AIR & LIQUID SYSTEMS CORPORATION V. DEVRIES: BARELY AFLOAT

ABSTRACT

A fundamental principle of products liability law tells us that manufacturers are only responsible for warning of the risk of harm posed by the use of their own products. A manufacturer is not responsible for warning of risk when a third-party adds a dangerous component to an otherwise harmless—or already adequately warned—product. Such a position furthers the policy interests of manufacturers. Manufacturers should not have to bear the costs of monitoring numerous, unpredictable downstream uses of—or modifications to—their products. To require manufacturers to warn of such risks would be contrary to a fundamental economic principle of tort law: liability should be assigned such that the costs of preventing harm, and the costs of compensating for actual harms, are assigned in a way that reduces the economic burden.

In Air & Liquid Systems Corporation v. DeVries, the Supreme Court held that, in maritime law, a bare-metal manufacturer has a duty to warn of harms its equipment might cause when a third-party later adds a harmful component—such as asbestos insulation—to a product with otherwise adequate warnings. In reaching this holding, the Court developed a new three-part rule, which required that: (1) a manufacturer's product is functionally dependent on incorporation of a component part; (2) a manufacturer knows or has reason to know that the final, integrated product is likely dangerous; and (3) a manufacturer has no reason to believe that the integrated products' users will know that it is dangerous. Fundamental to the Court's calculus were the facts that the harmed parties were enlisted in the U.S. Navy, and that maritime law has, for a long time, provided a special solicitude for sailors. This Comment argues that there are three reasons why the Court was wrong in finding that manufacturers of otherwise adequately warned products have a duty to warn of harms caused by later added components. First, the Court overapplied the special solicitude for sailors doctrine. Second, that defaulting liability to a solvent manufacturer is inconsistent with common law tort principles. And third, that a baremetal manufacturer should have no duty to warn when an organization, such as the U.S. Navy, voluntarily adopts other means, such as training, to mitigate the risk of harm to users of a product to which it adds a harmful component. The consequence of the Court's decision is an expansion of liability for failure to warn for cases sounding in maritime law, an expansion which could now more easily spread into nonmaritime contexts.

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INTRODUCTION

In some markets there is tolerance for expanded manufacturer liability. Some markets—notably those using or producing asbestos—have become so heavily parasitized, however, that they cannot support new bases for product liability that promotes plaintiffs discerning and pursuing novel types of defendant. The U.S. Supreme Court's decision in *Air & Liquid*

^{1.} For example, cigarette manufacturers have largely tolerated even massive damages settlements despite making harmful products that lacked warnings and have no safe use. *See, e.g.*, Bullock v. Philip Morris USA, Inc., 71 Cal. Rptr. 3d 775, 788 (Cal. Ct. App. 2008); R.J. Reynolds Tobacco Co. v. Robinson, 216 So. 3d 674, 680 (Fla. Dist. Ct. App. 2017); Engle v. RJ Reynolds Tobacco, No. 94-08273 CA-22, 2000 WL 33534572, at *8 (Fla. Cir. Ct. Nov. 6, 2000).

^{2.} Mark A. Behrens & Margaret Horn, Liability for Asbestos-Containing Connected or Replacement Parts Made by Third Parties: Courts are Properly Rejecting this Form of Guilt by Association, 37 Am. J. TRIAL ADVOC. 489, 491 (2014).

Systems Corporation v. DeVries³ makes manufacturers of harmless products liable in the maritime tort context when a third-party adds a component to their product, which results in the integrated product being harmful.⁴ The Court's new standard makes already vulnerable manufacturers, in an already attenuated market, even more susceptible to plaintiffs eagerly searching for the last-standing solvent defendant.⁵

Liability for harms caused by a defective product can typically arise in one of three ways. First, strict liability ensues when a product contains a manufacturing defect that is a departure from the intended design. Second, liability in negligence results from a defective design when a reasonably foreseen alternative design would have mitigated or eliminated the risk of harm. Third, liability in negligence arises when a product lacks warnings that would have reduced the foreseeable risks of harm associated with using the product. Ideally, all products placed into the stream of commerce by manufacturers would not harm the end user; however, not all products can meet such a bohemian standard.

Traditionally, a manufacturer of a product is not liable for harm caused by a second incorporated product, such as a component. For example, a manufacturer of a boiler would not be liable for an injury caused by a buyer's later addition of a hazardous, but necessary, component—such as asbestos insulation—to the boiler. Products entering the stream of commerce in a functional condition, except for the addition of a necessary component such as asbestos, are said to be in a bare-metal state. Manufacturers claiming that they are not liable for harms done by a later added component to their bare-metal products are so-called bare-metal defendants. 4

To hold bare-metal defendants liable for harms caused by another manufacturer's later added component is inconsistent with a primary goal of the economics of tort law: liability should be allocated such that both the cost of preventing harm and the cost of any actual harm are minimized.¹⁵ A growing body of litigation, however, seeks to create liability in

- 3. 139 S. Ct. 986 (2019).
- 4. Id. at 991.
- 5. *Id.* at 993–94.
- 6. RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 2 (AM. LAW INST. 1998).
- 7. Strict liability promotes investment in product safety; distributes investment costs across the market by reducing tolerance of defective products; and reduces the transaction costs of having to find fault by the manufacturer during the production process. *Id.* § 2 cmt. a.
 - 8. Id. § 2(a).
 - 9. Id. § 2(b).
 - 10. Id. § 2(c).
 - 11. Id. § 2 (quoting Reeves v. Cincinnati, Inc., 439 N.W.2d 326, 329 (Mich. Ct. App. 1989)).
 - 12. Id. (citing Faddish v. Buffalo Pumps, 881 F. Supp. 2d 1361, 1373 (S.D. Fla. 2012)).
- 13. See id.; see also Behrens & Horn, supra note 2, at 491–92 (defining bare-metal products in the context of uninsulated products requiring later added asbestos-containing insulation).
- 14. See Michael Drahos et al., Danger Ahead: The Changing Face of Failure to Warn Claims, 33 TRIAL ADVOC. Q. 28, 32–33 (2014); see also Behrens & Horn, supra note 2, at 492.
- 15. Guido Calabresi, The Costs of Accidents: A Legal and Economic Analysis 312 (1970).

a product manufacturer when there is a foreseeable incorporation of a third-party component into the manufacturer's product, and a harm results from the incorporated component due to the normal operation of the product. ¹⁶

This Comment suggests how Justice Gorsuch's dissenting opinion in Air & Liquid Systems Corp. could be supplemented to provide a stronger defense against a claim of a failure to warn in the context of maritime products liability. Part I of this Comment outlines the approaches of the Third and Sixth Circuit Court of Appeals to decide whether there is a duty to warn when a component is added to a manufacturer's bare-metal product by a third-party, and that addition results in a dangerous integrated product. Part II of the Comment summarizes the arguments of the majority and dissenting opinions in Air & Liquid System Corp. Part III makes three arguments that supplement the rationale proposed by Justice Gorsuch in his dissent: (1) that the Court over-relied on the special solicitude afforded to sailors; (2) that the Court's willingness to default liability to solvent defendants is inconsistent with common law tort law principles; and, (3) that the Navy's decision to provide training and education for service members, in lieu of allowing manufacturers of bare-metal products to provide product warnings, should not create a concurrent duty to warn¹⁷ in bare-metal defendants. This Comment concludes that the Court reached the wrong result because of an overreliance on the special solicitude afforded sailors and an expansion of liability contrary to the policies that tort law exists to further.

I. BACKGROUND

Asbestos is a group of six naturally occurring toxic minerals.¹⁸ The six minerals can be subclassified into two groups: the amphibole forms and the serpentine forms;¹⁹ all forms of asbestos are carcinogenic.²⁰ Asbestos is nonflammable, an effective thermal and electrical insulator, and resists degradation when subject to repetitive, abrasive forces.²¹ The Industrial Revolution created a demand for materials with properties like those of asbestos, and asbestos miners, processors, and manufacturers

^{16.} Id.

^{17.} A duty to warn is "[t]he obligation to notify a person about a known hazard or a known threat presented by another person." *Duty to Warn*, BLACK'S LAW DICTIONARY (11th ed. 2019).

^{18.} Miles O'Brien, *The Stunning Truth About Asbestos Use in the U.S.*, PBS (Mar. 13, 2019, 6:30 PM), https://www.pbs.org/newshour/show/decades-after-proof-of-its-carcinogenic-properties-asbestos-still-surrounds-us.

^{19.} Serpentine asbestos fibers are curved and loosely packed into fibrous sheets while amphibole fibers are needle shaped. Both are carcinogenic; however, the amphibole form requires substantially lower exposures to cause disease. *Types of Asbestos That Can Cause Asbestos Disease*, PENN MED., https://www.pennmedicine.org/cancer/types-of-cancer/mesothelioma/asbestos-cancer/types-of-asbestos (last visited Mar. 26, 2020).

^{20.} Id

^{21.} Asbestos Composition, MESOWATCH, https://mesowatch.com/asbestos/composition/ (last visited Mar. 20, 2020).

quickly realized the commercial potential of the minerals.²² For a number of years asbestos was used widely and without concern as its commercial, industrial, military, and residential applications expanded globally.²³

The health risks associated with inhaling asbestos have been known for a long time.²⁴ Circumstantial evidence suggests that even the slaves of nobles of the Roman Empire had inklings of the dangers of asbestos exposure after suffering severe coughing and early deaths associated with weaving asbestos napkins; the nobles would throw the napkins into their fires and pull them out whole as a way to regale guests.²⁵ Direct evidence of the risk of asbestos exposure became apparent as early as the nineteenth century.²⁶ By the 1960s, clinical oncologists were well on their way to showing a causal relationship between asbestos exposure and pleural mesothelioma.²⁷ Asbestos is now a well-established cause of mesothelioma.²⁸

Mesothelioma is a cancer affecting the thin cellular membranes that cover the outer surface of most organs;²⁹ the pleura are those membranes that cover the outer surface of the lungs.³⁰ Eighty percent of the diagnosed cases of pleural mesothelioma are due to asbestos exposure.³¹ The epidemiology of asbestos-induced mesothelioma is complex due to the insidious nature of the disease and the range of asbestos forms to which people are exposed. Forty-five years after the initial exposure, the estimated cumulative risk of disease³² is in the range of 1%–10%.³³ It is unclear whether a single incidence of exposure is adequate to trigger carcinogenesis; however, it is widely accepted that disease risk increases with

- 23. *Id*.
- 24. Id.

^{22.} Daniel King, *History of Asbestos*, ASBESTOS.COM, https://www.asbestos.com/asbestos/history/ (last updated Feb. 3, 2020).

^{25.} Steve Korris, A Lesson in History: Founder of Bankrupt Johns Manville Died of Asbestos-Related Illness, MADISON—ST. CLAIR REC. (June 17, 2005), https://madisonrecord.com/stories/510559967-a-lesson-in-history-founder-of-bankrupt-johns-manville-died-of-asbestos-related-illness.

^{26.} Joey Rosenberg, Asbestos Cover-Up, ASBESTOS.COM, https://www.asbestos.com/featured-stories/cover-up/ (last visited Mar. 26, 2020).

^{27.} J.C. Wagner et al., Diffuse Pleural Mesothelioma and Asbestos Exposure in the North Western Cape Province, 17 BRIT. J. INDUS. MED. 260, 260 (1960).

^{28.} Brooke T. Mossman & J. Bernard L. Gee, *Asbestos-Related Diseases*, 320 New Eng. J. Med. 1721, 1723 (1989).

^{29.} What is Malignant Mesothelioma?, AM. CANCER SOC'Y, https://www.cancer.org/cancer/malignant-mesothelioma/about/malignant-mesothelioma.html (last updated Nov. 16, 2018).

