

LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program



Program Area:	Monitoring	Directive Number:	SM-36
Date:	April 10, 2000	Supersedes:	SM-20
Subject:	Upgrade of CR10 Procedure Manager Software to Version 5.02		

Attached for immediate implementation please find Version 5.02 of the CR10 Procedure Manager (CR10PM) software. This version of the procedure manager has been updated to incorporate the SM192 storage module, contains Mobile files compatible with the ABF multiplexer and contains modifications implemented to make the software Y2K compliant. More specifically, the following modifications were made in this program version.

- The CR10PM software has been updated to incorporate the SM192 storage module to allow extended periods between site visits. The CR10PM expects a storage module to be present when collecting data at a SMP site. If a storage module is not present or a problem exists with the storage module, the program provides the option for collecting the data from the CR10 datalogger. The program has also been modified to invoke the storage module battery check; if a value of 1 is detected the storage module battery is good, if a 0 is detected the storage module battery needs replacement. ***When first installing a SM192 storage module it is advisable to clear and reset the storage area, to avoid file markers that may make it difficult to collect data at a later date.***
- Two distribution diskettes are provided that work with either the CRREL or ABF resistivity multiplexer. The original mobile systems were equipped with the CRREL multiplexer. The regional Mobile data acquisition systems were updated with the ABF multiplexer as part of the SMP II equipment upgrades. With this upgrade, the regions need to install the programs from the diskette containing the ABF files. The ABF multiplexer provides the input voltage and the voltage for a known resistor value (nominally 100k) making this information more useful to the end user. ***Please ensure you select the correct disk, based on the multiplexing system used, when updating your seasonal computers.***

- The Onsite9a program, which accepts two MRC probes (surface and soil), requires a separate Crydom relay for each MRC probe. The wiring is different from that for the OnsPlus program, which only requires the one relay when two probes are installed. ***Please ensure you follow the wiring diagram as provided with the CR10PM users guide when installing a second probe.***
- All data fields have been checked or modified to make the program Y2K compliant.

When installing this software it is suggested that the user create new site databases, load the templates as required (i.e. Onsite, Mobile, Onsite9a) and edit the TDR cable lengths, resistivity enabled, as required. This will ensure the correct setups are incorporated for the storage module and resistivity multiplexer. Please remember this is a DOS based program and it is not compatible with the PC208W Data Support Software for Windows.

This software should be loaded on all computers used to collect data at the non-continuous SMP Phase II monitoring sites or AWS weather stations.

If there are any problems, please submit a SMP problem report (SMPPR) form in accordance with the LTPP Monitoring Directive SM-6.

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