Federal Reserve Adoption of DSTU X9.37- 2003

Image Cash Letter Customer Documentation

Version 1.9
April 26, 2019

Document RevisionHistory

Release Number	Description of Change(s)
1.1 – July 1, 2004	Image Format – Removed (MM) big-endian byte order specification Return Record (Type 31) – Added Field 11 - External Processing Code specification; language consistent with Check Detail Record Field 3
1.2 – August 3, 2004	Check Detail Record (Type 25) – Changed Field 8 – ECE Institution Item Sequence Number; data shall be left justified
1.3 – October 5, 2004	Record Types – Section 3.2 – Return Addendum A Record (Type 32) & Return Addendum B Record (Type 33) - Changed from conditional to mandatory Image Quality – Sections 4.3, 4.3.1, 4.3.2 – Added detailed image quality information File Header Record (Type 1) – Section 5.1 – Changed Field 4 – Immediate Destination Routing Number must be the receiving Federal Reserve Office's actual 9 digit routing and transit number Cash Letter Header Record (Type 10) – Section 5.2 – Changed Field 3 – Destination Routing Number must be the receiving Federal Reserve Office's actual 9 digit routing and transit number; Changed Field 13 – Fed Work Type; defined values Check Detail Addendum a Record (Type 26) – Section 5.5 – This Record is required when the BOFD is the Truncating Bank Image View Data Record (Type 52) – Section 5.14 – Removed 4th bullet containing explanatory text regarding Image View Detail Records (type 50)
1.4 – July 20, 2005	TIFF description specifies LITTLE ENDIAN ONLY

	Link for FRB TIFF requirements document added
	Link for FRB Image Quality document has been added. IQA settings (values) have been removed from this document
	Cash Letter Header Record (Type 10) Section 5.2 - field13 – Fed Work Type – Government Item Fine Sort value changed from "F" to "H" and Postal Money Order Fine Sort value changed from "G" to "J"
	Return Record (Type 31) Section 5.8 - field 12 changed from "NB" to "N"
	Image View Detail Record (Type 50) Section 5.12 - fields 11, 12, 13, 14 and 15 changed from "NB" to "N"
	Image View Data Record (Type 52) Section 5.14 - fields 9, 10, 11, 12, 13, and 14 changed form "NB" to "N"
1.5 – November 1, 2005	Duplicate ICL files Section 2.6 – a more complete description of all of the file level edits performed to detect duplicate files.
	File Format Section 3 – Clarification of byte order requirements. Variable length indicator and record data must be Big Endian (Motorola) byte order. TIFF images must be in Little Endian (Intel) byte order.
	The term "expected" has been removed from this document to eliminate any confusion around its usage. It has been replaced with either Conditional or Mandatory
1.6 – October 15, 2007	Updated Cash Letter record (Type 10) Collection Type Indicator (Field 2) with Same Day Settlement (SDS) type '2'
	Updated Cash Letter Record (Type 10) Fed WorkType (Field 13) with all work types
1.7 – August 18, 2008	Updated section 2.5 on duplicate file detection

1.8 – September 20, 2008	Updated error in Record type 31 field 6 to reflect ''X' as valid Return Reason Code Clarified the use of Return Reason Code 'X' in Record Type 31 and 35. Updated several field descriptions for 'Sent to FRB' and Sent by FRB' to more accurately reflect our requirements. No processing requirements have been changed.
1.9 - April 26, 2019	Updated FRBservices.org^{SM} hyperlinks

The Federal Reserve Banks use the Accredited Standards Committee X9's Specifications for Electronic Exchange of Check and Image Data (DSTU X9.37-2003) in providing the suite of Check 21 services. This applies to all forward and return image cash letter files. The Federal Reserve's electronic check file standards follow the DSTU X9.37-2003 standard closely, with some field value restrictions and practices consistent with the role of the Reserve Banks as intermediaries in the check collection process. This document details those unique field value restrictions and practices and should be used in conjunction with the full DSTU X9.37-2003 standard. This information is subject to change; the most current information is available at www.FRBservices.org.

Accredited Standards Committee X9, Incorporated

1   General Deposit Information

This document describes how the DSTU X9.37- 2003 standard is used when a depository institution sends an image cash letter file as a deposit to the Federal Reserve Bank, or when the Federal Reserve Bank transfers, presents, or returns an image cash letter file to a depository institution. This document is not a standard of American National Standards Institute. In general, Reserve Bank check processing services are subject to Regulation J, 12 CFR Part 210, and to the terms and conditions set forth in Federal Reserve Bank Operating Circular 3. In addition, in sending or receiving image cash letters, the Federal Reserve Banks will use ANSI Draft Standard for Trial Use ("DSTU") X9.37 - 2003, as interpreted and amended by this document. This document provides additional information, beyond what is contained in DSTU X9.37 on how the DSTU X9.37 - 2003 format is used to send image cash letters to the Reserve Bank and to receive image cash letters from the Reserve Bank. This document is updated from time to time, and the Reserve Bank reserves the right to update or amend this document without prior notice. Updates to this document will be posted on the following FRB financial services website: https://www.frbservices.org/financial-services/check/service-setup/check21-technical-information.html When you send image cash letters to the Reserve Bank or receive image cash letters from the Reserve Bank, your systems must be prepared to work with all the records and all the fields defined in DSTU X 9.37 and in this document. You should refer to DSTU X9.37 – 2003, "Specifications for Electronic Exchange of Check and Image Data," for information regarding file format requirements, record format requirements, and fields not addressed in this document. Only the fields that have values defined by the FRB are specifically described in this document.

FRB supports the receipt and transmission or delivery of image cash letters using the DSTU X9.37 - 2003 format in the following ways:

ITEMS SENT TO FRB: 1. Check data with images included (ICL) - Forward and Return

ITEMS SENT BY FRB: 1. Check data with images included (ICL) - Forward and Return or

                                              2. Check data only early delivery with check data and images (ICL) to follow – Forward

Details regarding these and other FRB implementation restrictions are included in Section 5 Federal Reserve DSTU X9.37- 2003 Field Specifications:

IMAGE FORMAT: Images shall conform with ANS X9.100-181-2007

IMAGE COMPRESSION: CCITT G4 (resolution – 200 or 240 DPI - Black/White)

TIFF TAG BYTE ORDER   Little Endian (Intel) ONLY

CHARACTER CODE: 8 bit EBCDIC except for BINARY image data

VIEW DESCRIPTOR: Full view

FILE SIZE: 2 GB maximum

IMAGE QUALITY: IQA requirements are documented in Section 4.3

ADDENDA RECORDS: Addenda Records are required as documented in Section 3.2.   Refer to FRB Operating Circulars for details regarding actions resulting from missing Addendum Records.

MICR DATA: All MICR data present on the MICR line of the original item are required. Refer to FRB Operating Circulars for details regarding actions resulting from missing MICR Data.

2   Transmission Specifications

2.1   Image Cash Letter File Deposit Time

ICL deposits must be sent to the receiving Federal Reserve prior to the targeted deposit deadline. An image cash letter has been sent to a Reserve Bank only when the entire file has been transmitted and delivered to the Reserve Bank validation process. Transmission of an image cash letter is completed when the entire file has been written onto the Reserve Bank's system and made available for the Reserve Bank to validation process. Based on the size of the file, there may be a significant delay between the time you begin to send a file and the completion of the file transmission. Files that are received by a Reserve Bank after a deposit deadline will be considered deposited for the next deposit deadline. Processing fees and funds availability will be assessed based on the deposit deadline that is met.

2.2   Connectivity Options for File Transfers: Direct Network Connectivity and Internet

In order to facilitate efficient and effective transfer of image cash letters, the Reserve Banks have identified a set of connectivity options designed to meet the spectrum of customer needs. Customers exchanging images with the Federal Reserve must use electronic access that is provided by the FRBs in accordance with OC5, the Certification Practice Statement, and OC3.The options for transferring image cash letter files are detailed in the Federal Reserve Guide to Connectivity Options and can be found at: https://www.frbservices.org/assets/financial-services/check/setup/guide-to-connectivity-options.pdf

2.3   Internet Connectivity to FRB

ICL files can be delivered to the Federal Reserve or received from the Federal Reserve via the Internet. The receiving institution is required to install a Federal Reserve issued security credential (Digital Certificate) that allows access to FedLine Web Check Services. File transfers can be automated by implementing the Tumbleweed Secure Transport client. Institutions should work with Federal Reserve representatives and their internet service providers to assess if their Internet connection can support the desired transfer performance. There are two types of files, presentment and information. File creation constitutes presentment of presentment files. File creation is complete when the Reserve Bank has written the image cash letter file on a Reserve Bank storage device and has made the image cash letter available for delivery. Information files will be made available as they are created and creation does not constitute presentment.

