

**STATE OF TENNESSEE**

OFFICE OF THE  
**ATTORNEY GENERAL**  
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Opinion No. 04-022

Remote-Controlled Railroad Locomotives

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**QUESTION**

Under existing law, are remote-controlled locomotives authorized in Tennessee?

**OPINION**

Yes. Tennessee law relative to railroad safety has been largely preempted by the Federal Railroad Safety Act, and federal regulations promulgated by the Secretary of Transportation permit and regulate remote-controlled locomotives.

**ANALYSIS**

This opinion addresses whether remote-controlled locomotives are authorized in Tennessee under existing law. In your letter, you define a remote-controlled locomotive to be a locomotive “that through the use of a radio transmitter and receiver can be operated by a person not physically located at the controls within the confines of the locomotive cab.” You also cite three state statutes and question their impact on this issue, such as the requirement that a locomotive engineer's operator permit is required prior to lawful operation (Tenn. Code Ann. § 65-6-134), that this engineer's operator permit is required to be carried by the operator at all times during the operation of the locomotive (Tenn. Code Ann. § 65-12-115), and that an engineer, fireman or other person is required to be located upon the locomotive as a precaution for the prevention of accidents (Tenn. Code Ann. § 65-12-108(3)). The first two statutes concern the certification and licensing of any person who operates a locomotive. Tenn. Code Ann. § 65-6-134 provides:

Every company, association, person or other entity which employs or permits any person to operate a railroad locomotive shall issue to such person an engineer's operator permit. Such permit shall include the engineer's name, address, description, date of birth and a certification that such person is qualified as a locomotive engineer.

Additionally, this engineer's operator permit is required to be carried by the operator at all times during the operation of the locomotive:

Every person who operates a railroad locomotive in this state shall carry on such operator's person while operating such locomotive an engineer's operator permit.

Tenn. Code Ann. § 65-12-115. Therefore, to operate a locomotive legally under these provisions, whether in person or by remote-control (using a radio transmitter and receiver or other such device), the locomotive operator must have qualified for, been issued, and carry a valid engineer's operator permit at all times during such operation.

Not contemplating the possibility of operation by remote-control, the framers of these acts doubtless envisioned that the operator of a locomotive, on whose person the engineer operator's permit is required to be carried, would likewise be "at the controls within the confines of the locomotive cab." The statute does not expressly require this, however. It is our understanding that operators of remote-controlled locomotives function inside a fairly confined train yard within close proximity of the locomotive they are operating. An obvious purpose of § 65-12-115 is to provide that a train inspector will immediately be able to identify the person who is operating the train and determine that he is qualified to do so. This purpose is not impeded if the operator is not physically on the train but is in close enough proximity that his identity can be readily determined and his credentials can be inspected when one observes the operation of the train. Accordingly, we do not read these licensing statutes to prohibit an engineer, who has a valid engineer's operator permit on his person, from operating a train in close physical proximity by remote control.

However, the third statute you referenced, Tenn. Code Ann. § 65-12-108, states that an engineer, fireman or other person is required to be located "upon the locomotive" as a precaution for the prevention of accidents:

Every railroad company shall keep the engineer, fireman, or some other person upon the locomotive, always upon the lookout ahead; and when any person, animal, or other obstruction appears upon the road, the alarm whistle shall be sounded, the brakes put down, and every possible means employed to stop the train and prevent an accident . . . .

Tenn. Code Ann. § 65-12-108(3). Whether the locomotive operator is physically located at the controls within the confines of the locomotive cab or operating the locomotive from outside via remote-control, this subsection mandates that somebody, be it an engineer, fireman, or some other person always be on the lookout, as well as be in a position to sound the alarm whistle, apply the brakes, and do whatever else is necessary to stop the train and prevent an accident. Furthermore, this subsection appears to require that such person "upon the lookout ahead" be located upon the locomotive. It is our understanding, however, that remote-controlled locomotives sometimes have no one at all on board. Thus, this Tennessee statute may present an additional requirement on the remote-controlled operation of locomotives, even though it does not expressly forbid such operation.

