

**JOURNAL OF TRANSPORTATION LAW,
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2017-18 LAW AND GRADUATE STUDENT TRANSPORTATION

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The *Journal of Transportation Law, Logistics and Policy*, which is published by the Association of Transportation Law Practitioners (“ATLP”), announces its 2016 law and graduate student writing competition, seeking quality articles related to transportation. The winning articles will be published in the *Journal*. ATLP’s members are composed of legal, academic, business and government experts in the field of transportation. The *Journal*, which has been published quarterly since 1935, contains academic-quality articles on timely subjects of interest to transportation academics, attorneys, government officials and a wide variety of policy leaders in the field. Articles in the *Journal* cover all modes and all aspects of transportation policy and law, including both freight and passenger issues, and matters of interest both nationally and internationally. Subscribers to the *Journal* include academic and legal experts, practicing attorneys, government officials, and many others.

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Selection of Winners: No more than two winners will be selected through blind review from the entries submitted. Entries will be reviewed by the members of ATLP’s Publications Committee and/or members of the *Journal’s* Editorial Advisory

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Prizes: Winning entries will be published in the *Journal*, and a cash award will be given to the author of each winning entry. The winning authors will have the opportunity to present their papers at ATLP's Annual Meeting in June; the registration fee for the meeting will be waived, for both the student and the student's advisor. Authors of the winning entry and the student's advisor will also receive a complementary membership to ATLP for the next year.

Deadlines and Schedule: Papers must be submitted via email on or before April 1st. to Lauren Michalski, ATLP Executive Director, at michalski@atlp.org. Winners will be notified on or before May 1st. The winning papers will be published in the current year's edition of the *Journal*.

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1. All articles should be submitted in Microsoft Word. Please do not PDF the file.
2. Margins should be standard preset margins for 8.5 x 11.
3. Pages should be single-spaced, in Times New Roman font, no smaller than 11 points. Double space between paragraphs. Page numbers should be placed at the bottom of each page. The first line of each paragraph should be indented .5 inches. Case citations should be italicized.
4. Subheadings: All subheads should be flush with the left margin, with one line space above:

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5. Footnotes should be numbered and be placed at the bottom of the same page of the text to which they refer. Footnotes should either contain the full information regarding the cited source in the footnote itself (legal format), or they should contain the reference to the author and the year of the publication cited, with the details set forth in a "Reference" section at the end of the article (academic format).
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We are a global transportation and logistics organization, proud of our heritage, enthusiastic about our future and driven to exceed the expectations of our present and future members. We are leaders in providing educational opportunities, promoting transportation and logistics efficiencies, encouraging professional conduct and facilitating the free flow of information and exchange of ideas in the constantly changing and highly competitive transportation and logistics environment.

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AVIATION MODAL UPDATE

*John Maggio*¹

I. Introduction

Over the past year, several new court decisions and regulations have impacted air carriers. This article briefly discusses a few recent decisions involving federal preemption, the Montreal Convention, personal jurisdiction and *forum non conveniens*.

II. Federal Preemption

Article VI of the U.S. Constitution states that “This Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land.” This means that any state law that conflicts with a federal law is “without effect.”² There are two types of preemption: express preemption and implied preemption. That is, federal preemptive effect may be expressly stated in a federal statute’s text or may be inferred from its meaning and intent.³ Field preemption is one kind of implied preemption. It occurs when “the scheme of federal regulation is so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it.”⁴ Field preemption often arises in aviation cases because there are a variety of federal statutes intended to create a uniform system of federal regulation of air safety.

¹ John Maggio is a partner in the New York and Miami offices of the law firm Condon & Forsyth LLP. Evan M. Kwarta, an associate at the firm, assisted with this paper.

² *Altria Group, Inc. v. Good*, 555 U.S. 70, 76 (2008).

³ *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 383 (1992).

⁴ *Gade v. Nat’l Solids Waste Mgm’t Ass’n.*, 505 U.S. 88, 98 (1992).

When litigation arises after an aviation-related event, plaintiffs generally assert negligence-based causes of action relying upon state standards of care to recover damages. In response, defendants have argued that the federal government exclusively and completely controls, and regulates aircraft operation in the United States with “plenary authority,” including the field of aviation safety, which was Congress’s intent in enacting the Federal Aviation Act of 1958 (“1958 Act”) and a number of subsequent statutes.⁵ Accordingly, federal standards of care, not state law standards, relating to aviation safety apply to plaintiffs’ negligence claims. The majority of courts that have addressed the issue of preemption in aviation litigation have concluded that plaintiffs must establish a violation of a federal standard of care before allowing remedies under state law.

A. Federal Preemption Under the 1958 Act

The U.S. District Court for the District of Hawaii recently demonstrated the breadth of federal preemption in the context of the Federal Aviation Act of 1958. In *Escobar v. Nevada Helicopter Leasing, LLC*,⁶ the widow of a helicopter pilot brought claims against the owner/lessor of the subject helicopter after the helicopter crashed into the Hawaiian mountains, killing all on board, including the pilot. The court granted summary judgment to the aircraft owner/lessor on the grounds that the plaintiff’s state law strict liability and negligence claims were preempted by the 1958 Act.

⁵ 49 U.S.C. § 40101, *et seq.*

⁶ No. 13-00598-HG-RLP, 2016 WL 3962805 (D. Hawaii July 21, 2016).

The owner/lessor of the subject helicopter was Nevada Helicopter Leasing, LLC, a Nevada corporation. Nevada Helicopter leased the subject helicopter to Blue Hawaiian Helicopters. Although both Nevada Helicopter and Blue Hawaiian were owned by the same two individuals, the lease agreement for the subject helicopter provided that the lessee, Blue Hawaiian, would be in possession and control of the subject helicopter at all times until the expiration of the lease agreement. Because the 1958 Act provides that “lessors” and “owners” of aircraft with leases of more than thirty (30) days are shielded from liability when those owner/lessors are not in actual possession or control of aircraft, Nevada Helicopter moved for summary judgment, arguing that the plaintiff’s state law strict liability and negligence claims are preempted and, therefore, should be dismissed.

As an initial matter, the court noted that the 1958 Act does not expressly preempt the plaintiff’s claims because there is no express preemption clause in that statute. The court also determined that “field preemption” was not an issue because the 1958 Act does not so thoroughly occupy the legislative field so as to indicate that it was the intent of Congress to occupy the entire field to the exclusion of state law. In fact, the court set forth several instances where courts have found that the 1958 Act and its component regulations do not completely preempt the field to the exclusion of state law claims for injuries.

However, the court held that there could be conflict preemption in this case. Conflict preemption arises either when it is impossible to comply with both federal and state law, or when state law stands in the way of the accomplishment of an objective of federal law. The court

then analyzed the 1958 Act and determined that one of the objectives of the 1958 Act was to shield aircraft owners and lessors from liability arising from accidents involving those aircraft provided that the owners and lessors were not in control of the aircraft at the time of the incidents giving rise to injuries.

Thus, the court analyzed the plaintiff's state law negligence and strict liability claims to determine whether those claims potentially could conflict with the 1958 Act's shield to lessor/owner liability. With respect to the plaintiff's negligence claims, the court held that under Hawaiian law, Nevada Helicopter as the owner/lessor could be held liable if the plaintiff proves her negligence claims, even if Nevada Helicopter was not in possession or control of the subject helicopter. The court similarly held that Nevada Helicopter could be held liable in strict liability under Hawaiian law notwithstanding the fact that Nevada Helicopter was not in possession or control of the subject helicopter at the time of the accident giving rise to the plaintiff's suit.

Accordingly, the court determined that imposing liability upon the helicopter owner/lessor Nevada Helicopter under Hawaiian law for the subject accident would conflict with the purposes and objectives of the 1958 Act's shield to owner/lessor liability. In this regard, the court cited to several other federal courts that reached the same conclusion, including the Seventh Circuit Court of Appeals, as well as to state courts that similarly held that the 1958 Act bars claims against aircraft owners and lessors not in possession and control of the aircraft. The court also took the unusual step of criticizing the Florida Supreme Court,

which reached the opposite conclusion,⁷ citing to the dissent in that case, which had written that the Florida Supreme Court's holding "defies reality." The court also noted that the Florida Supreme Court's view is in the minority throughout U.S. jurisdictions.

On the basis that the plaintiff's state law negligence and strict liability claims against Nevada Helicopter were preempted by the 1958 Act, Nevada Helicopter was granted summary judgment and was dismissed from the case.

B. Federal Preemption Under the Airline Deregulation Act of 1978

As set forth above, federal preemption can arise under other federal statutes, including from the Airline Deregulation Act of 1978 ("ADA"). In *Conservation Force v. Delta Air Lines*,⁸ the plaintiffs brought claims against Delta Air Lines alleging that Delta, which had recently announced that it would stop transporting certain safari game trophies as cargo, was required to transport big game trophies. Specifically, the plaintiffs, alleged big-game hunters and conservationists, claimed that Delta's own prohibition against transporting trophies of lions, leopards, elephants, rhinoceroses, and buffalo: (1) violated Delta's common law duties as a common carrier by refusing to transport certain kinds of cargo; (2) constituted a tortious interference with the plaintiffs' business relations; and (3) violated federal regulations arising under the 1958 Act. Delta moved to dismiss each claim on the grounds that: (1) Delta is permitted to discriminate among the types of cargo

⁷ See *Vreeland v. Ferrer*, 71 So.2d 70 (Fla. 2011).

⁸ 190 F. Supp. 3d 606 (N.D. Tex. 2016).

it is willing to transport; (2) plaintiffs' tortious interference claim is preempted by the ADA; and (3) there is no private right of action for plaintiffs to enforce their claims under the 1958 Act. The court granted Delta's motion to dismiss on each of the plaintiffs' three claims.

First, with respect to the plaintiffs' claim that Delta's refusal to transport big-game trophies violated Delta's duty as a common carrier, the court explained that although common carriers are required under federal common law to treat all shippers equally, no court has held that common carriers cannot discriminate among the types of cargo they elect to carry. Accordingly, Delta could refuse to transport safari trophies even if its lone reason for doing so was, as the plaintiffs alleged, favorable publicity.

Delta argued that the plaintiffs' second claim, for tortious interference with business relations, was preempted by the ADA. Specifically, Delta argued that the ADA, by its own language, preempts all state law-based claims that could have an effect on an airline's "prices, routes or services." The court agreed. The plaintiffs argued that their tortious interference claim does not apply to one of Delta's services because it was Delta's announcement that it would no longer transport safari trophies had a deceptive and defamatory effect on plaintiffs' business relations and, therefore, the claim was related to an announcement Delta made, not a service. The court rejected this argument. First, it noted that the ADA's preemptive effect has been interpreted and applied broadly by all federal courts. Second, it held that the plaintiffs' complaint related to the transport of a particular kind of cargo, which necessarily is a service Delta provides regardless of how that service was

announced to the public.

Finally, the court addressed and rejected the plaintiffs' argument that Delta's refusal to transport big-game trophies was a violation of the 1958 Act. The plaintiffs again argued that Delta's refusal to carry big game amounted to unreasonable discrimination, and specifically discrimination prohibited by the 1958 Act. The court, however, did not even address this discrimination argument; instead it held that the plaintiffs have no private right of action against Delta under the 1958 Act. The court held that the Fifth Circuit in which it sits has not squarely addressed whether the 1958 Act provides a private right of action. Accordingly, it endeavored to analyze four factors to determine whether a private right of action exists: (1) whether the plaintiffs are a class for whom a special benefit in the 1958 Act was enacted; (2) whether there was a legislative intent to create a remedy for the plaintiffs; (3) whether the existence of a private right would be consistent with the underlying 1958 Act purpose and legislative scheme; (4) whether the plaintiffs' cause of action asserted is traditionally relegated to state law in an area of concern to states, such that it would be inappropriate to infer a cause of action based on federal law.

The court only analyzed the first two inquiries, holding that they weighed so heavily in favor of a finding against the existence of a private right of action that the court did not need to address the third and fourth factors. With respect to the first factor, the court held that the 1958 Act has no rights creating language, and that there was no indication that the 1958 Act was written for the purposes of creating a remedy for private litigants. With respect to the second factor, the court held that the enforcement scheme

set forth in the 1958 Act, including administrative proceedings and federal suits initiated by the Department of Transportation, strongly indicated that Congress did not intend to provide a private right of action stemming from the 1958 Act. Accordingly, the plaintiffs had no private right of action under the 1958 Act.

Finally, the court addressed the plaintiffs' separate argument that Delta's actions violated its air carrier certificate issued under the 1958 Act, and their request to invalidate Delta's operating certificate. The court rejected that argument holding that there is no private right of action to invalidate an air carrier's certificate. For these reasons, the court granted Delta's motion to dismiss in its entirety. The plaintiffs appealed to the United States Court of Appeals for the Fifth Circuit, which affirmed the dismissal on March 20, 2017.

In another recent case, *Gordon v. Amadeus IT Group, S.A.*,⁹ the plaintiffs brought a class action on behalf of consumers who have purchased airline tickets in the preceding ten years against the defendants, a group of global distribution systems ("GDS") through which airlines provide fare and schedule airline ticket information to travel agents. The suit alleges that the defendants conspired to restrain competition in violation of federal antitrust laws and state consumer protection laws.

GDSs serve as conduits between airlines and travel agencies that distribute information to travel agents concerning airline services, schedules and fares. In recent years, GDSs have faced competition from airline websites

⁹ 194 F. Supp. 3d 236 (S.D.N.Y. 2016).

and air ticket aggregator websites, such as Orbitz. According to the class-action plaintiffs, the independent GDS defendants responded to this competition by collusively negotiating with airlines for identical GDS agreements so that airlines would have no choice but to pay GDSs their requested fees, which would be lower if each GDS was forced to negotiate a different agreement with airlines on its own. The plaintiffs further alleged that in negotiating identical agreements, GDSs were able to manipulate the market for ticket sales because the GDSs manipulated travel agencies, through which many business travelers, who generate the majority of airline revenue, use to book their tickets. According to the plaintiffs, the GDSs' conduct raised airline ticket prices.

The defendants moved to dismiss the state consumer protection law-based claims on the grounds that they are preempted by the ADA, which preempts any state law relating to an airline's "price, route, or service." The plaintiffs argued that their state law claims do not relate to an airline price, route or service because they did not bring suit against any airline, just GDSs. The U.S. District Court for the Southern District of New York disagreed. The court first noted that in *Morales v. Trans World Airlines, Inc.*,¹⁰ the Supreme Court applied ADA preemption in the context of airline ticket marketing, even though marketing was not itself a price, route or service. The court here held that the impact that marketing has on airline prices, routes and services, was analogous to the impact that GDS competition has on airline prices, routes and services. Accordingly, the plaintiffs' state consumer protection law-based claims were preempted.

¹⁰ 504 U.S. 374 (1992).

The court noted the irony of its holding: that the ADA was designed to have a deregulatory effect and enhance marketplace competition, and by holding that GDSs essentially could act in concert to control ticket prices, the court could be promoting the opposite effect. However, the court held that this contradictory effect could not be cured from the bench.

The court next examined the plaintiffs' federal antitrust claims. The defendants moved to dismiss those as well on the grounds that the plaintiffs lacked standing to bring the claim. However, the court held at the motion to dismiss stage that the plaintiffs had sufficiently set forth a non-speculative injury and were among the class of plaintiffs who could be injured by the alleged GDS practice so as to provide standing for their claims. Finally, the defendants moved to dismiss on laches grounds, arguing that the plaintiffs' claims were inexcusably delayed because they accrued up to ten years prior to the bringing of the action. However, the court denied that motion on the grounds that the defendants were not prejudiced by the delay. The antitrust claims against the GDS defendants now will proceed in discovery.

III. The Montreal Convention

The Montreal Convention of 1999,¹¹ entered into force on November 4, 2003 is the successor to the Warsaw

¹¹ Convention for the Unification of Certain Rules for International Carriage by Air, opened for signature on May 28, 1999, *reprinted in* S. Treaty Doc. 106-45, 1999 WL 333292734 ("Montreal Convention").

Convention.¹² The Montreal Convention unifies and replaces the system of liability that derives from the Warsaw Convention,¹³ and is applicable to all “international carriage of persons, baggage or goods performed by aircraft for reward.”¹⁴ There are currently 125 parties to the Montreal Convention.

Many of the cases that involve the application of the Montreal Convention continue to reference its predecessor, the Warsaw Convention, to which over 150 nations are parties. Many cases discussing the Montreal Convention also have relied upon cases interpreting a provision of the earlier Warsaw Convention, where the equivalent provision in the Montreal Convention is substantively the same.¹⁵ In cases involving carriage between state parties that have not yet ratified the Montreal Convention, courts continue to apply the relevant provisions of the Warsaw Convention. Most cases discussing the Conventions tend to focus upon the preemptive effect of the treaties over state law rights and remedies.

A recent case from the U.S. District Court for the Central District of California is illustrative. In *Patel v. Singapore Airlines*, the court granted summary judgment to Singapore Airlines (“SIA”) against by a passenger who travelled with a cancelled passport from San Francisco to

¹² Convention for the Unification of Certain Rules Relating to International Transportation by Air, concluded at Warsaw, Poland, October 12, 1929, 49 Stat. 3000, T.S. No. 876, 137 L.N.T.S. 11 (1934), reprinted in note following 49 U.S.C.A. § 40104 (1997) (“Warsaw Convention”).

