical lifting forces upon the top side rails when the kinds of containers at issue here are lifted by their top corner fittings.

Grey further testified that the ISO specification standards also do not require that containers more than 10 feet long be designed to withstand non-vertical lifting forces when loaded and hoisted by their top corner fittings. For closed van containers more than 10 feet in length, none of the ISO lift tests involve external compressive forces on a top side rail. ISO 1496/1, "Freight containers -- Specification and testing" (1990), section 6.3 and Figure A.3. Furthermore, another ISO standard makes explicit that top lift slings such as Oceanic's four-legged bridle are not allowed for hoisting loaded containers over 10 feet in length. ISO 3874, "Freight containers -- Handling and securing" (1988/Amnd. 1: 1990), section 6.3 and Table 4.[12]

In addition, the Secretary submitted a letter from ABS officials stating that the only forces experienced by containers 20 feet or more in length, when being lifted by their top corner fittings, should be vertical forces.[13] As mentioned above, the ABS is the national

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[11]The non-vertical lifting forces at issue here -- externally applied corner loads acting parallel with the longitudinal axis of the container -- are depicted in the Container Side View marked C_4 on Fig. 12 of the ANSI "Basic Requirements" standard. The ANSI Closed Van standard refers back to the relevant sections of the "Basic Requirements" standard and states that the amount of force in C_4 Fig. 12 for which closed van containers are designed is zero.

[12]The containers at issue here are classified by ISO as type A (40 feet long) and type C (20 feet long). ISO 668, "Freight containers -- Classification, dimensions and ratings," (1988), section 5.2 and Table 2.

[13]The letter sought to clarify the limited scope of the ABS Guide for Certification of Container Securing Systems (1988). The ABS Guide would permit 10 tons of racking force, 5 tons of securing force, and 15 tons of lashing force on top side rails. The letter sought to

(continued...)

classification society in the United States for the certification and approval of containers. Lloyd's Register of Shipping ("Lloyd's") Container Certification Scheme (1988) specifically incorporates the ISO requirements for static lifting tests of containers, "[c]onsideration will be given to suitable alternative test procedures."

Grey acknowledged that some containers 20 feet or more in length actually *are* designed to accept the compressive forces of non-vertical lifting methods. However, as noted above, he testified that most of those containers are not designed that way. He also testified that the top lift sling method would be safe for hoisting loaded 10-foot containers, assuming that the angle between the bridle leg and the container's roof was at least 60°. That conclusion is consistent with the CSC and ISO provisions. However, the container specification standards distinguish between 10-foot containers and longer ones, and recommend only vertical lifting forces for those 20 feet or more in length.

III. Amount of compressive force imposed on the top side rails by Oceanic's method of lifting

Grey attempted to calculate the external compressive force along the top side rails due to Oceanic's method of hoisting the containers. That force was calculated under two hypothetical conditions: (1) static, with the container held motionless in suspension; and (2) dynamic, with the container being rapidly lowered at 8 feet per second ("fps") and then subjected to an emergency stop of half a second. For example, Grey made calculations based on one of Oceanic's actual lifts on the day of the inspection. That lift involved a 40-foot container with a load of 56,840 pounds gross weight. Grey calculated that the longitudinal compressive force into the top side rail of the container caused by each bridle leg would be 19,668 pounds under static conditions and 29,441 pounds under dynamic conditions (assuming uniform distribution of the load).

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[13](...continued)
make clear that that table and those figures do not relate to permissible compressive forces during lifting. Oceanic objected to admission of that letter because it was not a formal statement by the ABS. However, the judge admitted the letter in evidence and Oceanic has not objected to consideration of it on review.

Grey gave the opinion that such a lift would be unsafe, because the containers are not designed to accept external compressive loads in the top side rail. Oceanic disputes Grey's assumptions regarding dynamic conditions and argues that his calculations of static conditions confuse vector forces with actual weights on the top side rail. However, Oceanic's expert acknowledged that up to half of the force Grey calculated would be imposed on the top side rail by the four-legged bridle. Thus, it is undisputed the bridle causes a substantial compressive force upon the top side rail during lifting that is not present when vertical lifting methods are used.[14]

IV. Burden of proof under section 1917.71(f)(1)(i)

Oceanic argues that the evidence summarized above is insufficient to prove a violation of the cited provision. In its view, the Secretary must show that its hoisting method actually has damaged the types of containers at issue. It cites the decision to that effect by former Commission Judge Salyers in *Continental Stevedoring & Terminals*, 92 OSAHRC 56/B3 (No. 91-475, 1992)(ALJ). Oceanic also relies on certain prior testimony by the Secretary's experts that can be read as consistent with the judge's interpretation there. Oceanic further argues that the cited provision should be interpreted in light of section 1918.85(c), which was cited originally in this case, and which Oceanic views as imposing a lesser requirement than the Secretary seeks to impose here.

The Secretary interprets the standard, however, not to require proof of actual damage to containers. We conclude that the Secretary's interpretation is reasonable and we accept it, rather than the judge's interpretation in *Continental*. Further, we find that the expert testimony in *Continental* on which Oceanic relies is not inconsistent with the Secretary's position here. Finally, we conclude that the meaning of the cited provision is not limited by

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[14]Although Oceanic did not object to the introduction of Grey's calculations (Exhibit C-42), it asserts on review that Grey's use there of "a vector force depiction was clearly designed to mislead anyone looking at the exhibit who did not understand that the forces in question were vector forces." Oceanic characterizes Grey's conduct in that regard as "reprehensible." We find those assertions unwarranted. The evidence does not show that any of Grey's depictions or calculations were designed to be misleading.

section 1918.85(c). Thus, we hold that the Secretary established noncompliance, prima facie, by showing that most containers of the type Oceanic was lifting are not designed to withstand the compressive forces imposed by top lift slings, including four-legged bridles.

A. Secretary's interpretation in this case versus judge's interpretation in *Continental*

The cited standard does not spell out what constitutes an unsafe lifting method. Where, as here, Congress has not addressed the issue and the meaning of the regulatory language is not clear on its face, we look to the regulator's intent. *Cf. Unarco Comm. Prod.*, 16 BNA OSHC 1499, 1502-03, 1993 CCH OSHD ¶ 30,294, p. 41,732 (No. 89-1555, 1993) (where regulatory language has plain meaning, there is no need to look to other expressions of regulator's intent). The Secretary's interpretations of his standards and regulations should be given effect, so long as those interpretations are reasonable. *Martin v. OSHRC (CF & I Steel Corp.)*, 499 U.S. 144, 150 (1991).

The Secretary's interpretation of the cited standard is consistent with the language of the provision.[15] It also is consistent with its purpose, as explained in the preamble to the current provision. *Marine Terminals: Final Rule*, 48 Fed. Reg. 30,886, 30,902 (July 5, 1983). The preamble indicates that the language of the cited provision permitting safe non-vertical lifting methods was intended to allow demonstrably reliable non-vertical methods where a

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[15]The Secretary does not interpret the standard to prohibit all non-vertical lifts (although, as noted *supra* note 3, he recently has proposed a revision to it that would permit only vertical lifting forces for the types of containers at issue here.) Oceanic complains of Judge Burroughs's statement that "[w]hile there is some dispute as to the safety of non-vertical lifts, the preponderance of the evidence supports the Secretary's conclusion that it is not safe to lift in such a manner." We do not adopt that statement by the judge. The current provision does not prohibit all non-vertical lifting methods for containers 20 feet or more in length, and the Secretary does not seek a ruling that all such methods are unsafe. Further, there was testimony by the Secretary's experts that certain non-vertical lifting forces, which they did not describe, can safely lift some of those containers (*see infra* pp. 14-15). We need not address whether safe non-vertical lifting methods exist that were not discussed in this case.

true vertical lift cannot be achieved.[16] There is no indication that an "actual damage" proof requirement was intended.

Thus, we uphold as reasonable the Secretary's position that he does not have to prove that the employer's non-vertical lifting method has actually damaged containers, in order to find noncompliance. The Secretary need only show by a preponderance of the evidence that the lifting method may not be relied on to lift all the containers at issue without damage to them. The Secretary may establish that a non-vertical lifting method is unsafe prima facie by showing, as he did here, that not all the containers being lifted are designed or approved for lifting by that method.[17]

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[16]The pertinent discussion of section 1917.71(f)(1)(i) in the preamble is as follows:

> Paragraph (f)(1)(i) was proposed as paragraph (i)(1)(i), which held that if a container is hoisted by its top fittings, the lifting forces shall be applied vertically from at least four top fittings (46 FR 4240). Several commenters noted that some containers handled in other than specialized container terminals are hoisted with specialized stevedoring gear and hooks attached to double and single spreader bars by wire rope, and even though this method of hoisting produces other than a completely vertical lift, it has performed safely and efficiently for many years . . . . This paragraph has therefore been expanded to afford some operating latitude in the lifting of intermodal containers. Although it is good practice to conduct such lifts in a vertical manner from at least four top fittings (when lifted from the top), OSHA recognizes that a neat and clean vertical lift cannot always be achieved given certain conditions of stowage. It is accordingly not OSHA's intent to prohibit cargo movement if a true vertical lift cannot be achieved. However, methods of hoisting shall not damage the structural integrity of the containers. Therefore, the final rule provides that when a container is hoisted by its top fittings, the lifting forces shall be applied vertically from at least four such fittings, or by means which will safely do so without damage to the container. The alternative provision called for the lifting forces to be applied, "near" vertically, but, on reexamination, this phrase appeared to be too ambiguous and unenforceable . . . .

[17]The importance the Secretary places on container design is indicated by section 1917.71(f)(1)(iv). That section provides that methods of hoisting containers, other than those permitted by specific provisions, "may be used only if the containers and hoisting means are designed for such use."

As to Judge Salyers' interpretation of the standard in *Continental*, referred to above, he did not address the Secretary's interpretation of the provision. As discussed above, we find the Secretary's interpretation reasonable and thus controlling under *CF & I*. Thus, the Secretary has established prima facie that Oceanic's four-legged bridle is unsafe by showing that not all the containers being lifted are designed or approved for lifting by that method.

B. Prior testimony of Secretary's experts

Ronald L. Signorino gave expert testimony for the Secretary regarding safe lifting practices.[18] Oceanic relies on certain testimony by Signorino in *Continental*, and by Grey in his deposition in this case, which could be construed to support Judge Salyers' interpretation of the cited provision. However, that testimony also is consistent with the Secretary's position in this case. Thus, it does not change the result here.

Signorino testified in *Continental* that under the cited provision there must be some showing that the employer's non-vertical lifting method would, or might, damage a container. However, the Secretary's evidence here meets that test--most containers 20 feet or more in length are not designed or approved for non-vertical lifting forces, making it likely that at some point a container will be damaged due at least in part to such forces. Signorino also testified in *Continental* that "some bridle arrangements [would] be able to hoist an intermodal container in a safe manner." However, he did not approve of Oceanic's bridle and did not explain what bridle arrangements he thought would be safe. Moreover, he added that "as you get into more exaggerated sling angles and shorter slings, you get into situations where you would not be able to simply hoist the container." Therefore, Signorino's testimony in *Continental* simply does not support Oceanic's position.

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[18]Signorino was a manager in OSHA's Office of Maritime Standards in Washington, D. C., a post he had held for 11 years. Previously, he had served as an OSHA compliance officer, conducting maritime inspections for about four years in the Port of New York, NY. Prior to that he had been employed successively by two international marine shipping companies as Manager of Intermodal Services. Signorino also was a member of numerous marine terminal safety committees, including the ANSI committee that works with the ISO on design and handling of intermodal containers.