2.4   File History

Institutions that send or receive ICL files can view a history of their files by accessing FedLine Web Check Services via the Internet. Each file that is sent to the Federal Reserve will be listed on a "Pick List" of sent files. Information about events associated with any file on the pick list, including acknowledgement that the file was either accepted or rejected, is available for viewing. Listings for rejected files include information concerning the reason for the rejection. NOTE: THE FILE HISTORY LISTING INDICATES THE DISPOSITION OF THE FILE: REJECTED OR ACCEPTED. YOU CAN ALSO ELECT TO RECEIVE

SUCH NOTIFICATIONS VIA E-MAIL. EACH DEPOSITORY INSTITUTION THAT SENDS IMAGE CASH LETTERS TO A RESERVE BANK IS RESPONSIBLE FOR CHECKING THE FILE HISTORY TO ASCERTAIN WHETHER EACH IMAGE CASH LETTER HAS PASSED THE INITIAL EDITS. Files that are made available for an institution to receive will be listed on a file receipt "Pick List", along with events associated with each file. Individuals at the institution will be required to have a Federal Reserve issued security credential (digital certificate) to access the file history pick lists.

2.5   Duplicate ICL Files

File management applications prevent duplicate Cash Letters or retransmission of the same Cash Letters from being processed. Validation is performed on each Cash Letter to assess the following fields:

- Cash Letter Header Record (type 10) field 4 (ECE Institution Routing Number)

- Cash Letter Control Record (type 90) field 4 (Cash Letter Total Amount)

- Cash Letter Control Record (type 90) field 3 (Items Within Cash Letter Count)

- Forward/Return File type (based on presence of Forward Detail Record (type 25) or Return Detail Record (type 31)

- Cash Letter Header Record (type 10) filed 13 (Fed Work Type)

- ECE Institution Item Sequence number from either the first Check Detail Forward Record (type 25) (field 8) or first Check Detail Return Record (type 31) (field 10).

A comparison of the defined conditions is performed on a history of files from an FRB defined period. Duplicate matches will result in a file rejection.

3   File Format

The DSTU X9.37 - 2003 file is comprised of variable length records. Refer to DSTU X9.37 – 2003 Specifications for Electronic Exchange of Check and Image Data, Annex F for information regarding variable length records.

- All characters and symbols must be represented using 8-bit EBCDIC

- Image Data (Field 19) in the Image View Data Record (Type 52) is binary data.

- Variable length indicator and record data must be Big Endian (Motorola) byte order.

- TIFF images must be in Little Endian (Intel) byte order.

All fields in all records that are described in this document as being conditional and are not used shall be filled with spaces unless noted otherwise.

3.1   File Structure Requirements

An ICL file can contain one or more cash letters. Forward and Return cash letters may not be mixed within the same file. Cash letters can contain one or more bundles that are destined for the institutions identified in the Cash Letter Header Records. Bundles within Cash Letters can contain either Check Detail Records or Return Records and can contain image records.

The following figures generally illustrate the DSTU X9.37 - 2003 hierarchy for some, but not all, of the different cash letter and bundle structures available. This Section should be taken in conjunction with Section 3.2 to determine Federal Reserve requirements.

- Forward Cash Letter Hierarchy Diagram

- Return Cash Letter Hierarchy Diagram

- Forward Presentment Bundle Hierarchy Diagram

- Return Bundle Hierarchy Diagram

Figure 1 – DSTU X9.37 - 2003 Forward Cash Letter Hierarchy Diagram[*]

- Cash Letter Header Record (Type 10)
- Collection Type Indicator (Field 2) = '01' or '02'

M
File
Header
(01)

Cash Letter

M
File
Control
(99)

M
Cash Letter
Header
(10)

Forward
Presentment
Bundle

See Figure 3 for
Forward Presentment
Bundle detail

C
Routing
Number
Summary
(85)

M
Cash Letter
Control
(90)

One record for
each payor bank
routing number in
the Cash Letter
(By agreement)

LEGEND

M
Mandatory
Record

C
Conditional
Record

Multiple
Logical
Entities

C
Multiple
Conditional
Records

- Cash Letter Header Record (Type 10)
- Collection Type Indicator (Field 2) = '03'

See Figure 4 for
Return Bundle detail

LEGEND

M
Mandatory
Record

C
Conditional
Record

Multiple
Logical
Entities

Multiple
Conditional
Records

Figure 3 – DSTU X9.37- 2003 Forward Presentment Bundle Hierarchy Diagram
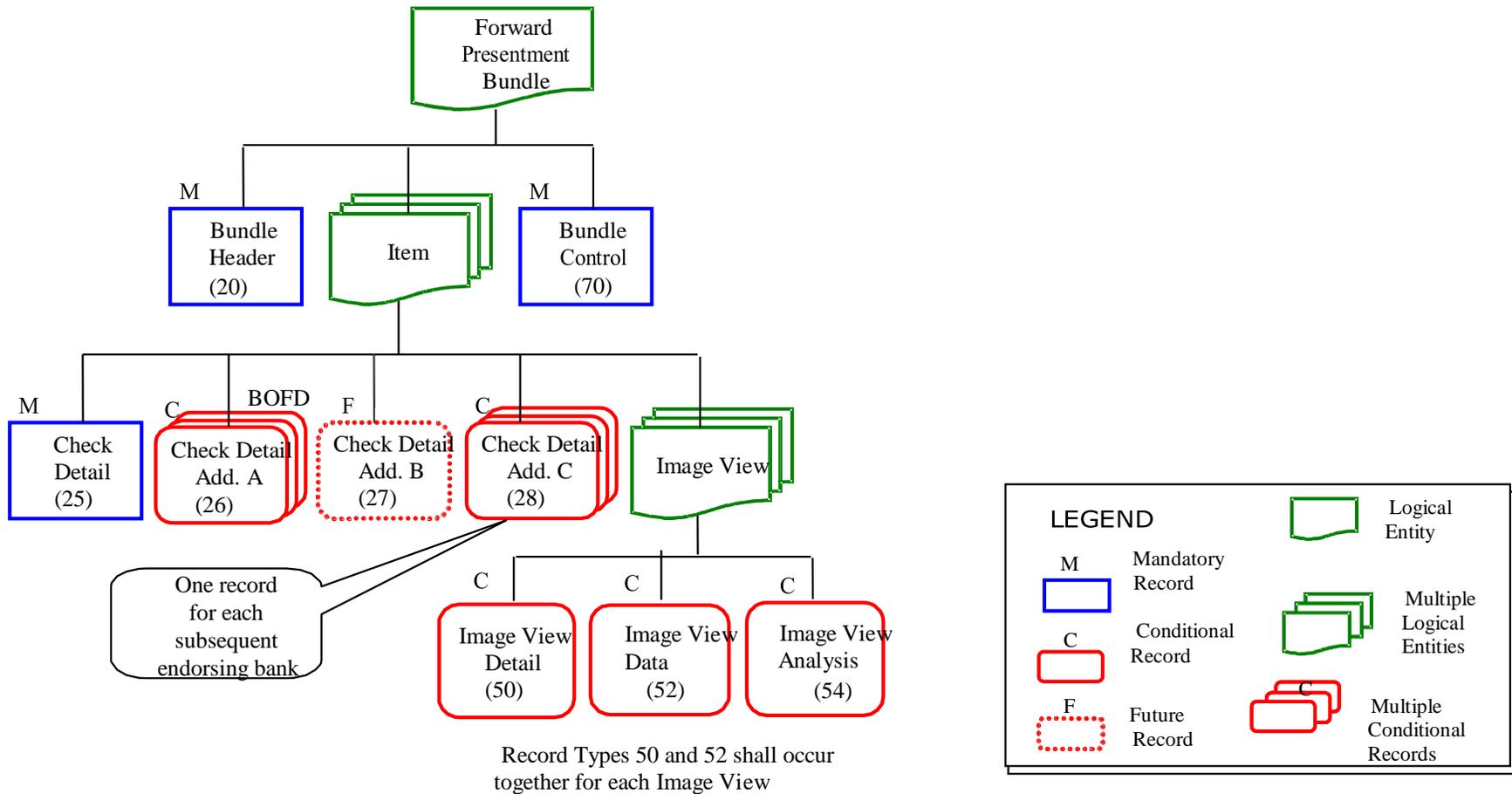
Forward Presentment Bundle