^{30.} KENNETH MASON ET AL, UNDERSTANDING BIOLOGY 802 (2d ed. 2018).

^{31.} What Causes Malignant Mesothelioma?, AM. CANCER SOC'Y, https://www.cancer.org/cancer/malignant-mesothelioma/causes-risks-prevention/what-causes.html (last updated Nov. 16, 2018).

^{32.} Cumulative risk refers to the likelihood that there will be an episode of disease in an otherwise disease-free individual in a given time period. For example, if the cumulative risk of a disease in a forty-five year time period is 5%, then 1 in 20 people will get that disease. See NCI Dictionary of Cancer Terms, NAT'L CANCER INST., https://www.cancer.gov/publications/dictionaries/cancerterms/def/cumulative-risk (last visited Mar. 26, 2020).

^{33.} See, e.g., Bengt Järvholm & Evelina Åström, The Risk of Lung Cancer After Cessation of Asbestos Exposure in Construction Workers Using Pleural Malignant Mesothelioma as a Marker of Exposure, 56. J. OCCUPATIONAL. ENVTL. MED. 1297, 1299 tbl.2 (2014); Karen Selby, Mesothelioma Statistics, ASBESTOS.COM, https://www.asbestos.com/mesothelioma/statistics/ (last updated Mar. 6, 2020).

duration of exposure—the greatest risk being associated with chronic exposure.³⁴ The widespread suppression of the risks of asbestos exposure by the asbestos industry substantially delayed litigation by harmed parties.³⁵ Once the risks associated with asbestos exposure surfaced and harms began to manifest in those occupationally exposed to the material, litigation blossomed against asbestos manufacturers and those using asbestos in their products.³⁶

When the risks of asbestos exposure were revealed, litigation most dramatically and immediately harmed the thermal insulation industry.³⁷ Between 2000 and 2002, twenty-nine asbestos manufacturers entered bankruptcy proceedings. ³⁸ Bankruptcy rates for asbestos manufacturers increased nearly thirteen-fold from an average of 0.75 over a prior twentyyear period to 9.7 over a subsequent three-year period.³⁹ During this time, plaintiffs' lawyers attempted to expand the scope of liability for their client's injuries by fashioning novel theories of liability. 40 Once there were no solvent asbestos-manufacturing defendants as targets for litigation, plaintiffs began targeting defendants more tangentially involved with asbestos-based products. 41 Plaintiffs' attorneys initially attempted to create liability using principles developed outside of the asbestos-litigation space; courts, however, were reluctant to entertain these novel theories and generally abjured the attempts.⁴² Instead, courts consistently applied the fundamental tort law rule that one product manufacturer cannot and should not be held liable for the harms caused by another's product.⁴³ There remained, however, an abundance of novel attempts to find new defendants sufficiently solvent to pay. 44 Most notable of these attempts were those alleging a third-party duty to warn.⁴⁵

^{34.} Asbestos Exposure and Cancer Risk, NAT'L CANCER INST., https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet (last visited Mar. 26, 2020).

^{35.} See Rosenberg, supra note 26.

^{36.} Victor E. Schwartz & Mark A. Behrens, Asbestos Litigation: The "Endless Search for a Solvent Bystander", 23 WIDENER L.J. 59, 59-60 (2013).

^{37.} Behrens & Horn, *supra* note 2, at 490–91.

^{38.} Schwartz & Behrens, supra note 36, at 60 n.8.

^{39.} Id.

^{40.} *Id.* at 69–94 (discussing novel theories of liability used in litigation).

^{41.} Id. at 69-70.

^{42.} *Id.* at 62–69 (describing plaintiff's attempts to use market share liability, enterprise liability, and alternative cause theories to impart liability to defendants based on the association of their products with asbestos components).

^{43.} See, e.g., Powell v. Standard Brands Paint Co., 212 Cal. Rptr. 395, 398 (Cal. Ct. App. 1985); Firestone Steel Prods. Co. v. Barajas, 927 S.W.2d 608, 614 (Tex. 1996); see also In re Darvocet, Darvon, & Propoxyphene Prods. Liab. Litig., 756 F.3d 917, 938 (6th Cir. 2014) (articulating that a limiting requirement for liability is that the plaintiff assert that the defendant's product caused a harm).

^{44.} Schwartz & Behrens, *supra* note 36, at 69–87 (describing the "any-exposure" theory of causation, postulating that any level of exposure to carcinogenic asbestos is adequate for liability to form, and the take-home exposure theory positing that asbestos on the clothing of a worker can be the cause of harms to others in the same home).

^{45.} See, e.g., O'Neil v. Crane Co., 266 P.3d 987, 991 (Cal. 2012).

Liability for failure to fulfill a third-party duty to warn arises in two ways. ⁴⁶ First, a seller provides a defective component that, when integrated into another product, results in a harm. ⁴⁷ Second, and more commonly, a seller of a component "substantially participates in the integration of [a] component into [a] design of [a] product; and . . . the integration . . . causes the [integrated] product to be defective . . . and . . . the defect . . . causes harm." ⁴⁸ Neither the seller nor the manufacturer of a product is liable when a nondefective component is integrated ex post facto; to create liability in such a way would be "unjust and inefficient."

A. Numerous Courts, Including the Court of Appeals for the Sixth Circuit, Apply the Bare-Metal Rule

Numerous courts have applied the approach of the Restatement (Third) of Torts, which rejects third-party duty to warn as a basis for finding a defendant who manufactured a harmless product liable when a third-party is responsible for integrating the component that created a dangerous final product. For example, in *Faddish v. Buffalo Pumps* the defendant manufactured equipment that was subsequently installed on the U.S.S. Essex. The plaintiff, who worked with and maintained the installed equipment, was exposed to asbestos, and subsequently developed mesothelioma of which he consequently died. The defendant equipment was supplied to the Navy in a "bare iron" state, and any exposure of the plaintiff to asbestos was due to the asbestos being added to the bare iron equipment by the Navy per their specifications. The court concluded that "a manufacturer's duty to warn... generally does not extend to hazards arising exclusively from [an]other manufacturer's products." Further, the court dismissed the notion that liability depends on the defendant's foresight that

^{46.} See Union Carbide Corp. v. Aubin, No. 3D10-1982, 2012 Fla. App. LEXIS 9848, at *16–17 (citing RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 (AM. LAW INST. 1998)).

^{47.} Id.

^{48.} Id. at *17.

^{49.} RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 cmt. a.

^{50.} Schwartz & Behrens, *supra* note 36, at 88–91 (listing courts that have rejected the third-party duty to warn claim: the Supreme Courts of California and Washington, appellate courts in Maryland, Massachusetts, New York, and Pennsylvania, state trial courts in Connecticut, Delaware, Maine, Minnesota and New Jersey, and several federal courts, including those operating under maritime jurisdiction).

^{51. 881} F. Supp. 2d 1361 (S.D. Fla. 2012).

^{52.} Id. at 1363-64.

^{53.} Mr. Faddish was a fireman's apprentice and then a fireman aboard the USS Essex from 1958–1961. Faddish's work involved wiping dust from the surface of equipment and pipes, performing maintenance on turbines externally insulated with asbestos-based insulation, and repacking and replacing asbestos-based gaskets on the turbine's pumps. Faddish's work exposed him to asbestos dust. By the time Faddish boarded the U.S.S. Essex in 1958, any insulation that had been supplied with the bare iron equipment from defendant-manufacturers had been replaced many times over based on undisputed Naval specifications. *Id.* at 1365.

^{54.} Id.

^{55.} i.e., without insulation. Id.

^{56.} *Ia*

^{57.} Id. at 1371 (emphasis omitted).

a dangerous component, such as cancer-causing asbestos, would be integrated into their safe product, thus rendering it dangerous.⁵⁸

The manufacturer of a product to which another adds a harmful component is not liable for the harms that result from the use of the integrated product.⁵⁹ The rationale to not find liability in response to a third-party duty to warn claim is rooted in the bare-metal rule, 60 presumably due to the bare iron language of the *Faddish* court.⁶¹ The bare-metal rule protects a manufacturer when it fails to warn about harms that might arise when its bare-metal products are modified by another party to create a harmful, integrated product. 62 For example, in O'Neil v. Crane Company 63 a manufacturer supplied machinery to the Navy, which later added asbestos containing external insulation and gaskets to the equipment. 64 A veteran was exposed to asbestos released from the added components; he developed mesothelioma, and consequently died. 65 The O'Neil court concluded that the manufacturer was not liable to the veteran's widow in strict liability or in negligence. 66 The court reasoned that liability for injuries caused by one product has never extended to a defendant-manufacturer when that manufacturer's product is not defective. ⁶⁷ Furthermore, liability does not follow when the defendant has not contributed substantially to the creation of a dangerous integrated product. ⁶⁸ At trial, the plaintiff argued that the use of asbestos in the equipment was foreseeable; therefore, defendants should be liable for the harms caused by the integrated product. ⁶⁹ The bare-metal rule, however, does not require foreseeability of a harm. Skeptical of the plaintiff's argument, the trial court evoked the "component parts doctrine"⁷⁰ and found for the defendant-manufacturers. ⁷¹

Despite a contrary ruling by the California Court of Appeals, the defendant-manufacturers ultimately prevailed when the California Supreme Court refused to expand liability in strict liability or negligence by recognizing that social policies must limit tort liability—even for foreseeable injury. Foreseeability, while required, is alone insufficient for liability in

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58. Id.
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^{59.} RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 cmt. a (Am. LAW INST. 1998).

^{60.} Defendants that rely on the application of the bare-metal rule to avoid liability are called bare-metal defendants.

^{61.} See Drahos et al. supra note 14.

^{62.} O'Neil v. Crane Co., 266 P.3d 987, 991 (Cal. 2012).

^{63. 266} P.3d 987 (Cal. 2012).

^{64.} Id. at 991-94.

^{65.} Id. at 993.

^{66.} Id. at 1006-07.

^{67.} Id.

^{68.} *Id*.

^{69.} Id. at 993-94.

^{70.} The component parts doctrine protects defendants when their products are integrated into a large, sophisticated system such as would be done when the Navy integrates a boiler into a steam producing system on a ship. RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 (AM. LAW INST. 1998); see also Davis v. Komatsu Am. Indus. Corp., 42 S.W.3d 34, 38 (Tenn. 2001) (gathering cases adopting the Restatement component parts doctrine standard).

^{71.} O'Neil, 266 P.3d at 994.

^{72.} Id. at 1007.

negligence; rather, a consideration of policy is also relevant to establishing duty, an essential element of a prima facie claim in negligence. In *O'Neil*, the California Supreme Court was unmoved by the California Court of Appeals' reasoning that the manufacturer's products were defective due to their "required asbestos packing and insulation," which created a duty to warn that was not provided by the manufacturer. Rather, the California Supreme Court concluded that the requirement for the use of the asbestos was a demand of the Navy's specifications, not of the manufacturer's, and that, therefore, no duty to warn arose in the manufacturer.

