



STATEMENT ON NHTSA DENIAL OF SBTC PETITION FOR DEFECT INVESTIGATION & MOTOR VEHICLE SAFETY STANDARDS

August 12, 2022

With respect to the SBTC's September 27, 2021 petition to USDOT's NHTSA on ELDs, which was sent because FMCSA did not take the ELD hacking issue seriously, it was dealt with by NHTSA (after initially ignoring it twice) in two parts...

In a document entitled "Resume," NHTSA deals with the first part (namely, a request for a defect investigation.)

Their basis to deny the request for defect investigation was:

Given the absence of any similar events/incidents related to this matter and lack of demonstrated potential for remote compromise, it is unlikely that an order concerning the notification and remedy of a safety-related defect would be issued due to any investigation opened as a result of granting this petition.

Therefore, upon full consideration of the information presented in the petition, and the potential risks to safety, the petition is denied. The denial of this petition does not foreclose the Agency from taking further action if warranted, or the potential for a future finding that a safety-related defect exists based upon additional information the Agency may receive.

So, in other words, since this is the first time anyone is formally bringing this to our attention as a complaint, we are going to do nothing on this right now because if this were really a problem, then someone else besides SBTC would have told us?

That's the way to handle this?

Imagine this:

911 Operator: This is the 911 Operator, please state your emergency...

1775 I. (Eye) Street, NW, Suite 1150, Washington, DC 20006
202-587-2751 www.Truckers.com Support@Truckers.com

Caller: There is a fire in the dumpster outside the school on Main Street and it's near an open propane gas tank.

911 Operator: Well, we haven't received any other calls about a fire at that location...

Caller: I think it might blow. And there are... KIDS inside!

911 Operator: Well, we're going to wait and see if we get any more reports before we dispatch the fire trucks.

Caller: But I'm calling to report a fire! I see it... right in front of me! And I see the children in the classroom inside.

911 Operator: Well, thank you for your report. We may take further action, if warranted, if we determine in the future that a safety-related emergency exists based upon additional information we may receive. Thank you for calling 911. Have a nice day.

The agency took this position to brush this aside despite the fact that we noted in the petition in our summary of the research (including various media articles) that in 2016, University of Michigan researchers Yelizaveta Burakova, Bill Hass, Leif Millar, and Andre Weimerskirch published a report entitled: **“Truck Hacking: An Experimental Analysis of the SAE J1939 Standard.”**

We quoted from the summary of that study:

We test our attacks on a 2006 Class-8 semi tractor and 2001 school bus. With these two vehicles, we demonstrate how simple it is to replicate the kinds of attacks used on consumer vehicles and that it is possible to use the same attack on other vehicles that use the SAE J1939 standard. We show safety critical attacks that include the ability to accelerate a truck in motion, disable the driver’s ability to accelerate, and disable the vehicle’s engine brake. We conclude with a discussion for possibilities of additional attacks and potential remote attack vectors...

We also pointed out to NHTSA that the **FBI issued a Private Industry Notification in 2020** stating:

The ELD mandate does not contain any cybersecurity or quality assurance requirements for suppliers of ELDs. As a result, no third-party validation or testing is required before vendors can self-certify their ELDs. Businesses choosing an ELD to use on their networks must therefore conduct due diligence themselves to mitigate their cyber risk and potential costs in the event of a cyber incident.

In it, the FBI also suggested that once a cyber-criminal gains access, he can install malware, such as ransomware, to prevent the ELD, the vehicle, or connected telematics services (such as dispatching or shipment tracking) from operating until the ransom is paid. We all remember the May 2021 Colonial Pipeline ransomware attack and its effects, we said to NHSTA.

And, we reminded NHTSA that previous to that, in 2016, NHTSA itself issued a joint notice with the FBI that invited the public to:

3. Contact the National Highway Traffic Safety Administration

In addition to contacting the manufacturer or authorized dealer, please report suspected hacking attempts and perceived anomalous vehicle behavior that could result in safety concerns to NHTSA by filing a Vehicle Safety Complaint.

Which, of course, was **precisely** what we were doing in the September 27, 2021 petition to them.

And, we asked them to note that Michael Graham, NTSB Board Member, said during the then-recent Westfield Transport hearing that FMCSA's review process for ELDs was "perilously close to very little or no certification" at all. "It works, and it works because I say it works," Graham said. "That's not a very robust system."

As for part two, the request for revised and new motor vehicle safety standards, their denial in that matter published below in the Federal Register was just as disingenuous and lame.