Nevertheless, in the final analysis these existing Tennessee statutes do not control the answer to your question. Tennessee state law, regulations and orders relative to railroad safety have been largely preempted by the Federal Railroad Safety Act (“FRSA”), specifically 49 U.S.C.A. § 20106, which states:

Laws, regulations, and orders related to railroad safety and laws, regulations, and orders related to railroad security shall be nationally uniform to the extent practicable. A State may adopt or continue in force a law, regulation, or order related to railroad safety or security until the Secretary of Transportation (with respect to railroad safety matters), or the Secretary of Homeland Security (with respect to railroad security matters), prescribes a regulation or issues an order covering the subject matter of the State requirement. A State may adopt or continue in force an additional or more stringent law, regulation, or order related to railroad safety or security when the law, regulation, or order—

- (1) is necessary to eliminate or reduce an essentially local safety or security hazard;
- (2) is not incompatible with a law, regulation, or order of the United States Government; and
- (3) does not unreasonably burden interstate commerce.

49 U.S.C.A. § 20106. Furthermore, the Secretary of Transportation has prescribed safety regulations that address major aspects of this subject matter. For federal preemption purposes, these regulations “occupy the field” concerning the training, qualification and certification of all locomotive engineers. The section entitled “Preemptive effect and construction” declares the specific intent of these regulations concerning federal preemption:

Under 49 U.S.C. 20106, issuance of the regulations in this part preempts any State law, regulation, or order covering the same subject matter, except an additional or more stringent law, regulation, or order that is necessary to eliminate or reduce an essentially local safety hazard; is not incompatible with a law, regulation, or order of the United States Government; and does not impose an unreasonable burden on interstate commerce.

49 C.F.R. § 240.5(a). In addition, federal regulations at 49 C.F.R. pt. 240, relative to the “Qualification and Certification of Locomotive Engineers” govern, among other things, all aspects

of the training and licensing of locomotive engineers. This would obviously include the training and certification of remote-controlled operators. These federal regulations include a very similar provision to the second Tennessee certification and licensing statute, Tenn. Code Ann. § 65-12-115, discussed above. 49 C.F.R. § 240.305(b) provides:

(b) Each locomotive engineer who has received a certificate required under this part shall:

(1) Have that certificate in his or her possession while on duty as an engineer . . . .

This federal regulation clearly preempts Tenn. Code Ann. § 65-12-115, because it covers the same subject matter and occupies the field. The State’s requirement that the engineer carry the engineer’s operator permit on one’s person while operating a locomotive is virtually identical in meaning, and the federal regulation clearly has not been construed to prohibit remote-controlled locomotives. So to, Tenn. Code Ann. § 65-6-134 has been essentially preempted by the certification program, the numerous evaluation procedures and the other training specified and required by 49 C.F.R. § 240.101 *et seq.*

Tenn. Code Ann. § 65-12-108(3), entitled “Precautions required for prevention of accidents,” presents a closer call. While not prohibiting remote-controlled operation of a locomotive *per se*, this subsection could be read to require someone other than the remote-control operator to be “upon” the locomotive, i.e., within the confines of the locomotive cab. The overarching purpose of this statute, however, is that a person, whether the operator or someone else, always be on the lookout ahead to prevent accidents. During operation, the remote-control operator is always on the lookout ahead, whether on the ground or in the locomotive cab. The other purpose of this statute is to ensure that a person is in a position to sound the alarm whistle, apply the brakes and stop the train. All three of these functions can be easily carried out by the remote-control operator, through his remote-control transmitter, which along with the other remote-control equipment, is subject to comprehensive federal regulations (see below). As such, the State’s requirement that another person must physically be within the locomotive cab appears to be preempted by the following federal law and regulations.