B. The Third Circuit Court of Appeals Creates a Split of Opinion by Refusing to Apply the Bright-Line Bare-Metal Rule

The bare-metal rule effectively protected bare-metal defendants through 2017. In 2005, the reasoning and holdings in O'Neil and in Faddish were reinforced in Lindstrom v. A-C Products Liability Trust. 76 In 2017 the bare-metal defense was again successfully used in In re Asbestos Products Liability Litigation. 77 In that case, the defendants were a group of manufacturers producing and supplying bare-metal equipment for the Navy; the Navy later added asbestos-containing components that allegedly caused mesothelioma in two former servicemen: Kenneth McAfee and John DeVries. 78 The plaintiffs' appeal muddied the waters regarding the applicability of the bare-metal defense, however. On appeal, the U.S. Court of Appeals for the Third Circuit decided on a contextual, fact-based standard that permitted liability of bare-metal defendants for failure of duty to warn if there was foreseeable risk of harm from a product to which asbestos had been added by a third-party. 79 This standard was similar in nature to the standard adopted by the courts in Chesher v. 3M Co. 80 and in Quirin v. Lorillard Tobacco Co. (hereinafter referred to as the Quirin rule).81

In its analysis, the Third Circuit weighed the benefits of a standards-based approach against the benefits of the bright-line, "no liability" baremetal rule that was applied by numerous courts. 82 The Third Circuit considered four elements in their analysis. First, maritime law is "deeply concerned with the protection of sailors, due to a historic and 'special solicitude for the welfare of those men who undertook to venture upon . . . sea

^{73.} Parsons v. Crown Disposal Co., 936 P.2d 70, 82 (Cal. 1997); Zimmermann v. Netemeyer, 462 N.E.2d 502, 508 (Ill. App. Ct. 1984); *see also* William L. Prosser, *Palsgraf Revisited*, 52 MICH. L. REV. 1, 15 (1953) (describing the interplay of factors in determinations of duty including "the hand of history, our ideas of morals and justice, the convenience of administration of the rule, and our social ideas as to where the loss should fall.").

^{74.} O'Neil, 266 P.3d at 994.

^{75.} Id. at 994, 1007.

^{76. 424} F.3d 488, 492, 498 (6th Cir. 2005).

^{77. 873} F.3d 232, 234 (3d Cir. 2017).

^{78.} *Id*

^{79.} Id. at 240.

^{80. 234} F. Supp. 3d 693, 697–98, 713–14 (D.S.C. 2017).

^{81. 17} F. Supp. 3d 760, 769–70 (N.D. Ill. 2014).

^{82.} In re Asbestos Prods. Liab. Litig., 873 F.3d at 236–38.

voyages."*⁸³ Second, maritime law favors "traditions of simplicity and practicality."⁸⁴ Third, maritime law is ultimately concerned with "the protection of maritime commerce."⁸⁵ Fourth, maritime law prefers consistent "rules to govern conduct and liability."⁸⁶ The court indicated that the third and fourth elements are largely irrelevant.⁸⁷ While this might be true of the third element, it is unclear why this is true of the fourth element given that the precedential value of using clear and easily interpreted rules over contextual, multifactorial standards that the court acknowledged are inherently less efficient and unpredictable than are bright-line rules.⁸⁸ Ultimately, the court discarded three of its four elements, finding repose in the special solicitude afforded to sailors so that it might "permit a greater number of deserving sailors to receive compensation."⁸⁹

The Third Circuit's holding in *In re Asbestos Products Liability Litigation* created a split of opinion regarding the use of the bare-metal defense. In *Lindstrom*, the Sixth Circuit applied the bare-metal rule to protect manufacturers from liability when their harmless product was made dangerous by the addition of a component by a third-party, ⁹⁰ while in *In re Asbestos Products Liability Litigation* the Third Circuit applied the *Quirin* rule to find liability in the same situation. ⁹¹ Given their defeat in the Third Circuit, and the split of opinion, the defendant-manufacturer Air and Liquid Systems Corporation appealed to the U.S. Supreme Court. ⁹² The Court subsequently resolved the question of the availability of the bare-metal defense by creating and applying a novel standard that renders the bare-metal defense moot in the maritime context. ⁹³

II. AIR & LIQUID SYSTEMS CORPORATION V. DEVRIES

A. Facts

Kenneth McAfee and John DeVries served aboard Navy ships 1977–1986 and 1982–1986, respectively. Air & Liquid Systems Corporation (the Manufacturer) provided the Navy with equipment—such as boilers, pumps, and turbines—in a bare-metal state for installation on Navy ships decades before McAfee and DeVries suffered any harm. The Navy added asbestos-containing insulation to the equipment provided by the Manufacturer, and service members replaced the insulation as needed over the

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83. Id. at 238 (quoting Moragne v. States Marine Lines, Inc., 398 U.S. 375, 387 (1970)).
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 $^{84.\ \ \}emph{Id.}$ at 239 (quoting Kermarec v. Compagnie Generale Transatlantique, 358 U.S. 625, 631 (1959)).

^{85.} Id. (quoting Exxon Corp. v. Cent. Gulf Lines, Inc., 500 U.S. 603, 608 (1991)).

^{86.} Id. (quoting Foremost Ins. Co. v. Richardson, 457 U.S. 668, 674-75 (1982)).

^{87.} Id. at 239-40.

^{88.} Id. at 238.

^{89.} Id. at 239.

^{90.} Lindstrom v. A-C Prod. Liab. Tr., 424 F.3d 488, 495 (6th Cir. 2005).

^{91.} In re Asbestos Prods. Liab. Litig., 873 F.3d at 240.

^{92.} Air & Liquid Sys. Corp. v DeVries, 139 S. Ct. 986, 991 (2019).

^{93.} Id. at 996.

^{94.} Id. at 991.

^{95.} *Id*.

course of their service. ⁹⁶ Carcinogenic particulate asbestos ⁹⁷ can be released by asbestos-containing equipment when the equipment is operated as intended by the manufacturer. ⁹⁸ During their service with the Navy, McAfee and DeVries were exposed to asbestos released from the routine operation of the equipment. ⁹⁹ After their service, McAfee and DeVries developed mesothelioma; consequently, both tragically succumbed to their diseases. ¹⁰⁰ The bare-metal equipment supplied to the Navy by the Manufacturer bore no warning regarding the dangers of the asbestos that was subsequently added by the Navy pursuant to their needs and specifications. ¹⁰¹

B. Procedural History

108.

109. 110. Id.

Plaintiffs McAfee and DeVries sued the Manufacturer in Pennsylvania state court for damages regarding their asbestos-induced cancers in strict liability and negligence. The case was removed to the Eastern District of Pennsylvania by the Manufacturer; the Manufacturer prevailed when the court applied the bare-metal rule. McAfee and DeVries succumbed to their cancers during the course of litigation and, subsequently, their widows sought review at the Court of Appeals for the Third Circuit. The case was summarily remanded for review of the negligence claim and for consideration of a circuit split in opinion regarding the availability of the bare-metal defense. The Manufacturer in Pennsylvania state of the Eastern District of Pennsylvania by the Eastern District of Pennsylvania by the Manufacturer; Tagically, McAfee and DeVries succumbed to their cancers during the course of litigation and, subsequently, their widows the subsequently remanded for review of the negligence claim and for consideration of a circuit split in opinion regarding the availability of the bare-metal defense.

On remand the district court clarified its application of the bare-metal rule and that its previous judgment applied to the plaintiffs' strict liability and negligence claims. McAfee and DeVries again appealed to the Court of Appeals for the Third Circuit, which reviewed the issue of the availability of the bare-metal defense de novo; 109 the court entered judgment in favor of McAfee and DeVries. The Manufacturer successfully petitioned the U.S. Supreme Court for a grant of certiorari to resolve the

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96.
         Id.
   97.
         Asbestos Exposure and Cancer Risk, supra note 34.
   98.
          DeVries, 139 S. Ct. at 991.
        Id. at 991–92.
  100. Id. at 991.
  101.
         Id. at 992.
  102.
         In re Asbestos Prods. Liab. Litig., 873 F.3d 232, 234 (3d Cir. 2017).
  103.
  104.
          Widows McAfee and DeVries are hereafter referred to as McAfee and DeVries, unless dis-
  105.
tinction is required between the original plaintiffs Kenneth McAfee and John DeVries and their wid-
  106.
         In re Asbestos Prods. Liab. Litig., 873 F.3d at 234–35.
  107.
         Id. at 235.
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^{110.} *Id.* at 241.
111. Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986, 991 (2019) (describing how in maritime tort cases the Supreme Court of the United States acts as discretionary court of last appeal and acts in its role as a common law court).

differing standards for third-party duty to warn as applied by the Third and Sixth Circuit Courts of Appeals. 112

C. Opinion of the Court

Justice Kavanaugh authored the majority opinion and was joined by Chief Justice Roberts, and Justices Ginsburg, Breyer, Sotomayor, and Kagan. The Court affirmed the judgment of the Third Circuit, requiring the district court to reevaluate its summary judgment for the Manufacturer.

The Court evaluated three different approaches, used by federal and state courts, to address the question of whether a manufacturer bears the burden of warning users of dangers posed from use of its bare-metal product when that product requires subsequent incorporation of a third-party component such that the integrated product poses a risk of harm. The first approach considered by the Court applies the *Quirin* rule as adopted by the Third Circuit. The Third Circuit's approach allows for manufacturer liability when it is foreseeable that the equipment could be used with a third-party component even if that integration is not necessary for the intended purpose of the equipment. The Court rejected the use of this rule for two reasons: (1) it would be unjust to impose liability upon a manufacturer merely for its lack of imagination in predicting all potential uses of its equipment and integrations of third-party components, and (2) such a rule dilutes the gravity of notice due to overwarning.

The second approach considered by the Court applies the bare-metal rule adopted by the Sixth Circuit¹¹⁹ and two U.S. District Courts.¹²⁰ Therein, a manufacturer is not liable for harms caused by its equipment when a component—that the manufacturer did not make, distribute, or sell—gets integrated into its equipment. This is true even if the intended purpose of the equipment necessitates the incorporation of the component, and the manufacturer knows that component to be dangerous.¹²¹ The Court was not persuaded by the manufacturer's argument that it has no duty to interfere with the actions of a third-party—in this case the Navy—to prevent harm being done to others.¹²² Rather, the Court concluded that there is no good reason to distinguish between a situation where a

^{112.} *Id.* at 993 (The rule applied by the Third Circuit is effectively the *Quirin* rule: a manufacturer is liable "when it [is] foreseeable that the manufacturer's product [will] be used with another product or part, even if the manufacturer's product [would] not require use or incorporation of that other product or part." The rule applied by the Sixth Circuit is the bare-metal rule).

^{113.} Id. at 991.

^{114.} Id. at 996.

^{115.} *Id.* at 993.

^{116.} Id.

^{117.} Id. (citing e.g. In re Asbestos Prods. Liab. Litig., 873 F.3d 232, 240 (3d Cir. 2017).

^{118.} Id. at 994.

^{119.} Lindstrom v. A-C Prod. Liab. Tr., 424 F.3d 488, 492 (6th Cir. 2005).

^{120.} Evans v. CBS Corp., 230 F. Supp. 3d 397, 403–05 (D. Del. 2017); Cabasug v. Crane Co., 989 F. Supp. 2d 1027, 1041 (D. Haw. 2013).

^{121.} DeVries, 139 S. Ct. at 993 (citing Lindstrom, 424 F.3d at 492, 495–97; Evans, 230 F. Supp. 3d at 403–05; Cabasug, 989 F. Supp. 2d at 1041).

^{122.} *Id.* at 993–94.

manufacturer's product is dangerous "in and of itself" and a situation where a manufacturer's product is dangerous by virtue of the required incorporation of a dangerous component such that the equipment operates as intended. ¹²³ The Court effectively rejected the Sixth Circuit's interpretation of the bare-metal defense in the maritime context. ¹²⁴

The third approach considered by the Court applies a modified form of the Third Circuit's *Quirin* rule. 125 The Third Circuit's approach of applying the *Quirin* rule only results in liability for a manufacturer that foresees integration of a dangerous component into its bare-metal product. 126 This modified *Quirin* rule considered by the Court only finds liability, however, in a manufacturer of a bare-metal product when functionality of the bare-metal product necessitates the integration of a dangerous component, yielding a harmful integrated product. 127 This approach limits the reach of the original *Quirin* rule adopted by the Third Circuit by making foreseeability of harm alone insufficient to create liability for failure of a duty to warn. 128

After considering these three approaches, the Court adopts a new three-element rule based partly on the *Quirin* rule. ¹²⁹ The new rule allows for product manufacturer liability in maritime contexts when: "(i) its product requires incorporation of a part, (ii) the manufacturer knows or has reason to know that the integrated product is likely to be dangerous for its intended uses, and (iii) the manufacturer has no reason to believe that the product's users will realize that danger." ¹³⁰ The Court articulates five reasons why this standard is the most appropriate in the maritime context. 131 First, a manufacturer of equipment is better positioned to know whether the intended use of an integrated product will be dangerous than will a component manufacturer who lacks information regarding all possible uses of its component. 132 Second, given that manufacturers already have a duty to warn of risks from their own products, the additional burden of warning about integrated components is negligible. 133 Third, there is no evidence of consumer confusion in markets already adopting the Quirin rule. 134 Fourth, there is no evidence in those jurisdictions already using the Quirin rule that the additional warning requirement creates a problem of overwarning. 135 Fifth, maritime law recognizes "special solicitude for the

^{123.} Id. at 993.