In Grey's deposition, he conceded that a loaded container may be lifted safely at an angle of less than 90° if it is so designed.[19] However, Grey testified at the hearing that most containers are not designed that way. For that reason, Grey was of the opinion that the OSHA provision is ill-advised in permitting some non-vertical lifts of containers 20 feet or more in length. Thus, Grey's prior deposition testimony does not support Oceanic. Based on this record, we have no reason to believe that a top lift sling would be acceptable for lifting loaded containers 20 feet or more in length, unless the angle between the container top and the bridle leg is in excess of 60°. Vertical forces are the safest means of lifting such containers, according to experts for both parties.

C. Effect of section 1918.85(c)

Oceanic further argues that section 1917.71(f)(l)(i) must be read to prohibit only those lifting methods that violate section 1918.85(c) (*supra* n. 7), the provision originally cited here. The pertinent language of the latter section is that "[a]ll hoisting of containers shall be by means which will safely do so without *probable* damage to the container" (emphasis added). We agree with the Secretary, however, that the meaning of the cited provision is not limited by section 1918.85(c). He correctly notes that, subject to exceptions not relevant here, the marine terminal standard applies *exclusively* (that is, to the exclusion of other OSHA standards) with respect to employment within a marine terminal. 29 C.F.R. § 1910.16(b). Further, the preamble to the marine terminal standard indicates that the standard was designed to improve employee safety as compared with the longshoring standard, which is older. That preamble states:

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[19]Specifically, Grey testified that:

> *It is not clear when [a non-vertical lift becomes unsafe] because it depends on the particular container that's being lifted.* Some containers will be over-designed. Some will be barely minimal. So as to whether or not a particular container would fail if it wasn't perfectly vertically lifted, you can't say that any more than you can say that a car traveling over the speed limit is going to have an accident.

(Emphasis added).

> *The attempt to apply and to enforce provisions from different standards to shoreside activities* has encouraged a fragmentary approach to compliance activity, has produced much misunderstanding and dissension, and *has not provided adequate employee protection.* . . . OSHA believes that *a marine terminal standard tailored specifically to the hazards and circumstances of this industry . . . is clearly needed.*

48 Fed. Reg. at 30,886 (emphasis added). In addition, the preamble to the proposal from which the marine terminal standard evolved states that "[n]either the longshoring regulations, which were published before the ISO standard, nor the ANSI marine terminal standard deals with container hoisting in detail." *Marine Terminals, Proposed Standard:* 46 Fed. Reg. 4182, 4212 (1981). Thus, we find that the meaning of the cited provision is not limited by section 1918.85(c).

V. Oceanic's rebuttal evidence

A. Provisions for racking, securing and lashing forces in container specification standards

Oceanic notes that under the same container specification standards relied on by the Secretary, containers are designed to withstand certain forces other than non-vertical lifting forces on their top side rails. Oceanic argues that as a result, containers 20 feet or more in length actually will withstand the compressive forces of its four-legged bridle.

Oceanic relies on the expert testimony of James T. McCrory, an independent marine surveyor, in this regard. McCrory noted that the industry standards discussed above permit at least 10 tons of racking force to be imposed on the top side rail during shipment. ISO and ANSI permit 15 long tons of that force along a top side rail of 20- and 40-foot closed van containers. (A long ton is 2,240 pounds.) ABS approves containers that can withstand 10 tons of that force. Lloyd's "Requirements for Freight Container Securing Arrangements" (1984) allows 12 tons of that force.

Racking forces are different from non-vertical lifting forces, however. They are not compressive forces *per se*, that is, forces operating in opposite directions in the same axis. Rather, racking forces operate in different axes. Examples are the external pressures on containers due to the roll and pitch of a ship. The longitudinal force on a top side rail due to racking moves from one end to the other.

Grey acknowledged that a racking force "does exert some compressive load along the top side rail," because the container is secured at the bottom. However, he testified that racking forces are resisted by the sidewalls, with assistance from the corner posts. In Grey's opinion, the allowances for racking forces in the standards have no significance for lifting. We conclude that the fact that containers are designed to withstand tons of racking force does not show that containers will safely withstand the very different forces created by non-vertical lifting devices such as Oceanic's four-legged bridle.

McCrory also testified that certain of the standards, including those of ABS and Lloyd's, require that containers be designed to withstand tons of securing and/or lashing forces.[20] However, again those forces act on a container differently from non-vertical lifting forces. Securing forces are longitudinal forces moving along the top side rail from one end toward the other due to securement of the container during transport. Lashing forces exert transverse forces on the corner fittings (from side to side of the container, not end to end). McCrory acknowledged that he had no reason to believe that the figures given by ABS and Lloyd's for those forces were intended to relate to lifting and handling of containers.

It also bears noting that when racking, securing or lashing forces are experienced, the cargo is not directly imposing a compressive force on the top side rails because the container is resting on the surface below. By contrast, during lifting the full weight of the cargo exerts a compressive force on the top side rails because the container is suspended in air. The weight of the cargo is a dynamic force on the top side rail when the container is in motion, and it is unevenly applied if the load is distributed unevenly inside. Grey testified that the intent of the vertical lift requirement is to minimize the amount of *external* compressive force

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[20]ISO considers the application of longitudinal securing forces along the top side rail impermissible. However, ANSI indicates that containers are to be designed to withstand such a force in the amount of 60 percent of their design gross weight for terminal operations, 70 percent for marine transport, and 180 percent for rail transport. ABS requires that containers be designed to withstand 5 long tons of securing force and 15 long tons of lashing force. Lloyd's requires the capacity to withstand 10 long tons of securing force and 15 long tons of lashing force. ISO and ANSI mention no allowable lashing force.

on the top side rails, considering the substantial compressive force already imposed by the cargo during lifting. Thus, we find that the portions of the container specification standards dealing with racking, securing and lashing forces do not indicate that containers 20 feet or more in length generally will withstand the non-vertical lifting forces of top lift slings.

Grey acknowledged that the strength of the top side rails of containers over 10 feet long is tested indirectly because the containers are loaded to twice their rated maximum gross weight during the lift tests called for by the specification standards. However, McCrory testified that the containers he inspects, which have been in service, often have damage to their top side rails. Thus, the original strength of the top side rails cannot be depended upon once containers have been in service. The evidence does not provide a basis for relying on the top side rails of loaded containers in service that are over 10 feet long to withstand non-vertical lifting forces.

B. Past performance of Oceanic's lifting method

The evidence indicates that occasionally a container has suffered damage to the top side rails while being lifted by non-vertical means such as a four-legged bridle. The Secretary's experts were of the opinion that the damage they had witnessed, or that was reported to them, was caused at least in part by the lifting method. However, they did not present comprehensive data on those incidents, and thus they could not state conclusively that it was the lifting method that actually caused the damage. Other possible causes were overloading of the containers or pre-existing damage to them.

On the other hand, the evidence does not support Oceanic's claim that four-legged bridles have had a safe history of hoisting loaded containers 20 feet or more in length. Thus, the Secretary's evidence of the risks of such a lifting method based on the container specification standards was not rebutted.

The testimony on the past performance of four-legged bridles was inconclusive. Signorino testified that in his 20-plus years of experience, he had seen half a dozen containers that were damaged while being lifted with non-vertical means, and that reports had been submitted to him about another half-dozen such containers. He testified that he personally witnessed a container rupture and spill its cargo over water while being hoisted with a four-legged bridle. That incident occurred in 1969 in Brooklyn, NY. Signorino

expressed the opinion that the container damage was due, at least in part, to the compressive forces applied to the top side rails of the containers by the four-legged bridle. On the other hand, he testified that he could not be absolutely sure, or render an expert opinion as to, the cause of that damage.[21]

Grey testified that he had observed at least 1000 non-vertical lifts made with bridle legs, and had not witnessed a failure in the process. However, he testified that he had seen damaged containers that he was informed had been lifted by such non-vertical means while loaded. Grey acknowledged that in his deposition he had testified that he did not "honestly know or recall whether or not" he had been told that any of those damaged containers had been lifted non-vertically. However, he testified that at the time of the hearing he recollected that, "having seen these containers and in inquiring how were they damaged, in some cases, that was attributable to the ship's lifting gear which was a non-vertical lift[.]" On the other hand, the damaged containers were in "all kinds of conditions," and that the damage could have been caused by eccentric loads, overloading or pre-existing damage. Thus, Grey testified, "I would not have known precisely what was the causative factor for their failure."[22]

Edwin Montz, safety director for Continental at the Port of Miami, testified that he had seen thousands of containers lifted with non-vertical forces. He had never seen a closed van container damaged by that system, but recently had seen a "well" break loose on a flat rack container (one without a roof or top side rails) that was being lifted with a four-legged

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[21]Signorino testified specifically:

> To render an expert opinion on a situation such as that, I would need to have more data, and while I am not ready to say it was solely the fault of the lifting appliance, I am neither prepared nor ready to say that it was solely because of possible rail damage.

[22]Oceanic argues in its review brief that Grey's testimony as to what he was told by others about damaged containers is "vague hearsay testimony [that] hardly qualifies as competent evidence proving that bridle lifts have caused container damage." However, Oceanic did not object to admission of that testimony at the hearing, thus waiving any hearsay objection to it. Fed. R. Evid. 103(a). *See Power Fuels, Inc.*, 14 BNA OSHC 2209, 2214, 1991-93 CCH OSHD ¶ 29,304, p. 34,347 (No. 85-166, 1991).

bridle. The flat rack was loaded with steel reinforcing bars, and Montz did not know whether that "well" had been damaged previously.

McCrory testified that he had seen many thousands of non-vertical lifts of containers. He had seen three failures of a container's top side rail while being lifted with a four-legged bridle, but he did not think any of them were the direct result of a non-vertical lift. He testified that in each case there was either overloading of the container or pre-existing damage to it. All of those lifts were in the Port of Miami. McCrory testified, however, that the containers he inspects (about 400 a month) often have damage to the top side rails.

We conclude that while failures of containers being lifted with non-vertical forces, such as those imposed by Oceanic's four-legged bridle, are not common, each of the experts was aware of such failures. It was not proven that the compressive lifting forces were responsible for the damage, but the evidence establishes that those forces could have caused or contributed to it. The evidence does not support Oceanic's claim that four-legged bridles have a safe history of hoisting loaded containers 20 feet or more in length.

In *Continental*, Judge Salyers found that four-legged bridles had been used regularly for years at the port of Miami without any damage to the container or resulting accidents. In his view, the Secretary's argument that non-vertical lifts are unsafe was "based upon a theoretical approach to the situation rather than a realistic assessment of the facts and circumstances." Here, by contrast, Oceanic's own experts testified to actually seeing containers damaged in the Port of Miami while being lifted by four-legged bridles.

Further, there was substantial testimony by Grey and Signorino here about containers, at ports other than Miami, that they believed were damaged by four-legged bridles. We find that this record is consistent with the Secretary's position that Oceanic's four-legged bridle may not be relied on to safely lift all the containers at issue without damage to them.

VI. Oceanic's other objections to citation

Based on our findings above, the Secretary has established all the elements of a violation. Oceanic objects to having to use spreaders or spreader bars for long containers generally, on the grounds that they are inefficient and create safety hazards themselves. The employer may defend against a citation on the ground that compliance with the cited

provision would create greater hazards to employees or would be infeasible.[23] However, Oceanic has not specifically raised either of those defenses on review, and the evidence does not support them.

