

**Mississippi Department of Public Safety
Criminal Information Center**

***MCHS Palm Print Certification
Test Procedures
and
Ongoing Evaluation Process***

Version 5.02 R19

**updated
March 30, 2018**

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OVERVIEW OF CERTIFICATION STEPS AND ONGOING EVALUATION PROCESS

The Palm Print Submission Evaluation Process consists of multiple phases as described below.

Phase 1 is conducted at CIC. Vendor brings scanning station(s), scanner(s), and printer. Tests include both ARRs and APPs. Transactions are evaluated in accordance with MCHS Tenprint Interface Control Document (ICD).

Phase 1 Palm Print Certification Part 1- Submit Test Transactions at CIC

- CIC assigns a station id to use in the tests.
- In one test, transactions with Type 15 palm print records are processed by MCHS and AFIS. (No transactions are sent to the FBI in Phase 1.)
- Only one transaction at a time is submitted.
- Vendor and CIC will view the Reject Notices and Warning Notices that are sent to the scanning station. CIC will also review palm prints and logs.
 - CIC will indicate when the next test transaction can be submitted.
- Perform Test 4A if full palm impressions will be captured. Perform Test 4B if upper/lower pair palm impressions will be captured.
 - For Tests 4A and 4B, it is not necessary to actually capture partial prints.
- Use the Type 2 data specified in appendix A unless otherwise specified in the individual test.
- Test transactions must be as defined in this document. Always create new transactions. A previously submitted transaction cannot be reused.

Phase 2 – Palm Print Certification Part 2 - Submit Selected Live Transactions at a Local Agency

- Vendor contacts CIC to schedule Phase 2 at each local agency.
- Prior to commencing Phase 2, vendor conducts training at local agency.
- Actual arrest transactions are submitted by the local agency with palm prints.
- A subject is selected for a transaction that includes capturing palm prints. Ideally, vendor observes the tests. CIC evaluates each transaction.
 - Local agency submits only one transaction with palm prints at a time and then contacts CIC.
 - CIC reviews transaction and contacts local agency and/or vendor if a problem is detected.
 - CIC reviews the FBI response, verifies whether the palm prints are enrolled in NPPS and contacts local agency and/or vendor if a problem is detected.
 - CIC indicates when the next live transaction with palm prints can be submitted.
- During Phase 2 testing, if necessary, live arrest transactions may be submitted that are not part of the test BUT do not include palm prints in the transactions.

Phase 3 - On-going Evaluation of Live Transactions

- In Phase 3, all ARR transactions may include palm prints.
- CIC continues to monitor transactions.
- CIC contacts vendor and/or local agency if problems are detected. Examples of problems include: palm print quality, compression ratio, or user errors that should be caught by vendor software.
- If problems persist, CIC may decide to prohibit the local agency from submitting palm prints until problems are corrected. Phase 1 or Phase 2 may need to be repeated.

Phase 4 – Setup and Evaluation of Each Local Agency to Submit Palm Prints

- As each local agency is set up to submit palm prints, vendor contacts CIC to conduct Phases 2 and 3 at each subsequent installation of the palm print capability.

Phase 5 - Type 15 Fields not Currently Supported by Vendor

CIC conducts this phase, in coordination with the vendor, to verify the format and content of these fields.

PHASE 1 – PALM PRINT CERTIFICATION PART 1 – SUBMIT TEST TRANSACTIONS AT CIC

1.1 Obtain Information from and Give Information to Vendor to Prepare for Phase 1 Certification Part 1 Tests

In preparation for the Certification Part 1 tests:

- CIC will obtain information from the vendor when palm print Phase 1 Certification Part 1 is scheduled. (CIC: Refer to CIC Ref Guide 1.1.1)
- CIC will give information to vendor prior to their arrival at CIC. (CIC: Refer to CIC Ref Guide 1.1.2 through 1.1.4)
- CIC will assign test conductor and prepare for certification prior to vendor's arrival at CIC. (CIC: Refer to CIC Ref Guide 1.2)

1.2 Set Configurations Prior to Vendor's Arrival for Phase 1 Certification Part 1 Tests

CIC: Verify that the configurations are properly set to begin Phase 1 certification tests. (CIC: Refer to CIC Ref Guide 1.3.1.1 and 1.3.1.2)

1.3 Review General Requirements for each Phase 1 Certification Part 1 Test Transaction

Before vendor begins setting up for Phase 1 tests, CIC and vendor review the following:

1. Vendor must successfully complete Configuration Verification A, Downloading the Edit Tables and ATN Blocks and Configuration Verification B in order to continue with certification tests 1 through 8.
2. The CIC test conductor will indicate the individual who will capture finger and palm prints and enter the text data. It may be the vendor or CIC personnel.
3. The transactions require the standard TCN format as is defined for live transactions (ICD Appendix A.1) .
4. Both arrest TOTs (ARR) and applicant TOTs (APP) are used in these tests.
5. In each test transaction, create an ARR transaction except Test 7 which requires an APP.
 - 1.07 Print Agency ORI and 1.08 Arrest/ Applicant /DOC Agency ORI use the test ORIs provided by the CIC for Phase 1 testing. **The ORIs are NOT the same at those used in the Tenprint Certification Test Procedures.**
 - **Use the Type 2 test data in appendix A unless otherwise indicated in an individual test. The following values are particularly critical:**
 - **Last name must always be "Z-TESTPRINTS".**
 - **First name must be changed in each transaction, as indicated in the instructions, for ease of identification.**
 - **Date of birth must be "19000101" except for Test 7.**
 - **Social Security Number must be "123456789" except for Test 7.**
 - **Hair color must be "ZZDoNotUse" except for Test 7.**(The DOB, SSN, and Hair Color values are valid according to the ICD but are invalid in MCHS and are used in test transactions to guarantee that the transaction will be rejected.)
6. A combination of values in the test data and settings in MCHS configuration files are set up to ensure that test transactions are not stored in MCHS or FBI/NGI.
7. Fingerprint images and palm print images must be included in the test transactions. The following is a summary of how the transactions in each test are processed:
 - In Tests 1 through 4, the transaction will be rejected and the images are not evaluated.
 - In Test 6, the transactions will be rejected but the images **are** evaluated and therefore must be

- good quality fingerprints and palm prints.
 - In Test 7, the transactions are accepted but, in addition to other controls, the type of transaction (APP) and the reason fingerprinted indicate to MCHS that it is not to be stored in MCHS and not to be sent to the FBI.
8. Include all fingerprint and palm print images in each test unless the test specifically indicates otherwise.
 9. **Always reenter data and capture new fingerprints and palm prints to submit a new transaction for each test and for each subsequent transaction if more than one transaction is submitted in a test. Do not modify and resubmit an existing transaction.**
 10. Do tests in sequence and when directed by CIC test conductor.
 11. CIC will review all submitted transactions. (CIC: Refer to CIC Ref Guide 1.5.1)
 12. If multiple scanners are being certified, some tests might be repeated for each scanner.
 13. In the test steps, CIC Test Conductor is abbreviated "TC".

