



February 24, 2021

Mr. Brian J. Wagner President National Association of Postal Supervisors 1727 King Street, Suite 400 Alexandria, VA 22314-2753

Dear Mr. Wagner:

As a matter of general interest, the Postal Service is updating the Mobile Delivery Device (MDD) and Mobile Delivery Device-Technical Refresh (MDD-TR) to enhance the device functionality.

Release 7.30 includes:

- SPM Sampling Verbiage Update
- Battery Find Me Application (MDD-TR only)
- Touch Panel Mode Enhancement (MDD-TR only)
- Lead Card Update (Future use)
- Inventory Support (Future use)
- Support Optimized Routing Solution (Future use City Carriers)
- Enable RXLogger on MDD TR (No user impact)
- Using DataWedge in TR OS (No user impact)

National implementation is scheduled for the MDD and MDD-TR on March 8.

We have enclosed the final draft copy of the MDD/MDD-TR Release 7.30 talking points for your review.

Please contact Bruce Nicholson at extension 7773 if you have questions concerning this matter.

Sincerely,

David E Mills Manager

Labor Relations Policies and Programs

Enclosure



MDD and MDD TR Release 7.30 will be deployed nationwide on March 8.

New features introduced in this release include several enhancements are being deployed with this release but will be inactive (Future use) or have no impact on the carriers:

MDD include:

- SPM Sampling Verbiage Update
- Lead Card Update (Future use)
- Inventory Support (Future use)
- Support Optimized Routing Solution (Future use)
- Decommission Enhancement No user impact

MDD TR include:

- SPM Sampling Verbiage Update
- Battery Find Me Application (MDD-TR only)
- Touch Panel Mode Enhancement (MDD-TR only)
- Lead Card Update (Future use)
- Inventory Support (Future use)
- Support Optimized Routing Solution (Future use City Carriers)
- Enable RXLogger on MDD TR No user impact
- Using DataWedge in TR OS No user impact



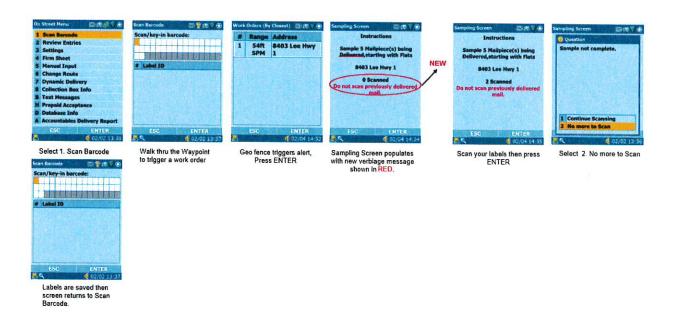
SPM Sampling Verbiage Update (MDD and MDD-TR)

Background (Carriers)

Currently a carrier is prompted with a sampling request when they reach a delivery point to scan a specific number of letters and flats mail pieces. The scanner screen shows a message stating instructions, the number of mail pieces required to be scanned, and the address for the request. The verbiage alone is unclear to the carriers and an additional instruction is needed.

Changes on MDD

- The phrase "Do not scan previously delivered mail." will be added to the bottom of Sampling Request screen on the MDD/MDD TR when the carriers reach a delivery point to scan a specific number of letters and flats mail pieces.
- The color of the phrase will be in RED to capture attention of the carrier





MDD –TR Battery Find Me (MDD-TR)

Background (Supervisors)

Engineering Delivery & Mobile Technology Team with the support of Topeka implemented MDD battery auto replenishment process in April 2017. Supervisors at local sites can log on RIMS and use "Find MDD Battery" application to identify bad batteries to be replaced. However locating the scanners containing bad batteries became challenging as Supervisors have to go through the entire scanner fleet at the site to find the ones requiring new batteries.

Changes on MDD

MDD TR will display a Battery message while inside cradle after receiving battery replacement message from RIMS for 10 minutes. The message will be in three different formats based on the status of the battery.

When removed from cradle, MDD will display the message until user presses "Enter", or after 10 min of display.

If battery is not replaced after being removed from the cradle, MDD is not expected to light the LCD and display the message again without Supervisor initiating the replacement message from RIMS.



