

**QUARTER 4 2007**

**ANIMAL VEHICLE CRASH MITIGATION USING ADVANCED TECHNOLOGY**

**PHASE II**

SPR 3(076) & Misc. Contract & Agreement No. 17,363

for

Oregon Department of Transportation  
Research Unit  
200 Hawthorne SE, Suite B-240  
Salem OR 97310

and

Federal Highway Administration  
400 Seventh Street SW  
Washington, DC 20590

and

Departments of Transportation of California, Indiana, Iowa, Kansas, Maryland, Montana, Nevada, New Hampshire, New York, North Dakota, Pennsylvania, Wisconsin, and Wyoming

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## ***Monthly report Animal-vehicle pooled fund study***

***October***

***2007***

**Task 1: Site survey            100%**

**Task 2: Modifications to system            90%**

**Task 3: Confirmation of system modifications            50%**

**Task 4: System reliability 0%**

### *False detections*

The performance of beam 8 appears to worsen. The effort now focuses on the diode. STS is now trying to repair boards from the “garbage bin” as there are no more spare parts. In addition, STS is preparing a mobile transmitter and receiver to bypass the current sensors. This procedure may help pin point where the problem lies; the circuit board or the sensors.

**Task 5: System effectiveness    20%**

### *Speed study*

Road tubes were removed on 5 October 2007 due to snow and plowing.

**Task 6: System acceptance        15%**

**Task 7: Information to project partners            69% (month 22 out of 32)**

**Task 8: System removal 0%**

Marcel Huijser

## ***Monthly report Animal-vehicle pooled fund study***

***November***

***2007***

**Task 1: Site survey 100%**

**Task 2: Modifications to system 90%**

**Task 3: Confirmation of system modifications 50%**

**Task 4: System reliability 0%**

### *False detections*

STS is trying to repair boards from the “garbage bin” as there are no more spare parts. In addition, STS is preparing a mobile transmitter and receiver to bypass the current sensors. This procedure may help pin point where the problem lies; the circuit board or the sensors.

**Task 5: System effectiveness 20%**

**Task 6: System acceptance 15%**

**Task 7: Information to project partners 72% (month 23 out of 32)**

**Task 8: System removal 0%**

Marcel Huijser

## ***Monthly report Animal-vehicle pooled fund study***

***December***

***2007***

General

WTI applied for renewal of the research permit from Yellowstone National park (through 31 Aug 2008).

**Task 1: Site survey            100%**

**Task 2: Modifications to system            90%**

**Task 3: Confirmation of system modifications            50%**

**Task 4: System reliability 0%**

### *False detections*

STS is trying to repair boards from the “garbage bin” as there are no more spare parts. In addition, STS has prepared a mobile transmitter and receiver to bypass the current sensors. This procedure may help pin point where the problem lies; the circuit board or the sensors. Upon arrival, WTI, with assistance of MDT, installed the new sensors (19 Dec). However, the sensors did not work; they appear to have been damaged during transport. Preliminary data suggest however, that the bursts of false detections have disappeared. Perhaps there was a loose connection or dirt on a connection and switching connectors may have restored proper contact. On Dec 22<sup>nd</sup> communication with the master station was lost, perhaps because of a power issue. A connection with the modem was restored on 2 Jan. STS will send replacement modem. Once communication is restored, beam 8 can be further evaluated.

WTI discussed the situation with MDT and STS early Dec. It was agreed that since the system still detects elk it would be best to wait with the potential removal of circuit boards until the seasonal migration is over. On the other hand, potential repairs need to be done early enough to conduct speed surveys during winter situation. We will revisit early January.

**Task 5: System effectiveness    20%**

**Task 6: System acceptance 15%**

A 6<sup>th</sup> location was stocked with a poster and handouts for the web based survey in Big Sky. This bring the total number of locations to 11.

**Task 7: Information to project partners 75% (month 24 out of 32)**

**Task 8: System removal 0%**

Marcel Huijser