^{124.} Id. at 995.

^{125.} See id. at 993-94.

^{126.} Id. at 993.

^{127.} Id. at 993–94.

^{128.} Id. at 995.

^{129.} Id. at 996.

^{130.} *Id*.

^{131.} *Id.* at 994–95.

^{132.} *Id.* at 994.

^{133.} *Id.* at 994–95.

^{134.} *Id.* at 995 (presumably the Court here is referencing jurisdictions already using the *Quirin* rule, such as the Northern District of Illinois).

^{135.} Id

welfare" of those men who undertook to "venture upon hazardous and unpredictable sea voyages," and such solicitude extends to the widows McAfee and DeVries. The Court limited the use of its new standard to product liability cases grounded in maritime law and incorporated existing standards for defining what it means for a component to be "required." A component is required when the manufacturer directs its incorporation, includes a component it knows will need replacing like-for-like, or makes a product that would be useless absent the required component. 139

D. Dissent

Justice Gorsuch authored a dissenting opinion joined by Justices Thomas and Alito. He dissent agreed with the majority opinion that the Third Circuit's *Quirin* rule is too far reaching and that the Third Circuit erred in using such a rule to find the Manufacturer liable. Ustice Gorsuch, citing extensively from the body of products liability common law, argued that the new standard created by the Court deviated from the common law duty of manufacturers to warn only of risk of harm caused by their own product. Ustice Gorsuch supplemented this argument by also noting that it does not matter if the manufacturer's product could be or needs to be integrated with other components for functionality. A manufacturer of a product is only responsible for risks associated with its own product, not risks associated with integrated components.

The dissent provides three reasons why the bare-metal rule is more appropriate than the new rule adopted by the Court. ¹⁴⁵ First, the manufacturer of a harmful product, such as asbestos, is usually the least-cost avoider and, thus, is highly motivated to adequately provide warnings regarding risks associated with use of its product. ¹⁴⁶ Second, consumers are better protected by warnings only from product manufacturers regarding inherent dangers of their product and not additional—possibly expansive and confusing—warnings of risks arising from mere use of the product. ¹⁴⁷

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136. Id. at 995 (quoting Am. Exp. Lines, Inc. v. Alvez, 446 U.S. 274, 285 (1980)).
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^{137.} Id.

^{138.} *Id.* at 995–96.

^{139.} *Id.* (citing Quirin v. Lorillard Tobacco Co., 17 F. Supp. 3d 760, 769–70 (N.D. Ill. 2014); Bell v. Foster Wheeler Energy Corp., No. 15-6394, 2016 U.S. Dist. LEXIS 137547, at *6–7 (E.D. La. Oct. 4, 2016); Chesher v. 3M Co., 234 F. Supp. 3d 693, 713–14 (D.S.C. 2017); May v. Air & Liquid Sys. Corp., 129 A.3d 984, 1000 (Md. 2015); *In re* Asbestos Litig., 59 N.E.3d 458, 474 (N.Y. 2016)).

^{140.} Id. at 996 (Gorsuch, J., dissenting).

^{141.} *Id*.

^{142.} Id. at 997 n.3.

^{143.} *Id.* at 997 (citing RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 cmt. b (AM. LAW INST. 1998).

^{144.} *Id.* (citing RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 cmt. b).

^{145.} Id. at 997-98.

^{146.} *Id.* at 997 (citing Italia Societa per Azioni di Navigazione v. Or. Stevedoring Co., 376 U.S. 315, 323–24 (1964), *superseded in part*, Longshoremen's and Harbor Workers' Compensation Act Amendments of 1972, Pub. L. No. 92-576, 86 Stat. 1251 (1972), *as recognized in* Hillier v. S. Towing Co., 714 F.2d 714, 718 (7th Cir. 1983); CALABRESI, *supra* note 15, at 135, n.1; STEVEN SHAVELL, ECONOMIC ANALYSIS OF ACCIDENT LAW 17 (1987)).

^{147.} Id. at 998 (quoting O'Neil v. Crane Co., 266 P.3d 987, 991 (Cal. 2012)).

Third, the bare-metal rule is simply applied, promotes equity, and does not require interpretation of a nebulous, multifactorial standard as does the Court's new rule. Rather, under the bare-metal rule, consumers know that the manufacturer of the harmful component in a product is liable for any harms the component causes, product manufacturers and designers know exactly with whom liability rests, and courts are less likely to invert the normal judicial process of interpreting the facts of the case using the relevant law. 149

Justice Gorsuch also noted the risk for significant confusion regarding the interpretation of the three-part standard adopted by the Court. For example, at what point do two products become integrated to create a single product, what qualifies as an integrated product, and when is a product manufacturer's responsibility to warn absolved by a third-party component manufacturer's warning regarding the danger of its component? Justice Gorsuch concludes that extension of the Court's standard beyond the maritime tort context risks overly burdening manufacturers and confusing consumers while simultaneously creating the same fair notice problem created by the application of the *Quirin* rule by the Third Circuit. 152

III. ANALYSIS

Justice Gorsuch's dissent in *DeVries* provides compelling persuasive authority for practitioners seeking to limit the damage that the Court's newly created standard might wreak. Part III of this Comment explores additional arguments that could strengthen the persuasive nature of the dissent and thereby considers possible additional arguments for bare-metal defendants given the Court's adoption of the new rule. First, the "special solicitude" afforded sailors for their "venture[s] upon hazardous and unpredictable sea voyages"153 could be argued to be overapplied when used to shoehorn a bare-metal defendant into the orbit of duty where no such duty has previously existed. Second, it is questionable whether the lack of a solvent defendant warrants diverting liability to a defendant that has historically not been liable under the common law, especially when other mechanisms exist to compensate plaintiffs. And, third, it is notable that, for combat and combat-support reasons, the Navy made the deliberate decision to not allow the labeling of bare-metal equipment to which it would later add asbestos, instead favoring personnel training and education according to strict military procedures. 154 Defendants facing a claim of

^{148.} Ia

^{149.} Id. (citing Antonin Scalia, The Rule of Law as a Law of Rules, 56 U. CHI. L. REV. 1175, 1182 (1989)).

^{150.} *Id.* at 998–99.

^{151.} *Id.* at 999.

^{152.} *Id*.

^{153.} See Moragne v. States Marine Lines, Inc., 398 U.S. 375, 387 (1970), superseded by statute, Longshoremen's and Harbor Workers' Compensation Act Amendments of 1972, Pub. L. No. 92-576, 86 Stat. 1251 (1972), as recognized in Smallwood v. Am. Trading & Transp. Co., 839 F. Supp. 1377, 1383–84 (N.D. Cal. 1993)).

^{154.} DeVries, 139 S. Ct. at 999 (Gorsuch, J., dissenting).

failure to warn in the maritime context may find that these points, when combined with those articulated in Justice Gorsuch's dissent, create a compelling position of advocacy. Those wishing to challenge the standard adopted by the Court, or looking to provide defenses against liability found under the standard, might expand and develop these ideas to support the persuasiveness of Justice Gorsuch's dissent.

A. The Court Assumed the Special Solicitude Afforded Sailors Is Relevant and Applicable Today

The Third Circuit Court of Appeals found the special solicitude afforded sailors dispositive in its adoption of the standards-based approach to finding liability based on the foreseeability rule. The majority opinion similarly relies on special solicitude in the adoption of its standard. Neither the Third Circuit nor the majority opinion considered, however, whether the special solicitude is relevant or appropriately applied in this case. 157

There are two reasons that the special solicitude relied upon by the Third Circuit and the Court is not necessarily relevant or applicable today. First, the special solicitude is arguably antiquated, paternalistic, and redundant to other mechanisms that afford more concrete and codified protections for those working at sea. Second, it is a protection that depends on the relational status between the protected party and their employer—historically between a seaman and his captain—and this is not the relationship that exists between the parties in *DeVries*.

1. Special Solicitude for Sailors May be Antiquated, Paternalistic, and Redundant with Other Protections

The special solicitude afforded sailors is not always relevant or applicable by default in the modern maritime environment. The Third Circuit's holding, along with the holding in *DeVries*, is premised "first and perhaps foremost" on how "maritime law is deeply concerned with the protection of sailors." Indeed, it is oft repeated in the case law¹⁵⁹ that sailors are due special solicitude and are frequently granted relief under maritime law when the common law would be less benevolent. Such mindfulness for the welfare of sailors, particularly in the military context, is unquestionably virtuous given the legacy of the nature of sailors' work

^{155.} In re Asbestos Prods. Liab. Litig., 873 F.3d 232, 240 (3d Cir. 2017).

^{156.} DeVries, 139 S. Ct. at 995.

^{157.} Id.; In re Asbestos Prods. Liab. Litig., 873 F.3d at 240.

^{58.} In re Asbestos Prods. Liab. Litig., 873 F.3d at 238 (citing Moragne, 398 U.S. at 387).

^{159.} See, e.g., Am. Exp. Lines, Inc. v. Alvez, 446 U.S. 274, 285–86 (1980); Sea-Land Servs., Inc. v. Gaudet, 414 U.S. 573, 577 (1974); Moragne, 398 U.S. at 386–87; Brown v. Lull, 4 F. Cas. 407 (C.C.D. Mass. 1836) (No. 2,018); Harden v. Gordon, 11 F. Cas. 480, 484–85 (C.C.D. Me. 1823) (No. 6,047).

^{160.} *In re Asbestos Prods. Liab. Litig.*, 873 F.3d at 238 (quoting Sea Gull, 21 F. Cas. 909, 910 (C.C.D. Md. 1865) (No. 12,578)); *see, e.g., Moragne*, 398 U.S. at 381–88, 408–09 (wherein the Supreme Court relied upon the special solicitude for sailors to hold that maritime plaintiffs could bring wrongful death lawsuits even where the common law disapproved of such actions).

and the sacrifices made by personnel serving in both merchant marine and military navy fleets.

There used to be, and in some modern instances may still be, a need for special protections afforded to sailors. Such largesse is due to the nature of the relationship between captain and sailor, the dangerous nature of a sailor's work, and the sailor's inability to mitigate his own risk from situations arising while at sea. ¹⁶¹ There seems to be no distinction drawn between sailors operating in military or merchant contexts when extending the special solicitude accommodation, however. Accordingly, Circuit Justice Story once commented that it was the naiveté and vulnerability of seamen that afforded them special solicitude:

Every court should watch with jealousy an encroachment upon the rights of seamen, because they are unprotected and need counsel; because they are thoughtless and require indulgence; because they are credulous and complying; and are easily overreached. But courts of maritime law have been in the constant habit of extending towards them a peculiar, protecting favor and guardianship. 162

Despite the well-intentioned (some might say paternalistic) sentiment of Justice Story's rhetoric, the rationale underlying the conclusion of solicitude provides compelling justification for the benevolence sailors were granted by maritime courts. Justice Story goes on to explain the rationale for the special solicitude granted to sailors:

Seamen are by the peculiarity of their lives liable to sudden sickness from change of climate, exposure to perils, and exhausting labour. They are generally poor and friendless, and acquire habits of gross indulgence, carelessness, and improvidence. If some provision be not made for them in sickness at the expense of the ship, they must often in foreign ports suffer the accumulated evils of disease, and poverty, and sometimes perish from the want of suitable nourishment. ¹⁶³

The sailors that Justice Story describes are under the command of a poorly paying master and are working in conditions where salubrious tropical diseases challenge immune systems weakened by malnutrition. ¹⁶⁴ Under such conditions, any harms that befall a sailor are likely to lead to his abandonment by the captain in the nearest port, given the sailor's inability to pay for medical care. ¹⁶⁵ By creating a special solicitude for sailors, maritime courts ensured that captains would respond to the special needs of their charges, minimize sailors' exposure to risk, and would take special precautions to eliminate disease amongst their crews. Similar reasoning persisted through the late nineteenth century but seemingly shifted to focus

^{161.} Harden, 11 F. Cas. at 483.

