



Securities Processing

6.07 CF2DMX: FUNCTION USER'S GUIDE

APRIL 18, 2024

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OVERVIEW

The CCF-II CF2DMX will allow Participants to send Direct Mail Agent Return (DMA) transactions to DTC. The CF2DMX function uses the format of the DMA magnetic tape system.

When using the CF2DMX function, the CCF-II User will submit DMA transactions to DTC and receive responses indicating any control errors that have been detected in those transactions. The transaction will be edited, flagging any fields that do not pass the edit criteria.

If any records are found to be invalid, the rejected record is returned with an AUDIT and a CONTROL record and the entire transmission is rejected. The status of the transmission is always known by looking at the control record.

Availability of CF2DMX

The CF2DMX function will be available from 4:00 a.m. to 2:00 p.m. (Eastern Time).

Transmitting Transactions to DTC

DTC's Computer to Computer Facility (CCF-II) is a medium for transmitting data to and from DTC. It allows a more efficient control over computer resources.

When a CCF-II User wishes to transmit data to DTC, he must prepare the request JCL as specified in this document, the *CCF-II RJE User's Guide* and the *CCF-II/NDM User's Guide*. The User then transmits the DTC-specified JCL in order to initiate a job within DTC's Computer System. The input file and summary records are edited, and any records in error will be transmitted back to the User. Valid transmissions will be processed.

File Preparation

In order to use the CF2DMX function to transmit Direct Mail Return transactions, the User must prepare one input file with the following characteristics:

- Instream data
- Record Length = 750 bytes
- 1st Record ==>PSW record (Signon/Password Record)
- 2nd Record ==> HDR Record (Header Record)
- DMA Transaction Records.
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- Last Record ==> TLR Record (Trailer Record).

Refer to the *CCF-II RJE User's Guide* and the *CCF-II/NDM User's Guide* for further transmission method details.

CF2DMX Transaction Record Descriptions

In order to facilitate the CF2DMX function, it is necessary to format the following record types:

- File Header Record (Type 00)
- Batch Header Record (Type 01)
- Security Detail Record (Type 05)
- Certificate Addendum Detail Record (Type 06)
- Batch Trailer Record (Type 88)
- File Trailer Record (Type 99).

Here are some basic rules for these record types:

| | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| File Control Records | Records transmitted by the DMA System to control the processing of transfer items. The records classified as File Control Records are: |
| 00 File Header Record | Describes the submitting and receiving institutions. |
| 01 Batch Header Record | Contains information and controls for a group of transfer items. |
| 88 Batch Trailer Record | Contains totals for each batch of transfer items. |
| 99 File Trailer Record | Contains control totals for all items on the transmission. |
| Transfer Detail Records | Records which carry the detailed information for each transfer item. Each transfer item must have two detail records: |
| 05 Security Detail Record | Which contains the information necessary for each transfer item. |
| 06 Certificate Addendum | Which contains additional details from the Record Transfer Agent. Contains denomination data and the starting certificate number. |

Examples:

The structure of a transmission is as follows:

DMA File Header Record (Type 00) 1 per Transfer Agent*

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Batch Header Record (Type 01) 1 per batch

Transfer Detail records

- Security Detail Record (Type 05)

- Certificate Addendum (Type 06)

Detail Record

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Batch Trailer Record (Type 88) 1 per batch

Batch Header Record

Transfer Detail records

- Security Detail Record
- Certificate Addendum Detail Record

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Batch Trailer Record

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DMA File Trailer Record (Type 99) 1 per Transfer Agent*

C There may be multiple batches within each transmission.

C There may be multiple sets of transfer detail records within one batch.

C There may be multiple Certificate Addendum Detail records for each Security Detail Record.

*There should be only one File Header Record and one File Trailer Record per transmission; however, in the case of a service bureau, there should be one File Header and one File Trailer for EACH of the Transfer Agents it services.

In addition, CCF-II requires the following:

C CCF-II PASSWORD RECORD

C CCF-II Header Record

C CCF-II Trailer Record

CF2DMX TRANSMISSION FORMATS

The CCF-II Signon/Password Record

The Password Record contains information regarding the eligibility of a Participant to use DTC's services.

The format of the Password Record is as follows:

| CCF-II Password Record Layout | | | | |
|-------------------------------|--------|-----------|-------------------|-------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 3 | Character | Record Identifier | Constant value "PSW". |
| 4 | 6 | Character | Signon ID | ID of Transmitting Participant. Left aligned, space filled. |
| 10 | 6 | Character | Password | DTC assigned password. |
| 16 | 6 | Character | Activity Type | Constant value "CF2DMX". |
| 22 | 3 | Numeric | Transmission ID | Non-zero value, right aligned, zero filled. |
| 25 | 876 | Character | Filler | DTC use only; do not use. |

The CCF-II Header Record

| CCF-II Header Record Layout | | | | |
|-----------------------------|--------|-----------|-------------------|---------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 3 | Character | Record Identifier | Constant value "HDR". |
| 4 | 4 | Character | Filler | DTC use only; do not use. |
| 8 | 4 | Character | SIGNON ID | ID of the transmitting Participant. |
| 12 | 6 | Numeric | Transmission Date | Format MMDDYY. |
| 18 | 6 | Character | Activity Type | Constant value "CF2DMX". |
| 24 | 3 | Numeric | Transmission ID | 3-digit numeric field, right aligned, left zero filled. |
| 27 | 1 | Character | Filler | DTC use only; do not use. |
| 28 | 1 | Character | Processing Option | P = Production T = Test |
| 29 | 710 | Character | Filler | DTC use only; do not use. |
| 739 | 6 | Character | Error Indicators | See "CCF-II Header Record Indicators" on page 42. |
| 745 | 10 | Character | Filler | DTC use only; do not use. |