1.4 Configuration Verification, Edit Tables, ATN Blocks for Certification Part 1 Tests

1.4.0 Vendor Sets Up Scanning Station for Palm Print Certification Tests

Vendor: When configuring the scanning station for certification testing, use the following values:

1. Station Id for palm print certification testing - specified by CIC test conductor
2. Print Agency ORI (1.07) for palm print certification testing - specified by CIC test conductor (ICD appendix A.1)
3. Station IP address - specified by CIC test conductor
4. POP3S mail login - as specified in ICD appendices D and E; uses station id specified in item 1
5. SMTPS To email address for sending transactions to MCHS - as specified in ICD appendix C
6. SMTPS From email address (and possibly SMTPS login info if vendor software requires it) for sending transactions to MCHS - as specified in ICD appendix C; uses station id specified in item 1
7. SMTPS email structure - as specified in ICD appendix C
8. Version Number (1.02) - as specified in ICD appendix A.1
9. TCN standard format - as specified in ICD appendix A.1; uses station id specified in item 1
10. Equipment Make and Model (2.067) exact text - assigned by CIC for use in certification test and in ALL subsequently installed scanning stations
11. Printer - same printer that was defined in configuration that vendor provided to CIC

1.4.1 Configuration Verification A - Verify POP3S Mail Connectivity & Printing at Scan Station

MCHS Tenprint ICD References: Appendix D

1. Vendor: Check POP3S mail for test station being used for the certification and discard any existing mail.
2. TC: Use 'Send Certification Test Response' to send response "Configuration Verification A" to the test scanning station.
3. Scanning station automatically retrieves message and prints response on scanning station printer.
4. TC: Compare the printed response with the response below. Note that station_id is as assigned by CIC (see 4.0.A item 1).

```
From: "MCHS" <mchs@mscjis.mchs.state.ms.us>
To: "Local Test Live Scan 1" <station_id@mscjis.state.ms.us>
Subject: Configuration Verification A
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
```

Mississippi Criminal History System

*** TEST RESPONSE 0 ***

Receipt of this message verifies scanning station POP3S connectivity.

The printed message verifies printer connectivity on the scanning station.

If Configuration Verification A is not successful, certification testing cannot commence. Vendor must correct these problems before going on to section 1.4.2.

1.4.2 Download Edit Tables and ATN Blocks required for Certification Part 1 Tests

This is not a test. It sets up the proper edit tables and ATN Blocks on the scanning station for Palm Print Certification testing. Note that the edit tables and ATN Blocks are different than those used for Tenprint Certification tests.

Steps:

Edit Tables:

1. Vendor: Check POP3S mail for the assigned test station id and discard any existing mail.
2. TC: Get the date from the ZZDoNotUse entry in the Hair Color table on MCHS.
3. TC: Using 'Download Station Edit Tables', send the Edit Table Message to the test station. (CIC: Refer to CIC Ref Guide 1.4.1)
4. TC with vendor assistance: Verify that the latest Edit Tables have been installed by checking the date in the ZZDoNotUse entry of the Hair Color table on the scanning station. (CIC: Refer to CIC Ref Guide 1.4.1)

ATN Blocks (live scan only):

1. **On MCHS, update the configuration for this test station to allow ARREST transactions.** (CIC: Refer to CIC Ref Guide 1.4.1)
2. TC: Using 'Maintain or Download ATN Blocks', send the ATN Block Message to the test station. (CIC: Refer to CIC Ref Guide 1.4.1)
3. Vendor: Verify ATN Blocks were installed.

1.4.3 Configuration Verification B - Verify SMTPS Mail Connectivity and Email Structure

1. Vendor: Create and submit an arrest transaction:

- Use standard TCN format.
- Last Name = 'Z-TESTPRINTS'
- First Name = 'Palmer'
- Date of Birth = '19000101'
- Social Security Number = '123456789'
- Hair Color = 'ZZDoNotUse'
- Enter any values in only required fields.

2. TC: Look for transaction in Prescreening Transaction Report for the test station id. If it is not in the report, look for it using 'View Damaged Transactions Log File' (may be 3-5 minute delay). If not found in either location, check the SA printer. If not found, ask System Support to look for it. (CIC: Refer to CIC Ref Guide 7.1 and before 6.1)

If the transaction is found in the report or the log file this verifies scanning station SMTPS connectivity.

3. TC and vendor:

- If the transaction generated output on the SA printer, most likely the From email address is in error: Make adjustments and send a corrected transaction.
- If the transaction is in the Damaged Transactions Log: Make adjustments and send a corrected transaction.
- If the transaction is in the Prescreening Transaction Report: If error message 203, 615, or 616 occurs: Make adjustments and submit a corrected transaction. Ignore all other error messages.

If any of Configuration Verification A or B or the Edit Table and ATN Block downloads is not successful, certification testing cannot commence. Vendor must correct these problems before going to Test 1.

1.5 Test 1 - Transaction Response – Warning Notice

Objective: Test the receipt and printing of the Warning Notice used for Type 15 records.

Steps:

1. Vendor: Check POP3S mail for test station the assigned test station id and discards any existing mail.
2. TC: Using "Send Certification Test Responses to Test/Eval Stations", send the following message to the test station.
 - Warning Notice (CIC: Refer to CIC Ref Guide 1.4.1)
3. Warning Notice automatically prints on scanning station printer.
4. TC: Compare the printed response with the response in the MCHS Tenprint and Palm Print Test Messages document. Verify that the content is complete.
5. TC: Verify that the response is printed and displayed using a fixed-width font.

If any of Test 1 is not successful, certification testing cannot commence. Vendor must correct these problems before going to Test 2.