Oceanic argues that "a bridle is much easier and safer for employees to maneuver as compared to a spreader bar weighing several tons." However, Oceanic has not argued or shown that its four-legged bridle would be less hazardous to employees *overall* than spreaders or spreader bars. Further, the judge found that the use of spreaders by Oceanic "would have reduced exposure to falls in excess of 8 feet since its employees would no longer be hooking or unhooking the four-legged bridles at the corners of the containers." Thus, we find that Oceanic has not shown that greater hazards would be created by complying with the cited provision. Nor has it made the other required showings under the greater hazard defense.

Oceanic argues that the "practice of continually changing from 20' to 40' spreaders is very time-consuming," and that the "inability of stevedoring companies to continue the historical custom of sometimes using four-legged bridles in order to move containers would result in a serious loss of productivity." Oceanic cites Montz's testimony that the National Maritime Safety Association Technical Committee, of which he was a member, did a cost impact study of container top safety in the industry in 1989. According to Montz, that committee concluded that using spreaders consistently, along with other container-top safety measures advocated by the Secretary, would result in a time loss of about 20 percent and would cost the industry $100 million. However, there was no showing, and no actual claim, that use of vertical lifting would be infeasible generally in Oceanic's operations. It was not

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[23]To establish a greater hazard defense, the employer must show that: (1) the hazards created by complying with the cited provision would be greater than those due to not complying, (2) other methods of protecting its employees from the hazards were used or were not available, and (3) a variance is not available or that application for a variance is inappropriate. *E.g., State Sheet Metal Co.*, 16 BNA OSHC 1155, 1159, 1993 CCH OSHD ¶ 30,042, p. 41,225 (No. 90-1620, 1993). To establish the affirmative defense of infeasibility, the employer must show that: (1) literal compliance with the requirements of the cited provision was infeasible; and (2) alternative means of protection were used, or were infeasible. *E.g., id.*, 16 BNA OSHC at 1160, 1993 CCH OSHD at p. 41,226.

shown that Oceanic's industry cannot afford the costs about which Montz testified, or that alternatives less hazardous than Oceanic's four-legged bridle could not have been used. Thus, Oceanic has not shown either of the factors required to establish the infeasibility defense.

Since the Secretary has shown all the elements of a violation and Oceanic has presented no sufficient defense, we affirm the alleged violation of section 1917.71(f)(1)(i). The evidence clearly shows that the violative conditions were serious, because death or serious physical harm would be the likely result if an employee were hit by falling cargo. *See, e.g., Consolidated Freightways Corp.*, 15 BNA OSHC 1317, 1324, 1991-93 CCH OSHD ¶ 29,500, p. 39,812 (No. 86-351, 1991) ("a serious violation is established if an accident is possible and there is a substantial probability that death or serious physical harm could result from the accident").

VII. Penalty

The judge assessed a $300 penalty, and that amount is not disputed by the parties.[24] In the circumstances, the $300 penalty assessed by the judge is appropriate under the penalty criteria set forth in 29 U.S.C. § 666(j), and we affirm it.

CONCLUSIONS

The Secretary has shown all the elements of a violation. In particular, he showed that top lift slings such as Oceanic's four-legged bridle, each leg of which formed an angle of approximately 35° with the top of a 40-foot container, were unsafe for lifting the containers at issue. Accordingly, the evidence establishes that Oceanic's lifting method did not comply with the cited provision. The evidence also supports the judge's findings that the other elements of a violation were established, and those findings are not disputed on review. The

[24]The Secretary had proposed a $540 combined penalty for that item and another which the judge vacated. At the hearing, the parties stipulated that the $540 penalty proposed by the Secretary was reasonable and acceptable if both items of the citation were affirmed.

hazards clearly were serious. Thus, we affirm a serious violation of section 1917.71(f)(1)(i) and assess a $300 penalty.

Stuart E. Weisberg
Chairman

Edwin G. Foulke, Jr.
Commissioner

Velma Montoya
Commissioner

Dated: September 23, 1994

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SECRETARY OF LABOR,	:	
Complainant,	:	
v.	:	Docket No. 91-0476
OCEANIC STEAMSHIP CO. & OCEANIC STEVEDORING, INC.,	:	
Respondent.	:	

NOTICE OF COMMISSION DECISION

The attached decision by the Occupational Safety and Health Review Commission was issued on September 23, 1994. **ANY PERSON ADVERSELY AFFECTED OR AGGRIEVED WHO WISHES TO OBTAIN REVIEW OF THIS DECISION MUST FILE A NOTICE OF APPEAL WITH THE APPROPRIATE FEDERAL COURT OF APPEALS WITHIN 60 DAYS OF THE DATE OF THIS DECISION.** See Section 11 of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 660.

FOR THE COMMISSION

Ray H. Darling, Jr.
Executive Secretary

September 23, 1994
Date

Docket No. 91-0476

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SECRETARY OF LABOR
Complainant,
v.

OCEANIC STEAMSHIP COMPANY, INC.
AND
OCEANIC STEVEDORING, INC.,
Respondent.

OSHRC DOCKET
NO. 91-0476

NOTICE OF DOCKETING OF ADMINISTRATIVE LAW JUDGE'S DECISION

The Administrative Law Judge's Report in the above referenced case was docketed with the Commission on January 7, 1993. The decision of the Judge will become a final order of the Commission on February 8, 1993 unless a Commission member directs review of the decision on or before that date. ANY PARTY DESIRING REVIEW OF THE JUDGE'S DECISION BY THE COMMISSION MUST FILE A PETITION FOR DISCRETIONARY REVIEW. Any such petition should be received by the Executive Secretary on or before January 27, 1993 in order to permit sufficient time for its review. See Commission Rule 91, 29 C.F.R. 2200.91.

All further pleadings or communications regarding this case shall be addressed to:

Executive Secretary
Occupational Safety and Health
Review Commission
1825 K St. N.W., Room 401
Washington, D.C. 20006-1246

Petitioning parties shall also mail a copy to:

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If a Direction for Review is issued by the Commission, then the Counsel for Regional Trial Litigation will represent the Department of Labor. Any party having questions about review rights may contact the Commission's Executive Secretary or call (202) 634-7950.

FOR THE COMMISSION

Ray H. Darling, Jr.

Date: January 7, 1993

Ray H. Darling, Jr.
Executive Secretary

DOCKET NO. 91-047t

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SECRETARY OF LABOR,

Complainant,

v.

OCEANIC STEAMSHIP COMPANY, INC.,

and

OCEANIC STEVEDORING, INC.,

Respondents.

OSHRC Docket No. 91-476

APPEARANCES:

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Donald T. Ryce, Esquire
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For Respondent

Before: Administrative Law Judge James D. Burroughs

DECISION AND ORDER

Oceanic Steamship Company, Inc., and Oceanic Stevedoring, Inc. (Oceanic),[1] contests alleged serious violations of § 1918.32(b), for failure to furnish fall protection for

[1] During trial preparations, the Secretary discovered that a second corporation was possibly involved in the stevedoring operations. On December 23, 1991, the Secretary filed a motion to amend complaint to add Oceanic Stevedoring, Inc., as a party. The motion was granted on January 3, 1992. The word "Oceanic" is used to refer to both respondents.

employees placing and removing cones used in the stowing of intermodal containers on the deck of a vessel, and of § 1917.71(f)(1)(i), for failure to use vertical lifting forces when hoisting containers by their top fittings.[2]

Intermodal containers, also referred to as ISO containers, are central to this case. There are several million containers in international trade (Tr. 195). About 75 percent of non-bulk shipments are shipped in ISO containers (Tr. 195). The containers are designed and constructed with corner castings for lifting. The four top corner castings or lifting fittings are used to lift the containers by hooks or twist locks (Exhs. C-34, C-35, C-36, C-37; Tr. 194-195, 384, 396).

Intermodal containers are standardized. The design criteria in the United States was developed by the American Standards Association (ASA), now called the American International Standards Institute (ANSI) (Exhs. C-28, C-29; Tr. 403-405). The design criteria by ANSI provides that no external compressive forces will be exerted on the top side rail of loaded intermodal containers (Exh. C-29; Tr. 405). The International Convention for Safe Containers, to which the United States is signatory, now governs the design, construction, testing and labeling of intermodal containers used in international commerce. The intermodal containers have a standard CSC plate identifying each container (Exh. C-30; Tr. 406-409, 419).

The two companies charged are ships' agents. They perform stevedoring operations and operate a marine terminal with their yards and offices located in the Port of Miami, Florida (Tr. 33). As part of its business, Oceanic discharges and loads containers using either the Port's gantry crane or mobile cranes. John Shapiro, Oceanic's general superintendent, oversees the yard, shop and vessel operations and a few ship superintendents at the Port of Miami (Tr. 33-34). Both corporations employ ship superintendents, each of whom oversees a crew of longshoremen (Tr. 33-34).

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[2] Oceanic signed an informal settlement agreement resolving all the controversies except the alleged violation of 29 C.F.R. § 1918.32(b), to which a timely notice of contest was filed on February 6, 1991. On March 22, 1991, the Secretary filed a motion to amend citation and complaint, in which the citation was amended to include an allegation that Oceanic violated 29 C.F.R. § 1917.71(f)(1)(i); no additional penalty was proposed. The motion to amend was granted on March 29, 1991.

Oceanic worked the vessel *MV Katrine* on September 26, 1990; November 9, 1990; November 26, 1990; December 21, 1990; and May 29, 1991 (Exhs. C-7, C-8, C-9, C-10; Tr. 66-68, 87, 171-172). Oceanic kept records showing the discharge and loading activities, equipment used and time of work. These records were made available to the Secretary (Exhs. C-3, C-5, C-6, C-7, C-8, C-9, C-10; Tr.34-47). Oceanic's employees also worked some vessels, such as the *Zim Korea* on July 19, 1991, and the *Zim Kingston* on January 17, 1991, with the gantry crane (Exh. C-5, C-6; Tr. 59-65). During these operations, Oceanic employees, while coning, were exposed to the hazard of falling more than 8 feet from the tops of containers (Tr. 59-65). Oceanic has harnesses with retractable lanyards (Tr. 34-35). Their employees did, on one or two occasions, attempt to use fall arrest systems while moving containers with the gantry cranes (Tr. 69-71). This limited use was done as a test (Tr. 71).

When working vessels with a shore-based mobile crane, Oceanic uses a four-legged bridle with legs 25 feet in length to move both empty and loaded intermodal containers (Tr. 7). Each leg of the four-legged bridle has a safe working load of 11 metric tons (Tr. 56). Oceanic owns fixed length 20-foot and 40-foot manual spreaders (Exh. C-4; Tr. 56-57). The 40-foot spreaders are used to lift aluminum-sided and refrigerated containers, as Oceanic considers these types of containers to be a "weaker box" (Tr. 58). Oceanic also works ships with specialized cranes, referred to as gantry cranes or container cranes (Exhs. C-5, C-6; Tr. 59-65).

Employees work on tops of containers to help land containers and to install twist locks or cones (Exh. A; Tr. 73, 78-79). They hook and unhook the hooks of the four-legged bridles (Exh. C-1, C-11; Tr. 88, 221-222). While so engaged, employees are exposed to the hazard of falling more than 8 feet from the edges of containers (Exhs. A, C-11; Tr. 73-80, 87, 221-222). While a signal person works on top of the containers, he does not need to go near the edge of the container (Tr. 558). No fall arrest systems were used by employees handling containers with shore-based mobile cranes or gantry cranes (Tr. 8).

Intermodal containers are rectangular in shape and generally are constructed of steel. They have the ability to be shifted from one transportation mode to another. For example,

the containers can be taken off a freighter and shifted to highway trailers, trains or aircraft. They are generally 8 feet 6 inches tall and 8 feet wide. They can vary in length.

