

Justification for compliance with 15.231 a) 1, 2 and 3

- (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.
- (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.
- (3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour.

Justification

- (1) The transmitter is not manually operated. Therefore, this clause is not applicable.
- (2) The transmitter samples the tire pressure and temperature every 70 seconds. If a change in pressure or temperature is detected, 10 12.5ms signal in series will be transmitted. It will enter into sleep mode upon completion of the transmission, which is less than 5 second.
- (3) If there is no transmission for the last 210 seconds, the transmitter will transmits 5 12.5ms signal to ensure integrity of data in the receiver. It will enter into sleep mode upon completion of the transmission, which is less than 5 second.

The total transmission time in one hour is

$$3600 \text{ seconds} / 210 \text{ seconds} \times 12.5 \text{ ms} \times 5 = 1071 \text{ ms}$$

This is less than 2 seconds per hour as required in clause 3.