1.6 Test 2 - Type 15 Record Format and Field Content

Objective: Test the format and content of text fields in the Type 15 record including:

- All of the fields that are applicable when all images are available for all palm positions for both hands.

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A including First Name 'Harold'.
 - Enter '<vendor name> Test 2' in Originating Agency Case Number (OACN).
 - Enter user-entered Type 15 data, if any. (CIC: Refer to CIC Ref Guide 1.4.2)
 - Capture all fingerprints and all palm print positions.
2. Vendor: Submit the transaction.
3. Review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore message 302 regarding compression ratio. This is addressed in another test.
 - Vendor: Review the Warning Notice. A Warning Notice will be sent only if issues with one or more Type 15 records are detected.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
 - Verify that 1.07 Print Agency ORI and 1.08 Arrest Agency ORI are as specified by CIC.
 - Verify that 2.067 Equipment Make and Model are as specified by CIC.
 - ALL Type 15 errors need to be corrected before continuing.
4. Vendor with TC observing: Create and submit new transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 2'.
 - Capture all fingerprints and all palm print positions.

1.7 Test 3 - Type 15 Record Data Entry and Scanning Station Validation Test

Usually this test is N/A because it only applies to the optional fields and only if they are user-entered.

Objective: Test that "user-entered" and "pre-set default" fields in Type 15 records are validated by the live scan before the transaction is sent to MCHS.

Steps:

1. TC: Confirm which Type 15 fields are included in this test. (CIC: Refer to CIC Ref Guide 1.4.3)
2. TC: Verify that all valid values can be entered by entering a variety of valid values in each field.
3. TC: Verify that no invalid values can be entered by trying to enter a variety of invalid values.
4. TC: Verify that a transaction with invalid values cannot be submitted to MCHS. To do this:
 - Enter the Type 2 data as specified in appendix A, but use first name 'Truncation'
 - Enter '<vendor name> Test 3' in Originating Agency Case Number (OACN).
 - Enter invalid values.
 - Capture all fingerprints and all palm prints.
 - Try to submit the transaction. It should not be possible to submit a transaction with invalid values.
5. If the transaction is submitted:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected.
 - TC: Review the Prescreening Transaction Report and review the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)

1.8 Tests Sets 4A and 4B - XX and UP Annotation in Field 15.018

1.8.1 Test Set 4A - Palm Print Record # 2 – 15.018 XX and UP Indicators – FULL Palms

Objective: Test the use of the Amputated or Bandaged field 15.018 for scanning stations that support FULL palm images.

The ANSI/NIST standard, as referenced by the FBI EBTS states: "XX shall be used only when a partial print exists due to amputation; therefore it contains some friction ridge detail. UP shall be used with the complete block where an image was to be transmitted, but there is no image due to amputation or total lack of friction ridge detail (such as with a bandage). An image with a scar should not be marked XX or UP." This means that:

- If the palm is partially amputated and a partial impression can be captured: Capture the impression and set 15.018 Amputated or Bandaged Code to 'XX' to indicate a partial amputation.
- If the entire palm cannot be captured: Supply only information in the Amputated or Bandaged field in the full and writer's palm record. Set the 15.018 Amputated or Bandaged to 'UP' to indicate that the palm impression cannot be captured (is unprintable).

	Amp/Band Code 15.018 in Type 15 record	Palm image in Type 15 record
Part of upper palm is amputated	XX	image
Entire upper palm amputated	UP	no image
Entire upper palm is unprintable (e.g., bandaged)	UP	no image

** Same rules apply to lower palm.

These tests require transactions with various combinations of palm print images and 15.018 Amputated or Bandaged Code values. (CIC: Refer to CIC Ref Guide 1.4.4)

1.8.1.1 Test 4A-1 - Designate palm image with partial amputation

Steps:

1. Vendor with TC observing: Create a new test transaction as follows.
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Adam'.
 - Enter '<vendor name> Test 4A-1' in Originating Agency Case Number (OACN).
 - Capture:
 - The fingerprints and palm impressions for full palm positions and writer's palm position for both palms
 - AND set 15.018 Amputated or Bandaged Code to 'XX' for the right full palm (position 21).
2. Vendor with TC observing: Submit the transaction.
3. Review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789".. Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected.

- TC: Review the Prescreening Transaction Report, review the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
4. Vendor with TC observing: Create and submit new transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4A-1'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.1.2 Test 4A-2 - Designate palm image unavailable due to full amputation or total lack of friction ridge detail

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Ben'.
 - Enter '<vendor name> Test 4A-2' in Originating Agency Case Number (OACN).
 - Capture:
 - The fingerprints and the palm impressions for the left full palm and left writer's palm
 - AND do not capture an impression for the right full palm and right writer's palm
 - AND set 15.018 Amputated or Bandaged Code to 'UP' for the right full palm position (position 21) and the right writer's palm (position 22).
2. Vendor with TC observing: Submit the transaction.
3. Review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789".. Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with the Type 15 record are detected.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
3. Vendor with TC observing: Create and submit new transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4A-2'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.1.3 Test Group 4A-3 - Improper Values in 15.018 Amp/Band Code

There are THREE tests in this group.

1.8.1.3.1 Test 4A-3-1 - Invalid Combination: No palm image and Amp/Band Code 'XX'

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Caleb'.
 - Enter '<vendor name> Test 4A-3-1' in Originating Agency Case Number (OACN).
 - Try to capture:
 - The fingerprints and the palm impression for the right full palm and right writer's palm
 - AND do not capture an impression for the left full palm and left writer's palm
 - AND set 15.018 Amputated or Bandaged Code to 'XX' for the left full palm position

(position 23).