The containers are stacked on top of one another. Generally, a row of containers is placed on the vessel. An employee ascends to the top and places cones in the corner castings of the containers to stabilize the next level of containers. Depending upon design criteria, the containers can be stacked up to ten high. Once the top height is reached, the containers are secured by lashing rods. Employees ascend to positions on top of the containers and manually place the cones in each corner casting by hand. Since employees go to the outer edges of the containers, they are susceptible to fall hazards while placing the cones. Their work environment is outdoors and is subject to the weather conditions.

Oceanic's employees generally do not use any form of fall protection device. While it has made harnesses available to employees, the harnesses have only been used a few times by employees who attached them to the gantry crane (Tr. 529-530). Neither the union nor individual employees have complained that they feel it is unsafe to work on top of containers without fall protection (Tr. 530-531). The employees do not want to use the harnesses (Tr. 530).

On September 26, 1990, Camille Villanova, an OSHA safety and health specialist, conducted an inspection of the operation of Oceanic Steamship Company and Oceanic Stevedoring, Inc., at the Port of Miami (Tr. 87). She observed a portion of the discharge operation of the *MV Katrine*. Employees were removing empty containers from the *Katrine* with a shore-based mobile crane and the four-legged bridle (Exhs. C-11, C-12, C-13, C-14; Tr. 88-92, 172, 175-176). They also used the four-legged bridle during the loading operation in which the bridle was used to lift loaded 20-foot and 40-foot containers (Exh. C-3; Tr. 8, 43-45).

Exhibits R-7 and R-8 Are Admitted and Exhibit R-9 Is Denied

The record of the hearing was held open for submission of additional evidence by the parties. Subsequent to the hearing, Oceanic submitted three exhibits for admission to the record in this case. The Secretary did not object to their authenticity but objected to the

relevancy of the exhibits. By order dated August 5, 1992, the exhibits were accepted for the record, but the objections of the Secretary were to be considered when the decision was written.

Exhibit R-7 consists of pertinent portions of material submitted by the Secretary to Oceanic during discovery. The documents pertain to the background of § 1918.32(b). Oceanic considers the documents relevant since one of its arguments is that § 1918.32(b) is void as applied to on-deck container stows. The documents are considered necessary to demonstrate the circumstances under which the standard was promulgated and the confusion surrounding the enforcement policy.

Exhibit R-8 is a copy of a memorandum to the Regional Administrators. The Secretary contends that it has no relevance. Oceanic contends that the document demonstrates the confusion and controversy over the application of § 1918.32(b) as it applies to containers.

Exhibit R-9 consists of material provided by the Secretary in response to production of document Nos. 1 and 2. The exhibits come from the Secretary's own file and reflect abatement efforts currently underway at the Port of Savannah. The Secretary represents that the documents accurately portray the respective parties' positions concerning abatement methods.

Oceanic also submits portions of the transcript in Continental Stevedoring, Inc. During the trial of this matter, several discussions were held with counsel for the parties concerning the stipulation of matters from the Continental transcript. It was the understanding of this judge that certain material could be introduced into the record in this case (Tr. 558, 610-611).

Exhibit R-7 is considered relevant to a bona fide issue raised by Oceanic as to the application of § 1918.32(b). The Commission in *Seattle Crescent Container Service*, 7 BNA OSHC 1895, 1979 CCH OSHD ¶ 24,002 (No. 15242, 1979), rejected such an argument because the record was not fully developed. In *Seattle Crescent*, *supra*, the Commission reversed the Judge who had held the standard inapplicable because, since the standard was promulgated in 1960, it had not been applied to work on deck. The Commission did not

consider the history of the Act to be controlling because of sparse development of the issue. It stated at 7 BNA OSHC 1898 (Emphasis added):

> [B]ecause of the relatively slight volume of containerized cargo in 1960, practically all of which happened to be stowed below deck and tween decks, it is impossible to determine whether the Secretary intended either to restrict application of the standard to work performed below deck and tween decks or, more generally, to protect employees against injuries resulting from working on top of cargo regardless of its location on board ship. The Secretary's silence since 1960 is equally ambiguous. *Stronger evidence is needed before we can interpret a standard restrictively to the detriment of employee safety.*

Exhibit R-7 will be considered in deciding the issue.

Exhibit R-8 is a copy of a memorandum dated January 2, 1992, from the Director of Compliance Program to the Regional Administrators that concerns the enforcement of § 1918.32(b). It is an official document that has relevance to the Secretary's position. It will be considered in evaluating the facts to reach a determination on the issue.

Exhibit R-9 has reference to settlements worked out by the parties in citations issued in Savannah, Georgia. As the Secretary contends, there has not been a showing that the factual situation which gave rise to the citations is similar to the facts in the case in issue. The documents pertain to other cases pending before OSHA and have no relevance to this proceeding. The facts have not been shown to be similar. Exhibit R-9 will not be considered in evaluating the evidence. The Secretary's argument has merit.

The other matter in dispute between the parties concerns the numerous references made by Oceanic to the transcript of Continental Stevedoring Co., Inc. This was a case in which the same counsel represented the parties. The Secretary contends that the facts in Continental were different and are at variance with the facts in the instant case. There have been numerous references made to the Continental transcript. As previously stated, it was the understanding of this Judge that certain material considered pertinent to this case would be stipulated in the record from the Continental hearing. Respondent's counsel had been instructed to forward copies of the pertinent transcript in Continental so that the two records would be separate. This requirement has been satisfied by him. The references to the Continental transcript are permitted. The references are primarily to the Secretary's position on enforcement of the standard.

Alleged Violation of 29 C.F.R. § 1918.32(b)

In order to establish a prima facie case that an employer has violated a standard promulgated pursuant to section 5(a)(2) of the Act, the Secretary must show by a preponderance of the evidence that (1) the cited standard applies to the facts, (2) its terms were not met, (3) employees had access to the violative condition, and (4) the employer knew or could have known of the violation with the exercise of reasonable diligence. *See e.g., Walker Towing Corp.*, 14 BNA OSHC 2072, 2074, 1991 CCH OSHD ¶ 29,239, p. 39,157 (No. 87-1359, 1991).

The parties stipulated that Oceanic employees did not use any type of fall arrest systems while loading or discharging 20-foot and 40-foot intermodal containers during conventional crane operations (Tr. 8)[3]. The employees had to approach the very edges of the containers and were exposed to the hazard of falling from a height in excess of 8 feet (Tr. 79-80). Oceanic's general superintendent was well aware of the methods used by the employees to place and remove the cones, as well as to the hooking and unhooking of the hoisting gear used during the discharge and loading operations. Oceanic had a ship superintendent to supervise each gang (Tr. 34). Its management knew of the hazards to which the employees were exposed.

The Secretary alleges that Oceanic violated § 1918.32(b) by failing to provide fall protection for employees placing or removing cones on container tops which were 8 feet or more in height. The standard provides:

> (b) When an edge of a hatch section or of stowed cargo more than 8 feet high is so exposed that it presents a danger of an employee falling, the edge shall be guarded by a safety net of adequate strength to prevent injury to a falling employee, or by other means providing equal protection under the existing circumstances.

The standard makes no reference to containers and was not initially applied to stowage on the deck of a vessel.

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[3] Reference pertains to a shore-based crane other than a gantry crane (Tr. 8).

In view of the stipulation and awareness of the management of Oceanic to the hazard, the Secretary argues that she has met her burden, citing F. H. Lawson, 8 BNA OSHC 1063, 1980 CCH OSHD ¶ 24,277 (No. 12883, 1980), wherein the Commission held that the Secretary establishes a prima facie case by showing that the violative conditions existed and that employees were exposed to the hazard. This argument is rejected. For the reasons set forth in *South Stevedoring, Inc.*, 15 BNA OSHC 1351, 1991 CCH OSHD ¶ _ (No. 89-1666, 1991), the Secretary has the burden of proof to establish a feasible means of abatement in this case.

Based on the history of the standard, Oceanic argues that the alleged violation of § 1918.32(b) should be vacated on the ground that the standard is void as applied to container stows on the deck of a vessel. Oceanic also argues that the standard is impermissibly vague. It contends that the standard fails to provide fair notice of its responsibility. The history of enforcement is replete with references to the applicability of the standard.

The original version of § 1918.32(b) was promulgated on February 20, 1960, as § 9.32(b) and read as follows:

> (b) When an edge of a hatch section or of stowed cargo more than 8 feet high is so exposed that it presents a danger of persons falling, the edge shall be guarded by a line, safety net or railing.

(Exh. R-7, pg. 5)

The same language was retained when the standard was re-promulgated as § 1504.32(b) on May 21, 1966 (Exh. R-7, pg. 8). When the rule was promulgated, containerization was in its infancy and was not a factor in shipping. Consequently, the rule-making history of § 1918.32(b) makes no reference to containers (Tr. 292-293). When the rule was adopted, it was applied to below-deck stows and not to cargo stowed on deck (Tr. 292). Apparently, OSHA did not consider the feasibility of providing fall protection from deck-stowed containers when it promulgated § 9.32(b) in 1960. This probably explains why the only means of abatement expressly provided for by the rule, a safety net, is regarded by OSHA as infeasible for containers.

For almost two decades, high-ranking individuals involved in OSHA's enforcement policy considered that § 1918.32(b), and its predecessor, was not intended to apply to cargo stowed on decks or, for that matter, to containers at all. On December 10, 1970, ten years after promulgation of the standard, Edward Jones of Region IX's Federal/State Operations observed by memorandum that § 1918.32(b) "applies to conditions found in cargo holds or compartments [and the] application and enforcement of this regulation has never been applied on the Pacific coast to deckloads" (Exh. R-7, pg. 9). He further noted that "the District Office in Portland and throughout the Pacific region as well as at the national level, was enforcing 1504.32(b) in the holds of ships and not applying [*sic*] it to deckloads" (Exh. R-7, pg. 10). Jones confirmed OSHA's limited application of § 1918.32(b) in a March 22, 1976, memorandum which explained:

> The standard was developed during a period of time when most maritime operations were still break bulk, and the intent was the protection of longshoremen working in the holds of vessels from falling from the edge of block stows of cargo and exposure to the unguarded edge of a partially open hatch

(Exh. R-7, pg. 13)

In 1977, Edward C. March of the Office of Maritime Safety Standards wrote a letter to Dale Larson of the Pacific Maritime Association which discussed the proper application of § 1918.32(b). March stated:

> Section 1918.32(b) was developed to handle circumstances when men were required to work either at the edge of a partially opened hatch section or of a block or unit of stowed cargo in a hold under the circumstances described. It is meant to apply only to those "hold" situations, and not to deck cargo situations, that matter specifically coming under § 1918.33.

(Exh. R-7, pg. 14)

March's letter brought a response from James W. Lake, the regional administrator for Region X, complaining that March's statements had undercut his region's position in two cases out of the Seattle office involving § 1918.32(b) citations (Exh. R-7, pgs. 16-18). March replied to Lake's statements in an October 12, 1977, memorandum (Exh. R-7, pgs. 19-22), affirming once more that "1918.32(b) was not intended for deck cargo . . . ." (Exh. R-7, pg. 20).

In 1979 the Commission in *Seattle Crescent Container Service*, *supra*, unanimously interpreted § 1918.32(b) as applicable to cargo carried on the deck of a ship. Cargo containers were held to fall within the category of "cargo" for purposes of the standard. The Commission reasoned that "a container is merely an extension of the cargo within." 7 BNA OSHC at 1900. Stowage on deck was held to be included in the term "stow" as it is used in the standard. That decision is relevant to this case.

