



Caltrans Division of Research,
Innovation and System Information

Research

Notes

Equipment

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Project Title:
Review of Truck-Mounted
Attenuator Accessories

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Review of Equipment and Accessories for Truck-Mounted Attenuator (TMA) Trucks

Evaluate various accessories and equipment available for TMA trucks that can improve safety and the function of TMA truck operations.

WHAT IS THE NEED?

The California Department of Transportation (Caltrans) Maintenance workers are exposed to the risk of vehicle impact, particularly in temporary work zones. These work zones also present hazards to the traveling public related to the presence of fixed and mobile equipment and vehicles. Caltrans needs to review new technology in the form of equipment and accessories available for truck-mounted attenuator (TMA) trucks that can improve the safety and function of the TMA operations.

WHAT ARE WE DOING?

The Advanced Highway Maintenance and Construction Technology (AHMCT) Research Center proposes to evaluate specific equipment and accessories available for TMA trucks. This research would include radar speed feedback signs, camera systems able to record multiple views, communication systems, and panic/warning lights.

WHAT IS OUR GOAL?

Reducing hazards to roadway workers and achieving a safer working environment for Caltrans' employees and the public remains a key and critical strategic priority for Caltrans.



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WHAT IS THE BENEFIT?

By identifying and evaluating equipment and accessories that can improve the safety of Caltrans' workers and the traveling public, Caltrans can procure technologies based on tangible demonstrated benefits, leading to a safer highway environment for all, and likely reduced overall costs.

WHAT IS THE PROGRESS TO DATE?

The Advanced Highway Maintenance and Construction Technology (AHMCT) research team mounted both the video capture panic button and TC Commander controller (panic message) on the dashboard on the Autonomous Truck Mounted Attenuator (ATMA), so the driver has ready access while in operation. The project panel has requested that the panic button(s) be further developed into a single switch rather than as it is presently configured with one button on the dashboard triggering the DVR to save "event" video clips and a second separate button on the TC Commander screen displaying the panic message on the signboard. The team has initiated contact with the vendor to determine if the two buttons could be adapted to function with a single panic button. The research team presented the various video transfer methods available to the project panel and the cellular link transfer to a Caltrans standard issue tablet/laptop computer was selected as the optimum transfer method for deployment. The team was in contact with the vendor to obtain the iCone/WAZE automated work zone reporting module for installation onto the ATMA for testing purposes.