



*A bold voice for transportation workers*

October 13, 2020

Mr. Ted Kim  
U.S. Coast Guard  
2703 Martin Luther King Jr. Ave. SE  
Washington, DC 20593

**RE: Request for Information on Integration of Automated and Autonomous Commercial Vessels and Vessel Technologies Into the Maritime Transportation System  
Docket No. USCG-2019-0698**

Dear Mr. Kim,

On behalf of the Transportation Trades Department, AFL-CIO (TTD), I am pleased to respond to the Coast Guard's request for information entitled "Request for Information on Integration of Automated and Autonomous Commercial Vessels and Vessel Technologies into the Maritime Transportation System." TTD consists of 33 affiliate unions representing workers in all modes of transportation, including those in the commercial maritime industry. We therefore have a vested interest in this request.<sup>1</sup>

The notice requests information regarding the introduction and development of automated and autonomous commercial vessels and vessel technologies subject to U.S. jurisdiction, on U.S. flagged commercial vessels, and in U.S. port facilities. The notice requests information regarding barriers to development, testing, and deployment of AI technology, including information regarding benefits and cost savings of automated vessel technologies, the extent that these technologies are already in use, and how they might be deployed in the future.

As policymakers have considered the implementation of automated technologies across all modes of transportation, TTD has consistently argued that good jobs in these sectors must be preserved, that safety is never compromised, and that reliable passenger and freight transport is not undermined.<sup>2</sup> Given the current and future workforce needs of the maritime sector and the unique

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<sup>1</sup> Attached is a list of TTD's 33 affiliated unions

<sup>2</sup> <https://ttd.org/policy/federal-comments/ttd-continues-to-urge-fmcsa-to-consider-automation-concerns/>

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Larry I. Willis, President / Greg Regan, Secretary-Treasurer



nature of commercial waterborne commerce, the correct application of these principles is critical. It is for this reason that we are disappointed that this request for information is structured and written in a way to generate comments that extol the values of automation and supposed cost savings while giving short shrift to critical questions of safety and impacts to the maritime workforce. This bias creates unrealistic expectations for the implementation of aspirational automation rather than prudent and measured adoption. It is essential that the Coast Guard and the Department of Transportation modify their request to give due consideration to these issues.

As TTD has previously discussed, it is incumbent on the federal government to consider how the deployment of new technology may impact workers, particularly if it is inserting itself in the development and deployment of automated vessel technologies by eliminating so-called regulatory barriers. There is no critical urgency in the maritime industry to prematurely accelerate the introduction of automation, and the International Maritime Organization has previously warned that “a degree of caution is needed to ensure that an inappropriate regulatory framework is not hastily put in place...”<sup>3</sup> The Coast Guard should closely study how automated vessel technology may alter the future of work for mariners and take a leading role in supporting an active labor market and training/retraining programs to prepare these employees for the challenges and opportunities presented by new technology. Further, any efforts to develop these types of programs cannot be developed in a vacuum and must be shaped in consultation with mariners and their unions.

The need for workforce considerations is particularly relevant given how the impacts of future automated technology present unique challenges for today’s industry. Maritime labor, shipping companies, and our federal defense partners have long sounded the alarm on the decline in the merchant mariner workforce, and the dangers of a shortage of domestic Coast Guard-qualified merchant mariners. Regardless of what impacts automation may or may not have in years to come, existing shortfalls in the maritime employment base are an immediate problem. Efforts to blindly champion the future of automated vessel technology without consideration for impacts on employment may have a chilling effect on the recruitment, training, and retention of the maritime workforce that the nation cannot afford.