^{162.} Id. at 485.

^{163.} Id. at 483.

^{164.} *Id*

^{165.} Id.

on the tyrannical nature of a ship's captain and his lack of compassion for the plight of a feckless crew. 166

Two conditions must exist for a special solicitude to be granted to sailors: first, there must be hazardous conditions to which sailors are exposed and, second, the sailors must be captained by one who acts selfishly regarding their welfare. 167 There are clear similarities between the maritime environment of the 1800s and today, and many dangers of the past persist today: environmental hazards, 168 slip-and-fall risks on decks, vessel disasters, 169 stress due to long periods away from friends and family, and piracy. 170 It would be absurd to claim that sailors of today are not exposed to hazardous conditions similar to those of the past; however, it is not as absurd to claim that sailors' captains do not act today as selfishly as they did when Justice Story articulated his reasoning for the need for a special solicitude for sailors. Indeed, respondents' brief, filed upon grant of certiorari by the Court of Appeals for the Third Circuit, made a valiant effort to highlight some of the similarities between the work of sailors in the eighteenth, nineteenth, and twentieth centuries. 171 The brief referenced "the recent collisions of the USS Fitzgerald and the USS John S. McCain with commercial ships...the explosion on *Deepwater Horizon*[,] and fourteen seasons of 'Deadliest Catch'" to conclude that today's maritime work is precarious.¹⁷² Of course, there will always be similarities of specific events when comparing two historical periods, but calling to specific events, including a highly editorialized reality TV show, does not inevitably lead to the conclusion that the historical construct of special solicitude to sailors is applicable by default today. 173 Granting a special solicitude to sailors aboard naval ships involved in collisions with other vessels, or to rig workers harmed by explosions, does not really grant them the protection against the Neronian captain that Justice Story had in mind.

Perhaps the correct inquiries are whether work at sea, under the command of a captain or employer, is less precarious today, and whether there are better protections against a tyrannical captain than there were when the solicitude was created. If there are less risks and there are better protections against the actions of a self-serving captain, then the need to extend the protection of the special solicitude afforded sailors might be questioned; alternative modern mechanisms might have supplanted a need for the continued application of an old rule.

^{166.} See, e.g., Scarff v. Metcalf, 13 N.E. 796, 797 (N.Y. 1887) (describing how the ship captain's authority is often roughly exercised and despotic in nature).

^{167.} Id.

^{168.} For example, exposure to extremes of heat, cold, and ultraviolet light.

^{169.} For example, aboard-ship fires, sinking at sea, and shipwrecking.

^{170.} Maritime Worker Safety, CDC, https://www.cdc.gov/niosh/topics/maritime/default.html (last updated Dec. 28, 2017).

^{171.} See Brief for Respondents, Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 989 (2019) (No. 17-1104), 2018 WL 4929873, at *4.

^{172.} *Id*.

^{173.} *Id.*

Today there are substantial protections afforded sailors and longshoremen¹⁷⁴ that render the special solicitude designed to protect them against a brutish captain moot. 175 For example, the interests of maritime workers are protected by an extensive union network: Seafarers International Union (with nearly 30,000 members and multiple affiliate unions);¹⁷⁶ the Sailors Union of the Pacific; the International Longshore and Warehouse Union (ILWU);¹⁷⁷ and the International Longshoremen's Association (ILA) (with over 35,000 members). ¹⁷⁸ Trade unions act as intermediaries between employees and their employers.¹⁷⁹ Due to the collective's greater bargaining power, unions give workers greater powers to negotiate with employers (to obtain better working conditions, safer workplaces) and advocate for economic justice. 180 From the 1880s, when conditions for maritime workers were intolerable, through the early twentieth century, numerous maritime unions organized and began taking direct action against employers to elicit changes in pay and working conditions. 181 The maritime unions also exerted an effect on maritime safety through the political process and have been instrumental in statutory reform that provides legal recourse for harms endured by those working in maritime environments. 182

The Merchant Marine Act of 1920 (the Jones Act) also contributes to the safety of U.S. maritime workers by extending the Federal Employers Liability Act to seamen. The Jones Act effectively codifies the special solicitude extended to sailors by affording them the remedy of damages in a civil action against their employer. This remedy allows employees to sue for compensation from an employer for injuries and death resulting from the negligence of their employer. Allowing employees who are harmed during their maritime work to pursue claims against their employers shifts the burden of harm from the injured party (employees) to the party creating an unreasonable risk (employers). The special solicitude

^{174.} Longshoremen "load and unload ships and move cargo around ports." Kate Martin, *Want a \$175K Longshore Job? Here's Your Chance – If You're Lucky. And Patient*, NEWS TRIBUNE (Aug. 2, 2018, 3:55 PM), https://www.thenewstribune.com/latest-news/article215993560.html.

^{175.} See sources cited infra notes 177–85 and accompanying text.

^{176.} Seafarers, UNIONFACTS.COM, https://www.unionfacts.com/union/Seafarers (last updated Nov. 15, 2016).

^{177.} Michael Reagan, *Maritime Workers and Their Unions*, WATERFRONT WORKERS HIST. PROJECT, https://depts.washington.edu/dock/maritime intro.shtml (last visited Mar. 26, 2020).

^{178.} Longshoremens Association, UNIONFACTS.COM, https://www.unionfacts.com/union/Longshoremens Association (last updated Nov. 15, 2016).

^{179.} What are the Benefits of Being a Union Worker?, UWUA, https://uwua.net/what-are-the-benefits-of-being-a-union-worker/ (last visited Mar. 26, 2020).

^{180.} Unions Begin With You, AFL-CIO, https://aflcio.org/what-unions-do (last visited Mar. 25, 2020).

^{181.} Reagan, supra note 177.

^{182.} Reagan, *supra* note 177 (describing how Andrew Furuseth, head of the International Seaman's Union, lobbied for passage of the 1915 Seaman's Act, which gave seamen new legal rights, including the right to disobey a work order without facing mutiny charges).

^{183. 46} U.S.C. § 30104 (2018).

^{184.} *Ia*

^{185.} *Id*.

^{186.} Ia

afforded sailors has the same effect in promoting greater precaution by the employer captain to reduce the risk of harm to the employee sailor. Also, the Death on the High Seas Act allows a spouse, child, or dependent relative to recover for the death of an individual due to the wrongful act, neglect, or default that occurred on the high seas. 187

Therefore, there are three ways in which sailors are protected against harms in a post-1920, modern era: (1) by the special solicitude originating with Justice Story's opinion in Harden v. Gordon¹⁸⁸ and promulgated through the mid- and late-twentieth century; (2) by unionization; and (3) from the Jones and the Death on the High Seas Acts. The availability of the second and third protections, combined with the substantial changes in seafaring conditions (improved safety and technology), argue for a context-dependent application of the special solicitude for sailors rather than a default application as appears to be the modern trend. A default application of the special solicitude to sailors harmed by a third-party's alleged negligence is a significant expansion of the protection that Justice Story initially imagined. 189 A default application is inconsistent with Justice Story's opinion and subsequent judicial decisions because the original intent of the solicitude is to protect the vulnerable sailor from the tyrant master. 190

2. Special Solicitude Is Based on the Relationship Between Sailor and Captain

Declining to extend special solicitude as a default rule may be particularly appropriate when the relationship subject to the solicitude is not between captain and seaman but is between seaman and a third-party. When courts extend the special solicitude consideration to sailors, it is based on the relationship between the seaman and his captain or his employer. 191 The Manufacturer in *DeVries* was neither captain to nor employer of either Kenneth McAfee or John DeVries when they were exposed to the asbestos that caused their deaths. 192 Rather, McAfee and DeVries were employees of the U.S. Navy. 193 Moreover, the widows of Kenneth McAfee and John DeVries have an even more attenuated relationship with the Manufacturer than did McAfee and DeVries themselves. 194 Although courts have been liberal in their use of the special solicitude consideration, and should be mindful of the charity it affords, this Comment argues that the courts

^{187.} Id. § 30302.

¹¹ F. Cas. 480 (C.C.D. Me. 1823) (No. 6,047). 188.

Compare 46 U.S.C. § 30104, and 46 U.S.C. § 30302, with Harden, 11 F. Cas. at 480. Compare 46 U.S.C. § 30104, and 46 U.S.C. § 30302, with Harden, 11 F. Cas. at 480.

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Moragne v. States Marine Lines, 398 U.S. 375, 407 (1970); Gillespie v. United States Steel Corp., 379 U.S. 148, 149 (1964).

Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986, 991 (2019).

^{193.}

^{194.} Id. at 992.

should not over apply the special solicitude consideration at the cost of other legal principles. ¹⁹⁵

There is also some evidence in the record suggesting there is merit to challenging the legacy value of the special solicitude consideration afforded sailors in DeVries. During oral argument Justice Sotomayor said, "So what do I do if I'm in a special area with a solicitude for sailors and I don't buy your argument that we should ignore that principle or overturn it after two centuries of case law on it?" 196 Justice Sotomayor is clearly referring to the two hundred years of case law supporting the solicitude afforded sailors given the hazards of their work on the seas. ¹⁹⁷ In *DeVries*, the Court seems willing to embrace the liberal solicitude consideration to expand liability to bare-metal defendants. 198 Yet, in Miles v. Apex Marine Corporation, 199 Justice O'Connor, joined in a unanimous opinion by Justice Sotomayor, noted that the Court is "not free to expand remedies at will simply because it might work to the benefit of seamen and those dependent upon them."²⁰⁰ It seems that even the Court had previously recognized that the special solicitude for sailors should not be the basis of expanding liability to embrace a particular group of plaintiffs.²⁰¹

The solicitude afforded the vulnerable populations of sailors of the past is not necessarily relevant today. It would, of course, be quite unseemly to suggest that sailors, and in particular those serving in the military, do not warrant legal protection as they go about their dangerous commercial business or about their dangerous work of protecting the liberties of others. Yet, much has changed in the last 200 years of maritime navigation: the age of the sail was left behind, along with the slave trade; steam propulsion came and went; the age of the gas turbine matured into the nuclear age; and sailors are no longer as vulnerable to the whims of a tyrannical captain as they once were. Perhaps the special solicitude is even less relevant in situations involving well-equipped, highly supported, professionally trained maritime naval forces, led by those who are highly motivated, and duty bound, to protect service members. ²⁰³

^{195.} See Miles v. Apex Marine Corp., 498 U.S. 19, 36 (1990).

^{196.} Transcript of Oral Argument at 8-9, *DeVries*, 139 S. Ct. 986 (No. 17-1104) (emphasis added).

^{197.} See, e.g., Moragne v. States Marine Lines Inc., 398 U.S. 375, 387 (1970).

^{198.} See DeVries, 139 S. Ct. at 986.

^{199.} *Miles*, 498 U.S. 19.