CF2DMX DATA RECORDS

The TA Return File Control Records are records referred to be the CF2DMX system to control the processing of transfer items. There are four types of TA Return File Control Records. Their formats are as follows:

CF2DMX File Header Record

| CF2DMX File Header Record Type 00 (Part 1 of 4) | | | | |
|-------------------------------------------------|--------|-----------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 2 | Character | Record Type | Constant value "00". |
| 3 | 1 | Character | Sending Institution Industry Code | Currently initialized to space. |
| 4 | 4 | Numeric | Sending Institution FINS Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 111). |
| 8 | 1 | Character | Sending Institution Check Digit | Currently initialized to space. |
| 9 | 2 | Character | Sending Institution Suffix | Currently initialized to space. |
| 11 | 20 | Character | Sending Institution Name | Name of the Sending Institution. |
| 31 | 1 | Character | Receiving Institution Industry Code | Constant value "7". |
| 32 | 4 | Character | Receiving Institution Number | Constant value "0001" for DTC. |

| CF2DMX File Header Record Type 00 (Part 2 of 4) | | | | |
|-------------------------------------------------|--------|-----------|----------------------------------------|-------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 36 | 1 | Character | Receiving Institution Check Digit | Constant value "3" for DTC. |
| 37 | 2 | Character | Receiving Institution Suffix | Constant value "00" for DTC. |
| 39 | 20 | Character | Receiving Institution Name | Constant value "DEPOSITORY TRUST CO". |
| 59 | 3 | Character | Record Length | Constant value = "740". |
| 62 | 2 | Numeric | Block Factor | |
| 64 | 1 | Numeric | Format Code | |
| 62 | 3 | Character | Filler | DTC use only; do not use. |
| 65 | 6 | Character | Filler | DTC use only; do not use. |
| 71 | 4 | Character | File Creation Time | Time of DMA file creation. Format HHMM. |
| 75 | 1 | Character | DP Servicing Institution Industry Code | Currently initialized to space. |
| 76 | 4 | Character | DP Servicing Institution Number | The number of the DP Servicing Institution processing for the TA. |
| 80 | 1 | Character | DP Servicing Institution Check Digit | Currently initialized to space. |
| 81 | 2 | Character | DP Servicing Institution Suffix | Currently initialized to space. |
| 83 | 10 | Character | DP Servicing Institution Name | The name of the DP Servicing Institution processing for the TA. |

| CF2DMX File Header Record Type 00 (Part 3 of 4) | | | | |
|-------------------------------------------------|--------|-----------|--------------------------------------------|-----------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 93 | 1 | Character | Manual Servicing Institution Industry Code | Currently initialized to space. |
| 94 | 4 | Character | Manual Servicing Institution Number | |
| 98 | 1 | Character | Manual Servicing Institution Check Digit | Currently initialized to space. |
| 99 | 2 | Character | Manual Servicing Institution Suffix | Currently initialized to space. |
| 101 | 10 | Character | Manual Servicing Bureau Name | Name of Manual Servicing Bureau for the TA. |
| 111 | 8 | Numeric | Sending Institution FINS Number | The DTC Expanded Transfer Agent Number will be used. Right aligned with leading zeroes. |
| 119 | 8 | Numeric | Creation Date | Format CCYYMMDD. Date on which the DMA file was created. |
| 127 | 600 | Character | Filler | DTC use only; do not use. |

| CF2DMX File Header Record Type 00 (Part 4 of 4) | | | | |
|-------------------------------------------------|--------|-----------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 727 | 5 | Character | Sending Transfer Agent Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 4-7). |
| 732 | 3 | Character | Julian Work Date | Day on which the TA processed the item. |
| 735 | 6 | Character | Record Number | Each Sequential record is assigned a sequence number in ascending order including all "01", "05", "06", "88" and "99" records. The File Header Record ("00") contains zeroes. |
| 741 | 5 | Character | Filler | DTC use only; do not use. |
| 746 | 3 | Character | Error Indicators | See "CF2DMX File Header Record Error Indicators" on page 43. |
| 749 | 7 | Character | Filler | DTC use only; do not use. |

CF2DMX Batch Header Record

| CF2DMX Batch Header Record Type 01 (Part 1 of 3) | | | | |
|--------------------------------------------------|--------|-----------------------------|----------------------|------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 2 | Character | Record Type | Constant value "01". |
| 3 | 9 | Character | CUSIP Number | CUSIP number of the issue whose transfer details follow the Batch Header Record. |
| 12 | 20 | Character | Security Description | Name of the security whose transfer items appear in the Security Detail Records for the batch. |
| 32 | 1 | Character | Issue Type | Indicator describing type of issue: "2" = ADR "3" = Debt Issue "4" = Equity Issue. |
| 33 | 1 | Character | RECORD DATE CODE | |
| 34 | 20 | Character | SPECIAL INSTRUCTIONS | |
| 54 | 5 | Character | Filler | DTC use only; do not use. |
| 59 | 11 | Character | FIRST FILLER | |
| 70 | 1 | Character | FAST W/T Status | Indicator to identify the FAST status of a W/T: "0" = Normal "1" = FAST W/T |
| 71 | 15 | SCL Reference Block | | Following 7 fields are SCL Reference fields. |
| | 4 | Numeric | SCL Julian Date | |
| | 1 | Numeric Date Indicator | SCL Record | "0" = Record date "1" = Non record date. |
| | 1 | Character SCL Record Type | | |
| | 1 | Character SCL Type | | |
| | 5 | Numeric SCL Sequence Number | | |