M — Bundle Header (20)

Item

M — Bundle Control (70)

M — Check Detail (25)

C — BOFD Check Detail Add. A (26)

F — Check Detail Add. B (27)

C — Check Detail Add. C (28)

Image View

One record for each subsequent endorsing bank

C — Image View Detail (50)

C — Image View Data (52)

C — Image View Analysis (54)

Record Types 50 and 52 shall occur together for each Image View

LEGEND

M — Mandatory Record

C — Conditional Record

F — Future Record

Logical Entity

Multiple Logical Entities

Multiple Conditional Records

Figure 4 – DSTU X9.37 – 2003 Return Bundle Hierarchy Diagram
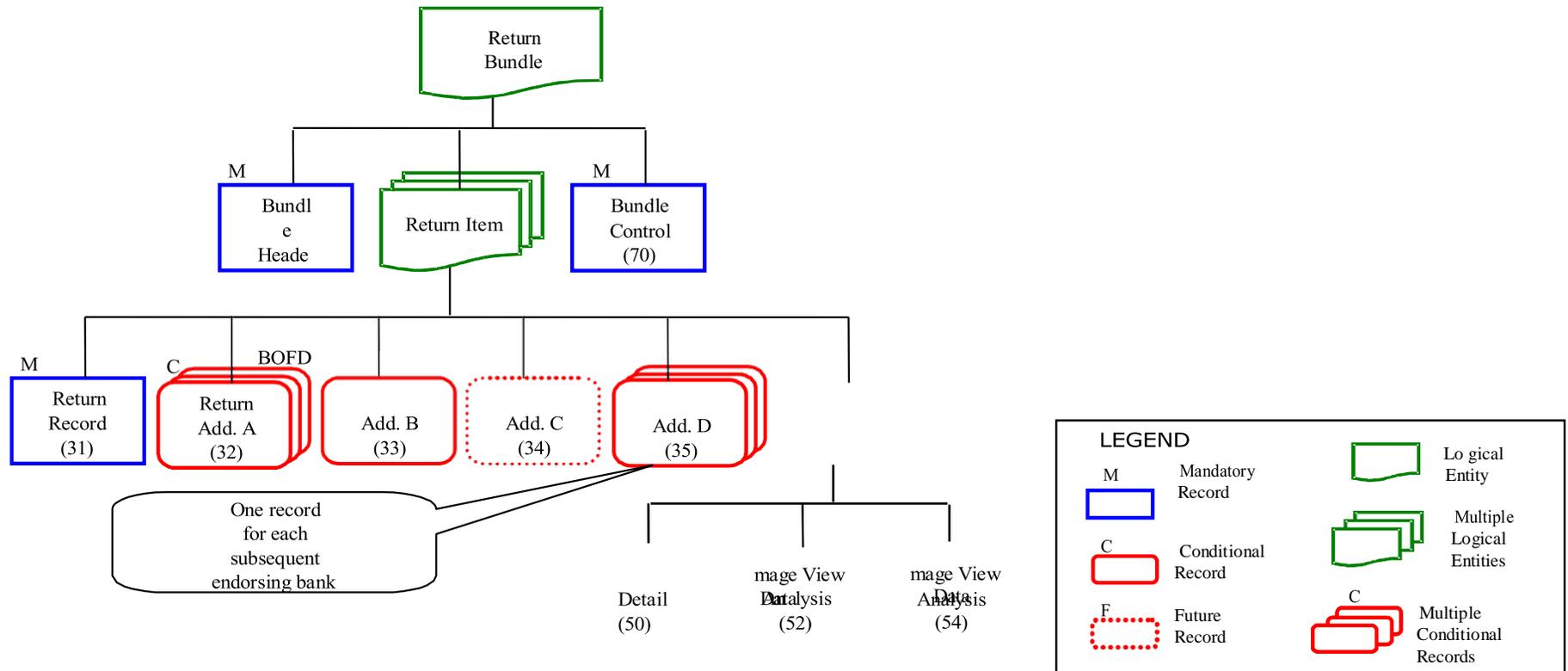
Return Bundle

M — Bundle Header

Return Item

M — Bundle Control (70)

M — Return Record (31)

C — BOFD — Return Add. A (32)

Add. B (33)

Add. C (34)

Add. D (35)

One record for each subsequent endorsing bank

Detail (50)

Image View Analysis Data (52)

Image View Analysis Data (54)

Record Types 50 and 52 shall occur

LEGEND

M — Mandatory Record

C — Conditional Record

F — Future Record

Logical Entity

Multiple Logical Entities

C — Multiple Conditional Records

3.2   Record Types

Record type usage is described below. Records that are identified as Mandatory are required to support Federal Reserve processing of the image file. Conditional records are required when the stated condition is true. In some cases information contained in "Conditional" records is required as a legal matter and liability will be imposed on the sender if the records are omitted, even though our systems will process the file. Refer to FRB Operating Circulars for details regarding actions resulting from missing records that are identified as "Conditional" in the matrix below.

	Forward Cash Letters (Sent to FRB / Sent from FRB)	Return Cash Letters (Sent to FRB / Sent from FRB)
File Header Record (Type 01)	Mandatory	Mandatory
Cash Letter Header Record (Type 10)	Mandatory	Mandatory
Bundle Header Record (Type 20)	Mandatory	Mandatory
Check Detail Record (Type 25)	Mandatory	Not Included
Check Detail Addendum A Record (Type 26)	Conditional - required when the item is truncated by or on behalf of the BOFD. The routing number of the truncating bank must be a valid Financial Institution. FRB will typically not create this record	Not Included
Check Detail Addendum B Record (Type 27)	This record is not supported	This record is not supported
Check Detail Addendum C Record (Type 28)	Conditional – required when the physical item (original or Substitute Check) is converted to image (subsequent to BOFD). The routing number used must be a valid Financial Institution.	Not Included
Return Record (Type 31)	Not Included	Mandatory
Return Addendum A Record (Type 32)	Not Included	Mandatory .
Return Addendum B Record (Type 33)	Not Included	Conditional - used in conjunction with the Return Record (Type 31) – Includes AUX ONUS information .
Return Addendum C Record (Type 34)	This record is not supported	This record is not supported

Return Addendum D Record (Type 35)	Not Included	Conditional - required when the physical item (original or Substitute Check) is converted to image (subsequent to BOFD) or the information is transmitted electronically
Account Totals Detail Record (Type 40)	This record is not supported	This record is not supported
Non-Hit Totals Detail Record (Type 41)	This record is not supported	This record is not supported
Image View Detail Record (Type 50)	Mandatory for Image Cash Letters	Mandatory for Return Image Cash Letters
Image View Data Record (Type 52)	Mandatory for Image Cash Letters FRB will create this record when they convert the physical item to image	Mandatory for Return Image Cash Letters
Image View Analysis Record (Type 54)	FRB will create this record when they convert the physical item to image. Records received in deposits will be passed on unaltered.	FRB will not create new records, records received in the Return ICL will be passed forward as received
Bundle Control Record (Type 70)	Mandatory	Mandatory
Box Summary Record (Type 75)	This record is not supported	This record is not supported
Routing Number Summary Record (Type 85)	This record is not supported	This record is not supported
Cash Letter Control Record (Type 90)	Mandatory	Mandatory
File Control Record (Type 99)	Mandatory	Mandatory

4   File Integrity and Quality Requirements

Incoming files will be validated for structure and content. All records and fields must be consistent with FRB requirements.

- Mandatory fields will be edited for presence, data type, and defined values.

- Conditional fields will be edited for usage and values (where applicable).

- Reserved and User fields will not be validated or edited unless otherwise specified in this document. Data in Reserved and User fields will be passed to the receiver as it was deposited. Control record level exceptions will result in a file rejection. Item record level exceptions will result in the individual item adjusted back to the depositor.

- Control Level Record exceptions will result in a file rejection

- Item Level Record exceptions will result in an item rejection. Provisions for rejected items are defined in OC3.