^{200.} Id. at 36.

^{201.} *Id*.

^{202.} See generally Jesse Ransley, Maritime Communities and Traditions, in THE OXFORD HANDBOOK OF MARITIME ARCHEOLOGY 879 (Ben Ford et al. eds., 2013).

^{203.} See, e.g., U.S. NAVY, U.S. NAVY PROGRAM GUIDE 2017, at 5, 9, 14, 67, 83, 90–91, 159 (2017), https://www.navy.mil/strategic/npg17.pdf (describing the medical capabilities of the U.S. Navy as of 2016 to include extensive medical provision and evacuation capabilities including: nuclear and biological countermeasures, integration with civilian medical facilities; eight amphibious assault ships each with six operating rooms, an intensive care unit, and 47 beds; thirteen amphibious dock ships each with four operating rooms—two of which are dental—and 24 beds; and two Mercy class hospital ships each with 12 operating rooms and up to 1000 beds). The U.S. Navy also has 24 land-

B. Defaulting Liability to Solvent Defendants in the Maritime Context Is Inconsistent with Common Law Principles

In *Exxon Co. U.S.A. v. Sofec, Inc.*, ²⁰⁴ the Court declared that, in deciding products liability cases in maritime law, it could draw on principles from state common law. ²⁰⁵ In creating a new duty to warn rule, the Court appears to have ignored—or at least significantly discounted—two principles drawn from the body of common law regarding products liability: first, assigning liability to manufacturers of products made harmful by the addition of others' components neither correctly assigns nor efficiently internalizes costs; ²⁰⁶ and second, the common law finds a manufacturer not liable for harms caused by another's product. ²⁰⁷ By discounting these principles, the Court favored expanded liability. Furthermore, it is unnecessary to expand the orbit of duty to bare-metal defendants when more easily accessed remedies for harms are available and have been recognized and promoted by the Court. ²⁰⁸

 Assigning Liability to Manufacturers of Products Made Harmful by the Addition of Others' Components Neither Correctly Assigns nor Efficiently Internalizes Costs

In creating a standard that will likely be used by the Third Circuit to assign liability to the Manufacturer for the externalized costs caused by the harmful third-party asbestos component, the Court neither efficiently internalized the costs of the harms suffered by DeVries and McAfee nor accurately assigned the costs to the correct party. Internalizing such externalities in an efficient manner is one of the main ways that tort law seeks to reduce the social costs of negligent behavior when transaction costs are too high to allow effective negotiations between parties.²⁰⁹ If liability is expanded as it is here, there could be compression of innovation in rapidly industrializing economies and creation of a sense of social injustice.²¹⁰

A public policy goal of tort law is to provide compensation to a party harmed by the negligent conduct of another. For example, this policy goal is furthered by compensating a party when a manufacturer negligently makes or supplies a product, or when its product lacks adequate warnings.²¹¹ A second public policy goal of tort law is to deter negligent

based facilities in the continental United States and seven overseas locations which along with maritime operations contribute essential service-time and post-service care to the dedicated servicemen and women of the U.S. Navy whose sacrifices and efforts protect the rights and privileges of many. *Locations*, NAVY MED., https://www.med.navy.mil/Pages/Locations.aspx (last visited Mar. 26, 2020).

^{204. 517} U.S. 830 (1996).

^{205.} *Id.* at 839 (applying proximate cause and superseding cause doctrines from the common law to a claim of negligence in the maritime situation).

^{206.} Richard A. Posner, A Theory of Negligence, 1 J. LEGAL STUD. 29, 29 (1972).

^{207.} In re Darvocet, 756 F.3d 917, 938–39 (6th Cir. 2014).

^{208.} See discussion infra Section III.B.iii.

^{209.} See Posner, supra note 206, at 37.

^{210.} *See* Posner, *supra* note 206, at 73.

^{211.} See CALABRESI, supra note 15, at 27.

behavior. 212 The policy goals of compensation and deterrence are met by reallocating the cost of the harm from the victim to the tortfeasor and, consequently, resources are more efficiently allocated. 213 The public policy goal of ensuring fairness demands (and the common law robustly supports) that the cost of compensating a harmed party should be borne by the actor who benefits from profits from the sale of a dangerous or underwarned product.²¹⁴ Thus, the burden of compensation paid to a harmed user by a manufacturer for their unsafe or underwarned product is borne by the responsible party. ²¹⁵ That party is, ideally, disincentivized from further such acts, and consequently, society benefits. ²¹⁶ In *DeVries*, the Manufacturer may ultimately have to pay damages for the harms caused when a third-party (the Navy) added a harmful component (asbestos) to the Manufacturer's inherently safe product.²¹⁷ The Manufacturer did not profit from the sale of asbestos by the asbestos manufacturer. ²¹⁸ Applying the long-held premise that the party benefitting from the sale of a harmful product, and no other, should pay directly for the costs of harms of that product²¹⁹ or should pay indirectly for the costs of insuring against claims arising from harms their product causes, it follows that the Manufacturer should not be liable for harms caused by asbestos. 220 Moreover, manufacturers—such as Air & Liquid Systems Corporation—which are held liable for harms caused by third-party products experience no deterrence in being penalized by damages for the harms caused by third-party components added to their products.²²¹ Such failure to deter might also be considered from the perspective of a burden placed on a manufacturer to warn of a hazardous product. Manufacturers of products that create risks of harm to users may either consciously or subconsciously consider the expected accident cost²²² arising from the use of their product.²²³

^{212.} Benjamin C. Zipursky, Rights, Wrongs, and Recourse in the Law of Torts, 51 VAND. L. REV. 1, 45 (1998).

 $^{213.\}quad$ See generally William M. Landes & Richard A. Posner, The Economic Structure of Tort Law 1 (1987).

^{214.} John Gardner, What is Tort Law For? Part 1. The Place of Corrective Justice, 30 LAW & PHIL. 1, 1–2 (2011).

^{215.} Zipursky, supra note 212, at 72.

^{216.} Zipursky, supra note 212, at 46.

^{217.} Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986, 991 (2019).

^{218.} Id. at 1000 n.5 (Gorsuch, J., dissenting).

^{219.} Id. at 997.

^{220.} Id

^{221.} *Id*

^{222.} The expected accident cost due to a harmful product is the likelihood of a harm occurring multiplied by the gravity of such harm. United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947).

^{223.} Eugênio Battesini, *Tort Law and Economic Development: Strict Liability in Legal Practice*, 1 LATIN AM. & IBERIAN J. L. & ECON. 1, 13–14 (2015). For an exhaustive analysis of the positive economic theory of tort law that explains the mathematical basis for calculation of tort costs, see generally Richard A. Posner & William M. Landes, *The Positive Economic Theory of Tort Law*, 15 GA. L. REV. 851, 851–52 (1980).

Accepting the premise that laws and regulations, or at least a fear of punishment, deter certain behaviors, 224 a manufacturer should—all other things being equal—be incentivized to provide a warning regarding a dangerous product when the expected accident cost exceeds the cost of placing a precautionary warning. Consequently, there is an incentive to warn when the burden of doing so is outweighed by the expected accident cost.²²⁵ In *DeVries*, the Manufacturer would presumably have foreseen a probability of harm to users of their product approaching zero.²²⁶ This is because the law, as correctly understood by the Manufacturer, imparted no duty to warn of the risk of harm created by another's product.²²⁷ Moreover, the Manufacturer's product was inherently harmless or, at worst, had an effective accident cost that was mitigated by the issuance of the usual warnings associated with their bare-metal product.²²⁸ Therefore, when a manufacturer is considering precautions that would mitigate or eliminate the effective accident cost, and it is acting in accordance with the law, there is no incentive to act because there is either no risk of harm from its product or because existing warnings mitigated any risk.

2. Under the Common Law, a Manufacturer Is Not Liable for Harms Caused by Another's Product

It is a well-known principle in product liability law that a harmed party must be able to assert that the cause of the harm suffered is attributable to the defendant's product and not to another's product.²²⁹ In assigning liability to the Manufacturer, the Court is reassigning responsibility for the harm caused by another manufacturer's harmful component (asbestos) to the manufacturer of an inherently safe product.²³⁰ Not only does the common law uniformly find no duty to warn of a risk of harm due to another's product, it also finds that a manufacturer of equipment has no duty to warn of a risk of harm when another manufacturer's component product is likely to be integrated into its equipment by a third-party.²³¹ Such a position is supported by the Restatement (Third) of Torts.²³² Liability for

^{224.} For a brief summary of whether criminal punishment, tort liability, or laws in general have consequential effects on behavior, see generally Posner & Landes, *supra* note 223, at 857–58.

^{225.} Id. at 884.

^{226.} DeVries, 139 S. Ct. at 993.

^{227.} Id.

^{228.} Air & Liquid Systems Corp. provided equipment in bare-metal form to a buyer, the Navy. That equipment was either inherently completely safe or had some non-zero risk associated with use. One can imagine a range of gravity of harms arising from the use or maintenance of such equipment. Assuming, arguendo, that the equipment was inherently safe and that the risk of harm from use is zero, the expected accident cost, for any gravity of harm, is zero. Assuming there is some risk of harm and some gravity of harm, there is an expected accident cost from use of the bare-metal product, which is offset by providing the usual warnings with the equipment. If the expected accident cost is zero, there is no deterrent effect of requiring a warning as there is nothing to warn of. If the expected accident cost is a non-zero value, it is offset by existing warnings; there is no incentive, or deterrent effect, to provide further warnings for another's product (added asbestos) when such warning is not required by law. Either way, there is no incentive for warnings beyond those already given.

^{229.} In re Darvocet, 756 F.3d 917, 938 (6th Cir. 2014).

^{230.} DeVries, 139 S. Ct. at 997 (Gorsuch, J., dissenting).

^{231.} Firestone Steel Prods. Co. v. Barajas, 927 S.W.2d 608, 613-14, 616 (Tex. 1996).

^{232.} RESTATEMENT (THIRD) OF TORTS: PROD. LIAB. § 5 cmt. b (AM. LAW INST. 1998).

harm to a user or their property only attaches to a seller or distributor of a component if "the component is defective *in itself*... and the defect causes the harm; or... the seller or distributor... substantially participates²³³ in the integration of the component into the design of the product."²³⁴ It would be "unjust and inefficient" to find liability in a manufacturer of equipment that incorporates a defective or harmful part.²³⁵

Requiring that the manufacturer of equipment into which a thirdparty integrates another's harmful product potentially requires the manufacturer to foresee the design and construction of all possible integrated components, by all possible manufacturers, during all conceivable time frames.²³⁶ In *DeVries*, the Manufacturer neither provided the asbestos product that caused harm nor played a role, substantial or otherwise, in the integration of the asbestos into their safe equipment; rather, the decision to add asbestos to the Manufacturer's bare-metal product was made exclusively by the Navy.²³⁷ McAfee and DeVries argued at the Third Circuit that the equipment provided to the Navy required asbestos for operation, that the use of asbestos in the supplied equipment was the industry standard, and that no other alternative to asbestos was then available for the normal operation of the equipment.²³⁸ Even reading these claims in a light most favorable to McAfee and DeVries, the facts are not relevant: the Manufacturer neither supplied nor played a substantial role in integrating the asbestos into the equipment that caused the harms—which is required for a finding of a duty to warn.

By requiring a duty to warn when "the manufacturer knows or has reason to know that the integrated product is likely to be dangerous for its intended uses," 239 the Court's new standard expands a manufacturer's duty to warn. The expansion of duty to warn materializes with the new standard because it includes any possible plaintiff who might, in any manner of ways—including those not yet even contemplated or discovered—use the manufacturer's product with another's component to create a harmful integrated product. The Court has previously rejected such expansion of liability for a variety of public policy and efficiency reasons. 241

^{233.} The Restatement does not clarify what is meant by "substantially participates"; however, it would be difficult to find liability for harm in the Manufacturer given the Manufacturer did not, substantially or otherwise, participate in the integration of the asbestos into their product.