| CF2DMX Batch Header Record Type 01 (Part 2 of 3) | | | | |
|--------------------------------------------------|--------|------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| | 1 | Character | SCL Check Digit | |
| | 2 | Numeric | SCL Page Number | |
| 86 | 1 | Character | MAIL ROUTE | |
| 87 | 3 | Character | BATCH NUM | |
| 90 | 6 | Character | RECEIVE DATE | |
| 96 | 8 | Numeric | Work Date | Format CCYYMMDD. Date upon which transfer item was processed by DTC. |
| 104 | 522 | Character | Filler | DTC use only; do not use. |
| 626 | 1 | Numeric | RSA/DMA Indicator | "1" = RSA "2" = DMA |
| 627 | 100 | Character | Filler | DTC use only; do not use. |
| 727 | 5 | Numeric | Transfer Agent Number | |
| 732 | 3 | Numeric | JULIAN DAY | |
| 727 | 14 | Sequence Number Block | | A record ID key which is assigned by the originating institution in association with the Work Date. The sequence number uniquely identifies each record in a file. Same format as 727-740 of "00" record. |
| | 5 | Numeric | Sending Transfer Agent Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 4-7). |
| | 3 | Character | Julian Work Date | Day on which the TA processed the item. |

| CF2DMX Batch Header Record Type 01 (Part 3 of 3) | | | | |
|--------------------------------------------------|--------|-----------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| | 6 | Character | Record Number | Each Sequential record is assigned a sequence number in ascending order including all "01", "05", "06", "88" and "99" records. The File Header Record ("00") contains zeroes. |
| 741 | 5 | Character | Filler | DTC use only; do not use. |
| 746 | 3 | Character | Error Indicators | See "CF2DMX Batch Header Record Error Indicators" on Page 44 |
| 749 | 7 | Character | Filler | DTC use only; do not use. |

CF2DMX Batch Trailer Record

| CF2DMX Batch Trailer Record Type 88 (Part 1 of 3) | | | | |
|---------------------------------------------------|--------|-----------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 2 | Character | Record Type | Constant value "88". |
| 3 | 7 | Character | Filler | DTC use only; do not use. |
| 10 | 7 | Character | Detail Record Count | Count of total number of Security Detail and, Addendum records (Types "05" and "06") contained in the batch. |
| 17 | 14 | Character | Filler | DTC use only; do not use. |
| 31 | 15 | Character | Entry Hash Total | Accumulation of sequence numbers for all transfer detail records ("05", "06") within the batch. All "88" records (position 31-45) are added to form the "99" record Entry Hash Total. |
| 46 | 1 | Character | SCL ID End | "0" = CUSIP number of next record will not change. "1" = End of CUSIP number. |
| 47 | 22 | Character | Filler | DTC use only; do not use. |
| 69 | 1 | Character | End of CUSIP Indicator | "0" = Another batch follows for this security. "1" = Last batch for this security. |
| 70 | 18 | Character | Filler | DTC use only; do not use. |
| 88 | 12 | Numeric | Whole/ Fractional Debit Share Quantity | Format 9(7)V9(5). |

| CF2DMX Batch Trailer Record Type 88 (Part 2 of 3) | | | | |
|---------------------------------------------------|--------|----------------------------|--------------------------------------------------|----------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 100 | 12 | Numeric | Whole/ Fractional Credit Share Quantity | Format 9(7)V9(5). |
| 112 | 16 | Character | Filler | DTC use only; do not use. |
| 128 | 16 | Numeric | Whole/ Fractional Credit Share Quantity Overflow | Format 9(11)V9(5). |
| 144 | 568 | Character | Filler | DTC use only; do not use. |
| 712 | 15 | SCL Reference Block | | Following 7 fields are SCL Reference fields. |
| | 4 | Character | SCL Julian Date | |
| | 1 | Character | SCL Record Date Indicator | "0" = Record date "1" = Non record date. |
| | 1 | Character | SCL Record Type | |
| | 1 | Character | SCL Type | |
| | 5 | Character | SCL Sequence Number | |
| | 1 | Character | SCL Check Digit | |
| | 2 | Character | SCL Page Number | |

| CF2DMX Batch Trailer Record Type 88 (Part 3 of 3) | | | | |
|---------------------------------------------------|--------|-----------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 727 | 14 | Sequence | Number Block | A record ID key which is assigned by the originating institution in association with the Work Date. The sequence number uniquely identifies each record in a file. Same format as 727-740 of "00" record. |
| | | | | |
| | 5 | Character | Sending Transfer Agent Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 4-7). |
| | 3 | Character | Julian Work Date | Day on which the TA processed the item. |
| | 6 | Character | Record Number | Each Sequential record is assigned a sequence number in ascending order including all "01", "05", "06", "88" and "99" records. The File Header Record ("00") contains zeroes. |
| 741 | 6 | Character | Error Indicators | See "CF2DMX Batch Trailer Record Error Indicators" on Page 47. |
| 747 | 4 | Character | Filler | DTC use only; do not use. |