4.1   File Level Fatal Exception Information

Conditions Identified for File or Transaction Rejection:

Failure to include mandatory information at the control record level or adhere to the identified file format will result in the rejection of an incoming file. A rejection occurs when the Reserve Bank is unable to process an incoming image cash letter file. The sending bank does not receive credit for a file that rejects until the problems with the file is fixed and the file is successfully processed. The following file level exceptions will be considered fatal and will result in the rejection of file without credit being passed to the depositor:

- Failure by the File Header Record to identify the file as being in DSTU X9.37-2003 format as required by the Federal Reserve Bank
- Failure to include and/or properly sequence any mandatory control level record types
- Failure to include and/or properly sequence any conditional record types (e.g. the Detail/Return Detail Addenda Records), when required
- Failure to balance Item Counts or Dollar Amounts in the Control Records (Bundle values must balance to the Cash Letter values and Cash Letter values must balance to the File values)
- Inclusion of any big endian (Motorola) byte order TIFF image
- Inclusion of an image whose Image View Data Record (type 52) exceeds 250,000 bytes
- Any future dated file

4.2   Record Level Threshold and Item Level Exception Information

Conditions Identified for File or Transaction Rejection:

The Federal Reserve has also identified certain record or item level exceptions that will cause a file to reject. If the item level exceptions exceed a reject threshold, established by the Federal Reserve Bank, the file will reject. These exceptions occur at the individual Record or Item level. All mandatory fields within the records must be present and must contain valid values as identified in this document in conjunction with DSTU X9.37-2003. Invalid conditions at the item level (missing or invalid field(s)) and/or IQA exceptions will be counted against the Federal Reserve's File Rejection Threshold. When this threshold has been exceeded (i.e. the percentage of invalid records), the file will be rejected. Credit will not be passed to the depositor.

Item Level Exceptions

Conditions Identified for Item Rejection:

Individual items deposited to the Federal Reserve may not meet minimum requirements, such as complete and valid MICR data or acceptable Image Quality (see 4.3.2 Detailed Image Quality). The truncation indicator must be set to Y in record 26 or 28 but not both. The truncation indicator must be set unless the item converted was a substitute check, in which case there will be a 4 in the EPC field (Record 25 field 3). The same condition exists for Returns records 32 and 35. The truncation indicator must be set to Y in either record, but not both, unless the item converted was a substitute check. Items that fail critical edits may be rejected by the Reserve Bank.

If an image cash letter file has passed the file level edits, but items within that file fail critical item level edits, the individual items will not be processed by the Reserve Bank. Instead, they will be rejected. The individual items will be adjusted back to the depositor, and the amount of the rejected items will be debited from the depositor's settlement account. Depositors will receive an advice via FedMail® or FedLine® for the Web from the Reserve Bank detailing the relevant information on the rejected item(s). The advice will list the basic reference information available including the cash letter date, cash letter total, bundle total, depositor item sequence number as well as the dollar amount of the items immediately before and after the rejected item(s).

4.3   Detailed Image Quality Information

First phase image quality will be determined based on a preliminary assessment of gross-level metrics and an overall quality assessment performed by an image quality engine.

4.3.1   Baseline Image Quality

Image quality checks will be performed for each set of Image View Records (Type 50, Type 52 & Type 54). If a mandatory field or fields within an Image View Record are invalid, the Record will be counted against the file rejection threshold (see 4.2 Record and Item Level Threshold Exception Information). All image items deposited as part of an Image Cash Letter must meet the following preliminary criteria:

- An individual item must have corresponding front and back image segments.

- The data size for each image segment must fall within the range acceptable for image data.

- Each image segment must be able to be decompressed.

- Each image segment must have a minimum resolution of 200 dpi.

- Each segment must be black and white and in the TIFF 6.0 CCITT Group 4 compression format.

4.3.2 Detailed Image Quality

Items that meet the preliminary quality criteria will be passed through an image quality engine. This engine will assess the overall quality of each segment based on particular quality metrics. These metrics include:

- Missing / torn corners Analysis is performed to determine if any of the document's four corners are either folded or missing. Depending upon the particular document layout, a corner that is either folded or is torn away may cause vital information to be missing from the image.

- Document length The length of the document may be above or below defined values. Ideally the length, as calculated by dividing the horizontal pixel count by the pixel density (dots per inch), is within standard check length specifications.

- Document height The height of the document may be above or below defined values. Ideally the height, as calculated by dividing the vertical pixel count by the pixel density (dots per inch), is within standard check height specifications.

- Document skew The document skew, defined as the measure of the angle formed between the horizontal edge of the physical document being scanned and the horizontal edge of the front of the document image, may be too great.

- Image brightness The black pixel count may indicate the image is too dark or too light.

- Noisy image If the black pixel distribution is outside of normal bounds, the image may be flagged.

Link to IQA Settings

https://www.frbservices.org/assets/financial-services/check/setup/iqa-settings.pdf

If any one image quality metric is flagged or suspect, that image fails to meet image quality requirements and it may be rejected by the Reserve Bank (see 4.2.2 Item Level Exceptions). The individual items rejected will be adjusted back to the depositor, and the amount of the rejected items will be debited from the depositor's settlement account.

5   Federal Reserve DSTU X9.37 – 2003 Field Specifications

Please refer to the DSTU X9.37 - 2003 for more complete information. Only the fields that have a value defined by the Reserve Bank are included in this documentation. All fields in all records (unless noted otherwise) must be included in the image file. DSTU X9.37 – 2003 Specifications for Electronic Exchange of Check and Image Data contains information regarding fields not included in this document. The tables below specify values for files sent to FRB and values for files sent by FRB.

5.1   File Header Record (Type 01)

- The File Header Record is Mandatory. It is the first record of the file.
- If a corresponding File Control Record (Type 99) is not present as the last record in this file, the file will be rejected.
- The data in the fields are created by the institution sending the file, the immediate origin institution.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Standard Level	M	03 – 04	N	'03' Indicates DSTU X9.37 – 2003	'03' indicates DSTU X9.37 – 2003
3	Test File Indicator	M	05 – 05	A	Must be "T" for all Test files and "P" for production files.	"T" for test files "P" for production files
4	Immediate Destination Routing Number	M	06 – 14	N	Must be the receiving Federal Reserve Office's actual 9 digit routing and transit number.	9 digit routing and transit number of the receiving Financial Institution or Processor.
5	Immediate Origin Routing Number	M	15 – 23	N	Must be the 9 digit routing and transit number of the creator of the file (Financial Institution or Processort)..	9 digit routing and transit number of the Federal Reserve sending the file.
8	Resend Indicator	M	36 – 36	A	'N' indicates original file or retransmission of original file	'N' indicates original file or retransmission of original file
11	File ID Modifier	C	73 – 73	AN	This field is used to edit for duplicate files. When ANSI file fields 4, 5, 6, & 7 are equal to another deposit, increment File ID Modifier to next sequence.	Set to '1' unless the data contained in Fields 4, 5, 6 & 7 are equal to another file. Then this field will contain a value 1 greater than the highest File ID Modifier created for this customer.