The Locomotive Inspection Act (“LIA”), codified at 49 U.S.C.A. § 20701 *et seq.*, mandates federal standards and requirements for locomotives concerning their safe use, necessary inspections, repairs, inspection and repair reports, accident reports and investigations involving locomotive accidents. Only when a number of safety conditions have been satisfied does the LIA allow a railroad to use a “locomotive or tender and its parts and appurtenances . . . .”<sup>1</sup> As used in 49 U.S.C.A. § 20701, “parts and appurtenances” would include the remote-control transmitter, remote-control receiver and any other equipment necessary for remote-controlled operation. This section further authorizes the Secretary of Transportation to prescribe regulations pertaining to the proper condition, the safe operation, and the inspection and testing of all railroad locomotive equipment.

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<sup>1</sup> 49 U.S.C.A. § 20701.

See 49 C.F.R. pt. 229 relative to “Railroad Locomotive Safety Standards”; in addition to other things, this part specifically regulates the operation and inspection of all locomotive equipment, which would include all equipment used for operation by remote control.<sup>2</sup>

Finally, on February 1, 2001, the Federal Railroad Administration (“FRA”) of the Department of Transportation issued its Notice of Safety Advisory 2001-01 which established recommended minimal guidelines for the operation of remote-controlled locomotives. This Notice was published in the Federal Register, *see* 66 Fed. Reg. 10340 (February 14, 2001); a copy is attached to this Opinion. The following paragraph is pertinent to your question:

Safety Advisory 2001-01

Recommendation: Operation of Remote Control Locomotives

The following design criteria and operating procedures are recommendations only. ***Compliance is voluntary.*** However, railroads are strongly encouraged to regard these suggested criterion as a minimum from which to tailor their own RCL [Remote Control Locomotive] operations. It should be noted that all of the design features recommended are available with the current generation of remote control technology. In certain circumstances, due to the design of their equipment, or differences in operating practices, a railroad may not be able to obtain complete consistency with these recommendations. In those situations railroads are encouraged to develop alternative designs or practices which offer at least equivalent or greater levels of safety. FRA emphasizes that although compliance with this Safety Advisory is voluntary, ***nothing in this Safety Advisory is meant to relieve a railroad from compliance with all existing railroad safety regulations. Therefore, when procedures required by regulation are cited in this Safety Advisory, compliance is mandatory.***

66 Fed. Reg. 10343 (February 14, 2001) (emphasis added). Neither Tennessee state law, the FRSA, nor U.S. Department of Transportation rules, regulations, or orders prohibit remote-controlled locomotives *per se*, and the FRA has devoted significant effort in drafting these recommended minimal guidelines for the safe operation of remote-controlled locomotives.

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<sup>2</sup> See Control of locomotives, 49 C.F.R. § 229.13. “Except when a locomotive is moved in accordance with § 229.9, whenever two or more locomotives are coupled in remote or multiple control, the propulsion system, the sanders, and the power brake system of each locomotive shall respond to control from the cab of the controlling locomotive . . . .”

While the federal regulatory scheme controls the operation of all locomotives, it specifically prohibits certain conduct relative to such operation. *See* 49 C.F.R. § 240.305(a). Additionally, pursuant to this federal scheme, the FRA regulates all locomotive equipment and all engineer operating permits, which includes remote-control transmitters and receivers as well as permit certification for remote-control operators. Accordingly, the Secretary of Transportation has prescribed regulations on this subject matter that appear to be comprehensive enough to occupy the field. Because of 49 U.S.C.A. § 20106, 49 U.S.C.A. § 20701 *et seq.*, 49 C.F.R. pt. 240, 49 C.F.R. pt. 229, and the FRA guidelines for the operation of remote-controlled locomotives, it is the opinion of this Office that the related Tennessee statutes are preempted. Tennessee may not adopt a railroad safety law concerning the operation of remote-controlled locomotives unless it is necessary to eliminate or reduce an essentially local safety hazard. This Office is not aware of any safety hazard peculiar to Tennessee that could be taken to justify special rules concerning the operation of remote-controlled locomotives within this state. Therefore, there is no prohibition on remote-controlled locomotives in Tennessee.

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