Battery in good condition. (Cycle count <250)



Battery in okay condition. (Cycle count between 251 to 424)



Battery in bad condition and shall be replaced. Cycle count >425)

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MDD TR Touch Panel Mode (MDD-TR Enhancement only)

Background (Carrier)

The MDD TR device offers different touch panel mode options to allow for the use of a bare hand, gloves, or stylus. These setting can be changed by the carrier according to the environmental conditions present for better functionality and ease of use of the touchscreen.

Changes on MDD TR

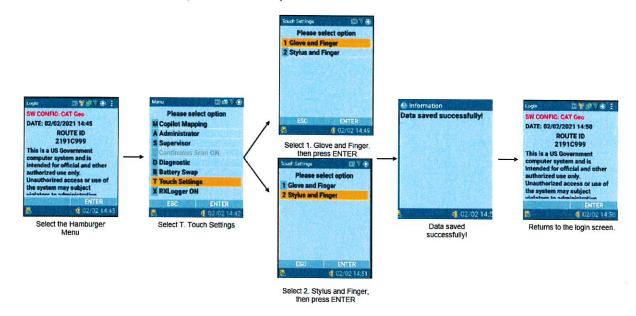
The option of Touch Panel mode has been added under the hamburger menu from any MDD application screen and provides the carrier with the following options:

- Glove and Finger
- Stylus and Finger

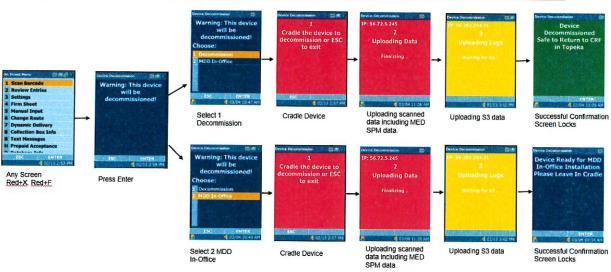
These settings options will improve the ease of use by increasing performance of the touchscreen by decreasing errors on data entry and smoother workflow.

The MDD application will automatically change the setting to Stylus & Finger at signature capture screen for the ease of customer use.

MDD TR Touch Panel Mode (Enhancement)









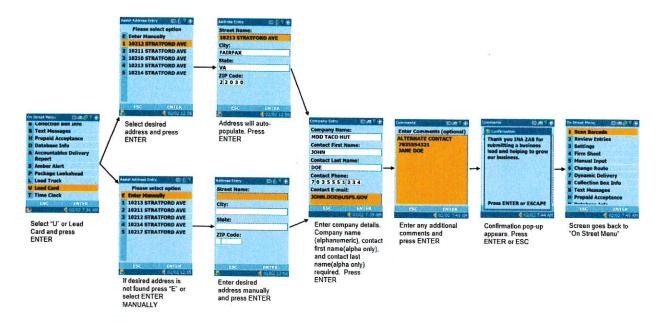
Lead Card Update – being push but not activated currently (for future use)

Background (Carriers) Limited Proof of Concept Pilot

The USPS currently has several programs in place to enable employees to submit potential business leads and help grow our customer base and revenue. The "Employee Engagement Program" allows various types of employees to manually fill out a lead card and submit it to their supervisors for data input, subsequent validation, and follow up by a member of the sales team. Carriers have the opportunity to observe new business leads each day as they carry their routes and interact with people at these businesses. MDD has implemented the workflow in an earlier release, but changes are requested after reviewed by the customer.

Changes on MDD

The Lead Card feature is only enabled on non-rural routes currently. After selecting Lead Card, the MDD will list nearby addresses based on the carrier's location. The carrier can either select the address from the list or choose to input manually if the address is not shown on screen. The MDD will allow for entry of the business name, contact name, phone number, and email. The carrier will also have the opportunity to enter any additional comments (up to 200 characters). A confirmation screen will be presented on the device with the message: "Thank you 'name' for submitting a business lead and helping to grow our business." The MDD will submit the data along with the carrier EIN (badge ID) to RIMS, then to Panorama/Sales Force system.