^{234.} RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 5.

^{235.} Id. § 5 cmt. a.

^{236.} *Id.* at reporter's note, cmt. a.

^{237.} Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986, 991 (2019).

^{238.} Brief for Respondents, supra note 171, at *12–13.

^{239.} DeVries, 139 S. Ct. at 996.

^{240.} Id.

^{241.} Consol. Rail Corp. v. Gottshall, 512 U.S. 532, 552-554 (1994).

3. Expansion of the Duty to Warn Is Unnecessary When Alternate, More Efficient Remedies are Available to Plaintiffs

In *DeVries*, the parties who could have most efficiently warned McAfee and DeVries of the harms of asbestos were the Navy and the asbestos manufacturer. The Navy knew best how the equipment would be used aboard its ships and within its facilities; the Navy knew which third-party components would be added to the bare-metal products with which it was supplied; and the Navy knew best what protective measures and training would be in place for its service members.²⁴² The asbestos manufacturer knows the risks posed by aerosolized asbestos—the proximate cause of the harms suffered by McAfee and DeVries.²⁴³ The Manufacturer knows only incidentally about the choices or knowledge of the Navy and the Navy's requirements, and the Manufacturer also cannot control the actions of the Navy.²⁴⁴ The most appropriate targets for relief are the Navy, a solvent asbestos manufacturer, or trusts established when asbestos manufacturers were forced into Chapter 11 bankruptcy by mass tort claims for harms caused by their products.

The majority opinion correctly recognizes the challenge faced by McAfee and DeVries in obtaining relief from the Navy. In *Feres v. United States*, the Court held that the Federal Tort Claims Act (FTCA) bars claims against the United States by service members who are harmed incidental to their service. This bar to recovery is known as the *Feres Doctrine*. Paradoxically, the point of the holding in *Feres* is to protect service members from, inter alia, litigation costs from a cause of action against the United States. In *Feres*, the compensation scheme favored over tort recovery by service members "normally requires no litigation, and is not negligible" while "[t]he recoveries compare extremely favorably with those provided by most workman's compensation statutes."

In addition to the federal compensation scheme noted in *Feres*, other opportunities for recovery for harms are available to the respondents. For example, the U.S. Department of Veteran's Affairs provides compensation for diseases and conditions arising from service-based contact with hazardous materials, including asbestos.²⁵² The standard to qualify for benefits are plainly articulated by the U.S. Department of Veteran's Affairs,

^{242.} DeVries, 139 S. Ct. at 999 (citing Joint Appendix at *40, 139 S. Ct. 986 (2019) (No. 17-1104) wherein an affidavit from Rear Admiral Roger B. Hornee states, "[T]he Navy chose to control and make aware of the hazards of asbestos through... specifications and personnel training.").

^{243.} Id. at 994.

^{244.} Id.

^{245.} *Id.* at 995.

^{246. 340} U.S. 135 (1950).

^{247.} Id. at 146.

^{248.} Feres Doctrine, BLACK'S LAW DICTIONARY (11th ed. 2019).

^{249.} Feres, 340 U.S. at 145.

^{250.} Service members Civil Relief Act, 50 U.S.C. §§ 3901–4041 (2018).

^{251.} Feres, 340 U.S. at 145.

^{252.} Exposure to Hazardous Chemicals and Materials, U.S. DEP'T VETERAN'S AFF., https://www.va.gov/disability/eligibility/hazardous-materials-exposure/ (last updated Sept. 27, 2019).

requiring only that a veteran claimant had contact with asbestos during military service and was not dishonorably discharged.²⁵³ The benefits available include both compensation payments for the harm and healthcare costs subsequent to the material-based exposure.²⁵⁴ Furthermore, the U.S. Department of Veteran's Affairs provides veterans access to trained professionals, including attorneys, who can assist with the sourcing of documentation to support a claim, and the actual filing of claims, as part of veteran benefits.²⁵⁵ As of August 2019, the U.S. Department of Veteran's Affairs takes an average of 82.5 days to make a decision regarding a claim.²⁵⁶ In contrast, plaintiffs McAfee and DeVries never received a remedy for their injuries, having died before the case was resolved. Subsequently, their widows are still without a remedy for the harms as of October 2019, nearly six years after the original action was removed to federal court.²⁵⁷

Furthermore, certain compensation schemes, such as the Service Members Civil Relief Act and disability benefits from the U.S. Department of Veteran's Affairs, are easier to navigate for claimants than complex litigation, and they do not demand the creation of potentially confusing new standards that contrive a historically ineligible defendant. An analogous argument holds for a bankrupt asbestos manufacturer: while relief would be impossible from a manufacturer protected from suit based on bankruptcy reorganization,²⁵⁸ there exists somewhere between sixty and one hundred asbestos trust funds holding a predicted \$30–\$41 billion that would afford simpler—and likely more equitable—relief than would litigation.²⁵⁹

The Court has created a conundrum. On the one hand, the Court denies relief to harmed service members under the FTCA, given its holding in *Feres*, while recognizing and acknowledging that alternative and more easily accessed compensation schemes exist that allow service members to obtain remedies for their harms. ²⁶⁰ Yet, on the other hand, the Court has created a novel standard that derives liability in a defendant not otherwise

^{253.} Veterans Asbestos Exposure, U.S. DEP'T VETERAN'S AFF., https://www.va.gov/disability/eligibility/hazardous-materials-exposure/asbestos/ (last updated Sept. 27, 2019).

^{254.} Id.

^{255.} Get Help Filing Your Claim or Appeal, U.S. DEP'T VETERAN'S AFF., https://www.va.gov/disability/get-help-filing-claim/ (last updated Sept. 27, 2019).

^{256.} How to File a VA Disability Claim, U.S. DEP'T VETERAN'S AFF., https://www.va.gov/disability/how-to-file-claim/ (last updated Mar. 20, 2020).

^{257.} McAfee v. 20th Century Glove Corp. of Tex., No. 5:13-06856-ER, 2014 U.S. Dist. LEXIS 189877, at *13 n.1 (E.D. Pa. Oct. 23, 2014).

^{258. 11} U.S.C. § 524(g) (2018).

^{259.} Behrens & Horn, *supra* note 2, at 517; *see also* Joe Lahav, *Mesothelioma and Asbestos Trust Funds*, ASBESTOS.COM, https://www.asbestos.com/mesothelioma-lawyer/compensation/trust-fund/ (last modified Mar. 5, 2020) (stating that there "are [currently] 60 active asbestos trust funds with an estimated \$30 billion available for claimaints."); *Full Trust List*, REAUD, MORGAN, & QUINN, L.L.P., https://rmqlawfirm.com/mesothelioma-lawyer/asbestos-trusts/list/ (last visited Mar. 22, 2020) (listing ninety-three trust funds, dates of formation, and individual estimated funds, which totaled \$46.15 billion as of Oct. 2019).

^{260.} Feres v. United States, 340 U.S. 135, 146 (1950).

liable under the common law and ignores alternative sources of relief it has previously acknowledged are appropriate and adequate. ²⁶¹

Before the Court's holding in DeVries, life was much simpler for military plaintiffs claiming a failure to warn of a risk of harm from the use of a bare-metal product. Decades of common law told such plaintiffs that a bare-metal defendant was not liable to them for failing to warn about a third-party added component that caused the bare-metal product to become harmful. 262 However, the Feres Doctrine eliminated a cause of action in negligence against their military employers, pursuant to the FTCA, but compensation was available from federally created compensation schemes, veterans disability benefits, and private asbestos trusts created from the bankruptcy of asbestos manufacturers. ²⁶³ Such a system was consistent with the common law principle that manufacturers are only liable for harms reasonably traceable to their products and not to third-party added components.²⁶⁴ The system was also consistent with the policy rationale of tort law that seeks to assign externalities in the most efficient way possible. 265 Today, however, plaintiffs must balance the cost and inconvenience of litigation using the Court's novel standard against the relative ease of claiming against a compensation fund.

C. The Navy, Not the Manufacturer, Decides on Specifications and Warnings to Be Posted

The U.S. Navy, like all branches of the U.S. military, finds itself in the unenviable position of putting service members in harm's way through direct engagements and training exercises. ²⁶⁶ An additional risk to those that serve, however, comes from the injuries and illnesses—sometimes resulting in death—arising out of routine maintenance operations required to achieve a state of combat readiness. ²⁶⁷ For example, Operation Iraqi Freedom, initiated by President George W. Bush on March 20, 2003, ²⁶⁸ resulted in 4,419 U.S. military deaths (3,481 were due to contact with hostile forces and 668 deaths were due to accident, illness, or injury). ²⁶⁹ Perhaps a more insidious source of harm for service members, however, arises from routine maintenance of equipment containing harmful materials—such as asbestos—that results in long-term suffering, and possibly death,

- 261. Id.
- 262. Behrens & Horn, supra note 2, at 494–505.
- 263. Id. at 490.
- 264. Rastelli v. Goodyear Tire & Rubber Co., 591 N.E.2d 222, 225–26 (N.Y. 1992).
- 265. Posner & Landes, supra note 223, at 854.

^{266.} Zachary Cohen, *More US Troops Die During Training Than in Combat Operations*, CNN POLITICS (Jun. 6, 2019, 5:27 PM), https://www.cnn.com/2019/06/06/politics/us-military-deadly-accidents/index.html.

^{267.} Joint Appendix, Vol. 1 at *25, Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986 (2019) (No. 17-1104), 2018 WL 3377182.

^{268.} Operation Iraqi Freedom, NAVAL HIST. & HERITAGE COMMAND (Oct. 9, 2019, 3:49 PM), https://www.history.navy.mil/content/history/nhhc/browse-by-topic/wars-conflicts-and-operations/middle-east/operation-iraqi-freedom.html.

 $^{269.\;\;}$ Nese F. Debruyne, American War and Military Operations Casualties: Lists and Statistics 15 (2019).

many years after conflict or service has ended.²⁷⁰ The harms suffered by sailors DeVries and McAfee fall into this category of risks.

The Navy is responsible for deciding whether or not to install asbestos aboard its vessels and, if it does install asbestos, how to maintain and replace the material aboard its vessels as part of its ongoing obligation to maintain combat readiness.²⁷¹ The Navy must make hard decisions that involve balancing the immediate service members and distant risks to service members, while ensuring that a combat ready force is maintained.²⁷² Part of this balancing requires weighing the risk of using asbestos to insulate fire-prone, high-temperature, high-pressure systems on ships which may result in asbestos induced harms to service members against the risks of immediate death or serious injury due to fire and steam from uninsulated ship systems.²⁷³ Naval ships built before 1980 were packed with asbestos.²⁷⁴ and the health hazards of asbestos exposure were well known by then.²⁷⁵ It follows, therefore, that the Navy decided that the risk of immediate death or serious burns due to not insulating ship systems, combined with the low cost and availability of asbestos, outweighed the distant 1%-10% cumulative risk of mesothelioma²⁷⁶ in service members who would be exposed to the asbestos. In O'Neil, the Navy's own specifications required that steam-carrying pipes and steam-producing equipment be insulated with asbestos.²⁷⁷ The Navy also required that gaskets inside steam regulating valves be made using asbestos²⁷⁸ and would not accept equipment that did not conform with their specifications. ²⁷⁹ Also, in Rust Engineering Company v. United States²⁸⁰ it is noted that "flameproof insulation described in Nav[al] specifications . . . was asbestos." 281

In an affidavit provided to the Court, Rear Admiral Roger B. Horne²⁸² explains that the Navy is in possession of specialized knowledge based on tactical demands and operational requirements and takes exclusive control

^{270.} Aaron Munz, Asbestos Exposure in Military Branches & Wars, ASBESTOS.COM, https://www.asbestos.com/veterans/military-branches/ (last updated Mar. 5, 2020).

