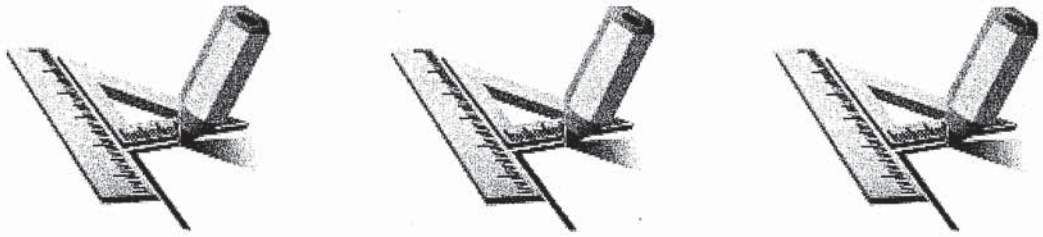

Session 28: **Warning Beacons for Service Vehicles**

Presenters: John D. Bullough, Lighting Research Center, Rensselaer Polytechnic Institute
Mark S. Rea, Lighting Research Center, Rensselaer Polytechnic Institute

Warning beacons using flashing or rotating amber lights are an important line of defense for service workers in the construction and maintenance fields. Not only should they provide conspicuity, warning drivers of other vehicles about the presence of workers and their vehicles, but they should also convey information about location, orientation and relative speed and distance. Normally, these lights flash at a constant rate and regardless of the presence of other warning beacons at a given work location. This can result in increased visual chaos and a lack of visual information. This presentation will describe recent research underway for the National Institute of Occupational Safety and Health (NIOSH) to identify the characteristics of warning beacon intensity, flashing properties and spatial patterns that support rapid detection and accurate identification about location, speed and if relevant, direction of travel. These findings can lead to the development of performance specifications of warning beacons that allow them to adapt to different working conditions for improving worker safety.

1 PDH Pending (PE)

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