CF2DMX File Trailer Record

| CF2DMX File Trailer Record Type 99 (Part 1 of 2) | | | | |
|--------------------------------------------------|--------|-----------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 2 | Character | Record Type | Constant value "99". |
| 3 | 7 | Character | Batch Count | Count of the total number of batches contained on the file. |
| 10 | 7 | Character | Detail Record Count | Count of total number of Security Detail and Addendum records (Types "05" and "06") contained in the file. |
| 17 | 7 | Character | Filler | DTC use only; do not use. |
| 24 | 7 | Character | Filler | DTC use only; do not use |
| 31 | 15 | Character | Entry Hash Total | Accumulation of sequence numbers for all transfer detail records within the file. |
| 46 | 42 | Character | Filler | DTC use only; do not use. |
| 88 | 12 | Numeric | Whole/ Fractional Debit Share Quantity | Format 9(7)V9(5). |
| 100 | 12 | Numeric | Whole/ Fractional Credit Share Quantity | Format 9(7)V9(5). |
| 112 | 16 | Character | Filler | DTC use only; do not use. |
| 128 | 16 | Numeric | Whole/ Fractional Credit Share Quantity Overflow | Format 9(11)V9(5). |
| 144 | 583 | Character | Filler | DTC use only; do not use. |

| CF2DMX File Trailer Record Type 99 (Part 2 of 2) | | | | |
|--------------------------------------------------|--------|------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 727 | 14 | Sequence Number Block | | A record ID key which is assigned by the originating institution in association with the Work Date. The sequence number uniquely identifies each record in a file. Same format as 727-740 of "00" record. |
| | 5 | Character | Sending Transfer Agent Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 4-7). |
| | 3 | Character | Julian Work Date | Day on which the TA processed the item. |
| | 6 | Character | Record Number | Each Sequential record is assigned a sequence number in ascending order including all "01", "05", "06", "88" and "99" records. The File Header Record ("00") contains zeroes. |
| 741 | 2 | Character | Filler | DTC use only; do not use. |
| 741 | 7 | Character | Error Indicators | See "CF2DMX File Trailer Record Error Indicators" on page 48. |
| 748 | 3 | Character | Filler | DTC use only; do not use. |

CF2DMX Security Detail Record

| CF2DMX Security Detail Record Type 05 (Part 1 of 11) | | | | |
|------------------------------------------------------|--------|-----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 2 | Character | Record Type | Constant value "05". |
| 3 | 1 | Character | Broker Industry Code | Currently initialized to space. |
| 4 | 4 | Numeric | Broker Participant Number | |
| 8 | 1 | Character | Broker Check Digit | Currently initialized to space. |
| 9 | 2 | Character | Broker Suffix | Currently initialized to space. |
| 11 | 8 | Numeric | Transaction Date | Format CCYYMMDD. Date which transaction was sent by broker to DTC for transfer processing. |
| 19 | 1 | Character | Direct Registration System Request Indicator | " " = Non DRS Request "S" = Statement Account for DRS "C" = Issue Certificate "Y" = Third Party Transfer. |
| 20 | 1 | Character | Depository Indicator | "D" = DTC "P" = Philadelphia. |
| 21 | 2 | Character | Filler | For DTC use only; do not use. |
| 23 | 1 | Character | Tax Waiver Code | Indicator which shows the tax status of this transfer according to New York State statute: "2" = Tax paid (future use) "3" = Tax waived. |

| CF2DMX Security Detail Record Type 05 (Part 2 of 11) | | | | |
|------------------------------------------------------|--------|-----------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 24 | 1 | Character | Taxpayer ID Code | Type of taxpayer ID shown in this record: "0" = Not available "1" = Social Security Number "2" = Employer Identification Number "3" = Non-resident alien (in the form NRAbbbbbb, where bbbbbbb stands for blanks). |
| 25 | 9 | Character | Taxpayer ID Code | The number (as defined in previous field) of the primary owner of the securities described in this transfer code. If Taxpayer ID Code = "3", owner is not subject to backup |

| CF2DMX Security Detail Record Type 05 (Part 3 of 11) | | | | |
|----------------------------------------------------------------------------------------|--------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 34 | 2 | Character | Social Code | <p>Defines the type of registration to be used for the security by the Transfer Agent. This code is set by the RSA system during processing:</p> <p>"00" = Unknown. "01" = Single Registrant - Male. "02" = Single Registrant - Female. "03" = Individual – Sex Undetermined. "04" = Tenants in Common. "05" = Tenants by the Entireties. "06" = Joint Tenancy. "07" = Community Property. "08" = Uniform Gifts to Minors. "09" = Fiduciary. "10" = Business.</p> |
| The following field has multiple definitions dependent on transaction indicated | | | | |
| For Regular W/T Transactions | | | | |
| 36 | 40 | Character | Broker Reference | A free format identification number which is assigned by the submitting broker to identify this transfer item. It should be used in any correspondence to the submitting institution concerning the item. |
| For DRS Items ONLY | | | | |
| 36 | 37 | Character | DRS Broker/Dealer Customer Account Number | For DRS items, this field will be used for the DRS Broker/Dealer customer account number instead of the broker reference number. |

| CF2DMX Security Detail Record Type 05 (Part 4 of 11) | | | | |
|------------------------------------------------------|--------|-----------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 73 | 3 | Character | Filler | For DTC use only; do not use. |
| 76 | 10 | Numeric | RECORD-VALUE | |
| 86 | 1 | Character | CEDE ID | |
| 87 | 2 | Character | FIRST FILLER | |
| 89 | 4 | Numeric | BROKER ID EXT | |
| 93 | 2 | Character | Transfer Transaction Code | "30" = Credit (Transfer Instructions). Defines type of transfer processing requested. |
| 95 | 2 | Character | DMA Return Code | <p>For returned items, reason why item was rejected by the processing institution:</p> <p>"00" = Transfer completed.</p> <p>"01" = Incomplete registration.</p> <p>"02" = Trust registration incomplete/ unacceptable.</p> <p>"03" = Address incomplete.</p> <p>"99" = TA rejected (other).</p> <hr/> <p>Note:</p> <p>If a code 99 is used here, see "06" record position 483.</p> <hr/> |
| 97 | 1 | Character | Filler | DTC use only; do not use. |
| 98 | 1 | Character | DMA Direct Mailing Code | <p>Defines procedure which will be used for returning the transferred securities to the registered owner.</p> <p>Blank or "0" =non-DMA</p> <p>"1" = DMA using registration for mailing.</p> <p>"2" = DMA using third party address.</p> |