¹³ See *Ehrlich v. American Airlines, Inc.*, 360 F.3d 366, 371 (2d Cir. 2004).

¹⁴ Montreal Convention, Art. 1(1).

¹⁵ See e.g., *Baah v. Virgin Atlantic Airways Ltd.*, 473 F. Supp. 2d 591 (S.D.N.Y. 2007); *Paradis v. Ghana Airways Ltd.*, 348 F. Supp. 2d 106, 110-11 (S.D.N.Y. 2004), *aff’d*, 194 Fed. Appx. 5 (2d Cir. 2006).

India, and was denied entry when she arrived in India.¹⁶ Prior to her scheduled travel, the plaintiff lost her U.S. passport, and instead brought her Indian passport. Her Indian passport, however, had been cancelled prior to her flights, and was stamped with a notation reading: “passport cancelled as acquired by U.S. nationals.” When the plaintiff presented her cancelled Indian passport to SIA to check in to her flight to India, SIA agents nonetheless allowed her to board.

On arrival in India, she presented her cancelled Indian passport to Indian immigration officials, who denied her entry because of her invalid passport. India’s laws require that SIA transport the plaintiff back to her place of origin, and she therefore took another SIA flight back to San Francisco. During the 14-15 hour return flight the plaintiff alleged that she suffered injuries including severe back pain, headaches, and emotional trauma. The plaintiff sued SIA for a single negligence cause of action which alleged that SIA was negligent for allowing her to make the “arduous” trip from California to India without a valid passport, which resulted in “unnecessary travel forced upon her.”

SIA moved for summary judgment on two grounds: (1) that the plaintiff’s negligence claim is preempted by the Montreal Convention; and (2) even if the Montreal Convention does not apply, the plaintiff could not prevail under California law. With respect to preemption, the court first examined whether the Montreal Convention applied to the plaintiff’s claim.

¹⁶ *Patel v. Singapore Airlines, Ltd.*, No. CV 15-4205 FMO, 2017 WL 1078444 (C.D. Cal. March 21, 2017).

The court's analysis began by noting the scope of the Montreal Convention, which applies "only and exclusively" to an airline's liability for "passenger injuries occurring on board the aircraft or in the course of any of the operations of embarking or disembarking."¹⁷ The plaintiff argued that the Convention was inapplicable because the alleged accident – SIA allowing the plaintiff to board her flight to India with an invalid passport – did not occur while she was on board a SIA aircraft, or while she was in the process of embarking or disembarking. The court rejected this argument because it conflates the applicability of the Convention with liability under the Convention: the applicability of the Convention is determined by whether the alleged injury occurred on board the aircraft, or in the process of embarking or disembarking, while liability under the Convention is determined by whether an accident occurred on board an aircraft, or in the process of embarking or disembarking. Because the plaintiff alleged that her pain and emotional injuries were caused by the "unnecessary travel" of the return flight to San Francisco, the court concluded that it was indisputable that the plaintiff's alleged injuries occurred while she was onboard her return flight to San Francisco. Consequently, the Montreal Convention governed her claim.

The court next examined Montreal Convention Article 17 liability. Liability requires proof of an "accident" that caused the plaintiff to suffer bodily injury, and that the accident occurred on board the aircraft or in the process of embarking or disembarking. An Article 17 accident is defined as "an unexpected or unusual event or happening

¹⁷ *El Al Israel Airlines, Ltd. v. Tsui Yuan Tseng*, 525 U.S. 155 (1999).

that is external to the passenger,”¹⁸ and the plaintiff’s alleged “accident” was SIA’s decision to allow her to fly to India without a valid passport. The court concluded, however, that this event did not constitute an “accident” because it was not external to the plaintiff. Rather, the plaintiff chose to bring her cancelled passport to the airport, and she also chose to board the flight to India knowing that her Indian passport had been cancelled. Accordingly, because the plaintiff was unable to prove that an Article 17 accident caused her injuries, or that such accident occurred in the process of embarking or disembarking, she could not prevail on an Article 17 claim against SIA.

The court also concluded that the plaintiff could not prevail on her state law negligence claim. The plaintiff argued that, as a common carrier, SIA owed her a heightened duty of care, and that SIA breached this duty by allowing her to board the flight to India, knowing that she did not have the proper passport to enter. The court rejected the argument that SIA owed the plaintiff a heightened duty of care because, under California law, such duty only applies to a sphere of the carrier’s activity that might constitute a mobile or animated hazard, such as moving vehicles, aircraft, or propeller air blasts. When the plaintiff checked in for her flight, however, she was not within the sphere of activity in which SIA’s activities might constitute a mobile or animated hazard to her. Consequently, she was only owed an ordinary duty of care, which does not require an airline to warn a traveler that she does not have proper documentation to enter a foreign country. Accordingly, the plaintiff’s claim was dismissed in full.

¹⁸ *Air France v. Saks*, 470 U.S. 392, 405 (1985).

IV. *Forum Non Conveniens* and Personal Jurisdiction

Fortunately, aviation disasters within the U.S. have become less common in recent years. However, when aviation tragedies occur outside the U.S., plaintiffs' attorneys have attempted to sue carriers, aircraft and component part manufacturers as well as lessors/leases in the United States. To dismiss such cases, defendants routinely rely on motions to dismiss based on *forum non conveniens* ("FNC") grounds. Pursuant to this common law doctrine, a court may dismiss a case, despite having jurisdiction over it, on the ground that a different, more appropriate and convenient forum exists. In making such determinations, courts consider whether: (1) an available and adequate alternative forum exists; and (2) the balance of the private and public interests supports litigating the case in the alternative forum.¹⁹ Courts afford substantial deference to domestic plaintiffs' choice of forum and will grant less deference to a foreign plaintiff's choice of forum.²⁰

In addition to motions to dismiss based on *forum non conveniens*, defendants have come to rely on the Supreme Court decision in *Daimler AG v. Bauman* in an effort to have cases dismissed on personal jurisdiction grounds.²¹ In *Daimler*, survivors from Argentina's "Dirty War" from 1976-1983 sued DaimlerChrysler in a United States District Court for the Northern District of California alleging that its subsidiary's activities in Argentina gave rise to claims under the Alien Tort Statute, the Torture Victim Protection

¹⁹ *Piper Aircraft v. Reyno*, 454 U.S. 235, 260-261 (1981).

²⁰ *Id.*

²¹ 571 U.S. ___, 134 S. Ct. 746 (2014).

Act, and California state tort law. The Supreme Court addressed whether a U.S. federal court had personal jurisdiction over Daimler in California based on actions outside the forum. The Court held that the Daimler's minor contacts in California, relative to its other national and international contacts, were not sufficient to render it "at home" in California for the purpose of general jurisdiction. Defendants in aviation cases have relied upon this decision to argue minimum contacts to the U.S. forum, in consideration of worldwide contacts, warrant dismissal.

A. AirAsia Flight QZ 8501 - FNC and Personal Jurisdiction

In *Siswanto v. Airbus, S.A.S.*,²² the United States District Court for the Northern District of Illinois addressed its jurisdictional reach over foreign defendants in the wake of the *Daimler* decision and an analysis of *forum non conveniens*. *Siswanto* arose out of the December 28, 2014 crash in the Java Sea of AirAsia flight QZ 8501 travelling from Surabaya, Indonesia to Singapore. All passengers and crew on board the flight perished.

Plaintiffs brought wrongful death claims for strict products liability, negligence and negligent entrustment against, among others, Airbus, which has its principal place of business and is incorporated in France, has no office or employee in the United States, nor owns or rents any property in the U.S. All manufacturing work on the subject aircraft occurred in Europe. Airbus sold the subject aircraft to AirAsia Berhad, a Malaysian carrier operating exclusively outside the U.S. The aircraft was in turn sold

²² 153 F. Supp. 3d 1024 (N.D. Ill. 2015).

to PT Indonesia AirAsia, the operating carrier of QZ 8501. AirAsia was not a party to the litigation.

As the incident itself had little to no connection to the United States, plaintiffs conceded that the Northern District of Illinois lacked specific personal jurisdiction over Airbus. Rather, plaintiffs proceeded under a theory of general personal jurisdiction, arguing that Airbus has extensive contacts with the U.S. as a whole to justify the exercise of general personal jurisdiction.

Because the statute under which plaintiffs sued, the Multiparty Multiforum Trial Jurisdiction Act of 2002, permits nationwide service of process, the relevant forum in relation to which Airbus must have “minimum contacts” sufficient to satisfy constitutional due process is the United States as a whole. To satisfy constitutional due process, a court may exercise general personal jurisdiction only in forums where the company is “essentially at home.” It is a severely high burden to establish that a company is at home in a location other than its place of incorporation and its principal place of business, and for good reason: a finding of general personal jurisdiction means that “the foreign defendant may be called into court to answer to any alleged wrong, committed in any place, no matter how unrelated to the defendant’s conduct in the forum.” Indeed, the U.S. Supreme Court has found general personal jurisdiction against a foreign defendant in a forum other than the defendant’s place of incorporation and principal place of business only once – in a circumstance where the defendant relocated its headquarters to the United States from abroad. *See Perkins v. Benguet Consolidated Mining Co.*, 342 U.S. 437 (1952).

With such an exacting standard, it was not surprising that the *Siswanto* court found general personal jurisdiction over Airbus lacking. Neither Airbus's aircraft sales in the U.S. (only 6.73% of overall sales), its aircraft-related purchases in the U.S. (although unrelated to the subject aircraft), nor the U.S. contacts of Airbus's subsidiaries could justify a finding that the foreign defendant was "at home" in the U.S. Although the foregoing evidence might demonstrate "extensive contacts" between Airbus and the United States, the company is not "essentially at home" in the U.S. Accordingly, the court dismissed Airbus from the litigation based on lack of personal jurisdiction.

After additional motion practice, the U.S. District Court for the Northern District of Illinois issued three separate decisions dismissing the entire litigation arising from the crash of AirAsia Flight QZ 8501. Before the court were: (1) a joint motion by Doric Corporation, Honeywell International, Inc., and Goodrich Corporation (the "FNC defendants") to dismiss on the basis of *forum non conveniens*; (2) a motion to dismiss for lack of personal jurisdiction by Thales Avionics, S.A.S., a French company that allegedly manufactured Flight Augmentation Computers for the accident aircraft; and (3) a motion for summary judgment by Airbus Americas, Inc.

The FNC defendants argued that Indonesia, rather than the United States, is the appropriate forum for the litigation because the crash occurred in or near Indonesian waters, the overwhelming majority of the decedent passengers and crew were Indonesian citizens, the flight was operated by an Indonesian airline, and the accident was investigated by

the Indonesian Transportation Safety Committee (the “KNKT”). In support of their motion, they provided the KNKT’s official report of the accident investigation, which suggested that pilot error and maintenance issues may have contributed to the crash, as well as testimony from an expert in Indonesian law regarding the accessibility of the Indonesian courts. Plaintiffs opposed the *forum non conveniens* motion and filed a separate motion to bar the testimony of the FNC defendants’ Indonesian law expert as unreliable.

The court denied plaintiffs’ motion, holding that standards of admissibility such as Federal Rule of Evidence 702 do not apply when assessing expert testimony on a question of foreign law.²³ Looking to Federal Rule of Civil Procedure 44.1, which permits courts to use “any relevant material or source . . . whether or not submitted by a party or admissible” to determine foreign law, the court held that it was free to use the expert’s testimony to assist it in deciding the *forum non conveniens* motion regardless of its admissibility or reliability under the Federal Rules of Evidence.

Turning to the *forum non conveniens* motion, the court first held that because none of the plaintiffs were U.S. citizens, their choice of forum was not entitled to deference. It then found Indonesia to be an available alternative forum for the litigation because the moving defendants had agreed to submit to personal jurisdiction there, and an Indonesian court could not decline to exercise jurisdiction *sua sponte*. Despite the fact that Indonesia

²³ See *Siswanto v. Airbus Americas, Inc.*, No. 15-CV-5486, 2016 WL 7178460 (N.D. Ill. Dec. 9, 2016) (memorandum opinion and order granting the FNC defendants’ motion to dismiss).

allows only limited pretrial discovery, the court also found it to be an adequate forum for plaintiffs to pursue their claims. The court then weighed the public and private interest factors implicated by plaintiffs' choice of forum in the United States, and found that these generally weighed in favor of dismissal. Specifically, the court found that the parties would have easier access to critical evidence, including aircraft wreckage and testimony from AirAsia employees, in Indonesia.²⁴ It also found that Indonesia's public interest in the litigation overwhelmingly outweighed that of the United States given that the accident occurred in Indonesia, involved an Indonesian airline, and implicated Indonesian flight safety regulations and air traffic control. In contrast to Indonesia's strong interest in adjudicating claims arising from the accident, the interests of the State of Illinois and the United States were "nearly nonexistent." Having determined that Indonesia had a stronger public interest in the litigation and would be a more convenient place to conduct it, the court granted the *forum non conveniens* motion and dismissed the case as against the three FNC defendants.

In its separate motion, Thales Avionics argued that the court could not exercise specific jurisdiction over it because the accident at issue had no connection to the United States, nor could the court exercise general jurisdiction because the French company does not have sufficient business contacts here. Opposing the motion, plaintiffs argued that under the Multiparty Multiforum Trial Jurisdiction Act (the "MMTJA"),²⁵ which provided the court's subject matter

²⁴ Important to this aspect of the decision was a declaration by AirAsia that it would refuse to consent to jurisdiction in the United States or cooperate with any United States-based litigation.

²⁵ See 28 U.S.C. § 1369.

jurisdiction, service of process alone was enough to establish personal jurisdiction. The court rejected plaintiffs' argument holding that the MMTJA does not abrogate the constitutional due process principle articulated by the Supreme Court in *Daimler*.²⁶ Although Thales Avionics markets its products in the United States and derives significant revenue from American customers, such revenue constitutes less than 10% of its annual global sales, it has no authorized agent or representative in the United States and performs no direct sales here. The court held that these contacts fall below the "essentially at home" standard required to exercise general jurisdiction, and granted the motion to dismiss.

In support of its motion for summary judgment, Airbus Americas, Inc. argued that while its parent company Airbus S.A.S. (which had already been dismissed from the litigation) designed and built the accident aircraft, it had no involvement with the aircraft's design, manufacture, marketing or sale, and could not be held liable. Assessing the evidence in the record, the court agreed. As a predicate to its decision, the court applied the "location" and "nexus" test set forth in *Jerome Grubart, Inc. v. Great Lakes Dredge & Dock Co.*²⁷ to determine that the case fell within admiralty jurisdiction and was governed by general maritime law. Under maritime law, a defendant "cannot be liable for a manufacturing defect in a product that it did not make or supply," and Airbus Americas, Inc. could not be liable.²⁸

²⁶ 134 S. Ct. 746 (2014).

²⁷ 513 U.S. 527 (1995).

²⁸ *Siswanto v. Airbus Americas, Inc.*, No. 15-CV-5486, 2016 WL 7178458, at *5 (N.D. Ill. Dec. 9, 2016) (memorandum opinion and order granting summary judgment as against Airbus Americas, Inc.).

Following the dismissal of the *Siswanto* case, another action was filed in the U.S. District Court for the Western District of Washington (Seattle) stemming from the same air disaster. The plaintiffs filed their action in Seattle where they reside, alleging subject matter jurisdiction under the Multiparty, Multiforum Trial Jurisdiction Act. Relying upon the U.S. Supreme Court decision in *Daimler*, defendants AirAsia Berhad and Artus S.A.S. successfully moved to dismiss for lack of personal jurisdiction.

In granting dismissal, the district court agreed that general jurisdiction was lacking because the defendants were not “at home” in the forum (in this case, the U.S.).²⁹ The court’s determination that jurisdiction was lacking was based on defendants’ affidavits establishing they were incorporated and had their principal places of business in foreign countries. The court rejected plaintiffs’ argument that certain domestic business activities, such as hosting a website on a U.S.-based server, rendered each of the defendants “essentially at home” in the United States for jurisdictional purposes, finding such contacts “minimal.”³⁰

The district court also determined specific jurisdiction did not exist based on plaintiffs’ failure to allege any causal connection between their claims and any U.S.-based conduct by either defendant.³¹

The *Siswanto* and *Sia* cases demonstrate both the increasing efforts by plaintiffs’ attorneys to sue foreign defendants in U.S. courts, as well as the powerful shields -- *forum non conveniens* and personal jurisdiction -- that defendants have to fight such lawsuits

²⁹ See *Sia v. AirAsia Berhad*, No. C16-1692 TSZ, 2017 WL 1408172 (W.D. Wash. Apr. 20, 2017) (order granting AirAsia Berhad and Artus, S.A.S.’s motions to dismiss).

³⁰ See *id.* at *3.

³¹ See *id.* at *4.