[Federal Register :: Federal Motor Vehicle Safety Standards; Denial of Petitions for Rulemaking](#)

The basis for this denial is preposterous:

1. SBTC has not provided sufficient information to establish a safety need associated with ELD installation. NHTSA reviewed all sources provided by the petitioner to determine whether a safety need exists that could be resolved by promulgating a FMVSS. In its first rulemaking petition, SBTC contended that the hacking vulnerability and weak encryption of ELDs may lead to safety-critical attacks (i.e., hazards) in commercial vehicles. The references cited by the petitioner do not provide support for such assertion or sufficient information, such as the nature, cause, size, and potential severity of the alleged hazard. As an example, SBTC argued that an adversary can hack into "a vulnerable ELD system" and take control of a commercial vehicle based on an academic research paper ("Burakova").[5] Contrary to the out-of-context excerpt petitioner included in its petition, this paper discusses the possibilities of using physical access to a SAE J1939 bus.[6] The paper makes no specific assertions concerning wireless or remote attacks, only that "Further research is needed."

In actuality, [the research paper we offered them](#), in addition to numerous other articles we supplied, did make such an assertion:

*We test our attacks on a 2006 Class-8 semi tractor and 2001 school bus. With these two vehicles, we demonstrate how simple it is to replicate the kinds of attacks used on consumer vehicles and that it is possible to use the same attack on other vehicles that use the SAE J1939 standard. We show safety critical attacks that include the ability to accelerate a truck in motion, disable the driver's ability to accelerate, and disable the vehicle's engine brake. **We conclude with a discussion for possibilities of additional attacks and potential remote attack vectors (emphasis added).***

In fact, the word "remote" appears in the study no less than 10 times. Perhaps they didn't actually read the study and used the cliff notes instead.

As for "further research is needed," that is the whole purpose of us petitioning the NHTSA. For **them** to conduct an investigation into this **important safety matter** discovered and preliminarily exposed by the researchers... and for the NHTSA to conduct that "further research." All we as the petitioner are supposed to do under the statute is "briefly" bring the matter to the agency's attention (as discussed below).

This is akin to me saying --when my seven year old mixes the colors blue and yellow, it seems to be green: you should research whether yellow and red similarly make another color... and NHTSA & FMCSA both saying we really don't care, SBTC, if you have discovered that mixing colors creates other colors, you have not proved to us that mixing yellow and red creates another color. More research (by YOU) is needed. All the while, there's the FBI and NTSB saying to the public: gee, that sure looks like orange when you mix red and yellow, doesn't it?

The NHTSA also ruled:

2. SBTC has not provided any information on the practical means or solutions by which NHTSA might resolve petitioner concerns. As stated in previous NHTSA guidance, the petition should describe technologies and designs that are or will be available to comply with the performance requirements and demonstrate the level of effectiveness of those technologies and designs in addressing the claimed concerns regarding the installation of ELDs. However, the petitioner provided only high-level, anecdotal information about their broad, general concerns. Furthermore, petitioner failed to provide any solutions to those concerns.

The SBTC is not expected by Congress to solve government's public policy problems single-handedly. Just that we cooperate, which we have done by extending our hand through the petition at our time and expense. But that does not invite a willingness to accept an unreasonable administrative burden that was never authorized by statute.

The NHTSA's "guidance" is ambiguous, not enabled by statute, and contrary to the language and intent of Congress that a petition should be "brief."

NHTSA's rule also uses the word "brief." In essence, the agency's "guidance" significantly adds to the petitioner's obligations set forth in the law and rule and thereby constitutes an unlawfully promulgated rule under the guise of "guidance." In any event, this "guidance" should be deemed void for vagueness and unenforceable against petitioners.

The agency should be directed to cease and desist from continuing to place unreasonable barriers in front of the public for the sole apparent purpose of interfering with and obstructing Constitutionally and statutorily-guaranteed petitions for redress of grievances and the obvious illegitimate purpose of preventing petitioners from making more work for the agency. This response entails an unlawful, overbearing requirement, one that has been unduly shifted to --and placed on --the petitioner for the sheer convenience of the agency, whose mission scope as stated on its website is to:

Save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity.

Research is their duly-delegated administrative responsibility, not that of the petitioner. Their failure to conduct that research after our report to them in the form of a petition, is disturbing, mismanagement, and endangers public safety... all because they don't want to do the work to get to the bottom of the ELD hacking problem.

And, they found:

3. SBTC has not provided the substance that a standard would be comprised of. As stated in previous NHTSA guidance,[9] the petition should describe the requested standard (i.e., the performance requirements, test conditions, and test procedures), the supporting research and reasons why those performance requirements, test conditions, and test procedures are appropriate and provide proposed regulatory text. However, SBTC failed to provide any substantive information regarding what a new FMVSS would be comprised of that would resolve the alleged concerns regarding the ELD installation.

A petitioner is absolutely not obligated by statute or rule to file "substantive information regarding what a new FMVSS would be comprised of" as a basis for her concerns to be addressed. That is the role of government to figure out through public notice and comment advanced notice of proposed rulemaking after preliminary government review, study, investigation and research.

Please note the law places no such unreasonable burdens on a petitioner who is Constitutionally petitioning for a redress of grievances in the interest of protecting public safety:

49 USC §30162. Petitions by interested persons for standards and enforcement

(a) Filing.-Any interested person may file a petition with the Secretary of Transportation requesting the Secretary to begin a proceeding-

(1) to prescribe a motor vehicle safety standard under this chapter; or

(2) to decide whether to issue an order under section 30118(b) of this title.

