Tracking Vehicles To Assess Training Impacts During Field Exercises. (A02-anderson123005-Oral)

Authors:

- P.Ayers University of Tennessee
- A.B.Anderson* ERDC-CERL
- L.Haugen Colorado State University
- B.Richmond Camp Atterbury

Abstract:

Vehicle tracking systems utilizing the Global Positioning System (GPS) were developed and utilized for tracking vehicles and determining their operating characteristics. Tracking systems were installed on military vehicles to evaluate the impact of vehicle training activities on soils and vegetation. Vehicles were operated through designed courses that resulted in a range of vehicle dynamic properties (turning radius and velocity). Corresponding disturbance along each course was measured as disturbed width and impact severity. Models of site impacts as a function of vehicle dynamic properties were developed from the field data. Tracking systems were then installed on vehicles from three units during three different training exercises. Vehicle tracking data for each event were combined with the impact prediction models to assess the cumulative site impact of each exercise.

Corresponding Author Information:

Alan Anderson phone: 217-352-6511 ERDC-CERL fax: 217-373-7266

2902 Newmark Drive e-mail: alan.b.anderson@erdc.usace.army.mil

Champaign, IL 61821

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