Oceanic argues that the Commission failed to recognize the pitfall of applying § 1918.32(b) to a kind of stow and cargo never contemplated when the standard was promulgated. It states that the Commission failed to appreciate the serious abatement problem created by extending the scope of the standard beyond its original intent. The only means of compliance mentioned in § 1918.32(b)--a safety net--was obviously infeasible for deck-stowed containers. Since OSHA does not regard a safety net as applicable for abatement purposes, an employer is left to guess what the phrase "by other means providing equal protection" requires it to do in order to achieve compliance.

The Secretary does not accept a net as a feasible means of providing fall protection even though that is the specified method of abatement provided by the standard. The Secretary has attempted to force employers to select a method of abatement at their own peril. This is one of the main reasons that a cooperative resolution of the problem has not been reached by the parties. Normally, a standard specifies different abatement methods that result in compliance when utilized. A net is not recognized as a feasible means of fall protection, and the Secretary is not proceeding on that basis. Oceanic finds itself in a Catch-22 situation. Unlike most standards, the method of compliance is left to the employer. The Secretary plays the role of a "Monday morning" quarterback. Employers are reluctant to expend funds for a method not approved by the Secretary. They want to know that energy and funds expended by them have a good opportunity to achieve compliance with the standard. In other words, the Secretary should disclose her hand as to what is acceptable.

After the Commission decision in *Seattle Crescent, supra*, considerable discussion ensued within OSHA regarding the applicability of § 1918.32(b) to containers stowed on the deck of a vessel. On December 3, 1979, Edward Jones issued a memorandum which suggested that OSHA might want to adopt the Review Commission's reasoning. Jones also observed that, until further clarification could be obtained from OSHA's Washington office, § 1918.32(b) should not be relied on for citing falling hazards from deckloads (Exh. R-7, pg. 23). In 1980 several OSHA administrators on the West coast prepared memoranda complaining about the confusion over container-top safety and pointing out the need for guidance from OSHA's national office (Exh. R-7, pgs. 24-30). The regional administrator for Region IX flatly stated on March 17, 1980, that "I currently have no intention of citing 1918.32(b) on deckloads unless I am instructed to do so by the National Office" (Exh. R-7, pg. 28).

In response to the various inquiries OSHA's national office was receiving, March prepared an undated memorandum in early 1980 which restated his view that "§ 1918.32(b) is not intended for and should not be applied to the containers or other deckload situations" (Exh. R-7, pg. 34). March also asserted that "it is not reasonable to cite *any rule* until such time as *we* have found a workable solution" (Exh. R-7, pg. 35).

Region IX decided that it would apply § 1918.32(b) to future cases involving fall hazards from the tops of containers. The reasons for this change of position were outlined in a July 23, 1980, memorandum from Edward Jones:

> We have written several memorandums to the Office of Maritime Standards and others requesting a National Office clarification of 1918.32(b). The question was whether the standard was applicable to employees exposed to falling when working on top of containers stowed on the deck of a vessel. There has been considerable controversy over the application of the standard since 1972 [*sic*].
>
> In 1979, the OSHRC, in their decision *OSHA vs. Seattle Crescent Container Service, Inc.*, ruled the standard was applicable for the protection of employees working on top of containers. We immediately requested a clarification of the standard because of the confusion and uncertainty created by the Review Commission's decision. The Office of Maritime Standards prepared a draft directive clarifying the standard. The directive was never released because the Solicitors felt the standard was applicable in view of the Commission's

> decision. Their position was also formed by previous discussions with OSHA staff in Washington, who they say indicated to them that 1918.32(b) was applicable to work being performed on top of containers on deck. It is now apparent that we are not going to receive a clarification of 1918.32(b); and we do not anticapate the maritime standards will be amended, at least in the foreseeable future. Therefore, future alleged violations for employee exposure to falling from containers stowed on deck should be cited under 1918.32(b). *This change in Region IX's position is made because of the absence of National Office direction, and recent developments that indicate that we will not be supported by the Commission or the Solicitors by the application of 5(a)(1) alleged violations in this situation.*

(Exh. R-7, pg. 44) (Emphasis added)

Issuance of OSHA Instruction CPL 2-1.17

Two years later, OSHA'S national office issued Instruction CPL 2-1.17 entitled "National guidelines for enforcing 29 CFR 1918.32(b) as it applies to falling hazards from working on containers stowed on the decks of vessels" (Exh. R-1). OSHA Instruction CPL 2-1.17 acknowledged that:

> *To date, there is no overall workable means to protect longshoremen in all instances of exposure.* Maritime associations and stevedore companies, both in the United States and other maritime nations, are researching and experimenting with various methods of protection. OSHA will monitor new developments through its committee activity.

(Exh. R-2, pg. 2) (Emphasis added)

The Instruction provided specific guidelines and procedures for OSHA safety and health specialists to follow in determining whether to issue a citation. The heart of those procedures is the following language:

> 4. When the employer has a means of protecting employees such as illustrated in E.3 of this instruction, or other means available to the employer that are not being used, then a proposed violation of 29 CFR 1918.32(b) shall be issued. *The CSHO shall note the circumstances, the number of employees exposed and indicate in the report and on the citation the feasible means of protection available to the employer.*

(Emphasis added)

> 5. If, in the opinion of the CSHO, the employer does not have a feasible means of protecting the employee, the hazard shall be brought to the attention of the employer. A violation should not be issued; however, OSHA should recommend and encourage the employer to work toward a solution and assist the employer in every way possible to effect a means of protection by advice, consultation and dissemination of information obtained during other inspections.

(Exh. R-1, pgs. 3-4)

The important point is that when CPL 2-1.17 was issued by the Secretary, employers received official notification as to the applicability of § 1918.32(b) to containers on the deck of a vessel. They were advised when the standard would be enforced. Much of the confusion should have evaporated. While there are still some difficulties with regard to enforcement, most of them emanate from the Secretary's failure to adhere to her own policy.

Region IV, which has jurisdiction over Florida employers, responded to the Instruction by declining to issue citations under § 1918.32(b) when employees were exposed to falls from containers. The region recognized the abatement problems associated with container-top safety (Tr. 119-121, 126-128). Instruction CPL 2-1.17 remained the official position of the Secretary.

Region IV's February, 1989, Policy Change

Region IV's policy against issuing § 1918.32(b) citations for containers changed in February or March of 1989, almost seven years after the Instruction had been issued (Tr. 121). During a regional seminar held in Atlanta, newly developed fall arrest systems were discussed.[4] According to Villanova who attended the seminar:

[4] All of the operations discussed at the seminar involved the use of a gantry crane (Tr. 128-129). The feasibility of using the systems discussed in the seminar during non-gantry crane operations was never considered.

> [T]owards the end of the meeting it was determined that there were feasible methods [of abatement] available, and we all received instructions to begin to--if we saw hazards, to begin to cite for fall protection not being provided by an employer (Continental hearing, pg. 143).

While the Secretary has issued § 1918.32(b) citations throughout the South Florida area, it has become obvious that there is no uniform and cohesive policy on how employers can successfully abate § 1918.32(b) citations. This fact is illustrated by two earlier cases litigated in South Florida. In *Hyde Shipping Corporation and Ram Stevedoring, Inc.*, 14 BNA OSHC 2228, 1991 CCH OSHD ¶ 29,283 (No. 89-3260, 1991), the Secretary contended that the stevedoring company should have complied with § 1918.32(b) by purchasing and using automatic twist locks, which obviated the need for employees to cone and de-cone from the tops of containers. *Hyde* decision and order, pg. 8. The Secretary initially took the same position in *Continental, supra*. At the Continental hearing and in his deposition in this case, Ron Signorino, the Government's expert, admitted that the purchase of automatic twist locks by a stevedoring company instead of the ship's owner was not a practical means of compliance (Signorino Deposition, pg. 16; Continental hearing, pg. 639).

In *Hyde, supra*, and *South Stevedoring, Inc.*, 15 BNA OSHC 1351, 1991 CCH OSHD ¶ 29,511 (No. 89-1666, 1991), the Secretary contended that, in order to comply with § 1918.32(b), employees had to be protected from falls while they were setting up fall protection devices (Tr. 800-805; *Hyde* Decision and Order, pg. 12; *South Stevedoring* Decision and Order, pg. 26). The Secretary has taken the same position in this case, asserting that failing to do so would constitute a violation of § 1918.32(b) which she would be bound to cite as a violation (Tr. 147). Signorino personally believes that it is impractical to insist that fall protection always be provided during the initial hook-up of such devices (Tr. 307-310).

OSHA's Current Policy on § 1918.32(b)

The confusion over OSHA's abatement policy is not confined to Region IV. As of the time of the hearings in the Continental and South Stevedoring cases, OSHA had not officially acknowledged that the various fall protection devices being considered by the

industry, such as the Charleston or Rogan clamp, constituted a proper means of abating a § 1918.32(b) citation. Oceanic states that this hesitancy on OSHA's part has had a detrimental affect on the stevedoring industry and created substantial compliance problems. On the west coast, the Pacific Maritime Association and the union are operating under an agreement which provides that fall protection devices will be used only under certain circumstances (Tr. 572). There has been little use of cage devices on the west coast (Tr. 348, 572). In 1990 stevedoring companies in Savannah and Charleston began an effort to abate several § 1918.32(b) citations by using the Rogan clamp, a system which OSHA still has refused to accept as successful abatement in those ports.

Signorino testified at the *Continental* hearing that OSHA was "in the process of amending" OSHA Instruction CPL 2-1.17 (*Continental* hearing, pgs. 709-710). One draft of the proposed amendment discussed the requirements OSHA intended to impose on safety programs utilizing a fall arrest system (Exh. R-8; *Continental* hearing, pgs. 733-735). According to the proposed Instruction, an acceptable fall arrest system could not permit a freefall of over 6 feet (Exh. R-8, pg. 9) and would have to comply with an excruciatingly detailed list of technical requirements (Exh. R-8, Appendix A). It is uncertain whether OSHA intends to amend Instruction CPL 2-1.17.

The Directorate of Compliance Programs issued a January 2, 1992, memorandum[5] which purports to inform regional administrators of OSHA's current position on the application of § 1918.32(b). The memorandum favorably refers to such devices as the Metropolitan stevedoring cage, Maher terminal shoebox, Charleston clamp, Rogan clamp, Eddie device and the Puerto Rican system, although it makes no effort to explain when and how their use will constitute an acceptable abatement method. The last sentence of the memorandum provides:

> Enforcement of 29 CFR 1918.32(b) shall only occur in situations where there is no container top fall protection provided and it can be established by the compliance officer that use of one of the above systems was feasible (Exh. R-2).

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[5] Oceanic first became aware of the memorandum's existence during the January 14, 1992, deposition of Signorino (Signorino Deposition, pgs. 56-57).

This language suggests that OSHA is following a position of issuing § 1918.32(b) citations that would appear to be in accordance with Instruction CPL 2-1.17 (Tr. 326). Signorino, however, conceded that prior to the issuance of the memorandum, OSHA had refused to take the position that using the Charleston or Rogan clamps could constitute compliance with the standard. To this extent, the memorandum represented a slight shift in OSHA's views (Tr. 346). OSHA's position on when § 1918.32(b) should be enforced and how it should be abated remains nebulous.