2. Vendor with TC observing: Try to submit the transaction. This combination of palm impressions and amputated or bandaged code should NOT be allowed by the scanning station.
3. If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. Look for error messages related to images and/or amputated or bandaged code, including error messages 558.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
4. Vendor with TC observing: Create additional transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4A-3-1'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.1.3.2 Test 4A-3-2 - Invalid Combination: Palm image and Amp/Band Code 'UP'

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Daniel'.
 - Enter '<vendor name> Test 4A-3-2' in Originating Agency Case Number (OACN).
 - Try to capture:
 - The fingerprints and palm impressions for full palms and writer's palms for both palms
 - AND set 15.018 Amputated or Bandaged Code to 'UP' for the left full palm position (position 23).
2. Vendor with TC observing: Try to submit the transaction. This combination of palm impressions and amputated or bandaged code should NOT be allowed by the scanning station.
3. If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789".. Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. Look for error messages related to images and/or amputated or bandaged code, including error message 519.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1) (The transaction will be valid if the scanning station uses only the latest information for a palm position by overriding previously entered information. E.g., a palm impression is captured, and then the 15.018 Amputated or Bandaged Code is set to 'UP' so the palm impression is removed.)
4. Vendor with TC observing: Create additional transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4A-3-2'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.1.3.3 Test 4A-3-3 - Invalid Combination: No palm image and no Amp/Band Code

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Edward'.
 - Enter '<vendor name> Test 4A-3-3' in Originating Agency Case Number (OACN).
 - Try to capture:
 - The fingerprints and the palm impressions for the left full palm and left writer's palm
 - AND do not capture an impression for the right full palm and right writer's palm
 - AND do not enter Amputated or Bandaged Code for the right palm positions.
2. Vendor with TC observing: Try to submit the transaction. This combination of palm impressions and amputated or bandaged code should NOT be allowed by the scanning station.
3. If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. Look for error messages related to images and/or amputated or bandaged code, including error message 520.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink (CIC: Refer to CIC Ref Guide 1.5.1)
4. Vendor with TC observing: Create additional transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4A-3-3'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.2 Test Set 4B - Palm Print Record # 2 – 15.018 XX and UP Indicators – UPPER/LOWER Pairs

Objective: Test the use of the Amputated or Bandaged field 15.018 for scanning stations that support UPPER/LOWER palm pair images.

The ANSI/NIST standard, as referenced by the FBI EBTS states: "XX shall be used only when a partial print exists due to amputation; therefore it contains some friction ridge detail. UP shall be used with the complete block where an image was to be transmitted, but there is no image due to amputation or total lack of friction ridge detail (such as with a bandage). An image with a scar should not be marked XX or UP." Therefore:

- If the upper portion of the palm is partially amputated and a partial impression can be captured: Capture the impression AND set the 15.018 Amputated or Bandaged Code to 'XX' to indicate a partial amputation.
- If the entire upper portion the palm cannot be captured: Supply only information in the Amputated or Bandaged field. Set the 15.018 Amputated or Bandaged to 'UP' to indicate that the palm impression cannot be captured (is unprintable).
- If the entire palm cannot be captured: Supply only information in the Amputated or Bandaged field in each of the upper and lower palm records. Set the 15.018 Amputated or Bandaged to 'UP' to indicate that the palm impression cannot be captured (is unprintable).

These tests require transactions with various combinations of palm print images and Amputated or Bandaged Code values. (CIC: Refer to CIC Ref Guide 1.4.3)

1.8.2.1 Test 4B-1 - Designate palm image with partial amputation

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Adam'.
 - Enter '<vendor name> Test 4B-1' in Originating Agency Case Number (OACN).
 - Capture:
 - The fingerprints and palm impressions for upper and lower palm positions and writer's palm position for both palms
 - AND set 15.018 Amputated or Bandaged Code to 'XX' for the right upper palm (position 26).
2. Vendor with TC observing: Submit the transaction.
3. Review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink (CIC: Refer to CIC Ref Guide 1.5.1)
4. Vendor with TC observing: Create and submit new transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4B-1'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.2.2 Test 4B-2 - Designate palm image unavailable due to full amputation or total lack of friction ridge detail

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Ben'.
 - Enter '<vendor name> Test 4B-2' in Originating Agency Case Number (OACN).
 - Capture:
 - The fingerprints and the palm impressions for the left upper and lower palms and left writer's palm and capture only the lower palm impression for the right palm
 - AND set 15.018 Amputated or Bandaged Code to 'UP' for the right upper palm position (position 26) and right writer's palm (position 22).
2. Vendor with TC observing: Submit the transaction.
3. Review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789".. Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)

4. Vendor with TC observing: Create and submit new transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4B-2'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.2.3 Test Group 4B-3 - Improper Values in 15.018 Amp/Band Code

There are THREE tests in this group.

1.8.2.3.1 Test 4B-3-1 - Invalid Combination: No palm image and Amp/Band Code 'XX'

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Caleb'.
 - Enter '<vendor name> Test 4B-3-1' in Originating Agency Case Number (OACN).
 - Try to capture:
 - The fingerprints and the palm impressions for the right upper and lower palms and right writer's palm and capture only the palm impression for the left lower palm
 - AND set 15.018 Amputated or Bandaged Code to 'XX' for the left upper and lower palm positions (positions 28 and 27).
2. Vendor with TC observing: Try to submit the transaction. This combination of palm impressions and Amputated or Bandaged codes should NOT be allowed by the scanning station.
3. If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789".. Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. Look for error messages related to images and/or amputated or bandaged code, including error messages 558.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
4. Vendor with TC observing: Create additional transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4B-3-1'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.2.3.2 Test 4B-3-2 - Invalid Combination: Palm image and Amp/Band Code 'UP'

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Daniel'.
 - Enter '<vendor name> Test 4B-3-2' in Originating Agency Case Number (OACN).
 - Try to capture:
 - The fingerprints and palm impressions for the upper and lower palms and writer's palms for both palms
 - AND set 15.018 Amputated or Bandaged Code to 'UP' for the left upper and lower palm

positions (positions 28 and 27).

2. Vendor with TC observing: Try to submit the transaction. This combination of palm impressions and codes should NOT be allowed by the scanning station.
3. If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. Look for error messages related to images and/or amputated or bandaged code, including error message 519.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1) (The transaction will be valid if the scanning station uses only the latest information for a palm position by overriding previously entered information. E.g., a palm impression is captured, and then the 15.018 Amputated or Bandaged Code is set to 'UP' so the palm impression is removed.)
4. Vendor with TC observing: Create additional transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.
 - Use the same OACN '<vendor name> Test 4B-3-2'.
 - Capture fingerprints and all palm print positions as required in step 1.

1.8.2.3.3 Test 4B-3-3 - Invalid Combination: No palm image and no Amp/Band Code

Steps:

1. Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Edward'.
 - Enter '<vendor name> Test 4B-3-3' in Originating Agency Case Number (OACN).
 - Try to capture:
 - The fingerprints and the palm impressions for the left upper and lower palms and the left writer's palm
 - AND do not capture an impression for the right upper and lower palm positions
 - AND do not set Amputated or Bandaged Code for the right upper and lower palm positions.
2. Vendor with TC observing: Try to submit the transaction. This combination of palm impressions and Amputated or Bandaged codes should NOT be allowed by the scanning station.
3. If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. Look for error messages related to images and/or amputated or bandaged code, including error message 520.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
4. Vendor with TC observing: Create additional transactions if requested by CIC.
 - Create an ARR transaction.
 - Change the first name by adding 'Two', 'Three', etc after the name in step 1.