| CF2DMX Security Detail Record Type 05 (Part 5 of 11) | | | | |
|------------------------------------------------------|--------|-----------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 99 | 45 | Character | Assignment Indicators | <p>A set of 15 three-byte fields for assignments which point to the following items:</p> <ol style="list-style-type: none"> 1. First name or initial of the first registrant. 2. Last name, including prefix if present, of the first registrant. 3. Length of the last name of the first registrant. 4. First name or initial of the second registrant. 5. Last name, including prefix, of the second registrant. 6. Length of the last name of the second registrant. 7. First name or initial of the third registrant. 8. Last name, including prefix, of the third registrant. 9. Length of the last name of the third registrant. 10. Starting position of the "In Care Of" phrase. 11. Starting position of the postal address. 12. Starting position of the city/town. 13. Starting position of the standard postal state abbreviation. 14. Starting position of zip code. 15. Reserved Indicators not used are zero filled. <p>Indicators not used are zero filled.</p> |
| 144 | 1 | Character | Syntax Code | <p>"1" = Formatted record "2" = Unformatted record.</p> |

| CF2DMX Security Detail Record Type 05 (Part 6 of 11) | | | | |
|------------------------------------------------------|--------|-----------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 145 | 210 | Character | Assignment | <p>If Syntax Code (pos 144) = "1", the Assignment field will be 7 lines of 30 characters each because it has been processed by DTC's RSA program.</p> <p>If Syntax Code (pos 144) = "2", the Assignment field will be 6 lines of 35 characters each (the format in which DTC received the input from a DTC Participant) because the RSA program could not reformat the item.</p> |
| 355 | 180 | Character | DMA Third Party Mailing | When Direct Mailing Code (pos 98) = "2", this field contains address to which transferred securities are mailed. |
| 535 | 9 | Character | Reinvestment CUSIP Number | |
| 544 | 1 | Character | Participant Input Mode | <p>"1" = Four Phase System</p> <p>"2" = PTS (Participant Terminal System)</p> <p>"3" = Tape, CF2, Mohawk.</p> |
| 545 | 1 | Character | Security Communication Code | <p>"0" = Not a communication issue</p> <p>"1" = Communication issue.</p> |
| 546 | 1 | Character | FAST Security Code | <p>"0" = Non-FAST Security</p> <p>"1" = FAST Security.</p> |

| CF2DMX Security Detail Record Type 05 (Part 7 of 11) | | | | |
|------------------------------------------------------|--------|-----------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 547 | 1 | Character | TEFRA CODE | Blank =not applicable "A" = Failure to provide TIN. "B" = Failure to certify TIN. "C" = Notification of incorrect TIN to Secretary of Treasury. "D" = Failure to certify backup withholding status. "E" = Voluntary disclosure from payee of affirmative backup withholding status. "F" = Notification to commence backup withholding from Secretary of Treasury for under reporting dividends and/ or interest payments. |
| 548 | 1 | Character | Partial process | |
| 549 | 1 | Character | Filler | DTC use only; do not use. |
| 550 | 5 | Character | DMA Item Charge by the TA | Format 9(3)V9(2). |
| 555 | 5 | Character | DMA Other Charge by the TA | Format 9(3)V9(2). |
| 560 | 5 | Character | Filler | DTC use only; do not use. |
| 565 | 12 | Numeric | Whole/ Fractional Share Quantity | Format 9(7)V9(5). |
| 577 | 40 | Character | DRS Participant Correspond- ent Name | For DRS transactions. |

| CF2DMX Security Detail Record Type 05 (Part 8 of 11) | | | | |
|------------------------------------------------------|--------|----------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 617 | 20 | Character | DRS Plan Customer Account Number | For DRS items, this field will contain the DRS Plan Customer Account Number. |
| 637 | 65 | Character | Filler | DTC use only; do not use. |
| 702 | 15 | SCL Reference Block | | Following 7 fields are SCL Reference fields. |
| | 4 | Character | SCL Julian Date | |
| | 1 | Character | SCL Record Date Indicator | "0" = Record date "1" = Non record date. |
| | 1 | Character | SCL Record Type | |
| | 1 | Character | SCL Type | |
| | 5 | Character | SCL Sequence Number | |
| | 1 | Character | SCL Check Digit | |
| | 2 | Character | SCL Page Number | |
| 717 | 1 | Character | UIT Reinvestment Code | "0" = Not applicable for UIT "1" = All Cash "2" = Reinvest Principal and Interest "4" = Reinvest Principal Only "5" = Reinvest Interest Only. |
| 718 | 9 | Character | CUSIP Number | |

| CF2DMX Security Detail Record Type 05 (Part 9 of 11) | | | | |
|------------------------------------------------------|--------|------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 727 | 14 | Sequence Number Block | | A record ID key which is assigned by the originating institution in association with the Work Date. The sequence number uniquely identifies each record in a file. Same format as 727-740 of "00" record. |
| | 5 | Character | Sending Transfer Agent Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 4-7). |
| | 3 | Character | Julian Work Date | Day on which the TA processed the item. |
| | 6 | Character | Record Number | Each Sequential record is assigned a sequence number in ascending order including all "01", "05", "06", "88" and "99" records. The File Header Record ("00") contains zeroes. |
| 741 | 4 | Character | Error Indicators | See "CF2DMX Security Detail Record Error Indicators" on page 45. |
| 745 | 6 | Character | Filler | DTC use only; do not use. |