**THE POLAR CODE: A REGIME SAFEGUARDING
HUMAN LIFE
AND THE MARINE ECOSYSTEMS OF EARTH'S
FRIGID ZONES**

*Katie Smith Matison*³²

**I. THE INCREASE IN SHIPPING TRAFFIC IN
POLAR WATERS SPARKS
ENVIRONMENTAL AND SAFETY
CONCERNS**

Earth's polar regions are shrouded by vast ice caps surrounded by frigid water littered with treacherous sea ice. The highest latitudes of the polar regions alternate between 24-hour total darkness in the winter and endless daylight in the summer months. Both the Arctic and Antarctic zones of the world are inhospitable to human life. Marine casualties in the polar zones often result in loss of life as a result of the harsh polar conditions. Moreover, the polar regions support delicate ecosystems and marine environments, which scientists uniformly agree are extremely susceptible to the threat of global warming and must be protected.³³

The Arctic zone is generally described as that region above 60 degrees north and includes the North Pole. The Arctic Ocean, which is the smallest of the earth's oceans, is

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³³ The author acknowledges the valuable assistance of Brynn Felix, student at Boston University School of Law, in the preparation of this article.

approximately the size of the continent of Antarctica and is often covered with sea ice. The Arctic zone also includes segments of the northern landmasses of Canada, the United States, Greenland, Iceland, Finland, Norway, Russia and Finland. The area is home to large endangered mammals, including the polar bear, walrus, and certain whales as well as critical northern species of marine life. In recent years, seafarers have forged new trade routes through the Arctic Ocean in areas that were previously blocked and impassable by the presence of sea ice. In addition, over the past three decades, the Arctic region has experienced a sharp increase in shipping traffic, as a result of resource exploration and tourism.

The Antarctic continent, which is more than twice the size of Australia, is encased by an ice sheet covering approximately 98% of the continental surface, that is on average, more than one mile thick. The empty wilderness has no permanent human residents, with the exception of the scientific outposts established by various nations. Antarctica holds about 90% of the world's fresh water. The continent is encircled by the frigid waters of the Southern Ocean, and supports vast ecosystems of sea mammals, birds, fish and invertebrates. Technological advancement, scientific exploration, and tourism have spawned a significant increase in the shipping traffic—both commercial and pleasure craft—within the region of Antarctica.

The International Maritime Organization (“IMO”), a United Nations specialized agency that was organized to ensure the safety and security of ships as well as the marine environment, recognized the lack of a comprehensive,

unified legal framework addressing the unique perils of navigating polar waters. In response, the IMO developed the Polar Code for the purpose of minimizing the threat to human life and the environment. The scope of the Polar Code encompasses ships that operate within the IMO-defined boundaries of Arctic and Antarctic waters. The safety measures under Part I-A are mandatory for any vessel certified under the International Convention for the Safety of Life at Sea (“SOLAS”).³⁴ Environmental regulations under Part II-A apply pursuant to their respective International Convention for the Prevention of Pollution from Ships (“MARPOL”)³⁵ Annexes.

The Polar Code modifies international laws through amendments to both SOLAS and MARPOL. Part I of the Code adds a new chapter to SOLAS for ships traveling through Polar waters (Chapter XIV), while Part II includes new environmental regulations to MARPOL Annexes I, II, IV, and V. Parts I and II entered into force on January 1, 2017.

II. PRESERVATION OF THE POLAR REGIONS BEFORE THE POLAR CODE

A. The Antarctic Treaty Established International Standards to Ensure a Peaceful and Pristine Landscape

Prior to the development of the Polar Code, the international community recognized the inherent need to impose strict standards on both Antarctic exploration and environmental preservation. The Antarctic Treaty was

³⁴ London, November 1, 1974, 1184 U.N.T.S. 2, 34 U.S.T. 47, as amended.

³⁵ 12 ILM 1319 (1973); TIAS No. 10,561; 34 UST 3407; 1340 UNTS 184.

ratified in 1959 by twelve countries whose scientists were active in the Antarctic region. The Antarctic Treaty established the culture and tone of policymaking in the Antarctic as a relatively pristine environment.³⁶ Although several countries have asserted territorial claims to the continent, Antarctica is governed internationally through the Antarctic Treaty system.³⁷ The political climate was therefore ripe for a treaty proclaiming that Antarctica would be used “for peaceful purposes only.”³⁸ The Treaty also established the region as a collaborative space for scientific investigation and cooperation.³⁹

The 1991 Protocol on Environmental Protection to the Antarctic Treaty (“Madrid Protocol”) affirmed the unique status of the continent, designating it as a “natural reserve, devoted to peace and science.”⁴⁰ Compared to the Polar Code, the Madrid Protocol sets forth far more stringent standards governing the range of permissible human activity in the Antarctic. Article VII, for example, prohibits all activities relating to Antarctic mineral resources, except for scientific research.⁴¹ Furthermore, until 2048, the Madrid Protocol may only be modified by unanimous

³⁶ Antarctic Treaty, art. 1, Dec. 1, 1959, 12 U.S.T. 794, 402 U.N.T.S. 71 (herein “Antarctic Treaty”).

³⁷ While some parties to the Antarctic Treaty do not recognize territorial claims, others maintain that they have the right to assert a claim in the future. Article IV of the Treaty addresses this issue directly: “No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.”

³⁸ Antarctic Treaty, art. 1, Dec. 1, 1959, 12 U.S.T. 794, 402 U.N.T.S. 71.

³⁹ *Id.* at Art. II.

⁴⁰ Protocol on Environmental Protection to the Antarctic Treaty, art. 2, Oct. 4, 1991, 30 I.L.M. 1461 (herein after “Madrid Protocol”). The Madrid Protocol was signed in Madrid on October 4, 1991 and entered into force in 1998.

⁴¹ *Id.* at art. 7 (“Any activity relating to mineral resources, other than scientific research, shall be prohibited.”)

agreement of all Consultative Parties to the Treaty. The prohibition on mineral resource activities cannot be removed unless a binding legal regime on Antarctic mineral resource activities is in force.⁴² In 2016, the Committee for Environmental Protection,⁴³ in commemoration of the twenty-fifth anniversary of the Madrid Protocol, published the Protocol on Environmental Protection to the Antarctic Treaty.⁴⁴

B. The Arctic

Antarctica and the Arctic have not received equal treatment from the international community, both in terms of disparities to environmental protections and approaches to risky human endeavors. By comparison to Antarctica, Arctic policies are decisively more permissive and regulation is more limited. The disparate treatment is due—in part—to the dissimilar landscapes. Unlike Antarctica, which is a non-sovereign land with no territorial seas, the Arctic Ocean is a complex network of international and internal waters, territorial seas, and exclusive economic zones. The latter three territorial designations fall under the jurisdiction of the “Arctic Eight”—Canada, the United States, Norway, Russia, Finland, Sweden, Iceland, and Denmark—sovereigns with the power to claim natural resources up to 200 miles from their coastlines.⁴⁵ These states, in addition to Arctic indigenous communities,

⁴² *Id.* at art. 25.5(a).

⁴³ The Committee for Environmental Protection included Members who are Parties to the Madrid Protocol, Observers—Parties to the Antarctic Treaty that are not parties to the Madrid Protocol, Observers and Experts. The Protocol on Environmental Protection of the Antarctic Treaty: <http://www.ats.aq/e/ep.htm>.

⁴⁴ *Id.*

⁴⁵ Bonnie A. Malloy, *On Thin Ice: How a Binding Treaty Regime Can Save The Arctic*, 16 *Hastings W.-N.W. J. Envtl. & Pol'y* 471, 476 (2010).

comprise the Arctic Council,⁴⁶ an international organization with significant influence over regional developments—including the Polar Code.⁴⁷ Consequently, the Arctic has historically been subject to territorial claims and geopolitical conflicts that have prevented the region from being converted into a second pristine, scientific haven.

III. DEVELOPMENT OF THE POLAR CODE

A. Recognition of the Need for a Sea Change

Shipping traffic has sharply increased in the polar regions over the past few decades, heightening concerns about further damage to the environment and the consequences of marine casualties. Over the past forty years, there has been a notable escalation of oil exploration activity and carriage of cargo with no indication that the trend will reverse.⁴⁸ Also, the polar regions have become tourist destinations for exotic *adventure* travel, further increasing the shipping traffic. Indeed, maritime activity is expected to accelerate in both polar regions as sea ice further recedes at an alarming rate, and new passages become available.⁴⁹

⁴⁶ In May 2015, the Arctic Council established the Task Force on Arctic Marine Cooperation (TFAMC) to ascertain potential avenues for closer cooperation between members. Betsy Baker, *ICES, PICES, and the Arctic Council Task on Arctic Marine Cooperation*, 6 UC Irvine L. Rev. 1 (2016).

⁴⁷ Hannah Polakowski, *Freezing the Issues: Why Arctic Coastal States Need to Implement Marine Protected Areas in the Arctic Seas*, 30 Tul. Envtl. L.J. 347, 348 (2017).

⁴⁸ American Bureau of Shipping, *IMO Polar Code Advisory*, (January 2016), P. 2. (Herein “IMO Polar Code Advisory”).

⁴⁹ Nengye Liu, *Can the Polar Code Save the Arctic?*, American Society of International Law, Vol. 20, Issue 7, March 22, 2016; See also <http://www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx>.

A recognition that the polar environment poses unique hazards to mariners as well as passengers—including low air temperatures, rapidly shifting weather conditions, ice accretion, and inaccessibility in the event of an emergency—contributed to the development of the Polar Code. The second factor driving the creation of the Polar Code is the fragility of both polar ecosystems, which are particularly vulnerable to oily discharge and toxic chemicals found on the hulls of ships.⁵⁰ The insufficient and inconsistent safety and environmental protections in place under the IMO and Arctic states exposed the need for a comprehensive, international regulatory system.⁵¹ As a result, the IMO agreed to develop the Polar Code.⁵²

B. The IMO Establishes an Outside Working Group

The IMO⁵³ established an outside working group tasked with recommending regulations for maritime activity in the Arctic in 1993.⁵⁴ In addition to surveying existing IMO instruments, the working group analyzed the United Nations Convention on the Law of the Sea and practices of

⁵⁰ Henry Fountain, *With More Ships in the Arctic, Fears of Disaster Rise*, New York Times, July 23, 2017: <https://www.nytimes.com/2017/07/23/climate/ships-in-the-arctic.html>[7/25/2017 4:15:17 PM]. The article details the 2004 sinking of the *Selendang Ayu*, a Malaysian cargo ship, that was lost off the coast of Unalaska Island, resulting in six deaths. The article highlights that today the *Crystal Serenity*, a luxury passenger ship transiting the Northwest Passage, is accompanied by a British supply escort ship, the *Ernest Shackleton*. The *Shackleton* will be ready to assist in the event of an emergency, and is equipped with helicopters and equipment for remediating oil spills.

⁵¹ IMO Polar Code Advisory, P. 2.

⁵² *Id.*

⁵³ The IMO is based in London, England and is represented by 171 Member States, three Associate Members and various Intergovernmental Organizations (IGO) and Non-Governmental Organizations (NGO). Member States meet at the Assembly every two years in regular sessions to approve the work of the IMO. The United States Coast Guard has been a key participant in the IMO for all policy development for more than 50 years, along with various U.S. governmental advisors and departments.

⁵⁴ IMO Polar Code Advisory, P. 2.

Arctic states for guidance.⁵⁵ The IMO endorsed certain priorities that laid the foundation for the IMO future work. Specifically, the IMO determined that ship construction and design should include unified standards for ice strengthening and that the carriage of oil against the outer shell should be prohibited. In addition, the IMO recognized that it was critical for crewmembers receive appropriate training to deal with the hazards of a polar environment. Also, the IMO determined that all ships operating within Polar regions must be equipped with appropriate navigation equipment that can withstand high latitudes. Finally, the IMO noted that ships should carry survival equipment for each person on board for the polar environment, and that ship capabilities and limitations should be considered in the planning of any anticipated polar voyage.⁵⁶

Based upon the recommendations of the IMO working group, the IMO published “Guidelines for Ships Operating in Arctic Ice-covered Waters” in 2002.⁵⁷ These non-binding guidelines delineated the boundaries of Arctic Waters and adopted several recommendations regarding ship construction, equipment, and environmental safeguards in the Arctic. The Guidelines became a segue for the genesis of the Polar Code.

During this same period, the International Association of Classification Societies (IACS), with support from Arctic coastal states, developed regulations pertaining to Polar Ice Classes, ship construction, and machinery in the Arctic.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ MSC Circular 1056/MEPC Circular 399.

The IACS Polar Class Rules, introduced in 2008, proved influential, with several key requirements later incorporated into the Polar Code.⁵⁸

Pressure from the Antarctic Treaty signatories, compounded by the sinking of the passenger cruise ship *M/V Explorer*⁵⁹ near the South Shetland Islands in 2007, prompted the IMO to extend the scope of its work to both polar regions.⁶⁰ As a result, the IMO adopted its “Guidelines for Ships Operating in Polar Waters”⁶¹ in 2009. That same year, several Arctic states submitted proposals to the IMO’s Maritime Safety Committee (“MSC”) for “Mandatory application of the polar guidelines.”⁶² Stakeholders continued to lobby for a mandatory code and additional polar regulations through 2014.

C. The New Regime

At the IMO’s November 2014 meeting and the MSC’s 94th session, the MSC added a fourteenth chapter to the SOLAS Convention that governs “Safety measures for

⁵⁸ IMO Polar Code Advisory, P. 3.

⁵⁹ The small Liberian flagged passenger vessel, *M/V Explorer*, IMO 6924959, was on an 18-day voyage from Ushuaia, Argentina to Antarctica to trace the journey of Ernest Shackleton. While transiting an ice field near midnight on November 22, 2007, the master struck a “wall” of sea ice, puncturing a 3-meter gash in the hull. The vessel sank in nearly 4,000 feet of water near the Bransfield Strait on November 23, 2007 after the entire crew and 100 passengers were evacuated to lifeboats. There were no fatalities. The Bureau of Maritime Affairs of the Republic of Liberia and the Liberian International Ship Corporate Registry conducted a post-casualty investigation and published a Report. Nearly four years later, the *M/Y Octopus*, a Cayman Islands flagged pleasure yacht owned by Navigea Ltd., recovered the Voyage Data Recorder of the *M/V Explorer* at a depth of 4,000 feet of water using an unmanned ROV. During subsequent litigation in Seattle, ownership of the Voyage Data Recorder was awarded to Navigea. *Navigea Ltd. v. In Re Kelvin-Hughes NDR 2002 Voyage Data Recorder et al.*, 2:11-cv-00541 JLR, Western District of Washington, Seattle.

⁶⁰ IMO Polar Code Advisory P. 3.

⁶¹ IMO Resolution A1024.

⁶² IMO Polar Code Advisory, P. 3.

ships operating in polar waters.”⁶³ These provisions fall within Part I of the Polar Code. In 2015, the IMO’s Marine Environment Protection Committee (MEPC) added environmental protections to MARPOL Annexes I, II, IV, and V at the 68th session.⁶⁴ These provisions fall within Part II of the Polar Code. Both sets of regulations entered into force on January 1, 2017.

In 2016, the MSC adopted amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers and its respective Code.⁶⁵ The changes enhance existing training requirements that masters, officers, and other crew must undertake prior to working on passenger ships. Crewmembers must be knowledgeable about passenger ship capabilities, including emergency procedures, safety services for passengers, and crisis management.⁶⁶ Additionally, Chapter 12 of the Polar Code requires that officers, chief mates and masters must complete specialized training modules, tailored to their respective on-board duties, for ships operating in polar waters.”⁶⁷ These regulations will enter into force on January 1, 2018.

⁶³ IMO Res. MSC.385(94) (Nov. 21, 2014).

⁶⁴ IMO, Res. MEPC.264(68) (May 15, 2015).

⁶⁵ IMO MSC.416(97), Annex 8, “Amendments to the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), 1978, As Amended (November 25, 2016).

⁶⁶ *Id.* at Chapter V, Regulations V/2(1-10).

⁶⁷ *Id.* at Chapter V, Regulations V/4(1-7).

IV. SPECIFIC CHANGES OF THE NEW REGIME

A. Ambit of the Polar Code

As detailed below, the scope of the Polar Code's application hinges upon (i) geographic location, (ii) ship classification, and (iii) subject matter. According to the IMO, the Polar Code applies to "the full range of shipping-related matters relevant to navigation in waters that surround the two poles – ship design, construction and equipment; operational and training concerns; search and rescue; and equally important, the protection of the unique environment and eco-systems of the polar regions."⁶⁸ Within that broad mission statement, however, several limitations apply which are discussed below.

B. The Polar Code Regulates Arctic and Antarctic Waters

Generally, the Polar Code applies to Arctic waters as defined under the 2002 MSC Circular 1056/MEPC Circular 399,⁶⁹ and Antarctic waters south of 60 degrees South. Rules within these two polar zones, however, are not uniform. For example, heavy fuel oils have been banned in

⁶⁸ IMO, "Shipping in polar waters," <http://www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx>.

⁶⁹ The Guidelines define "Arctic waters" as "located north of a line from the southern tip of Greenland and thence by the southern shore of Greenland to Cape Hoppe and thence by a rhumb line to latitude 67°03.9 N, longitude 026°33.4 W and thence by a rhumb line to Sørkapp, Jan Mayen and by the southern shore of Jan Mayen to the Island of Bjørnøya, and thence by a great circle line from the Island of Bjørnøya to Cape Kanin Nos and thence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude 60° North as far as Il'pyskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60° North and thence eastward to the southern tip of Greenland (see figure 1); and in which sea ice concentrations of 1/10 coverage or greater are present and which pose a structural risk to ships."

the Antarctic since 2011, per amendments to MARPOL Annex I.⁷⁰ The Polar Code did not extend that prohibition against the use of heavy fuel oil to the Arctic.