5.2 Cash Letter Header Record (Type 10)

- The Cash Letter Header Record is Mandatory. It follows the File Header Record (Type 01) unless the file contains multiple cash letters in which case the Cash Letter Header Record will follow the Cash Letter Control Record (Type 90) for the previous cash letter.
- Cash letter collection types (Field 2) cannot be mixed in the same file. Mixed collection types in the same file will result in a file reject.
- The data in the fields are created by the ECE institution, which may or may not be the Bank of First Deposit (BOFD)

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Collection Type Indicator	M	03 – 04	N	'01' Forward Presentment '02' Same Day Settlement (SDS) '03' Return	'01' Forward Presentment '02' Same Day Settlement (SDS) '03' Return
3	Destination Routing Number	M	05 – 13	N	Must be the receiving Federal Reserve Office's actual 9 digit routing and transit number.	9 digit routing and transit number of the Financial Institution receiving charges for the cash letter.
4	ECE Institution Routing Number	M	14 – 22	N	Must be the actual 9 digit routing and transit number of the Financial Institution that receiving credit for the Cash Letter.	9 digit routing and transit number of the Federal Reserve office that created the Cash Letter. May be different than the Immediate Origin RT in the File Header Record.
7	Cash Letter Creation Time	M	39 – 42	N	hhmm cash letter was created (System time reported in ET)	hhmm cash letter was created (System time reported in ET)
8	Cash Letter Record Type Indicator	M	43 – 43	A	'I' Forward or Return Image Cash Letter Deposit - indicates the deposit of Electronic Check Records with image records	'E' ECP - indicates Electronic Check Records with no image records for presentment. 'I' Image Cash Letter or Returns Image Cash Letter presentment - indicates Electronic Check Records with image records for presentment 'F' Image to follow - indicates Electronic Check Records and image records for information that correspond to a previously sent Cash Letter (i.e., 'E' file)

9	Cash Letter Documentation Type Indicator	M	44 – 44	AN	'G' Forward or Return Image Cash Letter Deposit – indicates images are included, no paper	'C' Used when Cash Letter Record Type Indicator (Field 8) is 'E'' - ECP indicates image provided separately, no paper 'D' Used when Cash Letter Record Type Indicator (Field 8) is 'E' with a Type 'F' file to follow and images are archived in FRB National Archive indicates image provided separately, no paper and image available on request 'G' Used when Cash Letter Record Type Indicator (Field 8) is 'I' or 'F' -Forward or Return Image Cash Letter Presentment indicates image is included, no paper 'H' Used when Cash Letter Record Type Indicator (Field 8) is 'I' or 'F' – Forward or Return Image Cash Letter Presentment and images are archived in FRB National Archive indicates image is included, no paper, and image is available on request 'L' Used when Cash Letter Record Type Indicator (Field 8) is 'E' - ECP and images are archived in FRB National Archive indicates no image, no paper, and image is available on request
10	Cash Letter ID	C	45 – 52	AN	Code that uniquely identifies the Cash Letter	AAAHMMSS AAA = FRB Advice Table (numeric or alphabetic) OR "ADV" if PBS multi-cash lettering is off H = hour (24 hour clock translated to Alpha characters) MM = minutes SS = seconds

13	Fed Work Type	C	77 - 77	AN	Valid Work Type Codes: 'A' = Fine Sort 'B' = Pre-Sort 'C' = Mixed 'E' = Electronic Group Sort 'H' = Govt Fine Sort 'I' = Postal Money Order	Valid Work Type Codes: 'C' Mixed 'X' Same Day Settlement (SDS) '4' Non-Imageagable

5.3   Bundle Header Record (Type 20)

- The Bundle Header Record is Mandatory.
- The data in the fields are created by the ECE institution, which may or may not be the Bank of First Deposit (BOFD)
- Items in the Bundles will be in the same order in the ECP (Cash Letter Type Indicator = "E") file and the ECP with Image to Follow (Cash Letter Type Indicator = "F") file.
-

FIELD	FIELD NAME	USAGE	POSITION	SIZE	Sent to FRB	Sent by FRB
2	Collection Type Indicator	M	03 – 04	N	'01' indicates Forward Presentment '03' indicates Return (within an individual Cash Letter this value must be consistent from Bundle to Bundle and must match the C/L record)	'01' indicates Forward Presentment '03' indicates Return
3	Destination Routing Number	M	05 – 13	N	Must be the same as the Destination Routing Number (Field 3) in the Cash Letter Header Record (Type 10)	9 digit routing and transit number of the Financial Institution receiving charges for the cash letter. Will be the same as the Destination Routing Number (Field 3) in the Cash Letter Header Record (Type 10)
4	ECE Institution Routing Number	M	14 – 22	N	Must be the same as the value in the ECE Institution Routing Number (Field 4) in the Cash Letter Header Record	9 digit routing and transit number of the Federal Reserve office that created the Bundle. Will be the same as the ECE Institution Routing Number (fField 4) in the Cash Letter Header Record (type 10).
7	Bundle ID	C	39 – 48	AN	If present - a number that identifies the bundle, assigned by the institution that created the bundle.	A unique numeric value per cash letter within a file. Unreadable characters are allowed and if present must be replaced by an "*". The value will be a random number between 6 and 10 digits in length. This field will be right justified (blank filled or not zero filled) if less than 10 characters. It must have leading blank spaces.
8	Bundle Sequence Number	M	49 – 52	NB	Indicates the relative position of the bundle within the cash letter. This number usually starts with one and is incremented by one for each Bundle Header record in this cash letter.	Indicates the relative position of the bundle within the cash letter. This number starts with one and is incremented by one for each Bundle Header record in this cash letter.
10	Return Location Routing Number	C	55 – 63	N	Not Supported	Spaces – not used

5.4 Check Detail Record (Type 25)

- The Check Detail Record is Mandatory.
- The data in the fields are created by the ECE institution, which may or may not be the Bank of First Deposit (BOFD)
- If FRB converts the paper to image, they will create the Check Detail Record (Type 25). If FRB receives an ICL from a depositing bank, the Check Detail Records (Type 25) included in the ICL will be passed on to the paying bank as they were received by FRB.
- A valid routing number consists of 2 fields; the 8 digit Payor Bank Routing Number and the 1 digit Payor Bank Routing Number Check Digit fields.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Auxiliary On-Us	C	03 – 17	NBSM	Mandatory if present on the MICR Line The 15 digit Auxiliary On Us field from the item MICR line (positions 48 – 62). This field is also known as field 7 or the serial number. Rules for formatting this field are: • Right justify the data • Retain "dashes" • Spaces may be omitted • Blank fill any unused positions • If the field is not present on the item, the field must be formatted with spaces	Mandatory if present on the MICR Line The 15 digit Auxiliary On Us field from the item MICR line. This field is also known as field 7 or the serial number. Rules for formatting this field are: • Right justify the data • Retain "dashes" • Omit spaces • Blank fill any unused positions • If the field is not present on the item, the field must be formatted with spaces
3	External Processing Code	C	18 – 18	ANS	Mandatory if present on the MICR Line The External Processing Code is position 44 or 45 of the MICR line. This field is located immediately to the left of the Routing Transit field. This field is also known as field 6. Rules for formatting this field are: • If the field is not present on the item, the field must be formatted with spaces.	Mandatory if present on the MICR Line The External Processing Code is position 44 or 45 of the MICR line. This field is located immediately to the left of the Routing Transit field. This field is also known as field 6. Rules for formatting this field are: • If the field is not present on the item, the field must be formatted with spaces.
5	Payor Bank Routing Number Check Digit	M	27 – 27	N	Mod Check will be done on field 4 – Payor Bank Routing Number. If the calculated check digit value differs from the data in this field the item will reject and adjusted back to the depositor.	Mandatory – will be the routing number check digit.

6	On-Us	C	28 – 47	NBSM OS	Mandatory if present on the MICR Line The On-Us Field of the MICR document is located between positions 14 and 31 of the MICR Line of the item. It is also known as Fields 2, 3, & 4 of the MICR line, usually including the Process Control or Transaction Code, Account Number and Field 4. Rules for formatting this field are: • Translate On Us symbols to forward slashes "/" • Right justify the data • Retain "dashes" • May omit spaces • Blank fill any unused positions	Mandatory if present on the MICR Line The On-Us Field of the MICR document is located between positions 14 and 31 of the MICR Line of the item. It is also known as Fields 2, 3, & 4 of the MICR line, usually including the Process Control or Transaction Code, Account Number and Field 4. Rules for formatting this field are: • Translate On Us symbols to forward slashes "/" • Right justify the data • Retain "dashes" • Omit spaces • Blank fill any unused positions
8	ECE Institution Item Sequence Number	M	58 – 72	NB	• This field is the depositing institution item locator information and will be supplied when making inquiries/adjustments.	FRB Item Sequence Number
9	Documentation Type Indicator	C	73 – 73	AN	This value will always be the same as the value in the Cash Letter Header Record (Type 10) Cash Letter Documentation Type Indicator (Field 9). (Valid values: G)	This value will always be the same as the value in the Cash Letter Header Record (Type 10) Cash Letter Documentation Type Indicator (Field 9). (Valid values: C, D, G, H, L)
10	Electronic Return Acceptance Indicator	C	74 – 74	AN	A code that indicates whether the institution that creates the Check Detail Record will or will not support electronic return processing	Spaces – not used
11	MICR Valid Indicator	C	75 – 75	N	A code that indicates whether any character in the MICR line is unreadable, or, the On-Us field is missing from the Check Detail Record	Spaces – not used
12	BOFD Indicator	M	76 – 76	A	'N' indicates ECE institution is not BOFD 'Y' indicates ECE institution is BOFD 'U' indicates ECE institution relationship to BOFD is undetermined.	'U' indicates ECE institution relationship to BOFD is undetermined.