CF2DMX Certificate Addendum Record

| CF2DMX Certificate Addendum Record Type 06 (Part 1 of 3) | | | | |
|----------------------------------------------------------|--------|----------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 2 | Numeric | Record Type | Constant value "06". |
| 3 | 1 | Character | Filler | DTC use only; do not use. |
| 4 | 560 | Character | DMA Number of Pieces | A group of up to 20 occurrences of a twenty-eight-position field describing the requested certificates requested by the transaction. The format is as follows: Number of certificates (3) Certificate denomination/ fractional (format 9(7)V9(5)). Starting Certificate Number: Certificate prefix (5) Certificate number (6) Certificate suffix (2). |
| 564 | 8 | Character | DMA Issue Date | This field has multiple definitions: <u>DMA Issue Date (for Regular W/T Transactions)</u> Format CCYMMDD. <u>Issue Date (for DRS items)</u> For DRS indicators "S" or "Y", the Issue Date field must be provided. Format CCYMMDD. |
| 572 | 8 | Character | DMA Mail Date | Format CCYMMDD. |
| 580 | 3 | Character | Filler | DTC use only; do not use. |
| 583 | 120 | Character | Rejection Explanation | If applicable. Note: if code "99" appears in position 95 of the "05" record, an explanation of the reject will appear here. |
| 703 | 15 | SCL Reference Block | | Following 7 fields are SCL Reference fields. |

| CF2DMX Certificate Addendum Record Type 06 (Part 2 of 3) | | | | |
|----------------------------------------------------------|--------|------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| | 4 | Numeric | SCL Julian Date | |
| | 1 | Numeric | SCL Record Date Indicator | "0" = Record date "1" = Non record date. |
| | 1 | Character | SCL Record Type | |
| | 1 | Character | SCL Type | |
| | 5 | Numeric | SCL Sequence Number | |
| | 1 | Character | SCL Check Digit | |
| | 2 | Numeric | SCL Page Number | |
| 718 | 9 | Numeric | CUSIP Number | |
| 727 | 14 | Sequence Number Block | | A record ID key which is assigned by the originating institution in association with the Work Date. The sequence number uniquely identifies each record in a file. Same format as 727-740 of "00" record. |
| | 5 | Character | Sending Transfer Agent Number | The Sending Transfer Agent Number will be used. Must be last 4 characters of 8 character Expanded TA Number (see Pos 4-7). |

| CF2DMX Certificate Addendum Record Type 06 (Part 3 of 3) | | | | |
|----------------------------------------------------------|--------|-----------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| | 3 | Character | Julian Work Date | Day on which the TA processed the item. |
| | 6 | Character | Record Number | Each Sequential record is assigned a sequence number in ascending order including all "01", "05", "06", "88" and "99" records. The File Header Record ("00") contains zeroes. |
| 741 | 4 | Character | Error Indicators | See "CF2DMX Certificate Addendum Record Error Indicators" on page 46. |
| 745 | 6 | Character | Filler | DTC use only; do not use. |

CF2DMX Trailer Record

| CF2DMX Trailer Record | | | | |
|-----------------------|--------|-----------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 3 | Character | Record Identifier | Constant value "TLR". |
| 4 | 4 | Character | Filler | DTC use only; do not use. |
| 8 | 4 | Character | Signon ID | Of transmitting agent. |
| 12 | 6 | Character | Activity Type | Constant value "CF2DMX". |
| 18 | 3 | Numeric | Transmission ID | Must be equal to the 3 digit numeric field on the CCF-II Header Record. Right aligned and zero filled. |
| 21 | 2 | Character | Filler | DTC use only; do not use. |
| 23 | 9 | Numeric | Total Record Count | Right-aligned and zero filled. total number of 750-byte CF2DMX records in the transmission excluding CCF-II PSW, header and trailer. |
| 32 | 703 | Character | Filler | DTC use only; do not use. |
| 735 | 6 | Character | Error Indicators | See "CCF-II Trailer Error Record Indicators" on page 49. |
| 741 | 10 | Character | Filler | DTC use only; do not use. |

CF2DMX TRANSMISSION RESPONSE

After CF2DMX transmissions are processed by DTC, an acknowledgment consisting of control totals of transactions processed and rejected are transmitted to the User. An Error Record is sent if the function or password is invalid or ineligible. Otherwise, a Control Record and an Audit Record are sent.

If errors are found in the transactions, one of the following actions will be taken depending upon the error's severity:

- Error:
- Header or Trailer Record is missing or invalid.
 - Trailer Record control totals do not match totals of records processed.
 - Invalid field or fields in detail record.
- Action:
- Entire transmission is rejected.
 - Rejected record(s) is/are returned along with Control and Audit Records.

If the entire transmission is rejected, the records transmitted to the User will be the following:

Control Record

Rejected Record(s) (EXCEPT "PSW" Record)

.
.
.

Audit Record

Note:

The initial "PSW" record is not returned to the Participant for security purposes. If a "PSW" record is embedded within the body of the file, it is treated as an invalid Detail Record and returned with the password field populated with asterisks for security.

If the transmission is accepted, the records transmitted to the User will be the following:

Control Record

Audit Record

The Control Record will contain a transmission status number, indicating the status of the transmission (See "Control Record Transmission Status Codes on page 50 for codes and their meanings).

