

# MERCATUS ON POLICY

## Sacrificing Safety Is an Unintended Consequence of the Jones Act

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**ON A 2015 VOYAGE FROM JACKSONVILLE,** Florida, to Puerto Rico, the Jones Act–eligible cargo ship *El Faro* sailed directly into Hurricane Joaquin and sank, losing all 33 crew members—one of the greatest peacetime maritime disasters in modern American history. *El Faro* was 31 years older than the average foreign-flag ship of its type, raising the question as to whether old age might have contributed to the sinking.<sup>1</sup>

The Jones Act of 1920 requires, among other things, that cargo voyages between two American ports must use American-built ships. As the United States has lost its comparative advantage in ship-building, US ships have become more expensive, and the average age of ships in the Jones Act–eligible fleet has risen relative to the average age of foreign-flag ships. Older ships are less safe, and reforming the Jones Act is the key to increasing safety in US shipping.

### **TECHNOLOGICAL CHANGE IN SHIPS AND COMPARATIVE ADVANTAGE**

In its first session following the ratification of the US Constitution in 1789, Congress required a vessel to be American built to be eligible for US-flag registry. In the early days of the nation and through the Civil War, the domestic-build requirement had little effect on US shipping costs, since American shipbuilders had a comparative advantage in producing ships that had wooden hulls and were wind driven. US-flag ships carried most of the nation’s foreign trade before the Civil War, and they were highly desirable for use in the international export market.<sup>2</sup>

As part of the Industrial Revolution, Great Britain began producing iron-hulled ships driven by steam that displaced the wooden, wind-driven ships. Ships equipped with the new technology quickly came to dominate most international sea lanes, relegating

wooden sailing ships to a subordinate role. American ships became technologically backward. Further, the British repealed the domestic-build requirement of the Navigation Acts, but the US retained its requirement. By 1900 ships wearing a US flag were still 73 percent sail powered, but the British fleet was only 20 percent sail powered.<sup>3</sup> The result was a long-term decline in the share of US trade carried by US-flag ships and a decline in the US-flag share of the world fleet.

The US Merchant Marine has been permanently damaged by the persistence of the American-build requirement. The United States is the only major country that retains a domestic-build requirement.<sup>4</sup> “Although this clearly was not the intention [of the build requirement], the policy further accelerated the virtual elimination of U.S. shipping from all trade routes open to foreign competition.”<sup>5</sup>

US shipbuilders lost their comparative advantage, and American-built ships became increasingly expensive relative to foreign-built ships. According to recent estimates, American-built oceangoing ships cost five times as much as their foreign counterparts. Because of the higher cost of new ships, American shippers have delayed replacing older ships, and the American fleet has gotten older. It is ironic that a law intended to strengthen the US Merchant Marine has contributed to its near disappearance.<sup>6</sup>

## AGE AND TECHNOLOGY

As technology advances, older ships have become more technologically backward. In principle, older ships could be serviced and refitted with the latest technology, but ship owners have avoided bringing older ships up to date because of the additional costs modernization would entail.<sup>7</sup> Services of American shipyards are more expensive than foreign shipyards, and a 50 percent tariff on the use of foreign shipyards that was part of the infamous Smoot-Hawley tariff of 1933 remains in effect. Safety rules with grandfather clauses have made it possible for older ships to operate legitimately without adding modern technology.

For example, *El Faro* was delivered in 1975 and it was required to follow the safety requirements of 1960 when it sailed in 2015. Safety standards are lower for older ships, and there is evidence that enforcement of standards is also weaker. In the *El Faro* case, some work was not done before the ship left the port because “parts for older ships were hard to find.”<sup>8</sup> The Coast Guard has been criticized for outsourcing some monitoring to the Alternate Compliance Program, which was judged to be ineffective.<sup>9</sup> Regarding safety standards for older ships, an American ship captain stated recently that “what they have done over the last 20 years is lowering the bar. Their definition of seaworthy gets lower and lower because the ships are getting older and older.”<sup>10</sup>

## ARE OLDER SHIPS LESS SAFE?

It is undeniable that the Jones Act contributes to the aging of the US-flag fleet.<sup>11</sup> Is there evidence that older ships are also less safe? Marine insurance companies consider older ships to be riskier. Marine insurance is one of the oldest forms of insurance, and insurers have accumulated vast experience evaluating the safety of different types of ships.<sup>12</sup> The importance of age varies with the type of ship, but marine insurers are reluctant to insure ships older than 20 years without extraordinary inspections or higher premiums.<sup>13</sup>

A group at Southampton Solent University conducted a comprehensive study of ship accidents taking place in the last 15 years and concluded, “The evidence confirms the hypothesis that most ship accidents can be linked with older vessels. . . .”<sup>14</sup> The average age of vessels lost was consistently above 20 years, and the average age of lost ships increased steadily over the sample period. National governments inspect foreign ships calling at their ports under the Port State Control (PSC) regime, verifying compliance with the several international conventions of the International Maritime Organization (IMO), a specialized agency of the United Nations. One of the nine regional PSC organizations worldwide, the Paris Memorandum of Understanding,

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reports the highest detention rates for ships older than 20 years and uses “age over 12 years” as a key risk profile factor.