The Secretary counters the position of Oceanic as to the internal positions of OSHA regarding the applicability of § 1918.32(b) as to containers on deck by arguing:

> This showing is meaningless and totally irrelevant in a Department employing thousands of persons within the Occupational Safety and Health Administration. Moreover, a showing of what these minority views were twelve years ago lacks *any* probative value in an industry that is only thirty years old; respondents are bringing up ancient history. Further, the evidence is completely irrelevant to this matter, in that respondents have not shown that they relied in any way upon that information in determining how or whether or not to comply with the provisions of § 1918.32(b).

While, as a general rule, a subordinate cannot bind the Secretary, the persons quoted are or were responsible to enforce the Act. Edward C. March was director of the Office of Maritime Standards. His views were certainly relevant to the position of the Secretary. The other persons quoted were persons relevant to enforcement of the Secretary's policy. It is a charade to take the position that the opinion of such high-ranking individuals has no affect on enforcement policy. Who makes policy? Who enforces the policy? Secretaries of Labor change with administrations, but career employees remain to interpret and enforce laws.

The current version of § 1918.32(b) has been modified from the original which was promulgated in 1960. It was modified to delete the reference to "line" and "railing" and to add the phrase "of adequate strength to prevent injury to a falling employee, or by other means providing equal protection under the existing circumstances." The standard was promulgated originally under The Longshoremen's and Harbor Workers' Compensation Act, 33 U.S.C. § 901 *et seq.*. It was subsequently promulgated under the Occupational Safety and Health Act as an established federal standard pursuant to 29 U.S.C. § 655(a).

The history serves a useful purpose of showing the confusion that existed in the applicability of § 1918.32(b). It helps to show why the burden of proof should be on the Secretary but is not appropriate grounds to conclude that the standard is void. The burden of proof to show the standard was void rests with Oceanic. It has failed to satisfy that burden. When containerization was in its infancy in 1960, little thought was probably directed toward including stowage of containers on decks. There were few employees exposed. When the predecessor of § 1918.32(b) was promulgated under OSHA some ten years later, containers were more in vogue and the number of employees exposed had increased. While the debate internally continued as to the applicability of § 1918.32(b), the Secretary, prior to 1979, was pursuing the question before the Commission. This resulted in the decision in *Seattle Crescent* by the Commission in 1979. Regardless of the views expressed in the internal documents alluded to by Oceanic, employers should have known after *Seattle Crescent* that the Secretary was actively pursuing the applicability of § 1918.32(b) to containers on deck. After the issuance of OSHA Instruction CPL 2-1.17, there should have been no doubt over the fact that the Secretary considered § 1918.32 applicable to containers stowed on deck of a vessel. An employer also must have been aware of *Seattle Crescent* and the number of cases decided by Commission judges subsequent to *Seattle Crescent*. The date of the modification to the standard is unknown, and it is impossible to conclude as to why the changes were made and what significance they have on the applicability of the standard.

The position of Oceanic that the standard is void is rejected.

Section 1918.32(b) Is Not Impermissibly Vague

Oceanic argues that the alleged violation of § 1918.32(b) should be vacated on the ground that the standard, as applied to containers, is impermissibly vague. It points out that the court's refusal to enforce vague standards is grounded in fundamental concepts of due process. It notes that the Fifth Circuit has observed:

> An employer is entitled to fair notice in dealing with his government. Like other statutes and regulations which allow monetary penalties against those who violate them, *an occupational safety and health standard must give an*

> *employer fair warning of the conduct it* prohibits or *requires*, and it must provide a reasonably clear standard of culpability to circumscribe the discretion of the enforcing authority and its agents.

(Emphasis added) *Diamond Roofing Co. v. OSHRC*, 528 F.2d 645, 649 (5th Cir. 1976) Oceanic further states that in *Contractors Welding of Western New York, Inc.*, 15 BNA OSHC 1249, 1251, 1991 CCH OSHD ¶ 29,454 (No. 88-1847, 1991), the Commission adopted the reasoning of *Diamond Roofing* and quoted with approval similar language from *General Electric Co. v. OSHRC*, 583 F.2d 61, 67 (2d Cir. 1978):

> The purpose of OSHA standards is to improve safety conditions in the working place, *by telling employers just what they are required to do in order to prevent or minimize danger to employees.*

(Emphasis added)

The U. S. Supreme Court in *Connelly v. General Construction Co.*, 269 U.S. 385, 391 (1926), held that a statute or regulation is void for vagueness under the due process clause of the Fifth Amendment if it is so vague that persons "of common intelligence must guess at the meaning and differ as to its application." In recent cases, the courts have stated that the statute or regulation must provide ascertainable standards of guilt to protect against arbitrary, erratic, or discriminatory enforcement. *Grayned v. City of Rockford*, 408 U.S. 104 (1972).

A basic principle of due process is that a proscribed course of conduct is void for vagueness if its prohibitions are not clearly defined. Vague laws offend several important values.[6] The Supreme Court mandates that laws give the person of ordinary intelligence a reasonable opportunity to know what is prohibited so that he may act accordingly.

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[6] The Court in *Grayned v. City of Rockford*, 408 U.S. 108-109, stated:

> Vague laws may trap the innocent by not providing fair warning. Second, if arbitrary and discriminatory enforcement is to be prevented, laws must provide explicit standards for those who apply them. A vague law impermissibly delegates basic policy matters to policemen, judges, and juries for resolution on an *ad hoc* and subjective basis, with the attendant dangers of arbitrary and discriminatory application. Third, but related, where a vague statute "abut[s] upon sensitive areas of basic First Amendment freedoms," it "operates to inhibit the exercise of [those] freedoms." Uncertain meanings inevitably lead citizens to 'steer far wider of the unlawful zone' . . .than if the boundaries of the forbidden areas were clearly marked."

Grayned v. City of Rockford, 408 U.S. 104, 92 S. Ct. 2294 (1972). If arbitrary and discriminatory enforcement is to be prevented, a standard must provide criteria by which the conduct of an employer can be objectively measured. However, this does not mean that all the guesswork as to what the standard requires of an employer must be eliminated.

In reaching a determination on the issue, we must recognize that there is a distinction between prosecution of civil and criminal matters. Penal statutes are narrowly construed. *Gooch v. United States*, 297 U.S. 124, 56 S. Ct. 395 (1936). It must also be noted that when the vagueness challenge does not involve a First Amendment freedom, the vagueness challenge must be examined in light of the facts of the case at hand. *National Dairy Products Corp.* 372 U.S. 29, 83 S. Ct. 594 (1963); *United States v. Maguire*, 419 U.S. 544, 95 S. Ct. 710 (1975).

The standard and its erratic enforcement warrant close scrutiny for the reasons aptly stated by Judge Edwin Salyers in *Hyde*, 14 BNA OSHC at 2229:

> The Secretary's proposals continue to ignore reality. The Secretary wishes to manufacture working conditions that will fit into the standard. But that is not how it is done. The standards are supposed to address actual working conditions. Coming up with means of fall protection that will only protect workers in ideal situations that do not actually exist does not effectuate the purposes of the Act. No doubt employees working to load and unload intermodal containers need some form of protection. But it is not fair to the employer to rely on and enforce a standard that was not intended to address on-deck containers, specifically prescribe safety nets as the means of abatement, then mandate that safety nets are inadequate, and cite the employer for not using one of a dozen different proposed means of abatement, none of which appear to provide adequate fall protection to the employees.

In this connection, it must be acknowledged that the Supreme Court has recognized that a statute may satisfy the due process clause and not be specific in setting forth the proscribed conduct. "[T]he law is full of instances where a man's fate depends on his estimating rightly, that is, as the jury subsequently estimates it; some matter of degree." *United States v. Powell*, 423 U.S. 92 (1975), quoting from *Nash v. United States*, 229 U.S. 373, 377 (1913). "Condemned to the use of words, we can never expect mathematical certainty from our language." *Grayned v. City of Rockford, supra*, 408 U.S. at 110.

What standard of conduct does § 1918.32(b) convey to an ordinary employer of average intelligence? First, even before he reads the standard, he knows it will be directed toward rendering the worksite free of a hazard or potential hazard since it is an OSHA standard. The stated purpose of the Act is "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions." He should recognize that the standard might require him to take action to be in full compliance. Whether he is in compliance is a decision that he will have to make at his own peril. Standards are sometimes promulgated to cover many different factual situations and, for this reason, are often expressed in generalized terms. "The fact that [the Secretary] might, without difficulty, have chosen '[c]learer and more precise language' equally capable of achieving the end which it sought does not mean that the statute which it in fact drafted is unconstitutionally vague." *U. S. v. Powell*, 96 S. Ct. at 321. The ultimate question to be resolved is "whether the standard is so indefinite that men of common intelligence must necessarily guess at its meaning and differ as to its application." *Allis-Chalmers Corp. v. OSHRC*, 542 F.2d 27, 30 (7th Cir. 1976).

An employer on reading § 1918.32(a) is informed that he must protect employees working "more than 8 feet high" stowing cargo when the employees are exposed to danger. As stated in *Seattle Crescent*, the purpose of the standard is to protect employees against injuries as a result of falls. The employer is plainly advised as to his duty or of the proscribed conduct. While the standard is referenced to the protection of an employee more than 8 feet high when exposed to an edge of a hatch section or stowed cargo, it makes no reference to containers stowed on the desk of a vessel. The standard specifies the use of a safety net and provides an alternative method of compliance by stating "other means providing equal protection under the existing circumstances." In determining whether or not the standard is vague, it must be interpreted in light of the existing facts.

While the standard is clear as to the hazard, it seeks "to protect employees against injuries as a result of falls." The difficulty arises with "fair notice" because the Secretary does not consider a safety net to be an appropriate means of abatement. The alternative means of abatement must provide equal protection to a safety net. The reference to a

safety net, in essence, implies the use of some equipment that will prevent a fall. As the safety net is not an allowable method of compliance, the employer must determine on its own as to what will provide equal protection under the standard. This determination is difficult to ascertain since the Secretary seems to vary from case to case as to how to abate the violations. There has been a reluctance on the part of the Secretary to fully advise the industry as to how it can comply to protect their employees.

The industry is placed in a real dilemma by the wording of the standard since it is not privy to the Secretary's thinking as to how to comply with the standard. For the reasons stated in the opinion in *South Stevedoring Co.*, *supra*, the employer is left to guess as to what means of abatement would be acceptable to the Secretary. The matter is further complicated by the fact the Secretary recognizes that there is no overall workable means to protect longshoremen on instances of exposure. This fact is clearly recognized and stated by the Secretary in OSHA Instruction CPL 2-1.17.

The fact that a specific means of abatement is not set forth in the standard does not render the standard impermissibly vague. As the Supreme Court noted in Powell: "[T]he law is full of instances where a man's fate depends on his estimating rightly . . . ." The important point is that the person have notice of the proscribed conduct. The standard satisfies this criteria and is not impermissibly vague.

The Secretary Failed to Comply With Instruction CPL 2-1.17

Oceanic was never informed by the Secretary of any method of compliance with the standard. OSHA Instruction CPL 2-1.17 states in paragraph IV that the compliance officer will note in his or her report and on the citation the feasible means of protection available to the employer. The citation contains no such disclosure. The Secretary has failed to follow her own instructions. This unnecessarily places Oceanic in the posture of having to select some means of compliance which might not be acceptable to OSHA. The decision as to how to comply made by Oceanic is subject to approval by OSHA. This subjects Oceanic to arbitrary and capricious action. Under such circumstances, the Secretary does not make a judgment until the employer has commenced action to achieve compliance.