C. Sea Ice Conditions and Ship Classification

Application of the Polar Code also depends upon the vessel's ship classification. The Polar Code outlines three ship categories: First, Category A ships are designed for operation in polar waters in at least medium first year ice (70-120 cm thickness), which may include old ice inclusions. Category B ships are those not included in category A, and are designed for operation in polar waters in at least thin first-year ice (30-70 cm thickness), which may include old ice inclusions. Finally, Category C ships are designed to operate in open water or in ice conditions less severe than those included in categories A and B.⁷¹

The degree of regulation thus depends on the ship category, which is dictated by the ice conditions the ship is expected to confront on its voyage. For example, a category C ship does not require ice strengthening if the ship's structure is adequate for its intended operations.⁷² Similarly, newly constructed category C ships need not adhere to the same requirements of category A and B ships, whose bridge wings must be enclosed or designed to protect navigational equipment and operating personnel.⁷³

⁷⁰ International Maritime Organization, "Antarctic fuel oil ban and North American ECA MARPOL amendments enter into force on 1 August 2011," Briefing 44 (July 29, 2011).

⁷¹ IMO Polar Code, Introduction, 3.1-3.3.

⁷² *Id.* at Part I-A, Chapter 3, 3.3.2.4.

⁷³ *Id.* at Part I-A, Chapter 9, 9.3.2.1.4.2.

The Polar Code's safety measures under Part I-A are mandatory for any vessel certified under the SOLAS Convention. This includes cargo ships (greater than 500 gross tons) and passenger ships carrying more than 12 passengers. Conversely, fishing vessels and ships less than 500 gross tons are excluded from Polar Code regulation and will remain unregulated until expressly added to SOLAS Chapter XIV. Environmental regulations under Part II-A apply pursuant to their respective MARPOL Annexes.

D. The Polar Code Regulates Safety and Marine Pollution

The Polar Code was designed to enhance existing safety measures codified in SOLAS and environmental regulations under MARPOL.⁷⁴ Despite the geographical differences between Arctic and Antarctic waters, the Preamble clearly states that the Code is intended to apply to both regions.⁷⁵ As detailed below, Parts I and II of the Polar Code contain critical requirements for shipping in the polar regions. With respect to Part II, it is notable that the scope of the regulations are limited to the prevention of pollutants and does not extend to broader environmental protections.

⁷⁴ "1. The International Code for Ships Operating in Polar Waters has been developed to supplement existing IMO instruments in order to increase the safety of ships' operation and mitigate the impact on the people in the remote, vulnerable and potentially harsh polar waters." *Id.* at Part I-A, Preamble.

⁷⁵ *Id.* Part I-A, Preamble, Section 6.

1. The Polar Code Introduces Several New Regulations

The Polar Code adds new safety and environmental measures to SOLAS and MARPOL, respectively, and heightens training standards to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers.⁷⁶ These provisions apply to new ships constructed on or after January 1, 2017. Existing ships are not required to comply until the earlier of January 1, 2017 or the date of the first intermediate or renewal survey.

2. Part I Creates New Safety Regulations Under SOLAS Chapter XIV

Part I-A of the Polar Code comprises twelve chapters⁷⁷ of mandatory safety measures required for operation of ships within the polar regions. The areas that are regulated for ships include three overarching primary categories including (i) equipment requirements, (ii) operations and manning, and (iii) design and construction.⁷⁸

⁷⁶ “2. The Code acknowledges that polar water operation may impose additional demands on ships, their systems and operation beyond the existing requirements of the International Convention for the Safety of Life at Sea (SOLAS), 1974, the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto as amended by the 1997 Protocol, and other relevant binding IMO instruments.” *Id.* at Part I-A Preamble.

⁷⁷ The twelve chapters of Part I-A entitled Safety Measures are designated as follows: General Requirements (Chapter 1); Polar Water Operational Manual (PWOM) (Chapter 2); Ship Structure (Chapter 3); Subdivision and Stability (Chapter 4); Watertight and Weathertight Integrity (Chapter 5); Machinery Installations (Chapter 6); Fire Safety/Protection (Chapter 7); Life-Saving Appliances and Arrangements (Chapter 8); Safety of Navigation (Chapter 9); Communication (Chapter 10); Voyage Planning (Chapter 11); and Manning and Training (Chapter 12).

⁷⁸ Part I-A is not officially organized into these three categories of regulation; rather, the IMO’s educational literature distills the twelve chapters into three unofficial classes. See IMO Media Centre’s infographic, “What Does the Polar Code Mean for Ship Safety?”

The Polar Code contains specific requirements for equipment necessary to operate safely in frigid zones. For example, completely open lifeboats are prohibited and all lifeboats must be partially or entirely enclosed.⁷⁹ Group survival equipment must be carried when there is an assessment of potential abandonment on land or ice.⁸⁰ Ships within the ambit of the Polar Code must carry adequate thermal protection for all persons on board,⁸¹ Passenger ships are required to provide insulated immersion suits or a thermal protective aid for all passengers aboard the vessel.⁸² Instability caused by heavy ice accumulation is an inherent risk for ships operating in frigid zones. The Code requires that all ships operating in areas when accumulation of ice may occur must carry specialized equipment to combat ice accretion, such as electrical and pneumatic tools, axes, and clubs.⁸³

Part I-A of the Polar Code requires that all mandatory fire safety equipment must be designed to withstand freezing temperatures and must be protected from ice and snow accumulation.⁸⁴ Fire safety equipment must be of a type that is easily handled by individuals wearing bulky cold weather gear.⁸⁵ Further, vessels must carry two-way portable radio communication equipment that is serviceable in polar conditions to guard against the risk of fire.⁸⁶ Also, fire safety equipment must be maintained above freezing

⁷⁹ *Id.* at Part I-A, Chapter 8, 8.3.3.3. “[n]o lifeboat shall be of any type other than partially or totally enclosed type.”

⁸⁰ *Id.* at Part I-A, Chapter 8, 8.3.3.3.

⁸¹ *Id.* at Part I-A, Chapter 8, 8.2.3.1.

⁸² *Id.* at Part I-A, Chapter 8, 8.3.3.3.

⁸³ *Id.* at Part I-A, Chapter 4, 4.3.1.2.

⁸⁴ *Id.* at Part I-A, Chapter 7, 7.2.

⁸⁵ *Id.* at Part I-A, Chapter 7, 7.2.1.

⁸⁶ *Id.* at Part I-A, Chapter 7, 7.3.1.2.

temperatures, including emergency fire pumps, water mist, and water spray pumps.⁸⁷

The operational regulations of the Polar Code are designed to improve navigation and ensure that mariners are aware of their vessels' capabilities and limitations.⁸⁸ Chapter 9, which governs "Safety of Navigation," mandates that ships must be capable of receiving up-to-date information about ice conditions, and outlines functional requirements for specific navigation equipment.⁸⁹ For example, certain ships must be equipped with sensors that project below the hull and protect against ice.⁹⁰ If a ship's main and emergency power courses are compromised, the ship must be able to rely upon two independently generated non-magnetic means to determine and display the ship's heading.⁹¹ Vessels that enter latitudes above 80 degrees must be fitted with at least one global navigation satellite system ("GNSS") compass or its equivalent.⁹² All ships, with the exception of those operating in 24-hour daylight, must be equipped with two remotely rotating, narrow-beam searchlights.⁹³

Part I-A, Chapter 3—Ship Structure—mandates specific requirements for ship design and construction.⁹⁴ Structural regulations require that ship materials be suitable for operation at the ship's polar service temperature.⁹⁵ To

⁸⁷ *Id.* at Part I-A, Chapter 7, 7.3.2.1.

⁸⁸ *Id.* at Part I-A, Chapter 1, 1.5.

⁸⁹ *Id.* at Part I-A, Chapter 9.

⁹⁰ *Id.* at Part I-A, Chapter 9, 9.3.2.1.

⁹¹ *Id.* at Part I-A, Chapter 9, 9.3.2.2.

⁹² *Id.* at Part I-A, Chapter 9, 9.3.2.2.

⁹³ *Id.* at Part I-A, Chapter 9, 9.3.3.1.

⁹⁴ *Id.* at part I-A, Chapter 3.

⁹⁵ *Id.* at Part I-A, Chapter 3, 3.2.

improve stability, ships operating in conditions where ice accretion is likely to occur must adhere to strict icing allowances on decks, gangways, and specified lateral areas above the water plane.⁹⁶ Furthermore, hatches and doors must be usable by personnel wearing cumbersome winter gear, including thick mittens, to ensure watertight and weather tight integrity.⁹⁷

Every ship that intends to enter polar waters is required to obtain a Polar Ship Certificate (“PSC”) demonstrating compliance with the requirements of the Polar Code.⁹⁸ The PSC includes four components, including (i) ship category and ice class information; (ii) ship design information; (iii) operational limitations; and (iv) other regulatory threshold information (intention to operate in specific ice conditions, temperatures, rescue information).⁹⁹ In addition, all ships must carry a Polar Water Operational Manual (“Manual”), which provides the owner, operator, master, and crew with information regarding the ship’s operational capacities and limitations in order to support informed decisions in exigent circumstances.¹⁰⁰ For example, the Manual must include procedures for contacting emergency response providers for salvage, search and rescue and spill response and procedures for maintaining life support and ship integrity in the event of prolonged entrapment by ice.¹⁰¹

⁹⁶ *Id.* at Part I-A, Chapter 4, 4.3.1.1.

⁹⁷ *Id.* at Part I-A, Chapter 5, 5.3.2.2.

⁹⁸ *Id.* at Part I-A, Chapter 1, 1.3.1.

⁹⁹ *Id.* at Part I-A, Chapter 1.

¹⁰⁰ *Id.* at Part I-A, Chapter 2, 2.1.

¹⁰¹ *Id.* at Part I-A, Chapter 2, 2.3.4.

Part I-B of the Polar Code contains additional safety measures that supplement the previous chapters.¹⁰² These guidelines provide additional considerations for ships that are subject to the ambit of the Polar Code, and includes provisions for assessment of limitations for operating in ice,¹⁰³ calculation of the lowest mean daily average temperature,¹⁰⁴ recommendations for the content of the Polar Water Operational Manual,¹⁰⁵ and guidance for navigation with icebreaker assistance.¹⁰⁶

3. Part II Adds Pollution Control Measures to MARPOL Annexes I, II, IV, V

Part II of the Polar Code regulates pollution prevention. Part II-A includes four chapters of mandatory environmental provisions and Part II-B includes non-binding guidelines. Part II-A explicitly prohibits the discharge of several detrimental substances, including oil or oily mixtures and noxious liquid substances.¹⁰⁷ Category A and B ships, and all oil tankers, are subject to double hull and double bottom requirements in order to separate oil tanks from a ship's outer shell.¹⁰⁸ Heavy fuel oil is banned in Antarctic waters under MARPOL, although such use or carriage is permissible in the Arctic.¹⁰⁹

¹⁰² *Id.* at Part I-B, Additional Guidance Regarding the Provisions of the Introduction and Part I-A.

¹⁰³ *Id.* at Part I-B, Section 1.

¹⁰⁴ *Id.* at Part I-B, Section 1.

¹⁰⁵ *Id.* at Part I-B, Section 3.1.

¹⁰⁶ *Id.* at Part I-B, Section 3.2.

¹⁰⁷ *Id.* at Part II-A, Section 1.1.

¹⁰⁸ *Id.* at Part II-A, Chapter 1, 1.2.1 – 1.2.4.

¹⁰⁹ The Marine Environmental Protection Committee, in its 60th session in March 2010, adopted a MARPOL regulation to protect the Antarctic from pollution by heavy grade oils that was entered into force on August 1, 2011. IMO "Shipping in Polar Waters"; <http://www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx>.

The discharge of sewage is also prohibited, except when performed by a ship with an approved sewage treatment plan. Specifically, sewage that is not disinfected may not be discharged within 12 nm of any ice shelf¹¹⁰ or fast ice,¹¹¹ while disinfected sewage may not be discharged within 3 nm of any ice shelf or fast ice.¹¹² Regulations governing garbage pollution prohibit the disposal of plastics (pursuant to MARPOL), animal carcasses, and food waste onto ice.¹¹³ Cargo residues, cleaning agents, or additives in hold washing water may be discharged under limited circumstances.¹¹⁴

E. Does the Polar Code Provide Sufficient Protection to the Marine Environment?

Although the Polar Code expands the ambit of international protection for the frigid zones, the new regime is not without its detractors. The Antarctic Treaty, with its groundbreaking approach to collaborative land use and environmental stewardship, offers context for present-day criticisms that the Polar Code does not go far enough to protect the Arctic's fragile ecosystem. In addition to different approaches to resource mining, MARPOL bans the use of heavy fuel oil ("HFO") oil in Antarctica but remains silent on its use in the Arctic.

¹¹⁰ "Ice shelf" refers to "a floating ice sheet of considerable thickness showing 2 to 50 m or more above sea-level, attached to the coast." *Id.* at Part II-A, Chapter 5, 5.1.1.

¹¹¹ "Fast ice" means "sea ice which forms and remains fast along the coast, where it is attached to the shore, to an ice wall, to an ice front, between shoals or grounded icebergs." *Id.* at Part II-A, Chapter 5, 5.1.2.

¹¹² *Id.* at Part II-A, Chapter 4, 4.2.1.1-3.

¹¹³ *Id.* at Part II-A, Chapter 5, 5.2.1.1-4.

¹¹⁴ If cargo residues are not harmful to the marine environment; if both departure and destination ports are within Arctic waters; and if there are no adequate reception facilities at those ports, cargo residues may be discharged. *Id.* at Part II-A, Chapter 5, 5.2.1.5.1.

Consequently, a number of commentators have been concerned about the potential for heavy fuel oil spills occurring in remote Arctic waters, particularly since HFO is the most commonly used marine fuel in the Arctic.¹¹⁵ The rationale behind this decision is unclear, given that significant oil spills near and in the Arctic region have occurred in the past. The IMO website dedicated to hot topics of the Polar Code, however, discourages ships from either using or carrying heavy fuel oil in the Arctic.¹¹⁶

Environmental advocates have also criticized Part II of the Polar Code for focusing too narrowly on preventing pollution, rather than instituting broad environmental protections.¹¹⁷ Of particular concern to environmentalists is the Polar Code's notable silence regarding "black carbon," a pollutant known to increase ice melt and accelerate climate change.¹¹⁸ The Polar Code, however, does not address this acknowledged threat, or provide for measures to reduce the black carbon footprint in polar regions.

V. CONCLUSION

The Polar Code provides a new regulatory framework for shipping and maritime activity in the Arctic and Antarctic. The new regime constitutes an important

¹¹⁵ Bryan Comer et al., *Prevalence of heavy fuel oil and black carbon in Arctic shipping, 2015-2025*, The International Council on Clean Transportation (May 1, 2017).

¹¹⁶ Shipping in Polar waters—"Protection of the Antarctic from heavy grade oils: See: <http://www.imo.org/en/mediacentre/hottopics/polar/pages/default.aspx>.

¹¹⁷ Captain J. Ashley Roach, JACG, USN (retired), presenting at Center for Oceans Law and Policy, June 26, 2015. Available at <http://www.virginia.edu/colp/pdf/shanghai-roach.pdf>.

¹¹⁸ *Id.*; See also Yereth Rosen, *IMO completes Polar Code, regulating Arctic and Antarctic Shipping*, Alaska Dispatch News (May 15, 2015).

collaborative international step by maritime nations to protect the sensitive polar regions of our planet. Additional future regulation will certainly be necessary, however, to avoid inevitable environmental disasters and loss of life that are the nature consequence of shipping in the polar regions.

THE STRANGE CAREER OF INDEPENDENT VOTING TRUSTS IN U.S. RAIL MERGERS⁺

Russell Pittman^{*}

ABSTRACT

Voting trust arrangements have a long history at both the ICC and the STB as devices to protect the incentives of acquiring firms and maintain the independence of acquiring and target firms during the pendency of regulatory investigation of the merger proposal. However, they are not without problems. The STB argued in 2001 that as Class I railroads have become fewer and larger, it may be difficult to find alternative purchasers for the firm whose shares are in the trust if the STB turns down the proposal. The Antitrust Division argued in 2016 that joint stock ownership creates anticompetitive and/or otherwise undesirable incentives, even if the independence of the voting trustee is complete. On the other hand, the functions served by voting trusts in railroad mergers are served by simple lockup agreements in other parts of the economy, without the same incentive problems as voting trusts. Thus

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voting trusts may no longer serve a useful function in railroad merger deliberations.