Inventory Support – being push but not activated currently (for future use)

Background (Carriers)

The OIG has requested the completion of an annual inventory to be performed on all MDD/MDD TR devices.

Changes on MDD

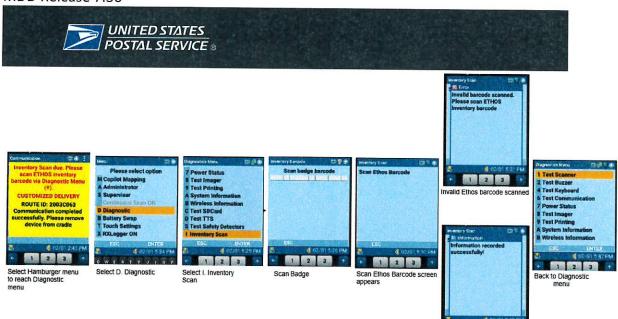
The MDD application is modified with an added "Inventory Scan" item to the diagnostic menu. This option will be enabled and allows site to do inventory when needed until direction changes. The inventory reminder will be displayed on the device upon user login, beginning on the first day of the annual designated 10-day time period, and every day until the inventory scan is completed. If needed, the reminder can be disabled after the 10-day inventory time period even if the inventory scan is not completed.

To start the inventory process, the user will enter the Diagnostic Menu, then select Inventory Scan. The user will then be prompted for the required scan badge ID before scanning the Inventory Barcode.

The process will be completed by scanning a PDF417 barcode. Once the inventory barcode has been scanned message "Information Recorded Successfully" will be displayed to indicate the completion of the inventory process. The inventory barcode along with the EIN and scan time will be sent to Ethos for consolidation and reporting.

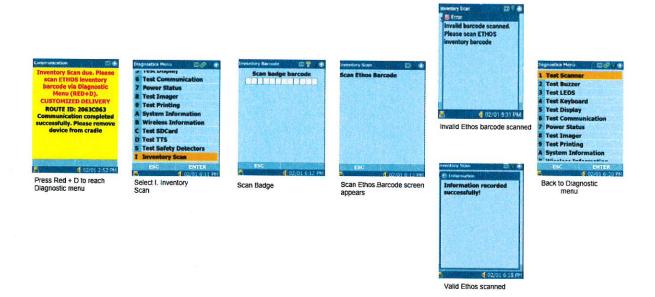
On scanners that fail/do not complete inventory by the specified date, a warning message will be presented while inside the cradle starting from 6:00am until 10:00pm local time. A yellow flashing screen(MDD) or a steady yellow screen(MDD TR) with the message, "Inventory Scan not complete, please scan ETHOS inventory barcode." will display to remind and/or assist the supervisor in identifying the scanners to be inventoried. This message will continue to be displayed when device is cradled until the inventory scan is completed. Message will be dismissed after scanner is removed from the cradle.

MDD-TR via Hamburger Menu



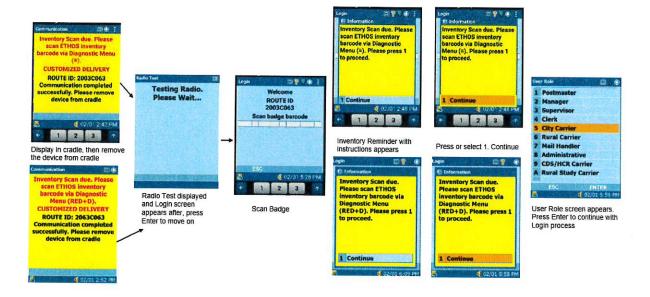
1 2 3 Valid Ethos scanned

MDD via Diagnostic Menu





MDD & MDD-TR at Login Menu



Inventory Reminder in Conjunction with Battery Find Me (BFM) and Radio Test

If Battery Find me request was sent to the scanner, the battery message will be displayed on top of the inventory reminder. After the scanner is removed from the cradle, the battery message can be dismissed by pressing "Enter", the inventory reminder will be displayed afterwards, then followed by the radio test and then the login screen.