Additionally, regulatory authorities must continue to perform their duties to uphold safety standards by fully evaluating automation technologies in partnership with mariners before allowing their deployment. Commercial maritime vessels present unique automation challenges, due to their size, cargo capacity (including hazardous and environmentally sensitive materials), and the general inability to quickly reach a port to resolve technological or mechanical issues. Even minimally intrusive automation introduced in main propulsion, auxiliary machinery and fuel, lubrication, and cooling systems could lead to tragic technical failures if insufficient crew members are available on board to service the ship and ensure proper operation. Regulatory standards should

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<https://ttd.org/policy/federal-comments/fra-must-not-ignore-safety-and-worker-issues-in-railroad-automation/>  
<https://ttd.org/policy/ttd-responds-to-fmcsa-on-automation/>

<sup>3</sup> Maritime Safety Committee, MSC 99/5/1, Feb. 22, 2018.

continue to uphold high levels of reliability and redundancies in addition to ensuring that crews can immediately respond and mitigate shipboard emergencies and pollution incidents. Today, the highly skilled men and women represented by TTD's seafaring unions ensure that these vessels operate safely as they sail the globe. Replacing them with unproven automation technologies invites tremendous and unnecessary risk to life and the maritime environment.

As with other automated technologies, the Coast Guard must seriously consider the cyber and information security issues associated with commercial vessel technology. Increasingly, pirates have turned to 21<sup>st</sup> century tactics, including the hacking of onboard technologies and exploiting the comparative lack of computer security. It is not difficult to imagine how dire the consequences of pirates, terrorists, or hostile foreign powers seizing control of a modern supertanker with 2 million barrels of crude oil would be.

For years, the Coast Guard and DOT have ensured the longevity of proven safety standards and that legacy should not be compromised because of unproven promises of new technology. Maritime labor has long adjusted and adapted to changes and new developments in the industry, but we remain steadfast that technology must not be deployed until it is fully evaluated and robust standards are in place to ensure it is implemented safely and responsibly.<sup>4</sup>

In considering actions on the future of the industry, we encourage the Coast Guard to consider the consequences of automation on the maritime workforce. We also urge the Coast Guard not to take premature actions to usher in the implementation of vessel automation technology until such time as technologies are proven safe and sufficient regulatory frameworks are in place to verify safety on an ongoing basis. We appreciate the opportunity to comment on this docket and look forward to working with the Coast Guard going forward.

Sincerely,



Larry I. Willis  
President

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<sup>4</sup> <https://ttd.org/policy/policy-statements/automation-in-transportation/>



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***TTD MEMBER UNIONS***

Air Line Pilots Association (ALPA)  
Amalgamated Transit Union (ATU)  
American Federation of Government Employees (AFGE)  
American Federation of State, County and Municipal Employees (AFSCME)  
American Federation of Teachers (AFT)  
Association of Flight Attendants-CWA (AFA-CWA)  
American Train Dispatchers Association (ATDA)  
Brotherhood of Railroad Signalmen (BRS)  
Communications Workers of America (CWA)  
International Association of Fire Fighters (IAFF)  
International Association of Machinists and Aerospace Workers (IAM)  
International Brotherhood of Boilermakers, Iron Ship Builders,  
Blacksmiths, Forgers and Helpers (IBB)  
International Brotherhood of Electrical Workers (IBEW)  
International Longshoremen's Association (ILA)  
International Organization of Masters, Mates & Pilots (MM&P)  
International Union of Operating Engineers (IUOE)  
Laborers' International Union of North America (LIUNA)  
Marine Engineers' Beneficial Association (MEBA)  
National Air Traffic Controllers Association (NATCA)  
National Association of Letter Carriers (NALC)  
National Conference of Firemen and Oilers, SEIU (NCFO, SEIU)  
National Federation of Public and Private Employees (NFOPAPE)  
Office and Professional Employees International Union (OPEIU)  
Professional Aviation Safety Specialists (PASS)  
Sailors' Union of the Pacific (SUP)  
Sheet Metal, Air, Rail and Transportation Workers (SMART)  
SMART-Transportation Division  
Transportation Communications Union/ IAM (TCU)  
Transport Workers Union of America (TWU)  
**UNITE HERE!**  
United Automobile, Aerospace and Agricultural Implement Workers of America (UAW)  
United Mine Workers of America (UMWA)  
United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service  
Workers International Union (USW)

*These 33 labor organizations are members of and represented by the TTD*