- Use the same OACN '<vendor name> Test 4B-3-3'.
- Capture fingerprints and all palm print positions as required in step 1.

1.9 Test 5 - Palm Print Capture Test #1

1.9.1 Test 5A - Palm Print Capture Test #1 – Live Scan

Objective: Verify ability to accurately and efficiently capture quality palm prints. Verify that: palm print scanner is easy for operator to use, QA software is operator-friendly, and quality of the palm print images is sufficient for MCHS AFIS and for the FBI NGI (based on QA results and a visual check).

This test does NOT submit transactions to MCHS.

Steps:

Do the following numerous times with different individuals in the role of operator and different individuals in the role of person whose palm prints are captured.

1. Various people under direction of TC:
 - Create an ARR transaction
 - Enter Type 2 data specified in appendix A
 - Capture fingerprints and palm prints
2. TC: Assess:
 - Usability of the scanner device
 - Behavior of the QA software
 - Quality of the palm prints
3. Do not submit the transaction.

1.9.2 Test 5B - Palm Print Capture Test #1 – Card Scan

Objective: Verify ability to accurately and efficiently capture quality palm prints. Verify that: QA software is operator-friendly, and quality of the palm print images is sufficient for MCHS AFIS and for the FBI NGI (based on QA results and a visual check).

This test does NOT submit transactions to MCHS.

Steps:

Do the following numerous times with palm print cards for multiple people.

1. TC:
 - Create an ARR transaction
 - Enter Type 2 data specified in appendix A
 - Scan fingerprint and palm print cards
2. TC: Assess:
 - Behavior of the QA software
 - Quality of the palm prints
3. Do not submit the transaction.

1.10 Test 6 – Palm Print Capture Test #2

Objective: Test the format and content of text fields in the Type 15 record including:

- No errors are detected in the Type 15 palm print image records.
- The compression ratio of the images is within a reasonable range of the FBI's target 15:1 ratio.

Steps:

1. Palm Position Combinations

Create new transactions as specified in a through c below. These cases should not be allowed but full transactions need to be created and submitted if allowed.

a. Two of the same palm position (live scan only)

- Vendor with TC observing: Create a new test transaction as follows:
 - Create an ARR transaction.
 - Enter the Type 2 data as specified in appendix A, but use first name 'Michael'.
 - Enter '<vendor name> Test 6' in Originating Agency Case Number (OACN).
 - For upper/lower palm pairs, capture the fingerprints and two impressions for the left writer's palm.
For full palms, capture the fingerprints and two impressions for the left full palm.
 - Try to submit this transaction. This combination of palm impressions should not be allowed by the scanning station.
- If the transaction is submitted, review the transaction:
 - Vendor: Review the Reject Notice. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". Also ignore error message 302.
 - Vendor: Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected.
 - TC: Review the Prescreening Transaction Report and the transaction content via the hyperlink. (CIC: Refer to CIC Ref Guide 1.5.1)
 - Look for error message 674.
 - Use the hyperlink to view the invalid combination.
- Vendor with TC observing: Repeat this process as needed.

b. No upper/lower or full palm position but writer's position

- Repeat step 2a.
 - For upper/lower palms pairs, specify right upper and lower palm positions as "UP" but include right writer's palm position.
For full palms, specify right palm position as "UP" but include right writer's palm position.
 - Look for error message 518.

c. Palm position missing

- Repeat step 2a.
 - For upper/lower palm pairs, don't include palm impression for right upper palm position and do not include palm position for right lower palm position.
 - Look for error message 676.

2. Compression Ratio of Images

- a. TC: In the Prescreening Transaction Report, look for all occurrences of message 302 for Type 15 records.

This message is used to diagnose image quality problems. If any of the compression ratios is significantly larger or smaller than 15:1, the compression software on the scanning station needs be adjusted. Message 302 is generated only if the compression ratio is less than 10:1 or greater than 20:1, allowing for considerable variance from 15:1.

- b. Vendor: If this message is in the Prescreening Transaction Report, the vendor needs to make adjustment so the compression ratio is within the allowed range.

1.11 Test 7 - Palm Print Image Quality – Full Review of Palm Print Images

This test will submit multiple APP transactions through the MCHS workflow and AFIS. Any errors in previous tests must be corrected before doing this test. For each transaction, reenter the Type 2 data and recapture the palm prints. These transactions will NOT be stored in AFIS. They will NOT go to the FBI.

Objective: Verify the quality of multiple sets of palm print images.

This test requires APP transactions to be submitted.

(CIC: Refer to CIC Ref Guide 1.4.5)

Do not use the test data in appendix A. The Type 2 data for this test is as follows:

Type 2 Field	Value
2.009 Originating Agency Case # (OACN)	Test 7 (in first transaction; change to Test 6 2, etc. in subsequent transactions)
2.018 Name	--
Last Name	Z-TESTPRINTS
First Name	FIRST (in first transaction; change in each subsequent transaction)
Middle Name	
2.020 Place of Birth	YY
2.022 Date of Birth *	19750101
2.024 Sex/Gender	Male
2.025 Race	White
2.027 Height	507
2.029 Weight	130
2.031 Eye Color	Hazel
2.032 Hair Color *	Pink
2.037 Reason Fingerprinted	Instate Inquiry Only
2.702 Applicant Agency ORI	<test ORI provided by CIC for these palm print tests>
Do not specify a Social Security Number	

Steps:

1. **TC: On MCHS, update the configuration for this test station to allow Applicant transactions for this test.** (CIC: Refer to CIC Ref Guide 1.4.5)

2. Create a new test transaction as follows:

- Create an APP transaction for reason fingerprinted Instate Inquiry Only.
- Enter the Type 2 data as indicated in the table above and below.
 - Reason Fingerprinted = 'Instate Inquiry Only'.
 - Enter '<vendor name> Test 7' in Originating Agency Case Number (OACN).
 - If the test is for a card scan, enter any valid value in the following required fields: Print Agency ORI, Date Printed.
- Capture all fingerprints and all palm print positions.