14	Correction Indicator	C	79 – 79	N	Indicator to identify whether and how the MICR line was repaired, for fields other than Payor Bank RT and Amount	Spaces – not used
15	Archive Type Indicator	C	80 - 80	AN	Code that identifies the type of archive that supports this Check Detail Record.	Spaces – not used

5.5 Check Detail Addendum A Record (Type 26)

- The Check Detail Addendum A Record is Conditional, but required when the BOFD is the Truncating Bank.
- More than one Check Detail Addendum A Records is permitted.
- The data in the fields are created by the BOFD when the physical item is converted to an image.
- FRB will forward the Check Detail Addendum A Records, as they were received from the BOFD to the paying bank. FRB will typically not create a Check Detail Addendum A Record

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Check Detail Addendum A Record Number	M	03 - 03	N	Number (beginning with '1') representing the chronological order in which each Check Detail Addendum A record was created. Check Detail Addendum A records shall be in sequential order according to this field.	Will forward information received in ICL
3	Bank of First Deposit (BOFD) Routing Number	M	04 – 12	N	• The 9 digit routing number for the Bank of First Deposit.	Will forward information received in ICL
4	BOFD Business (Endorsement) Date	M	13 – 20	N	yyyymmdd of the endorsement that designates the business date of the BOFD	Will forward information received in ICL
9	Truncation Indicator NOTE: Truncation indicator refers to the truncator of the ORIGINAL Check only.	M	74 – 74	A	'Y' indicates BOFD is truncator of original check 'N' indicates BOFD is not truncator of original check	Will forward information received in ICL

5.6   Check Detail Addendum B Record (Type 27)

FRB will not create Check Detail Addendum B Records (Type 27). FRB will forward these records if received from a depositing institution.

5.7 Check Detail Addendum C Record (Type 28)

- The Check Detail Addendum C Record is Conditional, but required when the item is sent electronically by endorsers subsequent to the BOFD. This record contains endorsement information that may not be present on the physical item.
- There may be multiple Check Detail Addendum C Records (Type 28), as each endorsing bank creates a new record and forwards all previous records.
- Data from this Check Detail Addendum C Record (Type 28) are transferred to the Return Addendum D Record (Type 35) when the item is returned.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Check Detail Addendum C Record Number	M	03 – 04	N	Number (beginning with '1') representing the chronological order in which each Check Detail Addendum C record was created. If the item becomes a return this number is transferred to the Return Addendum D Record (Type 35) Return Addendum D Record Number (Field 2)	Number (beginning with '1') representing the chronological order in which each Check Detail Addendum C record was created. If the item becomes a return this number is transferred to the Return Addendum D Record (Type 35) Return Addendum D Record Number (Field 2)
3	Endorsing Bank Routing Number	M	05 – 13	N	• 9 digit routing number of the bank that endorsed the check.	• 9 digit routing number of the FRB that endorsed the check.
4	Endorsing Bank Endorsement Date	M	14 – 21	N	yyyymmdd of the endorsement that designates the business date of the Endorsing Bank	yyyymmdd of the endorsement that designates the business date of the Endorsing Bank
5	Endorsing Bank Item Sequence Number	M	22 – 36	NB	A number that identifies the item at the Endorsing Bank	FRB Item Sequence Number.
6	Truncation Indicator NOTE: This indicator only refers to the truncator of the ORIGINAL check.	M	37 – 37	A	'Y' indicates this endorsing bank is truncator of original check 'N' indicates this endorsing bank is not truncator of original check	'Y' indicates endorsing bank is truncator of original check 'N' indicates endorsing bank is not truncator of original check
7	Endorsing Bank Conversion Indicator	M	38 – 38	AN	A code that indicates the conversion within the processing institution between original paper check, image and Substitute Check.	'1' indicates Original paper converted to Substitute Check '2' indicates Original paper converted to Image '5' indicates Image converted to Substitute Check '7' indicates Did not convert image '8' indicates undetermined

8	Endorsing Bank Correction Indicator	C	39 – 39	N	Indicator to identify whether and how the endorsing bank repaired the MICR Line	Will be "0" or "1"
9	Return Reason	C	40 – 40	AN	Spaces unless the item was returned and is being represented. If represented, the value will be the same as Return Record (Type 31) Return Reason (Field 6).	Spaces – not used

5.8   Return Record (Type 31)

- The Return Record is Conditional, but shall be present as indicated in the Cash Letter Header Record (Type 10) with a Collection Type Indicator (Field 2) set to '03'.
- The Return Record is created by either the payor bank, or the returning ECE institution
- FRB will create Return Record (Type 31) when converting paper deposited Returns to Image. A Return Reason of 'X' is used for FRB captured Return items.
- If the Fed is performing VRC and we correct the amount field, we will update the amount field in this record.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
3	Payor Bank Routing Number Check Digit	M	11 – 11	N	Mod Check will be done on field 2 – Payor Bank Routing Number. If the calculated check digit value differs from the data in this field the item will reject and adjusted back to the depositor.	Mandatory – will be the routing number check digit.
4	On-Us	C	12 – 31	NBSM OS	Mandatory if present on the MICR Line	Mandatory if present on the MICR Line .

6	Return Reason	M	42 – 42	AN	Reason for non-payment. 'A' NSF - Not Sufficient Funds 'B' UCF - Uncollected Funds Hold 'C' Stop Payment 'D' Closed Account 'E' UTLA - Unable to Locate Account 'F' Frozen/Blocked Account 'G' Stale Dated 'H' Post Dated 'I' Endorsement Missing 'J' Endorsement Irregular 'K' Signature(s) Missing 'L' Signature(s) Irregular 'M' Non-Cash Item (Non-Negotiable) 'N' Altered/Fictitious Item 'P' Items Exceeds Dollar Limit 'Q' Not Authorized 'R' Branch/Account Sold (Wrong Bank) 'S' Refer to Maker 'T' Stop Payment Suspect 'W' Cannot Determine Amount' 'X' Refer to Image	Reason for non-payment. 'A' NSF - Not Sufficient Funds 'B' UCF - Uncollected Funds Hold 'C' Stop Payment 'D' Closed Account 'E' UTLA - Unable to Locate Account 'F' Frozen/Blocked Account 'G' Stale Dated 'H' Post Dated 'I' Endorsement Missing 'J' Endorsement Irregular 'K' Signature(s) Missing 'L' Signature(s) Irregular 'M' Non-Cash Item (Non-Negotiable) 'N' Altered/Fictitious Item 'P' Items Exceeds Dollar Limit 'Q' Not Authorized 'R' Branch/Account Sold (Wrong Bank) 'S' Refer to Maker 'T' Stop Payment Suspect 'W' Cannot Determine Amount 'X' Refer to Image
8	Return Documentation Type Indicator	C	45 – 45	AN	Spaces – not used	Spaces – not used
11	External Processing Code	C	69 – 69	ANS	Mandatory if present on the MICR Line The External Processing Code is position 44 or 45 of the MICR line. This field is located immediately to the left of the Routing Transit field. This field is also known as field 6. Rules for formatting this field are: If the field is not present on the item, the field must be formatted with spaces.	Mandatory if present on the MICR Line The External Processing Code is position 44 or 45 of the MICR line. This field is located immediately to the left of the Routing Transit field. This field is also known as field 6. Rules for formatting this field are: If the field is not present on the item, the field must be formatted with spaces.
12	Return Notification Indicator	C	70 - 70	N	Spaces – not used	Spaces – not used
13	Return Archive Type Indicator	C	71 – 71	AN	Code that indicates the type of archive that supports the Return Record (Type 31).	Spaces – not used