Support Optimized Routing Solution – being push but not activated currently (for future use)

Background (Carriers)

Through development and implementation of a Local Area of Commerce business strategy, USPS will be able leverage the near real-time intelligence by pairing the Optimized Routing Solution (LAOC ORS) with the Mobile Delivery Device (MDD) systems and methods to increase the volume of existing products and services - by making products and services more accessible to customers that ship locally within their geographic areas.

Capabilities include but not limited to: Optimized routing prior and after carrier departure, Pickup visibility & tracking, Notification of route updates, Handoff capability to better align retailer customer geography, and work prioritized to improve route efficiency.

Changes on MDD

LAOC-ORD (Local Area of Commerce — Optimized Routing Solution) create route plans for carriers to support various use cases such as same-day delivery, next-day delivery, priority pickups and workforce optimization. LAOC will modify carrier routes periodically throughout the day to direct carriers to pick-up and delivery locations. These locations may not be points on the carrier's regular route, so the carrier may be diverted from their regular route to do the activity. LAOC-ORS determines the time when the carrier should do the diversions.

There are two ways that carriers will see the LAOC activity on the MDD:

- CCAs and RCAs will use the Dynamic Delivery menu on the MDD to see the order of stops that they must follow.
- Regular city and rural carriers will be notified of the LAOC activity through:
 - · Carrier pivot manifest
 - Package Look Ahead
 - Notifications when a carrier is supposed to divert

LAOC-ORS will transmit the route updates for Dynamic Routes through the DRT system. LAOC-ORS will transmit Carrier Pivot and Package Manifest through the TRP system.

Support Optimized Routing Solution Regular - overview

ORD Download Mechanism:

ORD packages are downloaded via RIMS pivot interface. This approach is real time compared to the regular package manifest download. Once the pivot stops are downloaded on MDD, matching packages are downloaded by MDD using the RIMS package manifest service. High Level Steps:

- a. Packages are sent from TRP to RIMS.
- b. MDD queries breadcrumbs service every minute to see if there are any new pivots to download for the logged in route.

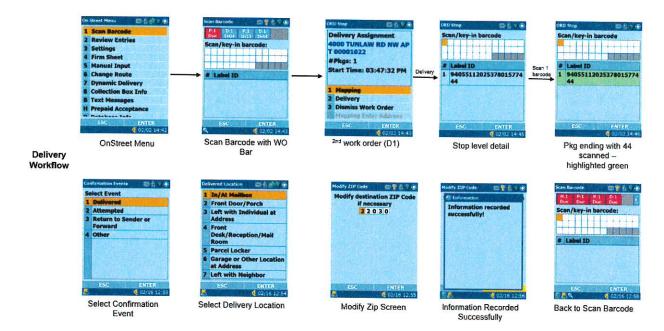


- c. If new pivots are available, they are downloaded over the air while the carrier is logged in.
- d. Matching packages for the pivot stops are downloaded.
- e. Once step c and d is completed, carrier will hear a chime on their MDD scanner and work order bar will be available on top of the scan barcode screen:



Work order bar is displayed with the running timer of when the ORD assignment is due

