

Part 218

(Subpart D) Prohibition Against Tampering With Safety Devices. Waiver is requested exempting on-board CAS equipment from the requirements of §§ 218.51, 218.53, 218.55, 218.57, 218.59, and 218.61 to the extent that CAS equipment on-board a locomotive shall not be considered a "safety device" subject to the provisions of this subpart at any time during the test phase.

Justification: CAS tests require flexibility in installing, removing, turning on, and turning off the on-board equipment. ARRC requires the flexibility to permanently disable or remove CAS equipment in the event that a production system is not implemented.

Section 229.7

Prohibited acts. Waiver is requested to the extent that CAS equipment on-board a locomotive shall not be considered "appurtenances" rendering the locomotive subject to the provisions of this section.

Justification: CAS tests require flexibility in installing, removing, turning on, and turning off the on-board equipment. ARRC requires the flexibility to temporarily or permanently disable on-board equipment. Whether or not the on-board CAS equipment is functioning, the train remains subject to the provisions of the rules governing the current methods of operation. CAS will be subject to the provisions of 49 CFR part 236, subparts A through G, and proposed Subpart H if promulgated, and therefore, should not be subject to part 229 in any fashion.

Section 229.135

Event recorders. Waiver is requested to the extent that CAS equipment on-board a locomotive shall not be considered an "event recorder" subject to the provisions of this section.

Justification: CAS equipment by design will operate intermittently during the pilot program. CAS tests require flexibility in installing, removing, turning on, and turning off the on-board equipment. ARRC requires the flexibility to temporarily or permanently disable on-board CAS equipment.

Section 233.9

Annual Reports. Waiver is requested exempting CAS operations in the test phase from the reporting requirements of this section.

Justification: ARRC recognizes that a CAS production system is subject to the provisions of this section, however, imposition of the requirements during

the test phase would impose an unnecessary paperwork burden.

Section 235.5

Changes requiring filing of application. Waiver is requested exempting the CAS from the filing requirements of this section during the test phase.

Justification: CAS tests require flexibility in installing, removing, turning on, and turning off the CAS equipment. ARRC requires the flexibility to permanently disable or remove CAS equipment in the event the production system is not implemented.

Section 236.4

Interference with normal functioning of device. Waiver is requested to the extent that CAS equipment be excluded from this requirement during the test phase.

Justification: During the CAS test phase, the "normal functioning" will be identified, defined and redefined. CAS tests require flexibility in installing, removing, turning on, and turning off the CAS equipment. With or without CAS equipment on-board the controlling locomotive, the train remains subject to the provisions of the rules governing the existing methods of operation.

Section 236.5

Design of control circuits on closed circuit principle. Waiver is requested excepting CAS equipment from the closed circuit design requirement.

Justification: CAS is composed of solid-state components that are software driven. Neither the hardware nor software can technically be designed to meet the provisions of this section. However, all safety-critical circuits external to the CAS equipment will be designed to meet this requirement.

Section 236.11

Adjustment, repair, or replacement of component. Waiver is requested exempting CAS components on-board a locomotive from the requirements of this section during the test phase.

Justification: CAS tests require flexibility in installing, removing, modifying, turning on and turning off equipment. Failure of a CAS component during the test phase will not jeopardize the safety of train operations. With or without CAS equipment operating on-board the controlling locomotive, the train remains subject to the provisions of the rules governing the existing method of operation.

Section 236.15

Timetable instructions. Waiver is requested exempting the CAS territory

from the timetable designation requirement of this section during the CAS test phase.

Justification: The CAS test phase will consist of tests and demonstrations at undetermined intervals and identifying the test territory in the timetable as "CAS" (or some similar label) would be both premature and an unnecessary paperwork burden.

Section 236.76

Tagging of wires and interference of wires or tags with signal apparatus. Waiver is requested exempting CAS equipment from the wire-tagging requirement.

Justification: CAS hardware consists of computers, computer peripherals, and communication devices. While the inapplicability of this section to circuit boards, connectors, and cables would appear obvious, waiver is sought for clarification.

Section 236.101

Purpose of inspection and tests; removal from service of relay or device failing to meet test requirements. Waiver is requested exempting CAS equipment from the requirement for removal of failed equipment from service during the test phase.

Justification: CAS requires flexibility in installing, removing, turning on, and turning off the CAS equipment. With or without CAS equipment operating on-board, a train remains subject to the provisions of the rules governing the existing methods of operation.

Section 236.109

Time releases, timing relays and timing devices. Waiver is requested exempting CAS equipment from the testing requirement of this section during the test phase.

Justification: The timing devices in CAS equipment are software-driven, have no moving parts, and are far more reliable than the devices for which this regulation was promulgated to address.

Section 236.110

Results of tests. Waiver is requested exempting CAS tests from the record keeping requirements of this section.

Justification: During the CAS test phase, the types of tests needed to ensure appropriate levels of maintenance will be defined.

Section 236.501

Forestalling device and speed control. Waiver is requested exempting CAS from the requirement for medium-speed restriction.

Justification: CAS receives input from the track database, bulletins, and signal