*(b) Statement of Facts.-A petition under this section must state facts that the person claims establish that a motor vehicle safety standard or order referred to in subsection (a) of this section is necessary and **briefly** describe the order the Secretary should issue.*

(c) Proceedings.-The Secretary may hold a public hearing or conduct an investigation or proceeding to decide whether to grant a petition under this section.

(d) Actions of Secretary.-

(1) In general.-The Secretary shall determine whether to approve or deny a petition under this section by not later than 120 days after the petition is filed.

(2) Approval.-If a petition under this section is approved, the Secretary shall begin the proceeding promptly.

(3) Denial.-If a petition under this section is denied, the Secretary shall publish the reasons for the denial in the Federal Register (emphasis added).

In fact, the statute specifically calls only for a "**brief**" description from the Petitioner.

The truth is, the petition supplied the agency with all of the required elements in the rule:

49 CFR § 552.4 Requirements for petition.

A petition filed under this part should be addressed and submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590. Each petition filed under this part must:

(a) Be written in the English language;

(b) Have, preceding its text, a heading that includes the word "Petition";

(c) Set forth facts which it is claimed establish that an order is necessary;

*(d) Set forth a **brief description** of the substance of the order which it is claimed should be issued; and*

(e) Contain the name and address of the petitioner (emphasis added).

There's the word "brief" again, following Congress' lead.

In terms of the rule governing the agency's processing of the petition and affording due process:

§ 552.15 Processing of petition.

*(b) At any time during the agency's consideration of a petition submitted under this part, the Administrator **may request the petitioner to provide additional supporting information** and data and/or provide a demonstration of any of the requested test procedures. The agency will seek to make any such request within 60 days after receipt of the petition.*

The agency made **no such request** to us for additional information and rather summarily denied our petition, in part, on the alleged basis that we did not supply enough information, thereby denying us the procedural due process required by the APA.

Furthermore, SBTC filed the petition under the Motor Vehicle Safety Act, 49 U.S.C. 30111, which encourages:

(c) Cooperation. -The Secretary may advise, assist, and cooperate with departments, agencies, and instrumentalities of the United States Government, States, and other public and private agencies in developing motor vehicle safety standards.

The 49 CFR § 552.6 Technical Review rule states:

The appropriate Associate Administrator conducts a technical review of the petition. The technical review may consist of an analysis of the material submitted, together with information already in the possession of the agency. It may also include the collection of additional information, or a public meeting in accordance with § 552.7.

The agency made no attempt to collect additional information or hold a public meeting. It summarily dismissed the petition without the bona fide technical review that is due under the rule.

The CFR § 554.5 Office of Defects Investigation rule states:

*The Office of Defects Investigation conducts investigations to implement the provisions of the Act concerning the identification and correction of safety-related defects in motor vehicles and motor vehicle equipment. It **elicits from every available source** and evaluates on a continuing basis any information suggesting the existence of a safety-related defect (emphasis added).*

So, to recap... **an agency with a \$1.27 billion 2023 budget request in progress** expects citizen petitioners, as well as small non-profit trade groups representing small motor carriers and operating on a shoestring budget, to conduct thorough, detailed Federal government-level technical research and investigation all by itself and essentially do the agency's work for it? That is not the statutory or lawful regulatory burden on the petitioner at all. That falls within the mission statement of the agency. The purpose of the petition is to merely report the concerns and ask the agency to conduct an investigation into defects, for the agency to do the research, and then promulgate new and/or revised safety standards, as appropriate.

There was no publication of the petition in the *Federal Register* soliciting comments. No request for us to supply additional information, no bona fide investigation, research, or rulemaking conducted, and no public meeting held; so, there was really no attempt to elicit information from **any** available source. This petition was therefore not processed in good faith.

This incident constitutes USDOT mismanagement, abuse, and violation of law and/or rule that entails dangers to public safety.

The other sources that could have been contacted on this matter include the sources we already referenced in the petition; namely, the FBI, the NTSB, and/or the University researchers themselves whom I am sure would cooperate with NHTSA to improve public safety. But NHTSA wasn't interested.

All of these ELD self-certification and telematics hacking issues we have brought to USDOT's attention are also of bona fide concern to the FBI and the NTSB. They are matters of public safety --if not national security; yet they have been neglected and ignored by four agencies within USDOT:

*FMCSA

*NHTSA

*OIG

*OST

We hope OSC will now take the Secretary to task on this issue in the interest of public safety rather than allow FMCSA and NHTSA to wait until disaster strikes by a criminal ransomware hacker or terrorist who remotely hacks into ELD telematics and takes control of the steering of a 70,000-pound hazmat truck filled with diesel fuel and plows into a school bus filled with children, a New York City parade, or a city's water supply.