While the standard is not impermissibly vague or void, the failure of the Secretary to follow Instruction CPL 2-1.17 severely handicaps Oceanic. The standard advises the employer of a specific means of abatement that will result in his compliance. Under the peculiar facts of the case, the Secretary advises employers "up front" that a net does not comply. Her instruction that the employer be advised in the citation as to how he can comply still presents to the employer a voluntary means of compliance. The failure to follow this procedure meant that Oceanic had no choice except to litigate the issue. Obviously, it (and all employers) wants assurance that whatever method it chose would be acceptable to the Secretary before he expended his funds.

Under the peculiar facts of this case, failure to advise Oceanic of a specific means of abatement that was acceptable to the Secretary mandates for dismissal.

The item is vacated.

The Evidence Does Not Establish a Violation of § 1918.32(b)

Assuming arguendo that the case should not have been dismissed for technical reasons, the evidence is insufficient to support a violation of § 1918.32(b). During the discharge operation on a vessel like the *MV Katrine*, there are several tasks which require employees to go on top of containers. The first job is the unlashing of the cargo, involving four to seven employees (Tr. 514-515). Then from two to seven employees, depending on the ship, remove any stacking cones and hook the four-legged bridle into the containers being discharged (Tr. 517-518).

After the discharge operation is completed, Oceanic begins to load the vessel, utilizing the loading guide prepared by the chief officer of the vessel to determine where the cargo will be stowed (Tr. 519). Once more, from two to seven employees go on top of the containers to guide the containers into position, to unhook the bridle from the containers, to do any necessary coning, and then to secure the cargo (Tr. 520-521). A signalman is also required for the loading operation (Tr. 521).

The parties agree that employees were routinely exposed to the hazard of falling more than 8 feet while placing or removing cones from the corners of containers (Exh. A; Tr. 73-80) and that they were also exposed to the hazard of falling more than 8 feet while

hooking or unhooking the four-legged bridle lifting gear used in mobile crane operations (Exh. C-11; Tr. 87, 221-222).

The Secretary contends that employees of Oceanic could have worked from ladders in many areas in which Oceanic employees would have been exposed to a hazard of falling in excess of 8 feet while coning or deconing (Tr. 226-228) and could have arranged the stowage so as to minimize exposure to falls (Tr. 226). In addition, the Secretary claims to have shown feasibility of several means of protecting employees with safety belts or body harnesses and lanyards during the coning and deconing operations of the *MV Katrine*. The Secretary further alleges that Oceanic could have used a Rogan bar (Exh. C-18; Tr. 229-231), a Charleston clamp (Exh. C-19; Tr. 231-232), the Eddie device (Exh. C-62; Tr. 654-655), and the Puerto Rican system to protect their employees (Tr. 233-236).

During operations with the gantry crane, it is argued that Oceanic could have used any of several methods to protect their employees from the hazard of falls while they were placing or removing cones. According to the Secretary, Oceanic could have used a cage type device as an anchor point for the attachment of lanyards. The box is a container-like device with an arm to which employees supposedly can attach their lanyards; the crane is then free to continue performing work (Tr. 267-268). It is argued that Oceanic employees could have tied off to a controllable gantry crane to protect against the hazard of falling (Tr. 266-267).

The Secretary points out that longshoring employees generally ride in a protected cage on top of the spreader of the gantry cranes to get to the tops of containers. They can carry cones and safety equipment in this area (Tr. 23-24). She states that Oceanic employees working vessels with gantry cranes could have used the Rogan bar, Charleston clamp, the Puerto Rican system, or the Eddie device to tie off while coning or deconing (Tr. 267-269).

The January 2, 1992, memorandum, which purports to inform regional administrators of OSHA's current position on container-top safety, favorably refers to such devices as the Metropolitan stevedoring cage, Maher terminal shoebox, Charleston clamp, Rogan clamp, Eddie device, and the Puerto Rican system, although it makes no effort to explain when and how their use will constitute an acceptable abatement method. The last sentence of the memorandum states:

> Enforcement of 29 CFR 1918.32(b) shall only occur in situations where there is no container top fall protection provided and it can be established by the compliance officer that use of one of the above systems was feasible.

(Exh. R-2)

Prior to the issuance of the memorandum, OSHA had refused to take the position that using the Charleston or Rogan clamps could constitute compliance with the standard. The memorandum represented a slight shift in OSHA's views (Tr. 346).

Oceanic contends that the Secretary failed to demonstrate a feasible method of complying with the standard in this case.[7] Signorino testified to a number of methods which he claimed could constitute at least partial abatement of the hazard of falling from a container. He conceded that, before he could judge whether a violation of the standard had occurred, he would need to know more than that an employee was on top of a container without a fall protection device (Tr. 316). He would also need the following information: (1) the location where the containers were stowed; (2) the means by which the stowage was secured; (3) the height of the containers; (4) the sequence by which the containers were discharged or loaded; (5) the kind of abatement means that could be used; (6) the design characteristics of the vessel; and (7) the kind of work the employees were doing while exposed to a fall (Tr. 313, 316-317). Since Signorino was not familiar with most of this information, Oceanic argues that he was not in a position to render an opinion on whether the standard had been violated or how abatement of any violation could be achieved. Oceanic argues that none of the methods suggested were feasible, in light of the nature of its operations, and many did not constitute legitimate means of abatement the Secretary could require under the standard.

Signorino admitted that the use of ladders for coning and deconing would not always be possible, depending upon the particular stowage situation (Tr. 333-334). Employees deconing from ladders would have to use at least one hand, and sometimes both, which

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[7] Even if the burden of proof were on Oceanic, it argues that it has demonstrated that no feasible means of abatement exists for its operations.

makes the employees susceptible to a fall. He also testified to the possible use of cage devices (Tr. 267-268) but admitted that these devices could not be used except in conjunction with gantry cranes (Continental hearing, pg. 794).

The Secretary contends that anchorage devices, such as the Rogan clamp or the Charleston clamp, were feasible (Tr. 235). Signorino further thought it was possible that the so-called "Puerto Rican system" could be used. This system involves anchoring a locking device diagonally opposed to corner posts and then attaching a static line to the anchors and working off that static line with a lanyard (Tr. 234). According to Signorino, these devices require uniform stows to be effective (Tr. 232, 235).

Oceanic faces irregular stowage in its loading operations because the containers are not placed sequentially across (Tr. 519-520). There are numerous gaps in the stowage, flat rack, and extra high containers (Tr. 523). The captain, not Oceanic, decides where a particular container will be placed (Tr. 520). Containers are stowed for several ports and the unloading results in irregular stowage (Tr. 520). Shapiro testified that the typical stowage on ships Oceanic services is irregular (Tr. 519-520). Oceanic further argues that the devices present the possibility of tripping hazards (Tr. 596) and expose employees to the hazard of falling while they are being attached. Oceanic represents that most of the methods advanced by the Secretary as possible forms of abatement have never been accepted in any case as a proper means of complying with § 1918.32(b).

While Signorino claimed that one of these devices could have been used during the portion of the discharge operation reflected in the Secretary's photographs, he never gave specific information on exactly how the devices would be utilized or whether they could have been used throughout Oceanic's discharge and loading operation that day. A number of possible abatement measures have been raised. Oceanic needs to be advised as to a specific means to comply.

The Secretary has used the "shotgun" approach in trying to establish a violation in this case. A plethora of methods have been put forth with the hopes that one of them will result in a feasible method of abatement. As a result of the multitude of methods, they all suffer from the lack of specific information that would make them feasible to Oceanic's

operations. The Secretary would do better by concentrating on one method and so advising the employer in the citation as set forth under Instruction CPL 2-1.17.

Alleged Violation of 29 C.F.R. § 1917.71(f)(1)(i)

Section 1917.71(f)(1)(i) provides:

> (f) Containers shall be handled using lifting fittings or other arrangements suitable and intended for the purpose as set forth in paragraphs (i)(1) through (i)(3) of this section, except when damage to an intermodal container makes special means of handling necessary.
>
> > (1) Loaded intermodal containers of 20 feet (6.1 m) or more in length shall be hoisted as follows:
> >
> > > (i) When hoisting by the top fittings, the lifting forces shall be applied vertically from at least four (4) such fittings or by means which will safely do so without damage to the container, and using the lifting fittings provided.

The issue is based upon the interpretation of the phrase "or by means which will safely do so without damage to the container, and using the lifting fittings provided." The standard requires that the employer either apply vertical lifting forces when hoisting intermodal containers or use means which will safely hoist the containers without damage to the container, using the lifting fittings provided.

Oceanic was hoisting loaded containers from trucks on the dock with lifting gear that basically consisted of a four-legged bridle with the legs attached to a common point. The gear was a top lift sling (Exh. C-14; Tr. 71). There is no disagreement that loaded containers were lifted by Oceanic with forces that were other than vertical. Oceanic contends that the lifts made in this manner were safe. This assertion is refuted by the Secretary. Oceanic could have used 20-foot and 40-foot spreaders to hoist containers while discharging and loading the vessel *MV Katrine* (Exhs. C-20, C-21, C-22, C-23; Tr. 236-248). It owned 20-foot and 40-foot spreaders with twist locks which were stowed on its facilities (Exh. C-4; Tr. 56-58). The use of proper spreaders, along with ensuring that containers are lifted with vertical forces, would have reduced exposure to falls in excess of 8 feet since its

employees would no longer be hooking or unhooking the four-legged bridles at the corners of the containers (Tr. 236-250).

Oceanic contends that the Secretary's position on § 1917.71(f)(1)(i) is frivolous. It asserts that Villanova did not cite Oceanic for violating § 1917.71(f)(1)(i) because she did not believe that Oceanic's lifting operation violated that standard (Tr. 141). The Secretary moved to amend the citation to allege that the condition also violated § 1917.71(f)(1)(i). The amendment was granted on March 29, 1991. Oceanic contends that the Secretary has cited an inapplicable standard.

Villanova did not cite Oceanic under § 1917.71(f)(1)(i) because she believed that Oceanic's longshoring operation was covered by Part 1918, not Part 1917. Part 1917 governs "employment within a marine terminal," [§ 1917.1(a)], while Part 1918 applies to "longshoring operations," defined as "the loading, unloading, moving or handling of cargo, ship's stores, gear, etc., into, in, on, or out of any vessel on the navigable waters of the United States." § 1918.3(i). Villanova observed the discharging and loading of containers onto the vessel, but she thought the operation was covered by § 1918.85(c), which does not mention vertical lifts.

Oceanic argues that even if § 1917.71(f)(1)(i) did apply, the Secretary's position conflicts with the plain wording of that standard and is based on the language of a much more restrictive ISO standard which OSHA chose not to adopt as its final rule. The Secretary's primary theory on the § 1917.71(f)(1)(i) issue is that all non-vertical lifts of less than 90 degrees introduce an external compressive force on the top rail of a loaded container, which she contends is inherently unsafe and a violation of the standard.[8]

The Secretary states that "the work environment at a marine terminal exposes maritime employees to a greater risk of injury than is true for workers in most other industries." "Cargo handling operations represent some of the most dangerous activities in

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[8] As counsel for the Secretary stated:

> [I]t is the Secretary's contention that the containers were designed and tested only to be lifted with vertical forces when they were lifted and that lifting them in any other manner, such as the use of a four-legged bridle going into a common point exerts forces on the top rail greatly in excess of that (Tr. 413).