If all other fields are valid but one of the above fields does not have the indicated value, Prescreening will not forward the transaction to the MCHS workflow and no response will be sent to the test station.

3. Submit the transaction.

4. Review the transaction:

- Look for a Reject Notice. If there are any errors, a new transaction needs to be created (with errors corrected) and submitted.
- Review the Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. (Note that if no errors are detected, MCHS will send an MS rap sheet

- which will indicate "The subject ... has no criminal history."
 - CIC: Review the Prescreening Transaction Report and the transaction content via the hyperlink.
(CIC: Refer to CIC Ref Guide 1.5.1)
 - Verify that all palm positions are present in the transaction.
5. CIC: AFIS examiner reviews the palm prints:
 - The submitted finger prints should match multiple sets of prints for this subject (which the CIC has already stored in AFIS).
 - The prints will be presented to the AFIS examiner for manual review. The examiner reviews the palm prints as well as comparing them with the fingerprints.
 - A common reason that the FBI rejects the palm prints is because the fingers in the palm prints do not seem to match the rolled finger prints.
 - The examiner indicates a match on one set of prints (no consolidation) and releases it to MCHS for further processing.
 - The examiner reports their assessment of the palm prints to the test conductor.
 6. CIC: In addition to overall quality, compare each image with palm capture diagrams from the FBI, in appendix B, to ensure that that the proper portion of the hand is fully captured, that the impressions have a north-south orientation, and that the operator is able to properly align them.
 7. Create and submit new transactions with new palm prints. CIC will identify various individuals whose prints will be captured and various individuals who will capture the prints. To distinguish between test transactions (vs. resubmission of a transaction, do the following:
 - Create an APP transaction.
 - Change the first name to 'Second', 'Third', etc.
 - Use the same Type 2 data.
 - Use the same OACN '<vendor name> Test 7'.
 - Capture all fingerprints and all palm print positions.

1.12 Test 8 - Print Palm Print Card

Objective: Print palm print images and demographic data on 8 ½ x 11 paper in the FBI Standard Palm Print Card FD-884 format.

This test requires blank palm print cards.

Steps:

1. Palm print card on 8 1/2 x 11 paper
 - a. Vendor with TC observing: Select a stored ARR transaction from a previous test. Enter the data, capture the prints, and print a palm print card (both sides) on 8 1/2 x 11 paper.
 - b. TC: Verify the format of the printed image of a card: "print the palm print images and demographic data on 8 ½ x 11 paper using an imbedded template such that the image and data formats appear on the paper to look like the front of the FBI Palm Print Card FD-884. For an upper/lower pair: print each palm position on a separate card, use the front of the card for each, include the writer's palm on each card, and include the demographic data on each card."
 - c. TC: Verify the contents of the printed palm print card.
 - d. TC: Look at the Prescreening Transaction Report to verify that the transaction was not submitted. (CIC: Refer to CIC Ref Guide 7.1).
2. Palm print card on preprinted card stock
 - a. Vendor with TC observing: Select a stored ARR transaction. Enter the data, capture the prints, and print a palm print card (both sides) on 8 1/2 x 11 paper.
 - b. TC: Verify that all data is correctly positioned on the FBI Applicant Card.
 - c. TC: Verify the contents of the printed palm print card.
 - d. TC: Look at the Prescreening Transaction Report to verify that the transaction was not submitted. (CIC: Refer to CIC Ref Guide 7.1).

1.13 Reset Configurations when Phase 1 Tests at CIC are Concluded

The following can be done after the vendor departs. CIC reset configurations. (CIC: Refer to CIC Ref Guide 1.3.2)

1.14 When the Vendor's Palm Print Capability Has Been Certified

A certification decision will be made a few days after the Phase 1 Certification tests are completed.

If the certification is given to the vendor, CIC reviews the requirements for Phases 2 through 4 of the palm print capability evaluation with the vendor:

- Phase 2 requirements for vendor's first installation of their palm print capability. This includes the portion of the evaluation where FBI responses to the palm prints are evaluated.
- Phase 3 requirements for the vendor's first installation of their palm print capability.
- Phase 4 requirements for the vendor's subsequent palm print installations at additional sites.

PHASE 2 – PALM PRINT CERTIFICATION PART 2 – SUBMIT SELECTED LIVE TRANSACTIONS FROM A LOCAL AGENCY

This phase:

- Evaluates the completeness of Type 15 records and assesses the quality of palm prints when entered by local agency personnel.
- Provides the FBI's assessment of the palm prints.

The operator training described in Phase 4 must be completed before commencing Phase 2. The quality of palm prints will be assessed during this test so operators should be proficient in capturing palm prints, specifying the 'XX' and 'UP' indicators, and entering values for user-entered Type 15 fields (if any).

MCHS ICD requirements for a Type 15 record are designed to be consistent with FBI requirements. However, the FBI may have additional validations and they also have a process to assess whether the palm print images are suitable for enrollment in the National Palm Print System. No transactions were sent to the FBI in Phase 1. The feedback from the FBI is provided in this phase.

Phase 2 Certification Part 2 - Live Scan at Local Agency

For this phase, the vendor coordinates with a local agency to arrange to submit selected live ARR transactions with palm prints, from the agency's scanning station, one at a time.

Steps:

To Schedule Certification Part 2 Testing

1. Vendor contacts CIC to coordinate Phase 2 testing. Vendor provides the following information:
 - Live scan id
 - Arrest agency ORI
 - Suggested dates/times to conduct these tests
2. CIC, vendor, and local agency determine whether vendor will be on site during the tests.
3. CIC: Sends the current version of the Live Scan Instruction Manual and the current version of the Tenprint Transaction Reject Notice and Warning Notice Error Messages document to the local agency.
4. CIC: Establishes date/time of test and notifies all participants.

Certification Part 2 Tests

1. CIC: Before the local agency submits the first live transaction with palm prints, CIC verifies that the configuration files are properly set for evaluation tests Phase 2. (CIC: Refer to CIC Ref Guide 2.1).
2. When all parties are ready to commence this phase, local agency live scan operator captures fingerprints and palm prints and enters biographic and arrest data.
3. After submitting a live ARR transaction, vendor and/or local agency contacts CIC test conductor and provides identification information (name and TCN).
4. Vendor and/or local agency look for a Reject Notice. There should not be a reject notice.
5. Vendor and/or local agency look for a Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. There should not be a Warning Notice. (If no errors are detected, MCHS will send a MS rap sheet.).
6. CIC: Reviews the Prescreening Transaction Report.
7. CIC: Reviews the FBI result in the Workflow Report. Contacts the vendor and/or the local agency when problems are detected by the FBI. (CIC: Refer to CIC Ref Guide 2.2)
8. CIC: Contacts the vendor and/or the local agency when problems are detected. If the transaction

was rejected or there are warning messages for Type 15 records, determine the type of problem.

