



U.S. Department
of Transportation
**Federal Highway
Administration**

OCT 22 2013

1200 New Jersey Ave., SE
Washington, D.C. 20590

In Reply Refer To:
HOTO-1

Mr. Greg Miller
Managing Director, Traffic
Carmanah Technologies Corporation
250 Bay Street
Victoria, British Columbia
CANADA V9A 3K5

Dear Mr. Miller:

Thank you for your letter of September 25 requesting an official interpretation on extending and delaying the flashing of Rectangular Rapid Flashing Beacons (RRFBs) when new actuations are received during or immediately after the flashing period.

The purpose of an RRFB is to attract attention to the warning sign with which it is associated. The flashing emanating from the RRFB does not have any meaning and does not require a specific behavior from the road user.

The motor vehicle laws of the various States require road users to either stop for or yield to pedestrians who are crossing the roadway in an uncontrolled marked crosswalk. The warning sign with the downward diagonal arrow supplemental plaque that is installed at the crosswalk warns road users that they might encounter a pedestrian attempting to cross the roadway at this location. A flashing RRFB attracts attention to the sign so that road users will be more likely to stop for or yield to the pedestrian in the manner required by the motor vehicle laws of that State.

Item 6d of the "Conditions of Interim Approval" in the Interim Approval 11 memorandum (http://mutcd.fhwa.dot.gov/resources/interim_approval/ia11/fhwamemo.htm) says, "The duration of a predetermined period of operation of the RRFBs following each actuation should be based on the MUTCD procedures for timing of pedestrian clearance times for pedestrian signals." Thus the length of time that the RRFBs flash is determined in advance based on the length of the crosswalk and this predetermined flash period should occur after each actuation. The phrase "following each actuation" does not include any qualifiers such as "following each actuation provided that the flashing has been terminated for at least XX seconds."

It is the FHWA's official interpretation that the predetermined flash period should be initiated each and every time that a pedestrian is detected either through passive detection or as a result of a pedestrian pressing a pushbutton detector. This would include pedestrians who are detected while the RRFBs are already flashing and who are detected immediately after the RRFBs have ceased flashing.

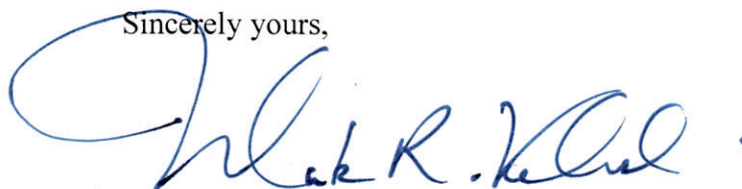
The following example is provided to clarify this official interpretation. If the predetermined flash period is set for 20 seconds and a new actuation is received when the RRFBs have already been flashing for 12 seconds, a new 20-second period will immediately commence, thus resulting in a continuous flashing duration of 32 seconds. If the predetermined flash period is set for 20 seconds and a new actuation is received 1 second after the RRFBs have ceased flashing, a new 20-second period will immediately commence, thus resulting in a flashing duration of 41 seconds with a 1-second interruption.

This is similar to the situation where multiple pedestrian crossings occur in an uncontrolled marked crosswalk that is not equipped with RRFBs, in which case the road users could find themselves waiting for a longer duration than the crossing time for one pedestrian as one group of pedestrians after another enter the crosswalk.

For recordkeeping purposes, we have assigned the following official ruling number and title: "4(09)-38 (I) – RRFB Flashing Extensions and Delays." Please refer to this number and title in any future correspondence regarding this topic.

Thank you for your interest in improving the clarity of the provisions contained in the MUTCD.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Mark R. Kehrli". The signature is fluid and cursive, with a large initial "M" and "K".

Mark R. Kehrli
Director, Office of Transportation
Operations