                          CERTALERT

           ADVISORY*CAUTIONARY*NON-DIRECTIVE   INFO
         CONTACT CERTIFICATION BRANCH, AAS-310, 202-267-8741

DATE: November 9, 1993   NO. 93-05

TO: AIRPORT CERTIFICATION PROGRAM INSPECTORS

TOPIC: STANDARDS FOR DECELEROMETERS

THIS CERTALERT CANCELS CERTALERT NO. 93-04

More and more airports are now acquiring vehicles equipped with
full anti-lock braking systems (ABS). A full ABS has three
sensors, one on each front wheel and one on the rear axle.
Whether the vehicle is four-wheel drive or not is irrelevant.
The question has arisen, "Can vehicles equipped with full ABS be
used with a decelerometer?"

FAA AC 150/5200-30A, Change 1, "Airport Winter Safety and
Operations," Appendix 6, paragraph 2b (2) states, "The vehicle
shall be equipped with either standard disc and/or drum brakes as
long as they are maintained according to the manufacturer's
performance requirements. They can also qualify if they have a
single sensor ABS (anti-lock braking system) installed on the
rear axle."

When using a decelerometer, preliminary studies by the Canadian
Government has shown that use of a full ABS vehicle will result
in significantly lower decelerometer readings than a vehicle
equipped with standard disc and/or drum brakes. This means if
the vehicle conducting the decelerometer testing is equipped with
full ABS, readings will be attained which indicate less friction
than actually exists. These erroneous readings may result in
closing runways and taxiways when they could have remained open.

The Canadian Government is planning to conduct additional studies
on the effects of full ABS vehicles on decelerometer readings
this winter. Results of these efforts will be available upon
completion of the studies.

In the interim, the FAA recommends that the use of decelerometers
be restricted to vehicles equipped with standard disc and/or drum
brakes or rear axle ABS.

Vehicles with full ABS can be used only if the sensors on the
front wheels, with the approval by the manufacturer of the ABS,
can be disengaged.

DISTRIBUTION: CERTALERT distribution list.