JEL: L92; G34; D82; K23; N72

Running title: Independent Voting Trusts

I. INTRODUCTION

In November 2015, the Canadian Pacific Railway Company (CP) made an unsolicited bid to acquire the Norfolk Southern Railway Company (NS). This was the first merger proposal among Class I railroads since the imposition by the Surface Transportation Board (STB) of increased scrutiny for such mergers announced in its *Major Rail Consolidation Procedures* decision of June 2001.¹¹⁹ Over almost a century it had become standard practice in the US railroad business for the acquiring company to be permitted to purchase the shares of the target upon announcement of the deal and then to place them in an independent voting trust during the pendency of the investigation of the proposal by the Interstate Commerce Commission (ICC) or STB. CP proposed a variant of this arrangement: rather than CP buying the shares of NS and placing them in an independent voting trust, CP would buy the shares of NS but then a) place *its own shares* in an

¹¹⁹ STB Ex Parte No. 582 (Sub-No. 1), 5 S.T.B. 539 (2001). The STB classifies railroads as Class I, II, or III according to their revenues; a railroad is defined as a Class I railroad if it has annual carrier operating revenues of \$250 million or more in 1991 dollars. Currently there are seven North American class I railroads: Burlington Northern Santa Fe, Canadian National, Canadian Pacific, CSX, Kansas City Southern, Norfolk Southern, and Union Pacific. See U.S. Surface Transportation Board, *FY 2015 Annual Report*, <https://www.stb.dot.gov/stb/docs/AnnualReports/Annual%20Report%202015.pdf>, and U.S. Surface Transportation Board, *Reporting Requirements for Positive Train Control Expenses and Investments*, Docket No. EP 706, August 13, 2013, <https://www.stb.dot.gov/decisions/readingroom.nsf/fc695db5bc7ebe2c852572b80040c45f9e3bab823b70ef9385257bc7004e9fad?OpenDocument>

independent voting trust, and b) immediately replace the CEO of NS with the CEO of CP.

The proposal immediately stirred up controversy in the railroad industry. In its *Major Rail Consolidation Procedures* decision, the STB had noted the increased concentration of the US rail sector at the national level and expressed concerns both about further mergers among class I railroads and about the use of independent voting trusts in such deals: “[W]e believe that, with only a limited number of major railroads remaining, we must take a much more cautious approach to future voting trusts in order to preserve our ability to carry out our statutory responsibilities.”¹²⁰ NS declined to accept the CP merger offer and released a white paper from two former STB commissioners arguing that the STB would be unlikely to approve either the voting trust arrangement or the merger transaction itself.¹²¹ Two of the largest Class I railroads, the Burlington Northern Santa Fe (BNSF) and the Union Pacific (UP), stated their opposition to the merger, arguing that, if approved, it would lead to further industry consolidation into a very small number of transcontinental railroads.¹²² When CP proceeded to file at the STB in

¹²⁰ The Board also noted that “This approach is consistent with the view expressed by CSX at oral argument that, while voting trusts can serve some public purpose, they should not be used routinely, but rather should be available only for those rare occasions when their use would be beneficial.” *Major Rail Consolidation Procedure*, 5 S.T.B. at 568 n. 29.

¹²¹ Norfolk Southern Corporation, “Norfolk Southern Releases White Paper from Former Surface Transportation Board Commissioners: Former Commissioners Francis Mulvey and Charles Nottingham Agree with the Norfolk Southern Board of Directors that the STB Would Be Highly Unlikely to Approve a Voting Trust or the Transaction Proposed by Canadian Pacific,” December 7, 2015, <http://www.nscorp.com/content/nscorp/en/news/norfolk-southernreleaseswhitepaperfromformersurfacettransportatio.html>.

¹²² Reynolds Hutchins, *CP-NS merger would fuel biggest rail industry shake-up since Staggers Act*, J. of COMMERCE, January 26, 2016, http://www.joc.com/rail-intermodal/class-i-railroads/canadian-pacific-railway/cp-ns-merger-would-fuel-biggest-rail-industry-shake-staggers-act_20160126.html.

March 2016 requesting approval of the proposed voting trust arrangement, the Antitrust Division of the Justice Department filed its own statement of opposition, as did many shippers and shippers' groups.¹²³ Finally, in the face of a wall of opposition, CP abandoned the proposal, seeing “no clear path to a friendly merger” with “the political and economic environment ... against us.”¹²⁴

A substantive investigation of the proposed merger by the STB would likely have led to multiple interesting and important debates. The combination would have been largely an “end-to-end” rather than a “parallel” merger, and the ICC and its successor the STB have traditionally found little likely harm to competition in such mergers.¹²⁵ This is despite the well established empirical finding that connecting railroads often compete with each other for traffic traveling to or from their points of intersection – two well known examples are US railroads competing to carry grain originating in the plains states to different domestic destinations for export and Mexican railroads competing to carry freight in both directions between Mexico City and different port cities.¹²⁶

¹²³ “Reply of the United States Department of Justice” before the Surface Transportation Board, Canadian Pacific Railway Limited – Petition for Expedited Declaratory Order, Finance Docket No. 36004, April 8, 2016, <https://www.justice.gov/atr/file/839531/download>.

¹²⁴ Jacquie McNish and Laura Stevens, *Canadian Pacific Drops Efforts to Merger With Norfolk Southern*, WALL ST. J., April 11, 2016, <http://www.wsj.com/articles/canadian-pacific-drops-efforts-to-merge-with-norfolk-southern-1460375864>.

¹²⁵ See, for example, Russell Pittman, *Railroads and Competition: The Santa Fe/Southern Pacific Merger Proposal*, 39 J. INDUSTRIAL ECON. 25 (1990) and John E. Kwoka, Jr., and Lawrence J. White, *Manifest Destiny? The Union Pacific and Southern Pacific Railroad Merger*, in Kwoka and White, eds., *THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY* (4th ed., 2004).

¹²⁶ James M. MacDonald, *Competition and Rail Rates for the Shipment of Corn, Soybeans, and Wheat*, 18 RAND J. ECON. 151 (1987); MacDonald, *Railroad Deregulation, Innovation, and Competition: Effects of the Staggers Act on Grain Transportation*, 37 J. LAW & ECON. 63 (1989), 63-95; Russell Pittman, *Railways Restructuring and Ukrainian Economic Reform*, 2 MAN & THE ECONOMY 87 (2015).

In addition, there were as noted already concerns expressed about the increased concentration in the U.S. freight rail sector at the national level – from over two dozen Class I railroads in 1980 to fourteen in 1991 to seven today – and any further reduction was likely to raise policy issues in a number of areas beyond that of the loss of competition to existing shippers, including fears of the loss of competition for locating new industrial plants, the reduced number of firms engaged in innovation and experimentation, and the “too big to fail” phenomenon more often applied to financial markets.¹²⁷

What was somewhat remarkable about this episode, however, was the attention devoted and controversy sparked by the independent voting trust proposal itself. As the CP noted and argued, independent voting trusts had been a standard part of US freight railroad mergers for decades – CP calculated that the ICC and STB combined had accepted all of the 144 proposed voting trust proposals placed before them between 1980 and 2016.¹²⁸ On the other hand, there had been no mergers among Class I railroads proposed – and thus no independent voting trusts between two Class I railroads created – since the strengthening of the scrutiny of such arrangements announced by the STB in 2001. Furthermore, the novel aspects of this particular proposal – in particular the plan to immediately replace the CEO of the target with the incumbent CEO of the acquirer – raised concerns about the

¹²⁷ See, for example, Russell Pittman, *The Economics of Railroad “Captive Shipper” Legislation*, 62 ADMIN. LAW REV. 919, 934 (2010).

¹²⁸ Canadian Pacific Railway, “CP-NS: A Comprehensive Approach to Regulatory Approval,” February 2016, <http://www.cpr.ca/en/investors-site/Documents/Comprehensive-Approach-to-Regulatory-Approval.pdf>.

independence of NS during the pendency of an STB review.¹²⁹

More important, as it turned out, may have been the specific concerns brought to bear by the STB and the Antitrust Division of the Justice Department. The STB's cautionary language in the *Major Rail Consolidation Procedures* decision laid particular emphasis not so much on general worries about railroad firm size and industry concentration as on the very concrete issue of the ability to find an alternative purchaser for a very large railroad enterprise if and when the STB turned down a rail merger proposal after the target's shares had been placed in a voting trust. The Antitrust Division, on the other hand, attacked the fundamental incentive structures created by the very nature of independent voting trusts. The Division applied the logic of the analysis of partial ownership of one competitor by another to argue that, like such partial ownership arrangements in general, the use of an independent voting trust during the pendency of STB investigation of a merger proposal created incentives for the softening of competition between the two firms – even if the day-to-day management of the second firm was shielded from direct influence by the existence of the trust. The Division further argued that even if the relationship between the firms was more vertical than horizontal, the voting trust arrangement would provide incentives for relationship-specific investments in capital assets that would remain in place long after a possible negative regulatory decision. The arguments expressed by the

¹²⁹ Bill Stephens, *Freight alliance questions CP's voting trust proposal*, TRAINS MAGAZINE, March 31, 2016, <http://trn.trains.com/news/news-wire/2016/03/31--cp-voting-trust>.

Division were new ones in the context of STB merger proceedings, and may have been decisive in convincing CP not to proceed.

This paper examines the history of the institution of independent voting trusts in the US rail industry, addressing the seeming puzzle of their widespread and historic use in the rail industry vis-à-vis their general absence in the context of mergers in other US industries. I argue that independent voting trusts raise issues of potentially anticompetitive (or otherwise welfare harming) incentives during the pendency of regulatory review that seem not to be raised by alternative contractual mechanisms that acquirers and targets in other industries rely on to deal with the same issues of risk and incentives addressed by independent voting trusts in railroads. I conclude that independent voting trusts have probably outlived their usefulness in the STB merger review context.

II. INDEPENDENT VOTING TRUSTS AND U.S. RAILROADS

The voting trust – the formal delegation by shareholders of control of a corporation to a separate group of trustees, independent in various ways of day-to-day influence by those shareholders – has a long history in the area of corporate control in the US, mostly but not exclusively in the railroad industry.¹³⁰ In the nineteenth century, voting

¹³⁰ Much of the historical discussion here is derived from Harry A. Cushing, *VOTING TRUSTS: A CHAPTER IN RECENT CORPORATE HISTORY* (1916); John Anton Leavitt, *THE VOTING TRUST: A DEVICE FOR CORPORATE CONTROL* (1941); James B. Eckert, *Review of Leavitt, THE VOTING TRUST*, 32 *AMER. ECON. REV.* 387 (1942); and John Warren Giles, *Is the Voting Trust Agreement a "Dangerous Instrumentality"?*, 3 *CATHOLIC U. L. REV.* 81 (1953).

trusts were often set up as a tool of reorganization following bankruptcy, in order to assure debtors that the quality of management would be maintained during the recovery process. Two well documented examples were the reorganization of the Pittsburgh, Fort Wayne and Chicago Railroad in 1859-62 and the reorganization of the Philadelphia and Reading Railway in 1887 and again in 1897;¹³¹ the voting trust was reportedly standard practice for the many railroad reorganizations undertaken by J.P. Morgan following the panic of 1893.¹³²

There were critics, including most famously Adolf Berle and Gardiner Means, who expressed concern that voting trusts could be used by unscrupulous managers to insulate themselves from shareholder control – one example out of many business and financial arrangements that those authors believed separated ownership from control, to the detriment of performance.¹³³ Harry Cushing noted early on that there might be limits on the completeness with which shareholders should or legally could sign away their own

¹³¹ For the PF&W, see J.F.D. Lanier, *Winslow, Lanier and Company*, SKETCH LIFE OF J.F.D. LANIER (1870), excerpted in Alfred D. Chandler, Jr., *THE RAILROADS: THE NATION'S FIRST BIG BUSINESS* (1965). See also PENNSYLVANIA COMPANY: CORPORATE HISTORY OF THE PITTSBURGH, FORT WAYNE AND CHICAGO RAILWAY COMPANY (1875), http://books.googleusercontent.com/books/content?req=AKW5QacOt9RbVxqTSI4KV4fuRH-K7-qcp48HYgcwW2HOH6YSGR6qUVFWQNKyQ13loFho_0dlaONe_YWxl2XzvtvsL6dds mqOhCSGjyYXkkBRUeOqi2tmQi1vGQURFu1N2AfHytbjRxxJStFIWtpOHd9bexgLZ3 k5iUjpxv2OT54TmAf8V1pOrkZgollvqFf5M_4sWFGNqsYyoBgrW-5ClkCF5xOTD2gLL pXwyWBd7CihV70ooqStGCVZHKtEEMQqY51-AWFvy7g4LHLpe9LNvFtOAtmpGzjmWDrVMj740-nlUSQwxspXZGc. For the Reading, see Jules Irwin Bogen, *THE ANTHRACITE RAILROADS: A STUDY IN AMERICAN RAILROAD ENTERPRISE* (1927), at 251, and N.S.B. Gras and Henrietta M. Larson, *J. Pierpont Morgan*, in *CASEBOOK IN AMERICAN BUSINESS HISTORY* (1939), excerpted in Chandler, *ibid*.

¹³² Gras and Larson, *ibid.*; E.G. Campbell, *THE REORGANIZATION OF THE AMERICAN RAILROAD SYSTEM, 1893-1900* (1938); Herbert E. Dougall, *Review of Campbell* (1938), 46 *J. POLITICAL ECON.* 420 (1938).

¹³³ Adolf A. Berle, Jr., and Gardiner C. Means, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932).

rights of control.¹³⁴ However, John Warren Giles noted that the ICC did not seem to share the concerns of both commentators and the Securities and Exchange Commission (SEC) about the loss of shareholder control, at least when trusts were utilized under carefully specified circumstances and for limited durations.¹³⁵

Early in the twentieth century, voting trusts began to be used, particularly in the railroad industry, as a device for creating or maintaining the independence of two companies either until their independent ownership could be effected or during the pendency of regulatory review of a merger proposal. This regulatory application was presaged in one of the first major cases brought under Section 2 of the Sherman Act – the section that prohibits the monopolization or attempted monopolization of a market – when the Department of Justice, in the person of Louis Brandeis, forced the J.P. Morgan interests who controlled the New York, New Haven & Hartford Railroad to divest themselves of the shares of both the Boston & Maine Railroad and of various local trolley companies in Connecticut and Rhode Island, in both instances requiring the creation of trusts to manage the operations of the companies until the eventual disposition of their shares.¹³⁶

¹³⁴ Cushing, *supra* note 12.

¹³⁵ Giles, *supra* note 12.

¹³⁶ The Sherman Act is 15 U.S.C. §2. See, for example, William Z. Ripley, RAILROADS: FINANCE & ORGANIZATION (1915), at 571-74; Leavitt, *supra* note 12, at 93; John L. Weller, THE NEW HAVEN RAILROAD: ITS RISE AND FALL (1969), at 161-195; Thomas A. Barnaco, *Brandeis, Choate and the Boston & Maine Merger Battle, 1908-1914*, 3 MASS. LEGAL HIST. 125 (1997); and *New Haven Road to Be Dissolved: Railroad's Representatives Accept Arrangements Suggested by Attorney General McReynolds*, SPARTANBURG HERALD, March 22, 1914, <https://news.google.com/newspapers?nid=1876&dat=19140322&id=0k0sAAAAIBAJ&sjid=4skEAAAIBAJ&pg=6938,3824235&hl=en>.

The earliest use of independent voting trusts by the ICC as a way to separate the control of multiple railways during the pendency of a regulatory review seems to have been two cases involving the Baltimore and Ohio Railway Company (B&O). In 1929 the ICC found that the B&O's acquisition of the stock of the Wheeling & Lake Erie Railway violated Section 7 of the Clayton Act – the section that addresses anticompetitive mergers and acquisitions – and ordered the B&O to divest itself of the stock. B&O's sale of the stock to an independent trustee for purposes of eventual disposition on the stock market was found to resolve the problem: “The substantial effect of this trust agreement is to vest the title of the interdicted stock and the power of voting it in a person as trustee, independent of the present holders of the stock and of the other defendants, thus, in effect, accomplishing the result sought in the Clayton Act proceedings.”¹³⁷ In the following year the B&O was found by the ICC to have again violated the Clayton Act by acquiring the stock of the Western Maryland Railway Company – in this case the focus was on the fact that they had done so without seeking advance approval from the ICC – and once again the placement of the shares in an independent voting trust was found to resolve the issue.¹³⁸

At about the same time, the ICC began to address its mandate from the Transportation Act of 1920 to develop a “master plan” for the consolidation of US railroads into a

¹³⁷ The Clayton Act is 15 U.S.C. §18. *Interstate Commerce Commission v. Baltimore & Ohio Railroad Company*, No. 21012, 152 I. C. C. 721 (1929), 156 I. C. C. 607, 609 (1929).

¹³⁸ *Interstate Commerce Commission v. Baltimore & Ohio Railroad Company*, No. 21032, 160 I. C. C. 785 (1930), 183 I. C. C. 165 (1932).

financially sound and competitive system.¹³⁹ The ICC duly commissioned and published a proposed national railway system plan constructed by Harvard economics professor William Ripley and began holding hearings on its implementation. In its first extensive decision discussing implementation, the Commission referred several times, at worst neutrally and at least once seemingly approvingly, to the use of independent voting trusts as a device to maintain managerial and operational independence among railroad companies with (for a time) common ownership. For example: “We cannot, therefore, give our approval to any application of the Pennsylvania Railroad Company designed and seeking to carry into effect any portion of so much of the proposed four-system plan [for New England] ... unless and until that railroad company either has divested itself of all stock held by it both directly in the New Haven and indirectly ... in the New Haven and the Boston & Maine, or has placed all such stock in the hands of independent trustees approved by us as in the public interest....”¹⁴⁰

Broadly similar proposals for the use of independent voting trusts to maintain the independence of two railroad

¹³⁹ See, e.g., Edgar J. Rich, *The Transportation Act of 1920*, 10 AMER. ECON. REV. 507 (1920); Lewis H. Haney, *THE BUSINESS OF RAILWAY TRANSPORTATION* (1924); Bliss Annes, *Federal Regulation of Railroad Holding Companies*, 32 COLUMBIA L. REV. 999 (1932); William Norris Leonard, *RAILROAD CONSOLIDATION UNDER THE TRANSPORTATION ACT OF 1920* (1946, repr. 1968); Carl Helmetag, Jr., *Railroad Mergers: The Accommodation of the Interstate Commerce Act and Antitrust Policies*, 54 VIRGINIA L. REV. 1493 (1968); James C. Johnson and Terry C. Whiteside, *Professor Ripley Revisited: A Current Analysis of Railroad Mergers*, 42 ICC PRACTITIONER’S J. 419 (1975); and Michael R. Crum and Benjamin Allen, *U.S. Transportation Merger Policy: Evolution, Current Status, and Antitrust Considerations*, 13 INT’L J. OF TRANSPORT ECON. 41 (1986).