American industry." 48 F.R. 30887 (July 3, 1983). As the Secretary noted in the foreword of *OSHA Publication No. 2232*, Revised September, 1985:

> These standards apply to all marine terminals and longshoring operations within the jurisdiction of OSHA.
>
> > a. There is no geographical limitation to the maritime jurisdiction on-shore other than the limitation of the Act itself. Employees of employers performing maritime employment on the dock, pier, terminal, yard, shipyard, machine shop, river bank, etc., as well as on the vessels, are now covered by the maritime standards.
> >
> > b. Maritime standards that contain words or phrases such as: on board, on the vessel, on the wingwall of drydocks, cargo spaces, ship spaces, weather deck, etc., are not limited to apply only aboard the vessel or drydock. When the standard covers a particular similar hazard on shore, and the application of the standard does not change its meaning, it should be cited to cover the on-shore hazard. Naturally, certain standards will apply only on board the vessel because the hazard has no counterpart ashore.

The regulations are intended to make the marine terminal a safer place to work by covering all of the hazards with the available standards. It was not the intention to limit artificially the application of any particular standard.

The Secretary alleges that Oceanic operates a marine terminal (Tr. 33) within the meaning of § 1917.2(u), which handles intermodal containers within the meaning of § 1917.2(s). She argues that § 1917.71 applies without limitation to terminals handling intermodal containers. The cited subsection, § 1917.71(f)(1)(i), applies to the "hoisting" of such containers. The standard on its face has no express or implied limitation as to what type of hoisting equipment is covered or not covered.

The scope of Part 1917 is broadly stated at § 1917.1(a): "The regulations of this part apply to employment within a marine terminal as defined in § 1917.2(u), including the loading, unloading, movement or other handling of cargo, ships's stores or gear within the terminal . . . ." The Secretary submits that the vertical lift standard is applicable to the movement of intermodal containers with a shore-based crane. She states that the hoisting

of intermodal containers within a marine terminal is included within the scope of § 1917.71(f)(1)(i).

In the *Federal Register*, Volume 48, No. 129, July 5, 1982, Page 30886, *et seq.*, the Secretary provided the background of the promulgation of the Part 1917 regulations. The original longshoring regulations (now Part 1918) ". . . only covered activities taking place aboard vessels." Passage of the Occupational Safety and Health Act of 1970 and adoption of longshoring regulations as established Federal standards resulted in their being applied to shoreside cargo-handling operations. In addition, OSHA applied Part 1910 and § 5(a)(1) to shoreside activities not covered by Part 1918.

Part 1917 is tailored more specifically to the hazards of the marine terminal industry. Otherwise, its provisions parallel those of Part 1918. Part 1918 has provisions covering containerized cargo, § 1918.85, which are similar, yet less explicit than those in § 1917.71, *Terminals Handling Intermodal Containers*. For example, § 1918.85(c) provides in part that "all hoisting of containers shall be by means which will safely do so without probable damage to the container, and using the lifting fittings provided," while § 1917.71(f)(1) regulates in great detail the hosting of loaded intermodal containers of 20 feet (6.1 m) or more in length.

The maritime regulations "apply to employment within a marine terminal as defined in § 1917.2(u), including the loading, unloading, movement or other handling of cargo, ship's stores, or gear within the terminal . . . ." as stated in § 1917.1. The definition set forth in § 1917.2(u) states that:

> "Marine Terminal" means wharves, bulkheads, quays, piers, docks and other berthing locations and adjacent storage or contiguous areas and structures associated with the primary movements of cargo or materials from vessel to shore or shore to vessel including structures which are devoted to receiving, handling, holding, consolidation and loading or delivery of waterborne shipments and passengers, including areas devoted to the maintenance of the terminal or equipment . . . .

The preamble to § 1917.1, *Scope and Applicability*, published in the *Federal Register*, Volume 48, No. 129, July 5, 1983, Page 30891, states:

> The coverage of Part 1917 includes all shoreside activities within a marine terminal--except those which are specifically exempted in the standard, as outlined in greater detail below. In clarifying the boundary between Part 1917

> and Part 1918, OSHA's shipboard longshore regulations, the Agency has set the foot of the gangway to mark the limit to which Part 1918 may be applied landward. Similarly, Part 1917's jurisdiction extends out to the ship no further than this point of the gangway.

The marine terminal standards were intended, both by the language of the standard itself in § 1917.1 and by the language of the preamble published in the *Federal Register*, to apply at least to the edge of the dock.

Employees working on the dock under Oceanic's control and direction were attaching or removing the lifting gear that the Secretary alleges violated the vertical lift standard (Exhs. C-3, C-11, C-12, C-13, C-14; Tr. 88-92). Oceanic employees used the lifting gear to hoist the loaded containers off the trailers above the dock, and then swung the containers towards the vessel. During this process, the employees on the dock were exposed to the hazard of falling cargo. The alleged violations clearly occurred in an area within the scope of Part 1917.

The Secretary contends lifts made by Oceanic were inherently unsafe, as shown by the fact that her experts were aware of container damage while being lifted "by other means" than by vertical forces (Tr. 202-212). Oceanic experts were also aware of container failures. Ed Montz, Director of Safety for Continental, testified that one end of a flat rack being lifted with a top life sling recently broke at the Port of Miami (Tr. 603). McCrory knew of some container failures possibly due to prior damage (Tr. 693). Proper lifting is especially important since containers often are overloaded and often have damaged top side rails (Tr. 695).

The Secretary's expert, Vincent Grey,[9] testified that containers are designed, built and tested according to international standards established under the International Convention for Safe Containers, to which the United States is a party (Exh. C-30; Tr.

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[9] Grey has been involved with the development of containers and the standardization of the intermodal containers since the inception of the container industry. He was senior staff engineer with the American Standards Association, now the American National Standards Institute and helped devise the engineering standards for containers (Tr. 376-378). The Secretary's expert also worked as the executive vice-president and engineering manager for a trailer manufacturer for five years (Tr. 378-379). Grey was in charge of the cargo handling research and development of the Office of Advanced Ship Operations of the Federal Maritime Administration (Exh. C-27; Tr. 378).

406-407). Article III of the Convention requires that all new containers and all existing containers used in international transport be tested or type-tested according to the provisions of the treaty (Exh. C-30; Tr. 408-409).

Grey calculated the forces that would be applied to a container with the lifting gear used by Oceanic when working the vessel *MV Katrine*. He found the *static* loading of external compressive forces on the top side rail in the 40-foot container on the *Katrine* to be 19,669 pounds (Exh. C-42; Tr. 444-450). Grey calculated the *static* external compressive forces in the top side rail of a fully loaded 40-foot container to be 23,253 pounds (Exh. C-42; Tr. 450). Oceanic's expert, James McCrory, agreed entirely with Grey's calculations of the static external compressive forces in the top side rail (Tr. 652-653).

Grey testified that no (zero) external compressive forces should be placed on the top corner fittings and the top side rail when lifting loaded containers of more than 10 feet in length (Exhs. C-28, C-29, C-40; Tr. 403-405, 427, 450, 455). He emphasized that the designers did not intend, nor did they design or test for, loaded containers of 20 feet or more in length to be lifted with other than vertical forces (Tr. 486-487). He stated that only 10-foot containers were designed to be lifted with top lift slings, and the angle between the top of the container and the sling had at least 60 degrees of included angle (Tr. 459-460). His calculation of the angle between the legs of the bridle used by Oceanic and the top of the container to be only 35 degrees (Tr. 501).

Oceanic appears to have not undertaken an analysis of the lifting method. The safe working load of legs of the four-legged bridle was exceeded by the lift of a 40-foot container weighing 56,840 pounds, whereas the capacity of a 40-foot container is 67,200 pounds (Exhs. C-3, C-42; Tr. 423, 454). Oceanic expert Ed Montz stated that he would not have permitted such a lift (Tr. 630). McCrory believed that the concept "safe working load" included an allowance for the angle of the leg of the bridle. McCrory was mistaken. Section 1918.63, *Wire rope and wire rope slings*, and Tables G-3 and G-4 (Attachment "A") show that the safe working load of slings is substantially reduced when the angle of the sling approaches 30 degrees.

A publication of the International Organization for Standardization, ISO 3874, specifically addresses the safe handling and securing of loaded containers. The ISO clearly

considers the lifting of loaded 20-foot and 40-foot containers with top lift slings to be unsafe (Exh. C-41; Tr. 434, 459). It considers the safe method of lifting loaded 20-foot and 40-foot containers to be with a top lift spreader (Exh. C-41; Tr. 434, 459).

Grey believed it was not safe to lift loaded 20-foot and 40-foot containers with the four-legged bridle used by Oceanic (Tr. 456, 486-487). Oceanic's own 20-foot and 40-foot spreaders with twist locks can safely lift loaded 20-foot and 40-foot intermodal containers (Exh. C-4; Tr. 200-201). His opinion is supported in writing by the ISO (Exh. C-41). Montz agreed that the spreader was the safest way to hoist containers (Tr. 605). Oceanic's general superintendent, John Shapiro, testified that the 40-foot spreader was used to lift "weaker boxes" (Tr. 58).

McCrory testified that it was safe to lift 20-foot and 40-foot containers with the lifting gear stipulated by the parties to have been used by Oceanic. He based his opinion upon publications of the American Bureau of Shipping (ABS), Lloyd's Register of Shipping and the American National Standards Institute relating to the securing and lashing of containers (Exh. R-5; Tr. 657-663). McCrory believed that these organizations allowed up to 15 tons of external compressive force to be applied to the top side rails in hoisting loaded containers (Tr. 657-663). He conceded that none of the numbers he had obtained related to the lifting and handling of containers (Tr. 690-691). Grey testified that the ABS publication on lashing and securing of containers is not applicable to the lifting situations. The ABS approves lifts of loaded 20-foot and 40-foot containers from the top corner fittings only with forces applied vertically (Exh. C-45; Tr. 742-750).

Oceanic argues that the Secretary is relying on the ISO standard which is more stringent than the OSHA standard. Section 1917.71(f)(1)(i) permits an employer to use other than vertical forces if the means used will "safely" do so without damage to the container. Oceanic is correct in its opinion that the OSHA standard does not prohibit non-vertical lifts, but it is mistaken as to the fact to which the proof of the Secretary is directed. Since non-vertical lifts were made, as stipulated by the parties, the Secretary's proof was directed toward establishing that such lifts could not be made safely.

While there is some dispute as to the safety of non-vertical lifts, the preponderance of the evidence supports the Secretary's conclusion that it is not safe to lift in such a manner.

This conclusion is supported by Grey, Signorino, and mathematical computations. It is also supported by the ISO and the ANSI standards.

While McCrory testified that he had observed at least 1,000 non-vertical lifts over the years and not a single one resulted in a damaged container (Tr. 87), there is contra testimony by Signorino that the non-vertical lift was unsafe and that he had seen a container rupture and had seen other containers after failure (Tr. 196-214).

The violation is affirmed. It is considered a serious violation since employees would be subject to falling freight or other objects stowed on the vessel.

The Secretary proposed a penalty of $540 for the violations of §§ 1918.32(b) and 1917.71(f)(1)(i). The two allegations were combined for purposes of the proposed penalty. The parties stipulated that the $540 penalty proposed by the Secretary was reasonable and acceptable if the violations were affirmed (Tr. 7). Since only one of the allegations has been affirmed, a penalty of $300 is assessed for the violation.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The findings of fact and conclusions of law are incorporated herein in accordance with Rule 52(a) of the Federal Rules of Civil Procedure.

ORDER

Based on the foregoing decision, it is

ORDERED: (1) That the alleged violation of § 1918.32(b) and the proposed penalty are vacated; and

(2) That the alleged violations of § 1917.71(f)(1)(i) are affirmed and a penalty of $300 is assessed.

James D. Burroughs

JAMES D. BURROUGHS
Judge

Date: December 23, 1992