The Audit Record will contain the total record count which DTC accepted for processing.

All transactions submitted will be checked for validity. Rejected records on the Error/Control File transmitted to the User will have a series of indicators placed in the records. Each indicator corresponds to a field in the record. A zero in the indicator means the field is valid. A number in the indicator represents a particular error which was detected. If the record identifier is incorrect, the record will be edited as if it were a Detail Record and returned to the User.

CCF-II CONTROL RECORD FORMAT

The Control Record contains information regarding the status of the transmission and the number of error records within the transmission.

| CF2DMX Control Record (Part 1 of 3) | | | | |
|-------------------------------------|--------|-----------|-------------------|----------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 3 | Character | Record Identifier | Constant value "CTL". |
| 4 | 4 | Character | Filler | DTC use only; do not use. |
| 8 | 4 | Character | Signon ID | Of transmitting Participant; Left aligned, space-filled. |
| 12 | 5 | Character | Filler | DTC use only; do not use. |
| 17 | 3 | Character | CONSTANT | Constant value "DTC". |
| 20 | 6 | Numeric | Process Date | Date transaction was processed through CF2DMX system. |
| 26 | 6 | Character | Activity Type | Constant value "CF2DMX". |
| 32 | 3 | Numeric | Transmission ID | Must be equal to the 3-digit numeric field on the Header Record; right aligned, zero filled. |
| 35 | 1 | Character | Filler | DTC use only; do not use. |
| 36 | 1 | Character | Processing Option | P = Production T = Test |

| CF2DMX Control Record (Part 2 of 3) | | | | |
|-------------------------------------|--------|---------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 37 | 3 | Numeric | Processing Status | <p>"000" = Transmission Accepted.</p> <p>"100" = Transmission Rejected (Invalid DMA Detail Records).</p> <p>"200" = Transmission Rejected (Invalid or missing DMA File Header).</p> <p>"250" = Transmission Rejected (Invalid or missing DMA File Trailer).</p> <p>"300" = Transmission Rejected (Invalid or missing DMA Batch Header).</p> <p>"400" = Transmission Rejected (Invalid or missing DMA Batch Trailer).</p> <p>"420" = Transmission Rejected (Invalid or missing DMA Security Detail).</p> <p>"430" = Transmission Rejected (Invalid or missing DMA Certificate Addendum).</p> <p>"444" = Transmission Rejected (No file received).</p> <p>"555" = Transmission Rejected (Past cutoff).</p> <p>"600" = Transmission Rejected (Invalid record identifier).</p> <p>"666" = Transmission Rejected (Function not available).</p> <p>"700" = Transmission Rejected (Accumulated CCF-II Trailer total invalid).</p> <p>"800" = Transmission Rejected (No CCF-II Trailer).</p> <p>"888" = Transmission Rejected (CCF-II Trailer invalid).</p> <p>"900" = Transmission Rejected (No CCF-II Header).</p> <p>"999" = Transmission Rejected (CCF-II Header invalid).</p> |

| CF2DMX Control Record (Part 3 of 3) | | | | |
|-------------------------------------|--------|-----------|----------------|-------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 40 | 5 | Numeric | Error Count | Total number of records returned due to errors. |
| 45 | 6 | Numeric | Time Arrived | Time record was received. Format HHMMSS. |
| 51 | 6 | Numeric | Time Completed | Time transmission was completed. Format HHMMSS. |
| 57 | 694 | Character | Filler | DTC use only; do not use. |

CCF-II AUDIT RECORD FORMAT

The Control Record contains information regarding the status of the transmission. It is sent regardless of the number of errors (if any) in the transmission.

| CF2DMX Audit Record (Part 1 of 2) | | | | |
|-----------------------------------|--------|-----------|-----------------------|----------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 3 | Character | Record ID | Constant value "ADT". |
| 4 | 4 | Character | Filler | DTC use only; do not use. |
| 8 | 4 | Character | Signon ID | Of transmitting Participant; Left aligned, space-filled. |
| 12 | 6 | Character | Activity Type | Constant value "CF2DMX". |
| 18 | 3 | Numeric | Transmission ID | Must be equal to the 3-digit numeric field on the Header Record; right aligned, zero filled. |
| 21 | 2 | Character | Filler | DTC use only; do not use. |
| 23 | 9 | Numeric | Total Valid Records | Counter of all valid DMX records transmitted. |
| 32 | 10 | Character | Filler | DTC use only; do not use. |
| 42 | 5 | Numeric | Total Invalid Records | Counter of all invalid DMX records transmitted. |
| 47 | 10 | Character | Filler | DTC use only; do not use. |
| 57 | 7 | Numeric | Total Shares | Counter of all DMX credit shares transmitted. |
| 64 | 10 | Character | Filler | DTC use only; do not use. |

| CF2DMX Audit Record (Part 2 of 2) | | | | |
|-----------------------------------|--------|-----------|---------------|-------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 74 | 15 | Numeric | Total Dollars | Counter of all DMA Hash Totals (dollars) transmitted. |
| 89 | 657 | Character | Filler | DTC use only; do not use. |

CF2DMX ERROR INDICATORS

Each item, in each record type edited, can have more than one possible Error Indicator. These Error Indicators will be explained, item by item, until each item in the record has been clarified.

NOTE:

If a "PSW" record is embedded within the body of a input file, it will be treated as an invalid Detail Record and returned with the password field populated with asterisks for security purposes.