Support Optimized Routing Solution Regular – Scan Barcode



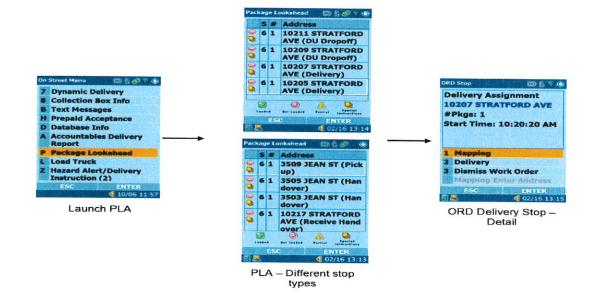


Support Optimized Routing Solution Regular - Scan Barcode



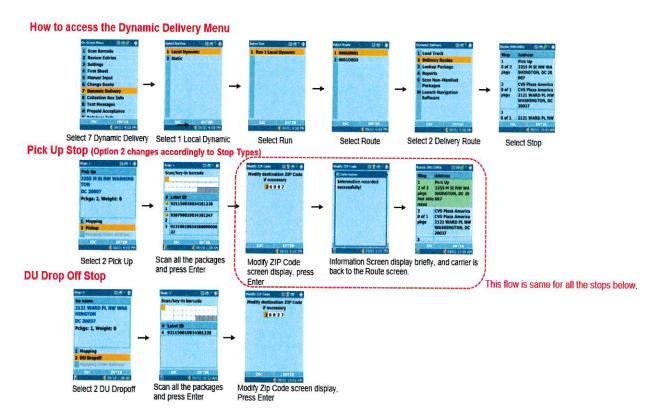
Note: Other ORD events such as Hand Over, DU Drop off and Hand over received follow the same workflow as pickup.

Support Optimized Routing Solution Regular – Package Lookahead

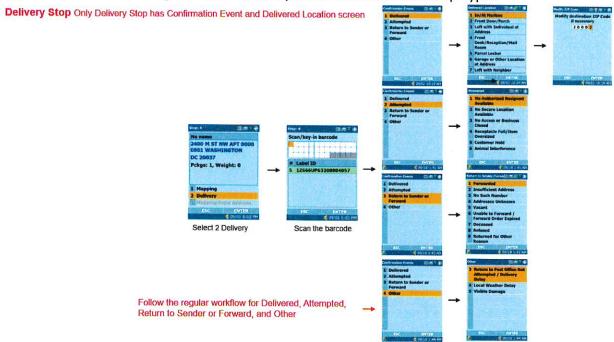




Support Optimized Routing Solution- Local Dynamic Workflow and Stop Types

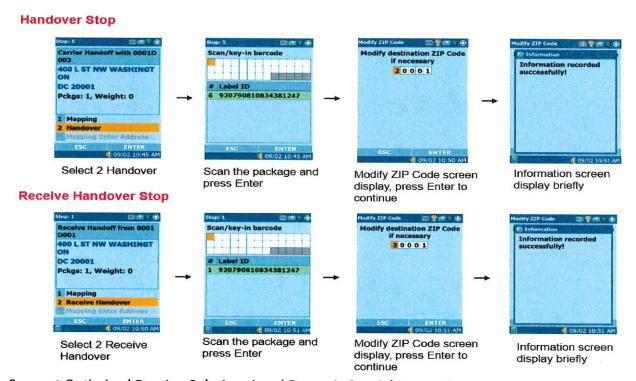


Support Optimized Routing Solution-Local Dynamic Workflow and Stop Types

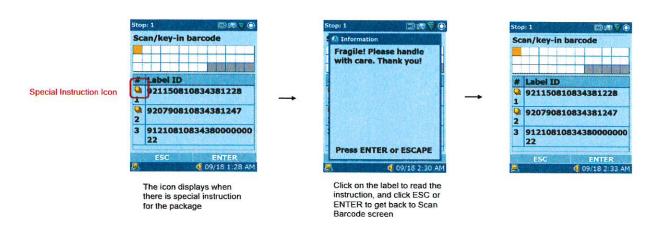




Support Optimized Routing Solution-Local Dynamic Workflow and Stop Types



Support Optimized Routing Solution-Local Dynamic Special Instruction





Support Optimized Routing Solution-Local Dynamic Partial Completion



If not all the packages of the stop are scanned and carriers press Enter, MDD will pop-up a question, and carriers need to confirm if they want to proceed with Partial Completion.











Select option 1 to proceed with Partial Completion
Or select Option 2 Cancel to back to scan barcode screen and scan more packages



MDD Decommission (Enhancement – No user impact)

Background

During MDD TR Phase I deployment, MDD TR installers raised a concern on current MDD decommission process. The regular process usually takes 5-10 minutes to complete but under some error conditions, such as bad LAN connectivity, bad storage card, bad IO Cap, etc., the decommission process would sometimes get stuck at the yellow screen and not proceed. The prolonged process resulted many incomplete decommissioned scanners and they ended not being returned to CRF as expected.