¹⁴⁰ *Consolidation of Railroads: In the Matter of Consolidation of the Railway Properties of the United States into a Limited Number of Systems*, No. 12964, 185 I. C. C. 403, 414 (1932).

companies temporarily held in common ownership continued to be accepted or even ordered by the ICC in the forties, fifties, and sixties.¹⁴¹ By the late fifties the Commission was treating such arrangements as standard operating procedure: “Voting-trust agreements have long been accepted by the Commission as a means of effecting compliance with the law in connection with holdings of stock in one railroad by another and without which the continued ownership of the stock might be considered unlawful and contrary to the public interest.”¹⁴² Similarly: “[This] trust agreement was drafted in terms obviously designed to meet the requirements for independent voting trusts heretofore approved and/or prescribed by the Commission in a number of proceedings involving the question of one carrier’s control of another where the object of the trust was to bar the beneficial owner of the securities from participation in the control, management, and operation of the issuing carrier.”¹⁴³

When put to the test, the use of independent voting trusts for such purposes by the Commission – and later by the Surface Transportation Board – was upheld by the

¹⁴¹ For the forties, see *Wabash Railroad Company Control*, Finance Docket No. 13235, 247 I. C. C. 365 (1941); *Chesapeake & Ohio Railway Company Purchase Etc.*, Finance Docket No. 14692, 261 I. C. C. 239 (1945). For the fifties, see *Central of Georgia Railway Company Control*, Finance Docket No. 19159, 295 I. C. C. 563 (1957); *New York, Chicago & St. Louis Railroad Company Control*, Finance Docket No. 17883, 295 I. C. C. 703 (1958). For the sixties, see *Pennsylvania Railroad Company – Control – Lehigh Valley Railroad Company*, Finance Docket No. 21459, 317 I. C. C. 139 (1962); *Norfolk and Western Railway Company and New York, Chicago and St. Louis Railroad Company – Merger, Etc.*, Finance Docket No. 21510, 324 I. C. C. 1 (1964); *Chesapeake & Ohio Railway Company and Baltimore & Ohio Railroad Company – Control – Western Maryland Railway Company*, Finance Docket No. 23178, 328 I. C. C. 684 (1967).

¹⁴² *New York, Chicago & St. Louis Railroad Company Control*, Finance Docket No. 17883, 295 I. C. C. 703, 715 (1958).

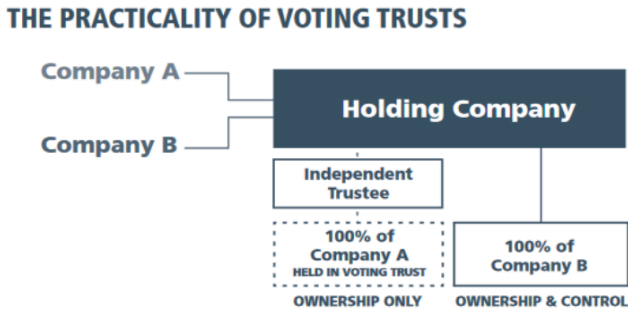
¹⁴³ *Missouri Pacific Railroad Company – Control – Chicago & Eastern Illinois Railroad Company*, Finance Docket No. 21755, 327 I. C. C. 279, 319-20 (1965).

courts.¹⁴⁴

III. WHAT’S WRONG WITH INDEPENDENT VOTING TRUSTS?

Figure 1 shows a schematic diagram of the voting trust arrangement proposed by CP in its bid to purchase NS. As is clear from the diagram, under such an arrangement a single “holding company” owns all the shares of both Company A and Company B but “controls” only Company B – Company A is controlled by the Independent Trustee.

Figure 1. The voting trust



Source: Canadian Pacific Railway, “CP-NS: A Comprehensive Approach to Regulatory Approval,” February 2016.

¹⁴⁴ *Illinois Central Railroad v. United States*, 263 F.Supp. 421 (1967); *B.F. Goodrich Company v. Northwest Industries and Interstate Commerce Commission*, 303 F.Supp. 53 (1969); *City of Ottumwa v. Surface Transportation Board*, 153 F.3d 879 (1998).

In the many decades of ICC and STB consideration of proposals for the creation of independent voting trusts to maintain the independent management and operation of two railroads whose shares had been placed in common ownership, the lion's share of the attention by all participants was devoted to discussion of the precise terms of the contracts that set up the trusts: regulators and courts sought assurances that the trustees would be in fact independent of control or even influence from the acquiring company and its shareholders. For example: "The creation of voting trusts as a means of satisfying the provisions of section 5 cannot be effective for that purpose unless and until we are satisfied that the trusts constitute an actual divestiture of control."¹⁴⁵

As noted above, in its *Major Rail Consolidation Procedures* decision of 2001, the STB expressed a newly heightened level of concern about the use of voting trusts in merger proceedings involving the class I railroads. However, the Board's stated principal concern was not trustee independence but rather the ability of the acquiring firm to find an alternative buyer of the target firm assets in the event of eventual STB denial of the merger application: "[I]t is precisely the divestiture process that now concerns us. When the ICC denied the application in SF/SP, at least two Class I railroads – the Denver and Rio Grand Western Railroad and KCS – were actively involved in bidding for SP when it had to be divested from the voting trust into which its stock had been placed pending the application. In

¹⁴⁵ *Central of Georgia Railway Company Control*, 295 I. C. C. 563, 576 (1957). See also *Voting Trust Rules*, 44 FED. REG. 202, October 17, 1979, concerning the investigation by ICC staff as to "whether the voting trust effectively insulates the [applicant] from any violation of Commission policy against unauthorized acquisition of control of a regulated carrier."

contrast, today there would likely be cases where there would be *no* remaining railroad bidders acceptable to us to buy the shares held in a voting trust if we were to deny a major control transaction or impose conditions that the applicants choose not to accept.”¹⁴⁶

In this paper I focus on a different issue – as the Antitrust Division did in its filing before the STB in the CP/NS proceeding. Even assuming the effectiveness of the voting trust contract in effecting the complete independence of Company A from control or influence by Company B and its shareholders, under the voting trust arrangement outlined in Figure 1 Company B is controlled by shareholders who also own the shares of Company A. This raises competitive issues that are quite familiar from the literature addressing the acquisition by a firm of shares of its competitor, or “horizontal shareholding”.¹⁴⁷

In particular, using standard railroad industry analysis, there are two broad ways in which the CP and the NS likely currently compete for traffic. The most obvious is what is called in the railroad industry “source competition”: competition for traffic originating and terminating at the points of intersection of the two railroads in and around Kansas City, Chicago, Detroit, Buffalo, and Albany. (See Figure 2.) CP and NS compete for traffic both originating

¹⁴⁶ *Major Rail Consolidation Procedures*, 5 S.T.B. at 567-68(footnote omitted, emphasis in original, spelling of “Grande” as in original).

¹⁴⁷ See, for example, Robert J. Reynolds and Bruce R. Snapp, *The Competitive Effects of Partial Equity Interests and Joint Ventures*, 4 INT’L J. OF INDUSTRIAL ORG. 141 (1986); Joseph Farrell and Carl Shapiro, *Asset ownership and market structure in oligopoly*, 21 RAND J. OF ECON. 275 (1990); Einer Elhauge, *Horizontal Shareholding*, 129 HARVARD L. REV. 1267 (2016); Amrita Nain and Yan Wang, *The Product Market Impact of Minority Stake Acquisitions*, 62 MANAGEMENT SCI. (2016), forthcoming; and Miguel Antón, Florian Ederer, Mireia Giné, and Martin Schmalz, *Common Ownership, Competition, and Top Management Incentives*, working paper, July 1, 2016 (finding that “executives are paid less for own performance and more for rivals’ performance when the industry is more commonly owned”).

at those points of intersection and terminating elsewhere (for example, grain headed out from Kansas City for export), and originating elsewhere and terminating at those points of intersection (for example, animal feed from a variety of origins competing for buyers in Kansas City). In addition, CP and NS compete with each other via “parallel competition” as parts of moves with different interline partners: traffic between Minneapolis and Atlanta, for example, could move via a CP/CSX routing or a BNSF/NS routing.

Figure 2. The CP and NS railroad systems



Source: Michael W. Blaszak, *Voting trusts, what they mean in a CP deal for NS*, TRAINS MAGAZINE, December 17, 2015.

As is well demonstrated in the literature examining the impact of the ownership of an equity interest in one firm by a firm with which it competes, if and when Company A and Company B are competing for the same business, the shareholders to whom Company B managers report will not

want Company B to behave too aggressively vis-à-vis Company A, because Company A's losses are their losses too.

But a corresponding logic applies to firms with vertical relationships. If and when Company A and Company B are cooperating for the same business – when traffic originating on the NS in Atlanta is traveling to a destination like Minneapolis that is served by CP but also by other railroads – the shareholders to whom Company B managers report will want the organization of interchange traffic to favor Company A rather than its competitors, all else equal, even if company A is not the most efficient partner for the traffic, because Company A's gains are their gains too. These factors are especially important in an industry like railroads where investments may be both relationship-specific (that is, productive only in the context of cooperation between those two railroads) and extremely long lived, so that improvements in track that favor interlining between Company A and Company B will survive long past a possible regulatory decision that prohibits the merger and returns the two companies to independent ownership.¹⁴⁸

Thus regardless of the effectiveness of the voting trust contract in insuring the independence of the management of the firm in the trust, the very fact of the purchase of that company's stock and the combined ownership of the stock of the two firms creates incentives for behavior that may be anticompetitive and/or irreversible in the event of a

¹⁴⁸ On relationship-specific investments in the railroad industry, see Russell Pittman, *Specific Investments, Contracts, and Opportunism: The Evolution of Railroad Sidetrack Agreements*, 34 J. LAW & ECON. 565 (1991).

decision to prohibit the merger.

IV. WHAT HAPPENS IN OTHER INDUSTRIES?

There is not a great deal of discussion in the historical record of the reasons behind the ICC's apparent favoring of the voting trust mechanism beyond the simple and straightforward statements in the decisions quoted from above. Giles notes, "Quite in contrast with the extended expressions of opinion by Judges and text writers and members of the Securities and Exchange Commission as to the merits or dangers of voting trusts, we find a number of decisions by the Interstate Commerce Commission which either approve or disapprove of the employment of voting-trusts, but those decisions contain little editorial comment."¹⁴⁹ The closest we seem to get to a positive rationale for the use of voting trusts in railroad merger proceedings must be inferred from the language in a dissenting opinion from Commissioner Farrell in 1930: "In my opinion, ... [section 7 of the Clayton Act] should be so construed as to permit one carrier to purchase a controlling interest in the stock of another carrier and hold the stock as an investment with the hope and expectation that such investment may be used later for consolidation purposes if the consolidation is approved by us. If such a purchase can not be made until after the intent to purchase has been advertised by an application made to us, it seems to me that it can not be made at all as a practical matter, because such advertisement would result in such an increase in the price demanded for the stock to be purchased that the purchase

¹⁴⁹ Giles, *supra* note 12.

would not be in the public interest.”¹⁵⁰

Commissioner Farrell refers to issues that are by now well addressed in the broader finance literature. In the context of a potential merger, the potential acquiring firm expends resources as it searches for possible targets and investigates both the internal workings of those firms and the potential cost and/or revenue synergies of combining itself with them. When the potential acquirer announces its plan, it reveals information to the market that it has acquired from the expenditure of these resources. Other investors may free ride on this information to bid up the value of the stock of a target firm, and other potential acquirers may free ride on this information to make their own, competing merger proposals.

One possible short-term outcome is the “winner’s curse”: the firm making the original announcement may win the bidding contest only if it is bidding more than the target is worth. One possible longer-term outcome is that mergers that would have created cost synergies and so improved economic welfare do not take place, because the incentives for potential acquiring firms to expend the resources to find and merge with targets are reduced or eliminated by this free riding.

But this is not the only risk facing potential acquirers. There are a number of reasons that merger proposals may fail, including not only the appearance on the scene of competing acquirers but also rejection by boards of directors; delays, costs, and adverse decisions by antitrust

¹⁵⁰ *Interstate Commerce Commission v. Baltimore & Ohio Railroad Company*, No. 21032, 160 I. C. C. 785, 793 (1930), dissent of Commissioner Farrell.

or regulatory bodies; protectionist, uncooperative behavior by target firm management; and so on. Some of these are risks also faced by target firms as they consider and then enter into contracts with acquirers, and target firms face their own set of risks, including the loss of customers and employees following the merger announcement and, if a deal falls through, the market inference that the firm seeking to be the acquirer unearthed unfavorable information – what might be termed the “Miss Havisham effect”.¹⁵¹ None of these risks are unique to the railroad industry. How are they addressed in industries that do not utilize independent voting trusts?

In fact there are many contractual mechanisms designed exactly to address the allocation of these risks among the parties to a merger agreement. They include the following:

- On the acquiring firm side, the inclusion of break-up fees to be paid by the target firm if it accepts an alternative bid has become a standard component of merger agreements, arguably required by fiduciary rules in order to maintain the option of the target firm’s directors and board to find the best deal for shareholders.¹⁵²
- But break-up fees are not the only risk-allocation device available to acquiring firms. Other options – though apparently less frequently used – include

¹⁵¹ In a nod to the character who is left at the altar in Charles Dickens, GREAT EXPECTATIONS (1861).

¹⁵² See, e.g., John C. Coates, IV, and Guhan Subramanian, *A Buy-Side Model of M&A Lockups: Theory and Evidence*, 53 STANFORD L. REV. 307 (2000); Thomas W. Bates and Michael L. Lemmon, *Breaking up is hard to do? An analysis of termination fee provisions and merger outcomes*, 69 J. OF FINANCIAL ECON. 469 (2003); Micah S. Officer, *Termination fees in mergers and acquisition*, 69 J. OF FINANCIAL ECON. 431 (2003); and Brian J.M. Quinn, *Optionality in Merger Agreements*, 35 DELAWARE J. OF CORP. L. 789 (2010).

stock lockups (giving the acquirer a call option on a specified number of shares in the target at a specified strike price), asset lockups (giving the acquirer a call option on certain assets of the target at a specified price), and, where permitted, no-shop provisions.¹⁵³

- On the target firm side, the inclusion of break-up fees to be paid by the acquirer to the target in case the deal fails to go through – so-called “reverse termination fees” – has become increasingly common in recent years. These seem to have been mostly associated at first with private equity deals and the accompanying uncertainty regarding the ability of the acquirer to line up financing, but they have lately spread to the mainstream and arguably become more complex in structure as well.¹⁵⁴ A notable recent example was the unsuccessful attempt by AT&T to purchase T-Mobile USA, which resulted in the payment by AT&T of a break-up fee to Deutsche Telekom, the parent firm of T-Mobile USA, of \$3 billion in cash and a volume of cellular spectrum valued at at least \$1 billion.¹⁵⁵
- But reverse termination fees are not the only risk-allocation device available to target firms. Other

¹⁵³ See, e.g., Coates and Subramanian, *supra* note 29, and Wolfgang Bessler, Colin Schneck, and Jan Zimmermann, *Bidder contests in international mergers and acquisitions: The impact of toeholds, preemptive bidding, and termination fees*, 42 INT'L REV. OF FINANCIAL ANAL. 4 (2015).

¹⁵⁴ See, e.g., Elizabeth Nowicki, *Reverse Termination Fee Provisions in Acquisition Agreements*, paper presented at the 3rd Annual Conference on Empirical Legal Studies, Cornell University (2008); Afra Afsharipour, *Transforming the Allocation of Deal Risk Through Reverse Termination Fees*, 63 VANDERBILT L. REV. 1161 (2010). (May 2016); and Steven Epstein, *Mergers and Heightened Regulatory Risk*, Harvard Law School Forum on Corporate Governance and Financial Regulation, May 5, 2016.

¹⁵⁵ Michael J. de la Merced, *T-Mobile and AT&T: What's \$2 Billion Among Friends?*, N.Y. TIMES, December 20, 2011, http://dealbook.nytimes.com/2011/12/20/att-and-t-mobile-whats-2-billion-among-friends/?_r=0.

options include “best efforts” and “hell or high water” clauses, obligations to litigate, specified divestiture obligations, “ticking fees” (increasing payments due to the target firm if closing recedes past a specified date), and termination dates.¹⁵⁶

As a group, these tools are designed to allocate risks between acquirers and targets, in part in recognition of the sometimes lengthy time requirements imposed by deliberations of antitrust investigators, regulatory agencies, and courts. The use of investment voting trusts in the context of merger investigations at the ICC and STB was likely at least in part a response to the traditionally extended nature of such investigations and proceedings, but there are now statutory limitations on their duration, and in any case investigations by the Antitrust Division, the Federal Trade Commission, the Federal Communications Commission, the Federal Energy Regulatory Commission, and the banking regulators – not to mention possible litigation – may be equally time-consuming. It is not at all clear why contractual provisions that have become standard in merger contracts throughout the economy cannot perform the same risk allocation function in the railroad industry.