5.9 Return Addendum A Record (Type 32)

- The Return Addendum A Record is Mandatory, it shall be present as indicated in the Cash Letter Header Record (Type 10) with a Collection Type Indicator (Field 2) set to '03'.
- More than one Return Addendum A Record is permitted for a Return Record (Type 31).
- FRB will create a Return Addendum A Record (Type 32) on behalf of customers participating in the Derived Return Image Cash Letter service. Otherwise FRB will forward the Return Addendum A Records (Type 32) to the BOFD as received in the incoming Image Returns Cash Letter deposit.
- If the information to create this record was taken from the Check Detail Addendum A record from the forward ICL, and the Bank of First Deposit (BOFD) Routing Number (Field 3) is invalid, FRB will create a new Return Addendum A Record (Type 32) with the corrected BOFD RT information. The remaining information in the new Return Addendum A Record (Type 32) will be copied from the original Return Addendum A Record (Type 32) with the following exception:
  - BOFD Correction Indicator (Field 11) will have a value of '5' to indicate that the BOFD field was repaired by FRB
- The new Return Addendum A Record will immediately follow the original Return Addendum A Record

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
3	Bank of First Deposit (BOFD) Routing Number	M	04 – 12	N	Routing number of the BOFD.	Routing number of the BOFD.
4	BOFD Business (Endorsement) Date	M	13 – 20	NS	yyyymmdd of the endorsement that designates the business date of the BOFD.	yyyymmdd of the endorsement that designates the business date of the BOFD.
9	Truncation Indicator NOTE: This indicator only refers to the truncator of the ORIGINAL check.	M	74 –74	A	'Y' indicates this BOFD is truncator of original check 'N' indicates this BOFD is not truncator of original check	'Y' indicates this BOFD is truncator of original check 'N' indicates this BOFD is not truncator of original check
10	BOFD Conversion Indicator	C	75 – 75	AN	Code that indicates the conversion within the processing institution between original paper check, image and Substitute Check	'5' indicates image converted to Substitute Check '7' indicates did not convert image
11	BOFD Correction Indicator	C	76 – 76	N	Indicator to identify whether and how the MICR line was repaired by the BOFD, for fields other than Payor Bank Routing Number and Amount	'5' indicates that the BOFD RT on the incoming Image Returns Cash Letter was invalid and the BOFT RT in this new Return Addendum A Record (Type 32) has been corrected

5.10   Return Addendum B Record (Type 33)

- The Return Addendum B Record is used in conjunction with the Return Addendum A Record (Type 32). It shall be present when AUX ONUS data exists on the check. The Return Addendum B Record is not required if there is no AUX ONUS data on the check.
- FRB will create a Return Addendum B Record (Type 33), when appropriate, on behalf of customers participating in the Derived Return Image Cash Letter service. Otherwise FRB will forward the Return Addendum B Records (Type 33) to the BOFD as received in the incoming Image Returns Cash Letter deposit.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
3	Auxiliary On-Us	C	21 – 35	NBS M	Mandatory if present The 15 digit Auxiliary On Us field from the item MICR line (positions 48 – 62). This field is also known as field 7 or the serial number. Rules for formatting this field are: • Right justify the data • Blank fill any unused positions • Retain "dashes" • Spaces may be omitted • If the field is not present on the item, the field must be formatted with spaces	Mandatory if present The 15 digit Auxiliary On Us field from the item MICR line (positions 48 – 62). This field is also known as field 7 or the serial number. Rules for formatting this field are: • Right justify the data • Blank fill any unused positions • Retain "dashes" • Spaces may be omitted If the field is not present on the item, the field must be formatted with spaces

5.11 Return Addendum C Record (Type 34)

FRB will not create Return Addendum C Records (Type 34). FRB will forward these records if received from a depositing institution.

5.12 Return Addendum D Record (Type 35)

- The Return Addendum D Record is Conditional, but required when the return item is sent electronically. This record contains endorsement information that may not be present on the physical item.
- There may be multiple Return Addendum D Records (Type 35), as each endorsing bank creates a new record and forwards all previous records.
- FRB will create a Return Addendum D Record (Type 35) for all items processed. When converting paper deposited Returns to Image a Return Reason of 'X' will be used.
- If this item was presented electronically, the data for this record comes from the Check Detail Addendum C Record (Type 28).

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Return Addendum D Record Number	M	03 – 04	N	A number (begin with '1') representing the chronological order in which each Return Addendum D record was created. If the item becomes a forward collection item this number is transferred to the Check Detail Addendum C Record (Type 28) Check Detail Addendum C Record Number (Field 2)	A number (begin with '1') representing the chronological order in which each Return Addendum D record was created. If the item becomes a forward collection item this number is transferred to the Check Detail Addendum C Record (Type 28) Check Detail Addendum C Record Number (Field 2)
3	Endorsing Bank Routing Number	M	05 – 13	N	The 9-digit routing number of the bank that endorsed the check. .	The 9-digit routing number of the bank that endorsed the check.
4	Endorsing Bank Endorsement Date	M	14 – 21	N	yyyymmdd of the endorsement that designates the business date of the Endorsing Bank	yyyymmdd of the endorsement that designates the business date of the Endorsing Bank
5	Endorsing Bank Item Sequence Number	M	22 – 36	NB	A number that identifies the item at the Endorsing Bank	FRB Item Sequence Number.
6	Truncation Indicator NOTE: This indicator only refers to the truncator of the ORIGINAL check.	M	37 – 37	A	'Y' indicates this endorsing bank truncated the original check 'N' indicates this endorsing bank did not truncate the original check	'Y' indicates this endorsing bank truncated the original check 'N' indicates this endorsing bank did not truncate the original check
7	Endorsing Bank Conversion Indicator	C	38 – 38	AN	Code that indicates the conversion within the processing institution between original paper check, image and Substitute Check.	
8	Endorsing Bank Correction Indicator	C	39 – 39	N	Indicator to identify whether and how the endorsing bank repaired the MICR Line	Will be "0" or "1"

9	Return Reason	C	40 – 40	AN	Reason for non-payment. 'A' NSF - Not Sufficient Funds 'B' UCF - Uncollected Funds Hold 'C' Stop Payment 'D' Closed Account 'E' UTLA - Unable to Locate Account 'F' Frozen/Blocked Account 'G' Stale Dated 'H' Post Dated 'I' Endorsement Missing 'J' Endorsement Irregular 'K' Signature(s) Missing 'L' Signature(s) Irregular 'M' Non-Cash Item (Non-Negotiable) 'N' Altered/Fictitious Item 'P' Items Exceeds Dollar Limit 'Q' Not Authorized 'R' Branch/Account Sold (Wrong Bank) 'S' Refer to Maker 'T' Stop Payment Suspect 'W' Cannot Determine Amount' 'X' Refer to Image	Reason for non-payment. 'A' NSF - Not Sufficient Funds 'B' UCF - Uncollected Funds Hold 'C' Stop Payment 'D' Closed Account 'E' UTLA - Unable to Locate Account 'F' Frozen/Blocked Account 'G' Stale Dated 'H' Post Dated 'I' Endorsement Missing 'J' Endorsement Irregular 'K' Signature(s) Missing 'L' Signature(s) Irregular 'M' Non-Cash Item (Non-Negotiable) 'N' Altered/Fictitious Item 'P' Items Exceeds Dollar Limit 'Q' Not Authorized 'R' Branch/Account Sold (Wrong Bank) 'S' Refer to Maker 'T' Stop Payment Suspect 'W' Cannot Determine Amount' 'X' Refer to Image

5.13 Image View Detail Record (Type 50)

- The Image View Detail Record is Mandatory when the Cash Letter Documentation Type Indicator (Field 9) in the Cash Letter Header Record (Type 10) is 'G' or 'H'
- The Image View Detail Record is one of two records (Type 50 and Type 52) that shall be used together to convey an image view associated with the related Check Detail Record (Type 25).
- If an Image View Detail Record is present, then an Image View Data Record (Type 52) shall be present.
- FRB requires both the front image and back image of the item.
- If FRB converts the paper to image, they will create the Image View Detail Record (Type 50). If FRB receives an ICL from a depositing bank, the Image View Detail Records (Type 50) included in the ICL will be passed on to the paying bank as they were received by FRB.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Image Indicator	M	03 – 03	N	'0' indicates image view not present '1' indicates Image view is actual check	'0' indicates image view not present '1' indicates Image view is actual check
5	Image View Format Indicator	M	21 – 22	N	Allowable value is '00'	'00' indicates TIFF 6
6	Image View Compression Algorithm Identifier	M	23 – 24	N	Allowable Value is '00'	'00' indicates Group 4 Facsimile (G4)
9	View Descriptor	M	33 – 34	N	'0' indicates Full View	'0' indicates Full View
10	Digital Signature Indicator	M	35 – 35	N	'0' indicates Digital Signature is not present.	'0' indicates Digital Signature is not present.
11	Digital Signature Method	C	36 – 37	N	Spaces	Spaces
12	Security Key Size	C	38 – 42	N	Spaces	Spaces
13	Start of Protected Data	C	43 – 49	N	Spaces	Spaces
14	Length of Protected Data	C	50 – 56	N	Spaces	Spaces
15	Image Recreate Indicator	C	57 – 57	N	Indicates whether the sender has the ability to recreate the image view conveyed in the related Image View Data Record (Type 52) Image Data (Field 19)	Spaces – not used