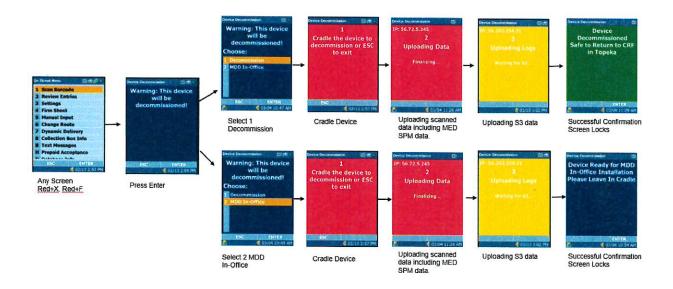
Changes on MDD

MDD decommission process can be triggered by a key combination (Red X + Red F). Two options will be displayed after the process is invoked:

- 1 Decommission Scanners will be returned to CRF after decommission.
- 2 MDD In-Office Scanners will be converted to MIO and kept at sites after decommission.

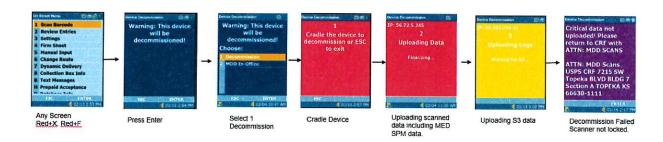
All scan data, SPM data and sensor data will be uploaded once the process starts. But only the sensor data from the rural study routes will be checked for decommission success or failure. Successful decommission will be ended with a message in green background and MIO conversion be shown with a message in blue background and the scanner will be locked in both cases. (i.e. the scanner is not operable anymore and the SIMs will be disabled afterwards) The failed decommission and MIO conversion will be ended with a message in Purple background and the scanners will not be locked. The sites/installer can continue the decommission or MIO conversion process until success if they choose or simply return the scanners to CRF.

MDD Decommission Enhancement





MDD Decommission Enhancement





MDD -TR Enable RX Logger (Enhancement - No user impact)

Background

To facilitate trouble shooting issues on MDD TR scanners, it is ideal to enable RXLogger and capture additional OS logs upon certain error conditions.

Changes on MDD

MDD shall enable RXLogger automatically upon following error conditions:

- After battery swap
 - SIM status capture for 2min
- Cellular Network failure
 - Radio On/Off capture for 2min
- · Software failure
 - Application crash
 - start the RxLogger upon crash
 - Stop after Rxlogger running for 5 min
 - Application CoPilot freeze- not able to launch
 - After ANR is recorded
 - After MDD application resumes
- · API call failure
 - Zebra Application Programming Interface (API)
 - After sending MX API,
 - trigger rebooting
 - set data time
 - enable Wide Area Network (WAN) Radio
 - bad battery reading (after the fact)
 - If needed carriers can enable the RXLogger via the hamburger menu to help trouble shooting issues.

Enable/Disable the RXLogger manually on the MDD TR scanner:



RXLogger is Disabled and can be turned on



RXLogger is Enabled and can be turned off.



MDD -TR Using DataWedge in TR OS (Enhancement - No user impact)

Background

In current production version of MDD TR On Street application R7.25, EMDK Barcode scan API was used in barcode and 3849 form/signature scanning. There is minor issue with switching between regular scan and Simulscan (3849 form) mode with the EMDK Scan API but it has been worked out and have no negative impact to end users.

With the updated OS 01-30-04.00-OG-U15-C84-P06, Zebra recommended Postal to use DataWedge as EMDK Barcode scan API is now considered obsolete. Per Zebra, DataWedge APIs have the same capability currently available in EMDK Barcode APIs: DatatWedge intent-based APIs are easier to implement than EMDK Barcode APIs, and DataWedge will be the focus of Zebra's ongoing development efforts and enhancements.

Changes on MDD

- MDD Application shall be able to detect the DataWedge version and determine which API to use
 - IF DataWedge is with Version 8.0 or higher, use DataWedge
 - Otherwise, use EMDK Scan API
- MDD application shall have a configurable setting to control whether to use DataWedge
 - <ZebraDataWedgeEnabled>1</ZebraDataWedgeEnabled>
 - The setting shall be default to 1
 - If set to 0, EMDK scan API is used for barcode scan and SimulScan for 3849 form/signature capture