V. CONCLUSION

Voting trust arrangements have a long history at both the

¹⁵⁶ See, e.g., Darren S. Tucker and Kevin L. Yingling, *Keeping the Engagement Ring: Apportioning Antitrust Risk with Reverse Breakup Fees*, 22 ANTITRUST 70 (2008); Brian Burke and John Fedele, *Think Again – Allocating Antitrust Risk in a Climate of Protracted Investigations*, CPI ANTITRUST CHRON., May 2016 ; and Steven Epstein, *Mergers and Heightened Regulatory Risk*, Harvard Law School Forum on Corporate Governance and Financial Regulation, May 5, 2016

ICC and the STB as devices to protect the incentives of acquiring firms and maintain the independence of acquiring and target firms during the pendency of Commission or Board investigation of the merits of the merger proposal. However, they are not without problems. As noted by the STB in 2001, as Class I railroads have become fewer and larger, it may be difficult to find alternative purchasers for the target firm if the STB turns down the proposal. As noted by the Antitrust Division in 2016, joint stock ownership creates anticompetitive and/or otherwise undesirable incentives, even if the independence of the voting trustee is complete.

On the other hand, whatever legitimate functions voting trusts serve in railroad mergers are served by simple lockup agreements in other parts of the economy, without the same incentive problems as voting trusts. It is thus not clear that voting trusts still serve a useful function in the context of railroad merger deliberations.

The Political Economy of Regulatory Costing: The Development of the Uniform Rail Costing System

William F. Huneke¹

Introduction

The partial railroad deregulation, which the Carter Administration and Congress put in place in the 1970s and 1980s, also put in place the need for a new rail regulatory costing system to replace Rail Form A. Congress directed the Interstate Commerce Commission (ICC) to develop the new system and also implanted an overseer, the Railroad Accounting Principles Board (RAPB), to direct the development process. The RAPB set the direction and gave the ICC certain principles to follow in developing the new costing system, which would come to be known as the Uniform Rail Costing System (URCS).

In the key piece of deregulatory legislation, the Staggers Rail Act of 1980, Congress established a critical function for URCS: to set the regulatory threshold. This threshold would determine what movements would be subject to regulatory oversight. Congress set this threshold to allow the railroads a safe-harbor for pricing and incorporated an implicit return on investment. This is a critical fact, a pricing safe-harbor incorporating a return on investment, to remember about URCS's role in the regulatory framework.

The deregulatory legislation came after a decade of

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severe financial challenges for the railroad industry. The Administration and Congress were concerned about the long-term health of the railroad industry. Incorporating some protection for investment return would provide incentive to attract private capital. But this political mission for URCS had important implication for what URCS became. URCS did not become a marginal-cost system. A marginal-cost system would not have this incorporation of an implicit return on investment.

As part of its overall direction, the RAPB wanted the ICC to create a costing system that the various concerned stakeholders could understand. The stakeholders had been using Rail Form A, which used certain rail activities and unit costs to estimate the cost of an individual railroad movement. URCS adopted a similar approach to movement costing. And URCS had to be able to cost movements to determine whether individual movements were subject to regulation. During its deliberations, the RAPB dismissed more theoretical econometric approaches as being too opaque.

Thus, the political process that brought rail deregulation also put in place the process that created URCS. URCS thus represents a political settlement and has played a role in the way partial deregulation has evolved over the last 25 years.

Cost Concepts

To understand the environment and theoretical basis for URCS, this paper will begin with a discussion of economic cost concepts, in particular defining fixed cost, variable cost, marginal cost and incremental cost. To distinguish

between fixed and variable cost, economists posit a time period they call short run, in which some productive factor or factors cannot be changed, added to, or reduced. This compares to the long run in which all productive factors can be varied. Cost definitions:

- Fixed cost – A cost that does not change during the time period considered. An example might be an equipment lease. Economists often consider most capital costs as fixed. These often represent investments in plant and equipment.
- Variable cost – A cost that changes with the amount of output during the period considered. An example might be locomotive fuel.
- Marginal cost – This is the additional cost of producing the last unit of output. For the mathematically inclined, it is the first derivative of the cost function.
- Incremental cost – This represents the additional cost incurred by implementing a specific management decision, for example a new marketing program. It is similar to marginal cost except that it is not concerned with the last unit of output per se but with what might be several units of output as part of a management decision. Incremental cost is also related to variable cost except that the managerial decision may be extend beyond the short run.

Costs are important references for economists when they look at firms and market structure. Economists extol the virtues of a competitive market structure because of the cost outcome. A competitive market structure has many small firms and no scale economies. Firms in a

competitive industry have similar cost structures and the virtue is that, at the margin, price equals marginal cost. This is the efficient outcome because it means the cost of the resources used to produce the last unit of output equal the price the consumer pays for that last unit.

Another important economic relationship is between revenue and variable cost. If a service is not generating enough revenue to cover its variable cost, that service should be shut down. In a railroad context, this can suggest cross-subsidy in the short run: if a service is not covering variable cost, it may be receiving a cross-subsidy to remain viable. However, any service generating more than variable cost is viable and contributing to common and fixed cost.

There are certain complexities that appear once economic cost models get applied in industry settings. Economic theorists think of fixed or constant costs generally as plant and equipment while labor is variable in a simple two-factor cost model, but rail labor does not vary smoothly in practice. Rail costing gets more detailed than a two-factor model and has to consider expense accounts such as switch-crew wages and determine what proportion is variable.

Moreover, the railroad industry is not an example of a nationwide, purely competitive industry. The current US railroad industry has seven large railroads that dominate and have varying degrees of local market power.

Railroad Costs

Railroading is not an industry marked by constant returns to scale, unlike firms in a competitive market. In

particular, railroads have economies of scale, scope and density. These are defined:

- Scale – The larger the operating plant or facility, the lower the average unit costs. For a railroad, the larger the network, *i.e.*, the more customers it reaches, and the more output moving on the network, the lower the average unit costs. Another way to think about this is that railroads have large fixed costs. As a railroad generates more volume, it is able to spread those fixed costs over more output: spreading the overhead.
- Density – The more intensely the firm uses a particular facility or production factor, the lower the average unit cost. The more traffic a railroad can push over a particular track segment, the lower is the per-unit cost of that track segment.
- Scope – The firm enjoys lower average unit costs if it can use the same facilities to provide multiple services. Railroads can use the same track and locomotives to move grain, coal or intermodal traffic.

Because railroads provide multiple services using the same facilities, many of their costs are shared among these various services. Economists describe these shared costs as common costs. This makes estimating railroad costs problematic, but a more fundamental conundrum is how railroads price their services.

The Pricing Problem

A firm with high fixed costs, like a railroad, cannot simply price all its output at marginal cost like a firm in an industry with low fixed costs and minimal or no scale

economies. Railroads' high "fixed costs require railroad pricing above short-run marginal cost to achieve revenue sufficiency."² Basically, this means a high fixed-cost firm needs to charge its customers different prices. Those with other purchasing options will get lower prices than those with limited or no options. Economists label this practice: price discrimination. In US rail regulatory practice it is known as differential pricing.³

Early in their history, railroads became expert in price discrimination. They would charge different prices based on demand characteristics, cost characteristics and market conditions. That meant similar rates for seemingly similar services. Railroads based rates on value of service. Price differences resulted from buyer location and leverage. This made for disfavored, unhappy customers who sought political redress. The seeming arbitrariness of railroad rates fed an urge for regulation.⁴

Pricing in a high fixed-cost industry had a further conundrum. In a recession, with traffic falling, railroads have low variable costs and could stay in business while charging very low rates. This led to accusations of cut throat or ruinous competition and ultimate bankruptcy. US rail regulators received powers to block this by banning minimum rates and approving new construction.⁵

² Laurits R. Christensen Associates, Inc., *A Study of Competition in the US Freight Railroad Industry and Analysis of Proposals That Might Enhance Competition*, Final Report, Prepared for the Surface Transportation Board, November 2008, p. ES-5.

³ D. Philip Locklin, *Economics of Transportation*, Homewood, IL, 1966, pp. 130-152; Robert E. Gallamore and John R. Meyer, *American Railroads, Decline and Renaissance in the Twentieth Century*, Cambridge, MA, 2014, pp.4-5 & pp.250-256.

⁴ Sanders, *Main Lines*, p. 22.

⁵ Locklin, pp. 306-307.

The Regulatory Dilemma

The importance of railroad costing for regulation starts with *Smyth v. Ames*, where the Supreme Court declared regulated rates had to include a fair return on assets.⁶ Ultimately, Congress directed the ICC to find the value of all those railroad assets in the Valuation Act of 1913.⁷ *Smyth* also set the stage for what is the regulatory dilemma: finding the balance between reasonable rates and a regulatory taking.⁸ This balance exists in the current statutory language, which directs the Surface Transportation Board (STB) to balance the need of the railroad industry for adequate revenues with the shipping public's need for reasonable rates. One can also see the antecedents of Ex Parte 347's "Stand Alone Cost" test in *Smyth*: reasonable rates should cover the cost of the facilities and expenses required to move the traffic.

The rail-costing journey only started with *Smyth*. It was a stumbling start because the *Smyth* decision was fatally circular. Economic cost is based on what investors will pay for the assets, or value depends on alternate use, but most rail assets are limited to rail use. How can a regulatory agency set rates based upon on how investors value the rate base, when investors see the economic value of the rate base as being dependent on the rates that could be charged?⁹ In other words, by setting rates through regulation, the regulatory agency determined what an asset could earn: what it was worth. This fatal circularity was

⁶ US Supreme Court, *Smyth v. Ames*, 169 US 466 (1898).; Huneke, p. 128.

⁷ Locklin, pp. 223-224.

⁸ Huneke, pp. 113-115

⁹ Louis Brandeis solved this circularity conundrum by proposing a nominal return set on historical cost, Huneke pp. 11-114. This would not be the approach followed in railroad regulation.

not immediately understood. The Transportation Act of 1920 directed the ICC to estimate and inventory all railroad assets.¹⁰ The ICC performed cost studies and tried to set costs of every railroad asset but the circularity flaw made this a quixotic venture. The Emergency Rail Act of 1933 removed “fair-return-on fair-value” standard and instead set in place the directive to balance the carriers’ need for adequate revenues against public’s need for lowest cost service.¹¹ After that, in the *Hope Natural Gas* case, the Supreme Court identified the *Smyth* circularity for all economic regulators.¹²

Having given up on setting rates based on the rate base, the ICC regulated rate levels rather than basing rates on cost. But there were problems with regulating rate levels: revenues could fluctuate as demand fluctuated. Moreover, if the rate level is fixed, greater returns on investment can be had only by increased efficiency or cost reduction. There was also the problem of cross-subsidy, most particularly, freight rates subsidizing passenger rates. Finally, prior to regulation, railroads had based rates on value of service, but market forces could change and change those values, freezing in place uneconomic rate levels.¹³ Just regulating rate levels was not enough. The ICC needed some cost-reference. To provide a cost-reference, the ICC developed Rail Form A in 1939.¹⁴

¹⁰ Locklin, pp226-239.

¹¹ Locklin, p.248

¹² US Supreme Court, *Federal Power Commission v. Hope Natural Gas C.*, 320 US 591 (1944),

¹³ Locklin, pp. 317-8, 323- 351

¹⁴ Railroad Accounting Principles Board, *Railroad Accounting Principles*, Final Report, September 1987, Vol. 2, p. 1

Regulatory Costing

The development of a cost-reference for railroad regulation presents a challenge. It would be hard to put in place such a reference based on marginal cost for the simple reason that railroads restricted to pricing at marginal cost would go broke as already discussed. In fact, in 1915, the Supreme Court ruled in *Northern Pacific Railway Co. v North Dakota (NP v North Dakota)* that the regulatory agency must include adequate provision for fixed and constant costs. An agency or legislature could not set rates that were “slightly remunerative, but in fact non-compensatory....”¹⁵ With this decision the Supreme Court put rail regulatory agencies on the path to include more than simply marginal cost in their regulatory costing systems.

Railroads have not only fixed costs but also common costs. A locomotive pulling a mixed freight train is contributing to multiple freight shipments and the locomotive’s costs are shared among those services. If the regulatory agency is to include more than marginal costs in its costing, the agency has to find a way to allocate those common costs. Such cost-allocation is fraught with arbitrariness in an industry like railroads that has joint and common costs.¹⁶ As the ICC was developing the successor to Rail Form A, the agency observed that railroad-costing was problematic, as railroad service is heterogeneous. It found that estimating aggregate cost functions too difficult and fell back on a building-block approach that attempted to add up the costs of an individual movement’s

¹⁵ 236 US 585 (1915), p. 591; Locklin, pp. 407-408.

¹⁶ Locklin, pp. 152-156.

components.¹⁷

While regulatory cost needed to include more than simply marginal costs, it also had to avoid allowing one type of shipment from cross subsidizing another. To avoid cross-subsidy, regulatory costing looked to developing a movement's variable cost. In truth, the correct answer would have been incremental cost, but in this context, variable cost is a good proxy. If a movement's revenues were not covering its variable cost, then cross subsidy was implicated. In fact if a service was not covering short run variable cost, then that service should be shut down. However, any service that had revenue more than variable cost should be provided. This service was providing a contribution to fixed and common costs. The big question for regulatory costing is to determine how much cost is variable. The ICC addressed this problem when it developed Rail Form A.

Rail Form A

The ICC's first costing system was Rail Form A. Based on the directive set in *NP v North Dakota*, the ICC created a costing system that was not based on marginal cost. Rather, the ICC included common-cost assignments. The ICC also did not base Rail Form A on specific markets or origin/destination pairs. Rather, the ICC created Rail Form A to provide the basis for determining system-average costs using the agency's Uniform System of Accounts, which dated from 1907.¹⁸ Those accounts derived from railroad reports for whole systems, not segments.

¹⁷ Interstate Commerce Commission, Bureau of Accounts, *Preliminary 1979 Rail Cost Study, Uniform Rail Costing System*, September 1981, p. 23.

¹⁸ Railroad Accounting Principles Board, p. 1.

The ICC reported to the Senate that 70-80% of railroad cost varied with volume. The rest is common cost and needs to be assigned.¹⁹ The ICC also simply declared that 100% of equipment and 50% of Road Property Investment (RPI) was variable. The ICC observed that this declaration got criticized by outsiders – but the ICC responded to its critics by saying that investment does not react immediately to traffic changes.²⁰ The ICC maintained this treatment of equipment as 100% variable and RPI as 50% variable when it developed Rail Form A's replacement, URCS.

With this treatment of equipment and RPI, the ICC was permitting some capital recovery but not all. It also made Rail Form A, a hybrid: Rail Form A was really an intermediate-run costing system. Rail Form A produced, and URCS produces, costs that are neither marginal cost nor short-run variable cost. Therefore, it should not be surprising that URCS costing may show movements with revenues less than regulatory cost. These movements may be viable and contributing to the railroad's overhead – just not at the level of 50% RPI and 100% of equipment. There were/are political and legal elements behind Rail Form A and URCS that have made them not pure economic-costing models.

Railroads on the Brink

At the turn of the twentieth century, railroads had limited competition from other modes of transportation. That competition came from water carriers, inland and

¹⁹ Chairman, Interstate Commerce Commission, Letter, "Rail Freight Service Costs in the Various Rate Territories of the United States," In Response to Senate Resolution No. 119, Certain Information on Rail Freight Service Costs in the Various Rate Territories of the United States, June 1943, p. 1.

²⁰ ICC Chairman Letter to Senate, 1943, pp. 86-87.

inter-coastal. However, the high fixed cost nature of railroads made them susceptible to volatile profit swings with the normal churn of the business cycle. This led leading industry executives and investors such as James J. Hill, Edward Harriman and J. P. Morgan to search for ways to restructure the industry to remove the profit volatility.

But these efforts at restructuring got the attention of President Theodore Roosevelt, who drove his Justice Department to block such combinations, most notably Northern Securities.²¹ At the same time Progressives like Roosevelt applied political pressure to the ICC to curb the arbitrary market power of the railroads reflected in their rate structures.²² The ICC was set on a course to limit rail rates below compensatory levels.

Railroads, tightly confined by regulation, could not respond when intermodal competition arrived with highway carriers. Highway carriers started siphoning off profitable traffic in the 1930s and 1940s, but the Interstate Highway System brought the railroads to an existential crisis in the 1950s and 1960s. ICC regulation limited the railroads' ability to respond, either through rate changes or productivity innovations. Southern Railway's Big John hopper car is a cogent example of ICC restrictions on productivity innovation. With dreadful financial returns and large segments in bankruptcy, the railroad industry was on the brink. Nationalization seemed possible.

Deregulation and Railroad Renaissance

By the 1970s, it was clear that rail regulatory policy had

²¹ Larry Haeg, *Harriman vs. Hill: Wall Street's Great Railroad War*, Minneapolis (2013).