5.14 Image View Data Record (Type 52)

- The Image View Detail Record is Mandatory when the Cash Letter Documentation Type Indicator (Field 9) in the Cash Letter Header Record (Type 10) is 'G' or 'H'
- The Image View Detail Record is one of two records (Type 50 and Type 52) that shall be used together to convey an image view associated with the related Check Detail Record (Type 25).
- If an Image View Detail Record is present, then an Image View Data Record shall be present.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
6	Security Originator Name	C	37 – 52	ANS	Spaces – not used	Spaces – not used
7	Security Authenticator Name	C	53 – 68	ANS	Spaces – not used	Spaces – not used
8	Security Key Name	C	69 – 84	ANS	Spaces – not used	Spaces – not used
9	Clipping Origin	M	85 – 85	N	'0' indicates clipping information is not present	'0' indicates clipping information is not present
10	Clipping Coordinate h1	C	86 – 89	N	Spaces	Spaces
11	Clipping Coordinate h2	C	90 – 93	N	Spaces – not used	Spaces – not used
12	Clipping Coordinate v1	C	94 – 97	N	Spaces – not used	Spaces – not used
13	Clipping Coordinate v2	C	98 – 101	N	Spaces – not used	Spaces – not used
14	Length of Image Reference Key	M	102 – 105	N	'0' indicates Image Reference Key (Field 15) is not present	'0' indicates Image Reference Key (Field 15) is not present
15	Image Reference Key	C	106 – (105+X)	ANS	Omit Field	Omit Field
16	Length of Digital Signature	M	(106+X) – (110+X)	NB	'0' indicates that a Digital Signature is not present.	'0' indicates that a Digital Signature is not present.
17	Digital Signature	C	(111+X) – (110+X+Y)	Binary	Omit Field	Omit Field

5.15 Image View Analysis Record (Type 54)

- This record is Conditional. When present, there is one Image View Analysis Record for each image view Data in the Image View Analysis Record will not be used by FRB for Image Quality Analysis and will be passed on to the receiving bank. If FRB converts the paper to image, they will create the Image View Analysis Record (Type 54). If FRB receives an ICL from a depositing bank, the Image View Analysis Records (Type 54) included in the ICL will be passed on to the paying bank as they were received by FRB. If an Image View Analysis Record indicates that an error condition is present the item will be rejected.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
2	Global Image Quality	M	03 – 03	N	'0' indicates image was not tested for image quality conditions '1' indicates image was tested and one or more image quality conditions were reported '2' indicates image was tested and no image quality conditions were reported	'0' indicates image was not tested for image quality conditions
3	Global Image Usability	M	04 – 04	N	'0' indicates image was not tested for image usability conditions '1' indicates image was tested and one or more image usability conditions were reported '2' indicates image was tested and no image usability conditions were reported	'0' indicates image was not tested for image usability conditions
4	Imaging Bank Specific Test	M	05 – 05	N	'0' indicates there are no user defined tests '1' indicates that other image conditions were tested and one or more are reported in User Field (Field 45) '2' indicates that other image conditions were tested and none are reported in User Field (Field 45)	'0' indicates there are no user defined tests
	Image Quality Information (fields 5 – 24)					
5	Partial Image	C	06 – 06	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present

6	Excessive Image Skew	C	07 – 07	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present
7	Piggyback Image	C	08 – 08	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present
8	Too Light Or Too Dark	C	09 – 09	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present
9	Streaks And Or Bands	C	10 – 10	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present
10	Below Minimum Image Size	C	11 – 11	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present
11	Exceeds Maximum Image Size	C	12 – 12	N	'0' indicates test not done '1' indicates condition present '2' indicates condition not present	'0' indicates test not done '1' indicates condition present '2' indicates condition not present
12	Reserved	C	13 – 13	N	Spaces	Spaces
13	Reserved	C	14 – 14	N	Spaces	Spaces
14	Reserved	C	15 – 15	N	Spaces	Spaces
15	Reserved	C	16 – 16	N	Spaces	Spaces
16	Reserved	C	17 – 17	N	Spaces	Spaces
17	Reserved	C	18 – 18	N	Spaces	Spaces
18	Reserved	C	19 – 19	N	Spaces	Spaces
19	Reserved	C	20 – 20	N	Spaces	Spaces
20	Reserved	C	21 – 21	N	Spaces	Spaces
21	Reserved	C	22 – 22	N	Spaces	Spaces
22	Reserved	C	23 – 23	N	Spaces	Spaces
23	Reserved	C	24 – 24	N	Spaces	Spaces
24	Reserved	C	25 – 25	N	Spaces	Spaces
	Image Usability Information (fields 25 – 44)					

25	Image-Enabled POD	C	26 – 26	N	'0' indicates it is unknown whether image was used in an image-enabled POD application '1' indicates image was not used in an image enabled POD application '2' indicates image was used in image enabled POD application	'0' indicates it is unknown whether image was used in an image-enabled POD application
26	Source Document Bad	C	27 – 27	N	'0' indicates Test not done '1' indicates Image unusable, source doc unusable '2' indicates Image unusable, source doc may be usable	'0' indicates Test not done
27	Date Usability	C	28 – 28	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
28	Payee Usability	C	29 – 29	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
29	Convenience Amount Usability	C	30 – 30	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
30	Amount in Words (Legal Amount) Usability	C	31 – 31	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
31	Signature Usability	C	32 – 32	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
32	Payor Name And Address Usability	C	33 – 33	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
33	MICR Line Usability	C	34 – 34	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable
34	Memo Line Usability	C	35 – 35	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done

35	Payor Bank Name And Address Usability	C	36 – 36	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
36	Payee Endorsement Usability	C	37 – 37	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
37	Bank Of First Deposit Endorsement Usability	C	38 – 38	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
38	Transit Endorsement Usability	C	39 – 39	N	'0' indicates Test not done '1' indicates area unusable '2' indicates area usable	'0' indicates Test not done
39	Reserved	C	40 – 40	N	Spaces	Spaces
40	Reserved	C	41 – 41	N	Spaces	Spaces
41	Reserved	C	42 – 42	N	Spaces	Spaces
42	Reserved	C	43 – 43	N	Spaces	Spaces
43	Reserved	C	44 – 44	N	Spaces	Spaces
44	Reserved	C	45 – 45	N	Spaces	Spaces
	Image Analysis User Information (field 45)					Spaces
45	User Field	C	46 – 65	ANS	Spaces	Spaces
46	Reserved	M	66 – 80	B	Spaces	Spaces

5.16   Bundle Control Record (Type 70)

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
4	MICR Valid Total Amount	C	19 – 30	N	Total US dollar value of all Check Detail Records (Type 25) which contain the Defined Value '1" in the MICR Valid Indicator	Spaces – not used

5.17   Routing Number Summary Record (Type 85)

If FRB receives a Routing Number Summary Record (Type 85) in an ICL deposit, the record will be ignored. If FRB has agreed to create this record for a receiving FI, there will be one record for each RT found in the Cash Letter.

5.18 Cash Letter Control Record (Type 90)

- This record is Mandatory. There must be one Cash Letter Record (Type 90) for each Cash Letter Header Record (Type 10). This record must be the last record in the Cash Letter.
- The data in the fields are generated by the ECE institution that created the corresponding Cash Letter Header Record.

FIELD	FIELD NAME	USAGE	POSITION	TYPE	Sent to FRB	Sent by FRB
7	Settlement Date	C	58 – 65	N	The year, month, and day that the institution that creates the cash letter expects settlement	Spaces – not used

5.19 File Control Record (Type 99)

- The File Control Record is Mandatory.
- It is the final record of an electronic exchange file.
- The data in the fields are created by the institution sending the file, the immediate origin institution.