



SMART SAFETY SOLUTIONS

December 14th, 2020

Administrator
FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION
1200 New Jersey Avenue SE
Washington, D.C. 20590-0001

Re: Application for Exemption from 49 C.F.R. 393.25(e)¹

Dear Administrator,

Pursuant to 49 C.F.R. Part 381, Subpart C,² Intellistop, INC. respectfully requests that the Federal Motor Carrier Safety Administration (FMCSA) exempt Intellistop on behalf of commercial motor carriers from the 49 C.F.R. § 393.25(e) requirement that all CMV's (including flatbed trailers and straight trucks) be equipped with steady burning brake lamps. This is akin to the 5-year exemption granted to the NTTCC³ in October and the 5-year exemption recently granted to *Grote Industries LLC*⁴ by the FMCSA.

Specifically, Intellistop Inc. requests a 5-year exemption to allow the use of the Intellistop module which pulses the preexisting brake, clearance and I.D. lamps.

Our company, *Intellistop*, manufactures a module that fits right into the nosebox of any trailer (or in-line with the body builder light connector on straight trucks) and prompts the preexisting brake and marker lights to pulse 4 times in under 2 seconds while simultaneously maintaining the burn—no extra equipment is required. Intellistop is designed and manufactured such that, should the module ever fail, the brake, clearance, and I.D. lamps will default to normal OEM function and illumination.

Intellistop requests this exemption on behalf of all motor carriers. Previous NHTSA research has shown that use of pulsating brake lamps increases visibility of motor

¹ 49 C.F.R. 393.25 <https://tinyurl.com/y2ckaktr> or https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.393#se49.5.393_125

² 49 C.F.R. Part 381, Subpart C <https://tinyurl.com/yytbkefue> or <https://www.law.cornell.edu/cfr/text/49/part-381/subpart-C>

³ 5-year exemption granted to the NTTCC <https://tinyurl.com/y3h5grqq> or <https://www.fmcsa.dot.gov/regulations/notices/2020-22233>

⁴ 5-year exemption granted to Grote Industries LLC <https://tinyurl.com/y692b2us> or <https://www.fmcsa.dot.gov/regulations/notices/2020-26772>

vehicles. Incorporating the *Intellistop* module with the preexisting brake, clearance, and I.D. lamps, creates a pulsing cycle while maintaining the steady burning red brake lamps as required by the FMCSRs. During the 4 pulses, the light does not go out, and after the 4 pulses the lamp finishes at full burn until the driver releases their foot from the brake pedal. This would allow commercial carriers to not only maintain operational safety levels, but also implement more efficient and effective operations.

Research conducted by the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA)^{5,6,7} has shown that enhanced rear signal systems, such as pulsing brake lights, which is the subject of this exemption application, may significantly reduce the frequency of rear-end accidents. NHTSA has previously interpreted that clearance lamps and I.D. lamps may have dual functionality as long as the primary function of that lamp is maintained.

Intellistop seeks the ability for all motor carriers to upgrade their existing safety features while maintaining those required under the FMCSRs. If the FMCSA grants Intellistop's temporary exemption, the company and their customer motor carriers and manufacturers will be allowed to voluntarily upgrade the brake lamp functionality on the rear of all CMVs (including flatbed trailers and straight trucks) and be able to utilize them in its daily operations to more safely share the highways with the motoring public.

Intellistop has satisfied the necessary requirements under 49 C.F.R. § 381.305⁸ for issuance of the requested exemption, in that: (1) Intellistop and commercial motor carriers are currently prevented from utilizing pulsing brake, clearance, and I.D. lamps by the FMCSRs. The company and commercial motor carriers could operate its equipment in a safer manner if the FMCSA were to grant this exemption request; and (2) Intellistop has shown that operating a pulsing brake activated warning light on the rear of all CMVs (including flatbed trailers and straight trucks) on a fleet-wide basis would allow motor carriers to maintain a level of safety that is equivalent to, or greater than, the level that it would achieve without the requested exemption.

For these reasons, Intellistop reverently requests that the FMCSA grant Intellistop a 5-year temporary exemption to the requirements of 49 C.F.R. § 393.25(e). Use of the Intellistop module to pulse the existing brake, clearance, and I.D. lamps would allow Intellistop and its motor carrier customers and manufacturers to continue their

⁵ NHTSA Study—Evaluation of Enhanced Brake Lights Using Surrogate Safety Metrics <https://tinyurl.com/y5dh7ok2> or <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/811127.pdf>

⁶ NHTSA Study—Enhanced Rear Lighting and Signaling Systems <https://tinyurl.com/y2romx76> or https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/task_3_results_0.pdf

⁷ NHTSA—Traffic Safety Facts <https://tinyurl.com/yxglsdax> or <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/tsf811128.pdf>

⁸ 49 C.F.R. § 381.305 <https://tinyurl.com/y5mscgra> or https://www.ecfr.gov/cgi-bin/text-idx?SID=b9f85ce66184f8d3ad1e3ed990651747&mc=true&node=pt49.5.381&rgn=div5#se49.5.381_1305

unwavering commitment to safely and efficiently servicing customers and sharing the nation's roadways with the motoring public.

To view Intellistop operating on different types of trailers please visit our website⁹ and watch our videos¹⁰. We believe this request for exemption satisfies all requirements as outlined in 49 C.F.R. § 381.310¹¹. However, if it does not, or if you have any questions, please contact me at any time. Thank you.

Sincerely,
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INDEPENDENT REFERENCES:

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<https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/analyses20of20rear-end20crashes20and20near-crashes20dot20hs2081020846.pdf>
2. NHTSA, ASSESSING THE ATTENTION-GETTING CAPABILITY OF BRAKE SIGNALS: EVALUATION OF CANDIDATE ENHANCED BRAKING SIGNALS AND FEATURES, June 2010
<https://one.nhtsa.gov/Research/Human-Factors/Rear-signaling>
3. NHTSA, EVALUATION OF ENHANCED BRAKE LIGHTS USING SURROGATE SAFETY METRICS, April 2009 <https://one.nhtsa.gov/Research/Human-Factors/Rear-signaling>
4. NHTSA, Traffic Safety Facts, STUDY OF PRESENT-DAY LED BRIGHTNESS AND CORRESPONDING REAR SIGNALING CONCEPTS (LED OPTIMIZATION), May 2009
5. 81 Federal Register 76 BEYOND COMPLIANCE PROGRAM
<https://one.nhtsa.gov/Research/Human-Factors/Rear-signaling>
6. National Safety Council, UNDERSTANDING THE DISTRACTED BRAIN: WHY DRIVING WHILE USING HANDS-FREE CELL PHONES IS RISKY BEHAVIOR, April 2010
<https://www.cartalk.com/content/understanding-distracted-brain-why-driving-while-using-hands-free-cell-phones-risky-behavior>

⁹ Intellistop Website www.IntellistopUSA.com

¹⁰ Intellistop Website—videos www.intellistopusa.com/videos/

¹¹ 49 C.F.R. § 381.310 <https://tinyurl.com/y5ulxfls> or <https://www.law.cornell.edu/cfr/text/49/381.310>