National ship registries with good safety records, such as the one for the Marshall Islands, will not register ships older than 20 years unless owners provide additional information about the safety of the older ships.<sup>15</sup> The financial community is also suspicious about the safety of older ships. Potential investors were once warned about investing in Horizon Lines, once the largest Jones Act company, because they owned too many older ships.<sup>16</sup>

### JONES ACT SHIPS ARE OLDER AND LESS SAFE

US-flag ships are older than those of the world fleet, and the Jones Act contributes to the extraordinary aging of the US fleet.<sup>17</sup> The average age of ships in the US fleet (33 years) is greater than the average age of ships in the foreign-flag fleet (13 years). At the age of 40, *El Faro* was even older than the average US-flag ship, and it was far older than the average age of international ships (23 years) that were recycled by shipbreakers from 2012 to 2015.<sup>18</sup> In their comprehensive study of the history of US maritime policy, Andrew Gibson of the Naval War College and Arthur Donovan of the US Merchant Marine Academy concluded that the Jones Act contributed to the aging of the US fleet: “The insistence that such ships be U.S. built is the Jones Act’s most constraining feature; no other nation imposes a similar requirement. U.S.-built ships are so expensive that ships in the Jones Act trades are kept in service long past their normal retirement age, the result being that the fleet is very old, indeed much of it virtually obsolete.”<sup>19</sup>

### THE JONES ACT AND RAILROAD SAFETY

The Jones Act has contributed to a decline in domestic water transportation. By making US coastal transportation more expensive, the act has also contributed to diminished transportation safety on land. Some oil shipments that could have used coastal tankers have instead been diverted to railroads.<sup>20</sup> A new study of rail safety has demonstrated that additional oil shipments by rail have added to rail congestion and to the frequency and severity of rail accidents.<sup>21</sup>

### THE *EL FARO* TRAGEDY AND THE AGE AND SAFETY OF JONES ACT SHIPS

The *El Faro* sinking is a tragic example of the relationship between older ships and safety. *El Faro*’s owner, TOTE Maritime, operates Jones Act common carrier ocean container shipping services in the Puerto Rico and Alaska trades. TOTE had a different kind of problem earlier on the Puerto Rican route. They were convicted of violating antitrust laws by conspiring to fix freight rates for actions in 2005 and 2008. Before the loss of *El Faro*, TOTE planned to reposition the ship and continue operating *El Faro* in their Washington State–Alaska service.

In their investigations of the *El Faro* sinking that ended in December 2017, the Coast Guard and the National Transportation Safety Board (NTSB) found multiple factors that contributed to the sinking and loss of lives, but both agencies identified factors related to the age of the ship. For example, *El Faro* was exempt from the current standards for lifeboats. Since it was delivered in 1975, *El Faro* was permitted to meet the 1960 requirements for ship safety set by

the International Convention for the Safety of Life at Sea, rather than the higher standards in place in 2015.<sup>22</sup> NTSB is now recommending closed-top life boats for all ships, rather than the open-top lifeboats used by *El Faro*.<sup>23</sup> In addition to lower standards for older ships, both agencies cited weaker enforcement of standards for older ships. The Coast Guard was criticized for applying the older safety standards, even though major refitting in 2005–2006 should have caused them to apply the higher standards for newer and remodeled ships. The Coast Guard’s Alternate Compliance Program, which was introduced in the 1990s, allows inspections of US-flag commercial ships required under IMO conventions to be delegated to a ship’s nongovernmental classification society, including—in the instance of *El Faro*—the American Bureau of Shipping. This practice has been accused of resulting in weaker vessel inspection enforcement than would have been performed by the Coast Guard, and it may have been a contributing factor in *El Faro*’s loss.<sup>24</sup> Since seamen are the main victims of shipping accidents, it is surprisingly difficult to find public statements from labor union officials expressing concern about possible safety problems with older ships.

## REFORMING THE JONES ACT TO IMPROVE SAFETY

Broadly eliminating the most commercially restrictive provisions of the Jones Act—including the US-build, US-ownership, and related requirements—would substantially improve the nation’s economic efficiency and shipboard safety. A narrower but still substantive national reform would be to eliminate only the domestic-build and related requirements, which would completely remove all the incentives to employ older ships. It would revitalize the Jones Act seagoing fleet with modern tonnage. A more moderate reform on a regional basis would be to eliminate the build requirement only for seagoing ships employed in the noncontiguous routes (Alaska, Hawaii, and Puerto Rico). Safety reform could be addressed directly by applying the same standards

and enforcement to both old and new ships. A reform that might receive the greatest support would be a permanent exemption from the Jones Act for Puerto Rico, which is suffering from a long-term debt problem, as well as a recent hurricane disaster.

## CONCLUSION

The Jones Act has been justifiably criticized for contributing to higher shipping costs and diverting some transportation from water to land.<sup>25</sup> An unintended consequence of the act is that it contributes to lower ship safety. The US-build requirement of the Jones Act (combined with the high tariff against foreign shipyards and the lower safety standards for older ships) contributes to more dangerous working conditions for American seamen. In spite of the large net cost of the act that is borne by millions of consumers and other end users, the act continues to have strong support from elected officials and union leaders ostensibly representing seamen and shipbuilders.<sup>26</sup> Sponsors of the Jones Act intended to create a stronger merchant marine, but the unintended consequences have been a smaller, older, and more dangerous American fleet that carries very little of US international trade.

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Thomas Grennes is an emeritus professor of economics at North Carolina State University. He has written extensively on topics related to international trade and finance. After the disintegration of the Soviet Union, he joined the newly founded Stockholm School of Economics in Riga, in newly independent Latvia, as a visiting professor. He coauthors the blog *Thoughts from across the Atlantic* with Andris Strazds at [www.economonitor.com/thoughtsacrossatlantic](http://www.economonitor.com/thoughtsacrossatlantic).

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