Federal Aviation Administration – William J. Hughes Technical Center

National Airport Pavement Test Facility (NAPTF)

Contract No: DTFACT-15-D-00007

TO 003 Nondestructive Airport Pavement Testing Support

5.1.63 Continuation of NAPTF Construction Cycle Support – CC9 (4.1.10.19a)

CC9 NDT Survey Notes

Device: GPR – Cart

Survey: Weekly Trafficking 20210621

Date: 06/24/2021

Operators: Steve Augustyn

Folder Name: 20210624 GPR Cart CC9 Weekly Raw Data

File Format: DZT

**General Notes**

* Data collected along the ten (10) Standard Transverse Test Lines at Stations.
* Cart is aligned with white transverse line and direction of travel is from Offset -26.66 ft. to +26.66 ft. (North to South).
* Survey starts and stops with the antenna centered on the yellow longitudinal edge of test area lines.
* Data collected with 900 MHz and 2.6 GHz ground-coupled antennas.
* Calibration of DMI performed before data collection with each antenna and value recorded.

**Settings**

Parameter 900 MHz Antenna 2.6 GHz Antenna

Transmit Rate 100 KHz 100 KHz

Samples/Scan 512 512

Bits/Sample 16 16

Range 15 ns 8 ns

Dielectric 4.00 (default) 4.00 (default)

Rate (Scans/Second) 100 (default) 100 (default)

Scans/Unit 30 scans/ft. 90 scans/ft.

Gain Points 3 2

Vertical Low Pass – LPIIR 2500 MHz 0

Vertical High Pass – HPIIR 225 MHz 10 MHz

Vertical Low Pass – LPFIR 0 5000 MHz

Vertical High Pass – HPFIR 0 400 MHz

**DMI Calibration**

Distance 900 MHz Antenna 2.6 GHz Antenna

10.00 ft. -499.40 -490.40

**Data Collection File Numbers**

Location 900 MHz Antenna 2.6 GHz Antenna

Station 0+15 LFS-1 016 006

Station 0+30 LFS-1 017 007

Station 0+75 LFS-2 018 008

Station 0+90 LFS-2 019 009

Station 1+35 LFC-3 020 010

Station 1+50 LFC-3 021 011

Station 1+95 LFC-4 022 012

Station 2+10 LFC-4 023 013

Station 2+55 LFC-5 024 014

Station 2+70 LFC-5 025 015

**Survey Notes**

* 900 MHz and 2.6 GHz data does not seem as defined as previous data collections when viewed on the SIR-3000 display. Will require troubleshooting with GSSI.
  + Requires visual comparison to be done between older and newer data.
* Compact Flash disc ran out of space and was reset. Its data backup will be placed on the G Drive in the future.
* The setting to indicate the antenna (“2.6 GHz” or “900 MHz”) was not changed from 2.6 GHz for the 5/24, 6/7, or 6/14 weekly set. We were made aware of this setting this week and began to set it appropriately.
  + This setting has no effect on the results.