- If it is an operator error, consider what training might be required.
- If it is a data entry error that should have been caught by vendor software, the vendor will need to correct their software or configuration.

9. CIC: Indicates when another live transaction with palm prints can be submitted.

10. Repeat steps 5 through 12 until CIC indicates that the session is concluded.

NOTE: The local agency can continue to submit live ARR transactions, but without palm prints, while CIC completes steps 9 through 11.

Phase 2 Certification Part 2 - Card Scan at CIC

For this phase, the vendor coordinates with CIC to arrange to submit selected live ARR transactions with palm prints, from a CIC card scan, one at a time.

Steps:

To Schedule Certification Part 2 Testing

1. Vendor contacts CIC to coordinate Phase 2 testing. Vendor provides the following information:
 - Suggested dates/times to conduct these tests
2. CIC: Ensures that card scan operators have the current version of the CIC's Card Scan Instruction Manual and the current version of the Tenprint Transaction Reject Notice and Warning Notice Error Messages document.
3. CIC: Establishes date/time of test and notifies all participants.

Certification Part 2 Tests

1. CIC: Before the local agency submits the first live transaction with palm prints, CIC verifies that the configuration files are properly set for evaluation tests Phase 2. (CIC: Refer to CIC Ref Guide 2.1).
2. When all parties are ready to commence this phase, card scan operator scans fingerprints and palm prints and enters biographic and arrest data.
3. After submitting a live ARR transaction, vendor and/or CIC operator contacts CIC test conductor and provides identification information (name and TCN).
4. Vendor and CIC operator looks for a Reject Notice. There should not be a reject notice.
5. Vendor and CIC operator looks for a Warning Notice. A Warning Notice will only be sent if issues with one or more Type 15 records are detected. There should not be a Warning Notice. (If no errors are detected, MCHS will send a MS rap sheet.).
6. CIC: Reviews the Prescreening Transaction Report.
7. CIC: Reviews the FBI result in the Workflow Report. Contacts the vendor when problems are detected by the FBI. (CIC: Refer to CIC Ref Guide 2.2)
8. CIC: Contacts the vendor when problems are detected. If the transaction was rejected or there are warning messages for Type 15 records, determine the type of problem.
 - If it is an operator error, consider what training might be required.
 - If it is a data entry error that should have been caught by vendor software, the vendor will need to correct their software or configuration.
9. CIC: Indicates when another live transaction with palm prints can be submitted.
10. Repeat steps 5 through 12 until CIC indicates that the session is concluded.

PHASE 3 – ON-GOING EVALUATION OF LIVE TRANSACTIONS SUBMITTED AT LOCAL AGENCY

This phase applies to live scans installed at a local agency and card scans installed at the CIC.

At the completion of Phase 2 and before the local agency or CIC can continue to submit transactions with palm prints, the vendor or local agency must:

- Contact CIC to set the configuration for Phase 3.

CIC will set the configuration for post-Phase 2 palm print submissions. (Refer to CIC Ref Guide 3.1)

During Phase 3:

- CIC will continue to monitor live transactions. CIC will contact the vendor and/or the local agency if/when problems are detected. They will report problems with the palm print records and the quality of the prints as well as other errors that cause a transaction to be rejected.

PHASE 4 – SETUP AND EVALUATION AT EACH LOCAL AGENCY

This phase applies to live scans installed at a local agency and card scans installed at the CIC.

In order for a local agency or CIC to submit palm prints at a location subsequent to the first installation, the vendor must complete the following:

- Training including capturing palm prints, specifying the 'XX' and 'UP' indicators, and entering values for user-entered Type 15 fields (if any).
- Conduct tests outlined in Phase 2 - Submit Selected Live Transactions at a Local Agency.
- Sheriff's Offices only: Conduct tests outlined in Phase 2 for an APP for Sex Offender Registration transaction.

To initiate tests at the local agency, contact the CIC.

The vendor may elect to arrange conduct of the Phase 2 tests during the same period of time when they install the palm print capability and conduct palm print training.

Follow the instructions in Phase 2.

After completion of the testing outlined in Phase 2, a local agency will go on to Phase 3 - On-Going Evaluation of Live Transactions.

PHASE 5 – TYPE 15 FIELDS NOT CURRENTLY SUPPORTED

Many of the optional fields are not critical to Mississippi local agencies at this time. However, if the vendor supports them, MCHS will accept them.

If the vendor does not support them at the time Phase 1 Certification Part 1 conducted, but does at the future time, the vendor must contact the CIC when they begin to support the additional fields

CIC will conduct this phase in coordination with the vendor. The tests will verify the format and content of these fields.

APPENDIX A TYPE 2 DATA TO USE FOR PHASE 1 TEST TRANSACTIONS

For Tests 2 through 5:

Use the following values unless a test explicitly indicates a different value.

Type 1 or 2 Field	Value
1.07 Print Agency ORI	Card scan: MSZZEVAL1 This field is user entered ONLY IF the certification is for a card scan. Live scan: NOT user entered. Hardcoded value assigned to test live scan by CIC.
2.009 Originating Agency Case # (OACN)	****Enter value specified in each individual test****
2.016 Social Security #	123456789
2.018 Name	--
Last Name	Z-TESTPRINTS <always use this last name>
First Name	HAROLD <change as indicated in each transaction >
Middle Name	POTTER
Name Suffix	--
2.020 Place of Birth	YY
2.022 Date of Birth *	19000101
2.024 Sex/Gender	Male
2.025 Race	White
2.027 Height	507
2.029 Weight	130
2.031 Eye Color	Hazel
2.032 Hair Color *	ZZDoNotUse
2.035 Palm Prints Available	No
2.036 Photo Available	No
2.038 Date Printed	Card scan: 20170715 This field is user entered ONLY IF the certification is for a card scan. Live scan: NOT user entered.
2.045 Date of Arrest	20170715
2.084 Amputated or Bandaged	As indicated in individual tests in Test Sets 4A and 4B
2.701 Arrest Tracking Number	Card scan lceval1,cceval1: next ATN in list below this table Enter THIS ATN, do NOT enter the ATN on test tenprint card Live scan lseval1: Assigned by live scan from downloaded ATN Block. Live scan: Assigned by live scan from downloaded ATN Block.
2.702 Arrest Agency ORI	<test ORI provided by CIC for these palm print tests>
2.704 Arrest Type	Adult
2.705 Arrest Charge Set	--
Citation	49-7-83
# Counts	2
Date of Offense	20170710
Action	Arrest Charge