^{271.} Joint Appendix, *supra* note 267, at *26–27.

^{272.} *Id.* at *43–44.

^{273.} *Id.* at *43–44.

^{274.} Aaron Munz, *Asbestos Exposure on Navy Ships*, ASBESTOS.COM, https://www.asbestos.com/navy/ships/ (last updated Mar. 5, 2020) (describing how the areas of a ship with the highest risks of exposure are the engine, boiler, and pump rooms; however, given the use of asbestos in fire-insulation and as pipe-wrap, there is some risk of exposure in all pre-1980 Naval vessels).

^{275.} See Mossman & Gee, supra note 28, at 1723.

^{276.} See, e.g., Järvholm & Åström, supra note 33, at 1299 tbl.2; Selby, supra note 33.

^{277.} O'Neil v. Crane Co., 266 P.3d 987, 991-92 (Cal. 2012).

^{278.} Id.

^{279.} Id. at 991.

^{280. 95} Ct. Cl. 125 (1941).

^{281.} Id. at 133.

^{282.} Rear Admiral Horne was the Chief Engineer and Deputy Commander of Naval Sea Systems Command and responsible for the development of ship design and maintenance, having been involved in the construction or overhaul of more than eighty ships and submarines. The Rear Admiral provided expansive evidence regarding how the Navy goes about the business of designing and constructing warships, including descriptions of responsibilities of contractors supplying equipment. Joint Appendix, *supra* note 267, at *25–44.

of the specifications for its equipment.²⁸³ According to the Rear Admiral, "all Navy vessel equipment... was built according to Navy specifications";²⁸⁴ he continues by noting that "[i]t was the Navy, not contract manufacturers that required the use of asbestos thermal insulation."285 Concluding, the Rear Admiral states that "the Navy exclusively controlled the detailed specifications for its equipment . . . and the type of insulation materials to be used with that equipment "286" and that "[the Navy] exclusively controlled warnings related to health and safety implications of its selected insulation materials."²⁸⁷ Furthermore, the O'Neil court notes that prior to the 1960s, when the Manufacturer in DeVries provided bare-metal equipment to the Navy, no alternative to asbestos was available.²⁸⁸ The Navy had absolute control over the specifications of the equipment it was procuring and did not allow manufacturers to provide warnings to sailors regarding insulation materials.²⁸⁹ Rather, the Navy chose to provide warnings in the form of training and specifications. 290 It is unclear, therefore, exactly how a manufacturer could have provided any warning regarding harms due to asbestos added by the Navy while remaining in compliance with Navy specifications. The strict requirements of the Navy, and the Navy's desire to be in absolute control over the warnings issued to service members regarding asbestos-related harms, evaporates the Manufacturer's duty to warn.²⁹¹ This is because it is impossible for the Manufacturer to provide the equipment to the Navy, per the Navy's requirements, without simultaneously breaching a duty to warn under the Court's new standard.

The Court's standard requires that the Manufacturer provides a warning when a harm is foreseeable from the Navy adding asbestos to the provided equipment. Navy specifications for the equipment allowed no warnings however, and the bare-metal rule, under which the Manufacturer was operating, does not require that the Manufacturer contemplate a harm from the Navy's foreseeable addition of asbestos. He Navy rejects equipment provided to it by manufacturers that does not comply with its specifications. The Court's new standard and the requirements and actions of the Navy are, therefore, seemingly mutually exclusive. Moreover, the Court's new standard for duty to warn presumably extends to all possible users of the Manufacturer's equipment who would be subject to

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283.
       Id. at *25-44.
       Id. at *33.
284.
285.
       Id. at *35.
       Id. at *43.
286.
       Id. at *43-44.
287.
       O'Neil v. Crane Co., 266 P.3d 987, 992 (Cal. 2012).
288.
289.
       Joint Appendix, supra note 267, at *39–40.
290.
       Id. at *40.
291.
       See Id. at *39-44.
292.
        Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986, 996 (2019).
293
        Joint Appendix, supra note 267, at *39-40, *43-44.
294.
        O'Neil v. Crane Co., 266 P.3d 987, 991 (Cal. 2012).
        Joint Appendix, supra note 267, at *34, *42; see also O'Neil, 266 P.3d at 992.
295.
       See O'Neil, 266 P.3d at 992.
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maritime law, until such time that the equipment is no longer in use.²⁹⁷ This expanded the duty the Manufacturer owed to any user, at any time, in any possible use scenario.

In other areas of asbestos litigation where there are claims of thirdparty failure to warn, courts have often declined finding a duty and, thus, refused to expand liability to large, poorly defined groups of individuals who may be affected by exposure in abstracted ways. ²⁹⁸ In many instances these refusals to expand liability are based on the policy reasons of practicality, efficiency, and judicial management.²⁹⁹ In a category of cases known as "take-home asbestos exposure cases," the plaintiffs are relatives and others who come into contact with the asbestos-laden clothing of those who have been occupationally exposed to the material.³⁰⁰ Courts are split on whether a third-party duty to warn exists in the take-home asbestos cases.³⁰¹ A number of courts consider the importance of limiting widespread liability in their analyses. For example, in In re N.Y.C Asbestos Litigation, 302 the Court of Appeals of New York ultimately decided that the most important policy consideration was limiting a potential expansion of liability, and in doing so, effectively relegated the role of foreseeability in the determination of whether recovery for exposure is possible.³⁰³ The court was quite explicit about its concerns regarding the risk of boundless liability when it said, "the 'specter of limitless liability' is banished only when 'the class of potential plaintiffs to whom the duty is owed is circumscribed by the relationship. "304 Similarly, in CertainTeed Corporation v. Fletcher. 305 the Georgia Supreme Court found no duty to warn family members of asbestos risks posed by laundering asbestos-contaminated clothing or to warn members of the public about a risk of asbestos exposure because "the mechanism and scope of such warnings would be endless."306 The Supreme Court of Illinois similarly declined to find a duty to warn of a risk of acquiring mesothelioma from incidental exposure to

^{297.} Brief of the Product Liability Advisory Council, Inc. as Amicus Curiae Supporting Petitioners at 31, *DeVries*, 139 S. Ct. 986 (No. 17-1104).

^{298.} Jake Snow, Considering Duty in Take-Home Asbestos Exposure Cases, 12 LIBERTY U. L. REV. 199, 207–12 (2017).

^{299.} Quiroz v. ALCOA Inc., 416 P.3d 824, 842-43 (Ariz. 2018).

^{300.} Snow, *supra* note 298, at 201.

^{301.} Donald R. Kinsley, *Duty for Take Home Asbestos Exposure: A Jurisdictional Analysis*, MARON MARVEL BRADLY ANDERSON & TARDY LLC (Jan. 7 2019), http://www.maronmarvel.com/news-insights/duty-for-take-home-asbestos-exposures-a-jurisdictional-analysis (describing jurisdictional splits where duty exists based on foreseeability: Alabama, California, Delaware, Indiana, Louisiana, New Jersey, Tennessee, Virgina, and Washington; where duty does not exist based on no finding of foreseeability: Arizona, Kentucky, Maine, Oklahoma, Pennsylvania, and Texas; where duty does not exist based on lack of relationship and public policy concerns: Arizona, Georgia, Illinois, Iowa, Maryland, Michigan, New York, North Dakota, and Ohio; and where recovery is statutorily barred for take-home exposure: Kansas and Ohio).

^{302. 840} N.E.2d 115, 122 (N.Y. 2005).

^{303.} Id. at 122.

^{304.} Id. (quoting Hamilton v. Beretta U.S.A. Corp., 750 N.E.2d 1055, 1061 (N.Y. 2001)).

^{305. 794} S.E.2d 641 (Ga. 2016).

^{306.} Id. at 645.

asbestos on a family member's clothing because "the universe of potential persons to whom the duty might be owed is unlimited." ³⁰⁷

Even if the Navy allowed manufacturer-provided warnings and user manuals to be attached to its procured equipment, the utility of such warnings is questionable in reducing risks to users. The practicality of providing a warning is that the warning will persist over time and be acted on by its recipient. When the warning cannot have its practical effect, the cost of providing such warning weighs heavily against a warning being issued. Any warning of asbestos exposure provided by the Manufacturer on its equipment would have been removed pursuant to Naval specifications long before McAfee or DeVries worked with the equipment. Furthermore, the Navy elected to provide training regarding the risks of asbestos exposure over requiring warnings be posted.

The Navy's specifications did not allow for warnings on the equipment provided to it by the Manufacturer. Any such duty that is imposed upon the Manufacturer expands liability, a notion that many courts have been reluctant to entertain. Any duty to provide a warning creates a problem that tort law strives to avoid: the impossibility of compliance with a duty. Lastly, the practicality of any warning provided by the Manufacturer is questionable. In the aggregate, these considerations weigh strongly against finding that manufacturers have a duty to warn when a second-party harmful component is integrated into a harmless piece of equipment by a sophisticated third-party, such as the Navy.

CONCLUSION

In *DeVries*, the Court finds a duty for a manufacturer of products used in the maritime context to provide a warning about the possible incorporation of another's product, that it may or not know will be incorporated, that is selected and installed by a third-party, and which might cause harm to an expansive number of individuals.³¹⁵ The Court rejected what it perceived as an overextension of foreseeability in the reasoning of the Third Circuit;³¹⁶ however, the foreseeability required with the new standard seems similarly far-reaching.

^{307.} Van Fossen v. MidAmerican Energy Co., 777 N.W.2d 689, 698–99 (Iowa 2009).

^{308.} *See* Brief of the Richard Epstein as Amicus Curiae Supporting Petitioners, *supra* note 297, at 26–28.

^{309.} Ga. Pac., LLC v. Farrar, 69 A.3d 1028, 1039 (Md. 2013) (describing that even if it is fore-seeable that someone is in the "zone of danger, there was no practical way that any warning given by [defendant] to any of the suggested intermediaries would or could have avoided that danger." The court found no duty to warn).

^{310.} See Joint Appendix, supra note 267, at *40, *44.

^{311.} *Id.* at *40–41, *44.

^{312.} *Id.* at *40–41, *44.

^{313.} See, e.g., O'Neil v. Crane Co., 266 P.3d 987, 997 (Cal. 2012).

^{314.} See RESTATEMENT (SECOND) OF TORTS § 4 cmt. a (AM. LAW INST. 1965).

^{315.} Air & Liquid Sys. Corp. v. DeVries, 139 S. Ct. 986, 996 (2019).

^{316.} *Id.* at 993–94.

The DeVries decision, while narrowly framed in the maritime context, creates a new legal reality where maritime bare-metal defendants are liable for harms long after they engaged in conduct that, at the time, was perfectly reasonable and in conformity with the standard of care. Justice Gorsuch's dissent in *DeVries* may be augmented in three ways. First, the dissent could be strengthened by confronting the majority opinion's overapplication of the special solicitude for sailors by recognizing the Court's discounting of tort law principles when assigning liability to one manufacturer for the harms caused by another's product.³¹⁷ Second, Justice Gorsuch's arguments regarding the majority's disregard of principles of tort law can be expanded.³¹⁸ And, third, the dissent is strengthened by discussion of how the Navy's own requirements lead to a world in which a manufacturer could never provide the Navy with a bare-metal product, per the Navy's specifications, without being liable for future harms due to the Navy's later addition of asbestos insulation. 319 The unfortunate economic consequence of the Court's broadening of the scope of liability is that manufacturers of bare-metal products, once protected by the clear and easily applied bare-metal rule, which were barely afloat in a sea of asbestos litigation, could be financially sunk.

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^{317.} See analysis supra Section III.A.

^{318.} See analysis supra Section III.B.

^{319.} See analysis supra Section III.C.

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