²² Albro Martin, *Enterprise Denied, Origins of the Decline of American Railroads, 1897-1917*, New York, 1971.

to change dramatically. Large parts of the industry were in bankruptcy, most notable the Penn Central. Congress responded with the 3R Act, 4R Act and creation of the United States Railroad Administration (USRA).²³ USRA's mission was to restructure the Penn Central and the other bankrupt, northeastern railroads into a railroad system or systems as viable as possible. USRA's successful legacy was Conrail, but Conrail's success could only be assured if there were also significant changes at the ICC.

Congress aimed to curb and streamline the ICC's powers and processes. The railroad industry was too large for the 1970s economy when the capabilities of highway and water carriers were in place. Yet the ICC processes inhibited any railroad industry effort to restructure. The ICC approved industry mergers, which would be one route to industry restructuring; but the ICC was too slow, as was evident in the travails of Union Pacific's attempted takeover of the bankrupt Rock Island.²⁴ To facilitate mergers, Congress put in place an expedited merger-review process. Similarly, Congress streamlined the ICC's abandonment process to facilitate the railroad industry's elimination of unviable facilities and attainment of a more economically rational network.

Congress's 1970s legislation aimed to create a more financially viable railroad industry and began the sweeping regulatory change that would culminate in the Staggers Act in 1980, but it did not end with industry structure: this reform effort also initiated regulatory cost change. The ICC responded by revising its rail regulatory accounting

²³ For a recent and thorough discussion of these acts and the issues they addressed, see Gallamore & Meyer, *American Railroads*.

²⁴ Sanders, *Main Lines*, pp. 153-155.

system, USOA, and began to develop a new costing system based on the reformed accounts: URCS.²⁵ Changing regulatory costing would be an important part of a larger Congressional drive to curb the ICC's power over railroad rates.

The Cost Recovery Percentage

With so much of the railroad industry appearing economically tenuous, Congress and the Carter Administration sought to reduce the ICC's rate regulation. This public policy reform required an approach that would allow railroads pricing freedom to obtain more revenues and financial solvency but at the same time protect shippers from exorbitant rates. This meant a balance between railroads' need for adequate revenues and shippers' need for reasonable rates.

In the political discussions prior to the enactment of Staggers, railroad financial solvency was a key concern. Transportation Secretary Brock Adams testified before the House of Representatives that railroad deregulation was meant to forestall railroads need for a government subsidy.²⁶ DOT's version of a railroad deregulation bill was to give railroads complete pricing freedom after a five-year transition period. This transition period would allow shippers to adapt to the new environment.²⁷ ICC Chair Daniel O'Neal opposed complete deregulation because he felt the railroads would not compete and would just soak up whatever monopoly profits they could make.²⁸ Congress

²⁵ Railroad Accounting Principles Board p. 1; Bureau of Accounts letter on 1979 Cost Study in 1979 Preliminary Cost Study.

²⁶ US House of Representatives, Hearings on HR 4570; Serial 96-145 (1979), p. 89.

²⁷ Hearings on HR 4570; Serial 96-145, pp. 93-94.

²⁸ Hearings on HR 4570; Serial 96-145, pp. 143-144.

did not adopt complete deregulation so there needed to be an approach that balanced the railroads' need for adequate revenue with shippers' need for reasonable rates.

The search for this balance moved to a regulatory-cost concept, the cost recovery percentage (CRP). The House Committee on Interstate and Foreign Commerce created CRP as a test to determine "the level at which a rate exceeds the level necessary to cover costs."²⁹ Congress initially set a 150% Revenue/Variable Cost (RVC) threshold and then directed the ICC to determine what threshold should be to provide safe harbor for adequate revenues.³⁰ Another way to look at the safe-harbor CRP was that it sought to determine just how far railroads could exploit their market power before shippers could seek regulatory relief. CRP would be a political settlement.

This directive meant the ICC would need to compare its regulatory costs using Rail Form A to existing rail revenues to find what would be a safe harbor for rail pricing. But a costing process that incorporated a return on investment could not be a system designed to generate marginal costs, not for the railroad industry. Neither Rail Form A nor URCS were designed to generate marginal costs.

Having created the CRP, Congress attempted to direct the ICC in how to do the costing and develop a replacement for Rail Form A. ICC Chairman O'Neal pushed back: He said the ICC believed that regulatory costing could not be management costing. O'Neal stated: "We do not believe it would be appropriate for the Commission to prescribe an

²⁹ US House of Representatives, Staggers Rail Act of 1980, House Report 96-1035 (1980), p. 3984.

³⁰ US Senate S. 1946, Senate Report 96-470 (1979), , pp18f.

internal managerial cost accounting system which would involve the Commission in internal management decision-making.” O’Neal said the ICC was developing “a regulatory cost center reporting system” but feared the bill’s requirement of a “cost accounting system” would mean internal management accounting.³¹ ICC would develop a successor costing system to Rail Form A but it would be neither a marginal-cost system nor a management-cost system. It would be a regulatory-costing system to implement what Congress intended with the CRP.

ICC staff researched what the appropriate CRP would be. ICC staff reported to Congress that the optimum CRP safe harbor should be 190-200%.³² Not everyone agreed with this assessment. The National Industrial Traffic League (NITL) opposed setting CRP at 190% because it gave railroads a windfall above what NITL observed was full cost recovery, 140% (this was the overall average percentage markup railroads needed to achieve to cover all their expenses). NITL said that, with such a high CRP, railroads would have no efficiency incentive and instead would just pass cost increases through to shippers.³³

The Variable Cost Threshold Becomes Law

Within the ICC, there was no consensus for the appropriate level for the CRP. Darius Gaskins, who replaced Dan O’Neal as ICC Chairman in 1980, thought the

³¹ US Senate, Hearings before the SubCttee. On Surface Transportation of Senate Commerce, Sen bill 796 ‘To Reform the Economic Regulation of Railroads, and for other Purposes’ Serial No. 96-41 (1979), p. 915

³² US House of Representatives, Hearing before Subcommittee On Oversight & Investigations, Committee on Interstate & Foreign Commerce, House (1980), serial 96-176, p. 12.

³³ US House of Representatives, Rail Act of 1980: House Hearings, Serial 96-186 (1980), p. 187.

CRP should 200%. No real surprise that the Chairman and ICC staff were in agreement. But other Commissioners were not so sure.

In particular, Commissioner Charles Clapp disagreed with setting the CRP at 190 or 200%. He supported a lower percentage, starting at 160 “with gradual upward movement over a period of 3-4 years [this would end up in the Staggers Act] and provision for a study at the end of the period to evaluate the impact on captive shippers, the railroad industry and the national economy and energy concerns.”³⁴

When Congress enacted the Staggers Act, it largely accepted Commissioner Clapp’s opinion. The law originally set the ICC’s jurisdictional threshold at 160% and increased each year by 5% points until it reached the cost recovery percentage (which in practice meant 180%). That is where the jurisdictional threshold has remained for the last three decades.

As this overview of the legislative history shows, the variable cost threshold derives from the CRP, which was meant as a measure of what railroads would need to earn to achieve adequate revenues.³⁵ But, by not completely deregulating railroads, Congress set in place a regulatory backstop for rate relief with the starting point being the jurisdictional threshold of 180%. This was thus a check on how far railroads could go in exploiting their market power.

³⁴ Hearings before Sub. On Oversight & Investigations, Cttee on Interstate & Foreign Commerce, Houses, 8-28-80, Serial 96-176, Gaskins throughout, Clapp at p. 6, staff at p. 12.

³⁵ Staggers Rail Act of 1980, House Report 96-1035, p. 3984.

The Railroad Accounting Principles Board

To provide guidance to the development of the USOA and URCS, Congress instituted the Railroad Accounting Principles Board (RAPB). The Staggers Act created RAPB and Congress funded the RAPB in 1984 with two overriding goals:

1. [To] establish a body of cost accounting principles to serve as the framework for implementing the regulatory provisions in which cost determination plays a vital role and
2. [To] make administrative and legislative recommendations it deems necessary to integrate the principles into the regulatory process.³⁶

The Staggers Act directed the ICC to implement and enforce the RAPB's cost principles through rulemaking and such a rulemaking process would "afford interested parties an opportunity to participate." Staggers recognized that the ICC was ultimately responsible for the cost principles embedded in its costing system, but the ICC needed to explain the rationale behind the rules adopted. "However, as part of the rulemaking process, the ICC [had to] accord substantial deference to the RAPB's principles and to the rationale underlying those principles."³⁷

The RAPB did institute a rulemaking. It issued a series of comment notices in the *Federal Register* asking for comments on costing issues, problems and ultimately on its draft principles. The RAPB conducted a hearing on its

³⁶ Railroad Accounting Principles Board, Final Report, Volume 2, p. 2.

³⁷ Railroad Accounting Principles Board, Final Report, Volume 2, p. 2.

proposed Principles on April 30, 1987.³⁸

The RAPB did receive comments from econometricians during the rulemaking. Economists, particularly academic economists, like to use translog cost functions. These provide costs as a function of input prices and outputs. These models can provide marginal cost estimates, which, if the researcher has pricing data, can lead to analyses of economic efficiency and market power. Abba Lerner suggested an index of market power that is based on the divergence of price from marginal cost.³⁹

The econometrician comments during RAPB's rulemaking said the proposed Principles and URCS were flawed. They recommended that the RAPB replace URCS with more modern technology that more closely incorporated economic theory.⁴⁰ But the RAPB dismissed the econometric critique for three reasons:

1. Econometric models had limited suitability for movement costing;
2. Econometric models were not practical—they required too much information. (And this at a time when deregulation should be reducing information needs.); and
3. Econometric models were complex and were not easily understood by the community.⁴¹

³⁸ Railroad Accounting Principles Board, Final Report, Volume 2, p. 2.

³⁹ Kenneth G. Elzinga and David E. Mills, "The Lerner Index of Monopoly Power: Origins and Uses," *American Economic Review: Papers & Proceedings*, 2011, 101:3, pp. 558-564.

⁴⁰ Railroad Accounting Principle Board, Final Report, Volume 2, pp. 95-96.

⁴¹ Railroad Accounting Principles Board/APB, Final Report, Volume 2, p. 96.

Congress gave the RAPB a mission to develop a set of principles as a basis for railroad costing and see that these principles were faithfully adhered to in the new costing system. The new costing system has to be capable of estimating individual movement costs—those costs set the regulatory threshold. The ICC was developing its new costing system in a deregulatory era when information requirements needed to be scaled back. The new costing system needed to be understood by practitioners, many of whom would be unfamiliar with econometric techniques.

The RAPB completed its mission with the publication of its Principles. These principles remain the foundation of regulatory costing and URCS, which the ICC officially adopted in 1989 after rulemaking. URCS is a direct outgrowth of the deregulatory legislation. The basic jurisdictional threshold and the role of the jurisdictional threshold in the regulatory framework require the movement costs that URCS provides.

Creating the New Regulatory Cost System

Even before Congress had enacted the 180% jurisdictional threshold in Staggers, the ICC had begun work on a new regulatory accounting system and costing system, successors to the existing USOA and Rail Form A. This was no surprise because Congress mandated and funded this activity in The Railroad Revitalization and Regulatory Reform Act of 1976 (4R Act). The Act directed the ICC to create a new system that included: “(i) operating and nonoperating revenue accounts; (ii) direct cost accounts for determining fixed and variable costs ...; and

(iii) indirect cost accounts ... and the method for the assignment of such costs to various functions..."⁴² The ICC developed a new system of accounts in 1977 and implemented the new USOA in 1978.⁴³ The ICC would not formally adopt URCS until 1989.⁴⁴

From its inception, the ICC designed URCS as an accounting-cost system, not an economic-cost system, and certainly not a marginal-cost estimating system. The ICC employed statistical techniques to analyze the relationships between railroad expenses and outputs. The ICC declared that this statistical analysis had to be done because the USOA collected costs and outputs on a system-wide basis rather than a movement-specific basis.⁴⁵ It is inconceivable that the ICC could have collected the data on a movement-specific basis that would have been required for doing marginal-cost estimates for specific units. Congress had directed the ICC to do the somewhat less onerous task of developing an inventory of all railroad assets in the 1920, which would have been a necessary input for movement-specific marginal cost estimates, but the ICC could not complete that inventory. Falling back to system-average costs, based on accounts for the totality of individual railroads, was about all that was possible.

URCS's mission is to estimate the regulatory variable-cost estimates for specific railroad movements. Those estimates become the basis for jurisdictional threshold.

⁴² *Railroad Revitalization and Regulatory Reform Act of 1976*, Section 101 (a) as quoted in ICC, Preliminary 1979 Rail Cost Study, Uniform Rail Costing System, September 1981, p. 1.

⁴³ ICC, Preliminary 1979 Rail Cost Study, Uniform Rail Costing System, September 1981, p. 2.

⁴⁴ ICC Ex Parte No. 431 (Sub-No. 1), Decided September 8, 1989.

⁴⁵ ICC, Preliminary 1979 Rail Cost Study, Uniform Rail Costing System, September 1981, p. 22.

From the early stages of URCS development, the ICC was clear that URCS was not generating economic-cost estimates. ICC designed URCS to generate historical, system-average costs derived from railroad system accounts.⁴⁶ URCS is not seeking marginal-cost estimates. Congress's directive to the ICC was to create something that was not marginal cost. URCS diverges from marginal cost in both (1) that URCS creates system-average estimates and (2) that it is not short run. Because URCS incorporates Rail Form A's treatment of RPI as 50% variable and equipment as 100% variable, URCS is better described as intermediate run like Rail Form A was. As such, URCS allows some capital recovery, but not all.

An important principle that the RAPB charged the ICC to follow in URCS development was Cost Causality: "Costs shall only be attributed...when a causal relationship exists." And the RAPB defined cost as "the amount (usually expressed in monetary terms) of input resources used to achieve a specified quantity of activity or service." The causality principle "limits the use of costs to only those resulting from the activity which is subject to the regulatory decision." There was also an avoidability test; because of joint and common costs, not all costs can be avoided.⁴⁷ Trying to determine a shipment's cost responsibility was the goal. This was why determining variability was so important: how costs changed with changes in volume would drive URCS cost-allocation.

RAPB said "[three] criteria should be used to establish variability relationships through regression analysis: 1)

⁴⁶ ICC, Preliminary 1979 Rail Cost Study, Uniform Rail Costing System, September 1981, p. 26.

⁴⁷ Railroad Accounting Principles Board, Final Report, Vol 2,, p. 9.

logical explanation of a causal relationship between expense and output, 2) results that are statistically significant, and 3) judgment and experience in interpreting the results of the analysis.”⁴⁸ In its preliminary work on variabilities in 1981, the ICC found variabilities from 34-100%, but many in the range of 60-80%.⁴⁹ Professor Daniel Westbrook completed the regression analysis that underlies URCS to this day. These regressions are part of Phase 1 of URCS.

The ICC divided URCS into three phases:

- Phase 1: This phase determines how expense accounts vary with various railroad activities. For example, an expense account is running crew wages-engine crews, and a related activity is train-miles running. The output of Phase 1, expense variabilities, is fed into Phase 2.
- Phase 2: This phase creates unit costs for particular train activities. An example is train-miles crew cost. These unit costs are input to the next URCS phase.
- Phase 3: This phase creates cost estimates for specific movements. It is the movement-costing program. Users provide movement criteria like train mileage and Phase 3 generates an URCS cost estimate. Multiply the cost estimate by 180% and that would be the movement’s jurisdictional threshold.

Neither the ICC nor the STB has redone the regressions of Phase 1. The ICC did and STB does update URCS Phase 2 every year with each year’s new financial reports

⁴⁸ Railroad Accounting Principles Board, Final Report, Vol 2, p. 11.

⁴⁹ ICC, Bureau of Accounts, Prelim. 1979 Rail Cost Study, URCS, Sept. 1981 pp.46-55.

from the railroads. The agencies would then use the Phase 2 unit costs to cost the annual Waybill Sample and create the interactive Phase 3 program, which is available from the STB's Web site.

What URCS Does and Does Not

URCS is a regulatory tool that is embedded in the partial deregulation environment that the Carter Administration and Congress put in place in the 1970s and 1980s. URCS's origins lie in this legislation. This legislation, including URCS, represents a political settlement. URCS is a regulatory tool and not an academic exercise.

The legislation created a process with the RAPB as an overseer to replace the ICC's predecessor regulatory cost tool, Rail Form A. The RAPB set the direction and gave the ICC certain principles to follow in developing URCS. One critical function for URCS was to set the regulatory threshold. This function came from Staggers. Congress set this threshold to allow the railroads a safe harbor for pricing and the threshold incorporates an implicit return on investment.

At the time the Administration and Congress were concerned about the long-term health of the railroad industry. Incorporating some protection for investment return sought to provide attraction to private capital. But this political mission for URCS had important ramifications for what URCS is and is not: URCS cannot be a marginal-cost system. A marginal-cost system would not have this incorporation of an implicit return on investment.

The RAPB also directed the ICC to create a costing system that the various concerned stakeholders could

understand. The stakeholders had been using Rail Form A, which used certain rail activities and unit costs to estimate the cost of an individual railroad movement. URCS uses a similar format. The RAPB dismissed an econometric approach as being too opaque.

URCS is a regulatory tool and results from the political process that brought about rail deregulation. As such, URCS has played a role in the way the partial deregulation has evolved over the last 25 years.

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