ATNs for lceval1 and cceval1:

For lceval1 and cceval1, use the following ten character ATNs:

5000000005	5000000013	5000000021	500000003X
5000000048	5000000056	5000000064	5000000072
5000000080	5000000099	5000000102	5000000110

5000000129	5000000137	5000000145	5000000153
5000000161	500000017X	5000000188	5000000196
500000020X			

In Tests 2 through 5:

The values used in the DOB and Hair Color fields will ensure that a Reject Notice is generated. Ignore error messages 701 regarding hair color "ZZDoNotUse", 503 regarding DOB "19000101", and 511 for SSN "123456789". (The DOB, SSN, and Hair Color values are valid according to the ICD but are invalid in MCHS and are used in test transactions to guarantee that the transaction will be rejected)

In Test 7:

Do not use the values in this appendix. Use the values indicated in Test 7.

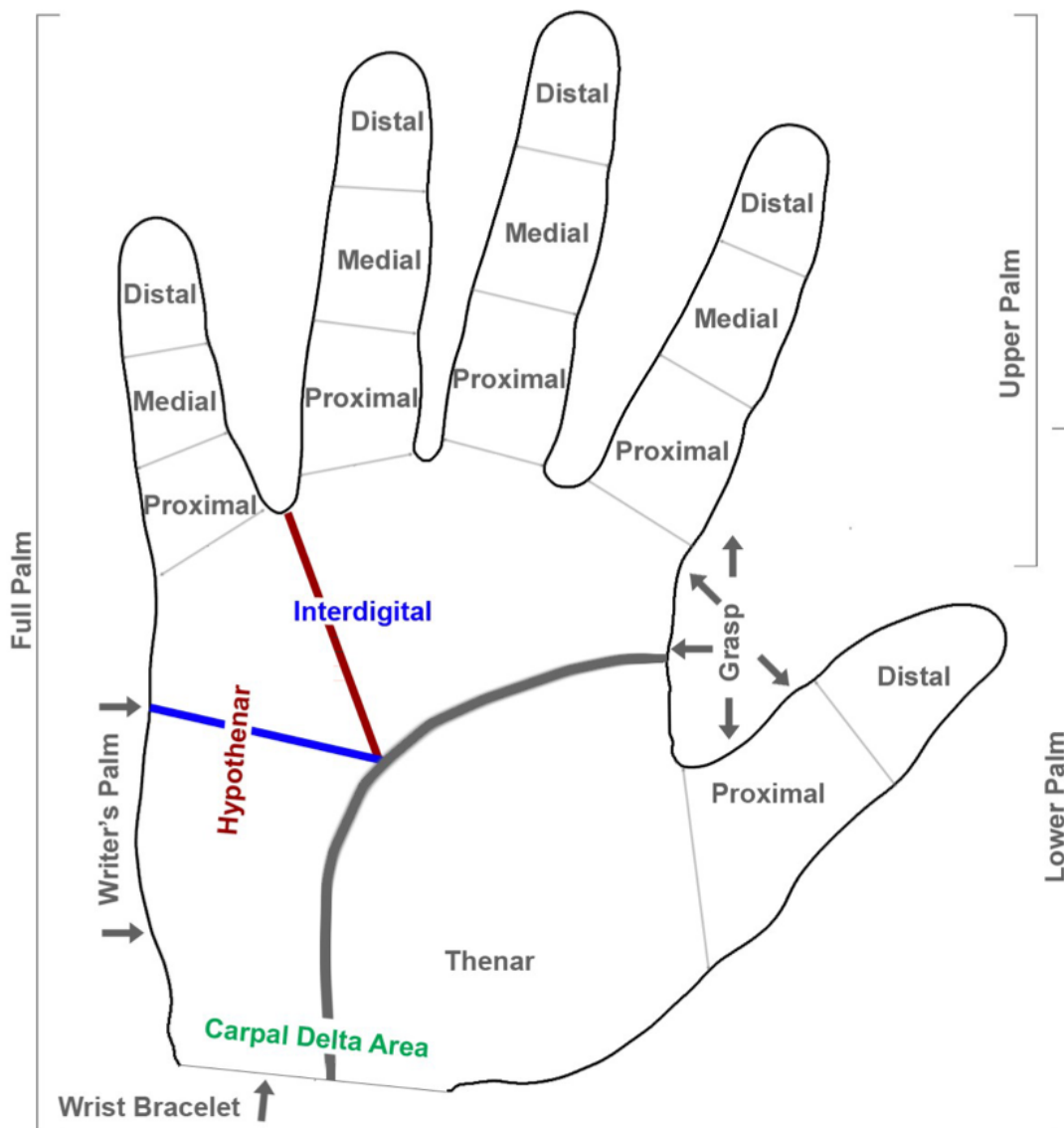
APPENDIX B PALM CAPTURE DIAGRAMS FROM THE FBI

The content of this appendix is extracted from the FBI's "A Practical Guide for Palm Print Capture".

Parts of the Palm

The entire area of the full palm (See Figure 1) is defined as that area extending from the top of the *wrist bracelet* to the tips of the fingers and can be represented as one or two scanned images. If two images are used to represent the full palm, the lower image shall extend from the top of the *wrist bracelet* to the top of the *interdigital* area (*proximal* finger joint) and shall include the *thenar* and *hypothenar* areas of the palm. The upper image shall extend from the bottom of the *interdigital* area to the upper tips of the fingers. This provides an adequate amount of overlap between the two images to facilitate subject verification. By matching the ridge structure and details contained in the common *interdigital* area, an examiner can confidently state that both images came from the same palm. The inclusion of the finger impressions, particularly the distal segments, allows the palm print to be verified against a tenprint record for confirmation of identity.

Figure 1 - Finger and Palm Segment Positions



Full Palm Capture - 4 Image Capture



Upper/Lower Palm Capture - 6 Image Capture