CCF-II Header Record Error Indicators

| CCF-II Header Record Error Indicators | | |
|---------------------------------------|-------|--------------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 739 | 0 | Filler. |
| 740 | 0 | Valid. |
| | 1 | Sign On ID does not match JCL Sign On ID. |
| 741 | 0 | Valid. |
| | 1 | Transaction Date not numeric. |
| | 2 | Transaction Date does not match the current date. |
| 742 | 0 | Valid. |
| | 1 | Activity Type not equal to "CF2DMX". |
| 743 | 0 | Valid. |
| | 1 | Transmission ID not numeric. |
| | 2 | Transmission ID does not fall between 1 and 999. |
| | 3 | Transmission ID is a duplicate. |
| | 4 | Transmission ID does not match Transmission ID used on the JCL. |
| 744 | 0 | Valid. |
| | 1 | Processing option does not equal one of the following: P = Production T = Test |
| | 1 | Production transmission past cutoff time. |

| CF2DMX File Header Record Error Indicators | | |
|--------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 746 | 0 | Filler. |
| | 0 | Valid. |
| 747 | 1 | The previous record was not one of the following: CF2DMX Header Record File Trailer Record (in the case of a service bureau). |
| | 0 | Valid. |
| | 1 | Sequence Number not numeric. |
| 748 | 2 | Sequence Number does not equal "00". |

CF2DMX Batch Header Record Error Indicators

| CF2DMX Batch Header Record Error Indicators | | |
|---------------------------------------------|-------|--------------------------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 746 | 0 | Filler. |
| 747 | 01 | Valid. |
| | 1 | The previous record was not one of the following: File Header Record Batch Trailer Record. |
| 748 | 0 | Valid. |
| | 1 | Sequence Number is not numeric. |
| | 2 | Sequence Number error. |

CF2DMX Security Detail Record Error Indicators

| CF2DMX Security Detail Record Error Indicators | | |
|------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 746 | 0 | Filler. |
| 747 | 0 | Valid. |
| | 1 | The previous record was not one of the following: Certificate Addendum Record Batch Header Record. |
| 748 | 0 | Valid. |
| | 1 | Sequence Number is not numeric. |
| | 2 | Sequence Number error. |
| 749 | 1 | Valid. |
| | 2 | Participant not eligible for processing at DTC. |
| | 3 | Participant not eligible for DRS processing. |

CF2DMX Certificate Addendum Record Error Indicators

| CF2DMX Certificate Addendum Record Error Indicators | | |
|-----------------------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 745 | 0 | Filler. |
| 746 | 0 | Valid. |
| | 1 | The previous record was not one of the following: Security Detail Record Certificate Addendum Record. |
| 747 | 0 | Valid. |
| | 1 | Sequence Number is not numeric. |
| | 2 | Sequence Number error. |
| 748 | 0 | Valid. |
| | 1 | The previous record received was a Security Detail Record ("05"), and the "05" record was a general reject (return code of "99" in bytes 95-96 of "05" record) and reject reason is equal to SPACES (position 483 for 120 bytes in "06" record). |

CF2DMX Batch Trailer Record Error Indicators

| CF2DMX Batch Trailer Record Error Indicators | | |
|----------------------------------------------|-------|---------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 743 | 0 | Filler. |
| 744 | 0 | Valid. |
| | 1 | The previous record was not a Certificate Addendum Record. |
| 745 | 0 | Valid. |
| | 1 | Sequence Number is not numeric. |
| | 2 | Sequence Number error. |
| 746 | 0 | Valid. |
| | 1 | Number of detail items is not numeric. |
| 747 | 0 | Valid. |
| | 1 | Batch Trailer hash total is not numeric. |
| | 2 | Batch Trailer hash total not equal to DTC's accumulated hash totals. |
| 748 | 0 | Valid. |
| | 1 | Total overflow credit shares is not numeric. |
| | 2 | Total overflow credit shares not equal to DTC's accumulated batch share totals. |

CF2DMX File Trailer Record Error Indicators

| CF2DMX File Trailer Record Error Indicators | | |
|---------------------------------------------|-------|----------------------------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 743 | 0 | Filler. |
| 744 | 0 | Valid. |
| | 1 | The previous record was not a Batch Trailer Record. |
| 745 | 0 | Valid. |
| | 1 | Sequence Number is not numeric. |
| | 2 | Sequence Number error. |
| 746 | 0 | Valid. |
| | 1 | Number of batch items is not numeric. |
| 747 | 0 | Valid. |
| | 1 | Number of detail items is not numeric. |
| 748 | 0 | Valid. |
| | 1 | File Trailer hash total is not numeric. |
| | 2 | File Trailer hash total not equal to DTC's accumulated hash totals. |
| 749 | 0 | Valid. |
| | 1 | Total overflow credit shares is not numeric. |
| | 2 | Total overflow credit shares not equal to DTC's accumulated file trailer share totals. |

CCF-II Trailer Record Error Indicators

| CCF-II Trailer Record Error Indicators | | |
|----------------------------------------|-------|------------------------------------------------------------------|
| Position | Value | Explanation of Value |
| 735 | 0 | Filler. |
| 736 | 0 | Valid. |
| | 1 | Sign On ID does not match JCL Sign On ID. |
| 737 | 0 | Valid. |
| | 1 | Activity Type not equal "CF2DMX". |
| 738 | 0 | Valid. |
| | 1 | Transmission ID not numeric. |
| | 2 | Transmission ID does not match Transmission ID used on the JCL. |
| 739 | 0 | Valid. |
| | 1 | Total DMA Record Count is not numeric. |
| | 2 | Total DMA Record Count does not match the number of DMA Records. |
| 740 | 0 | Valid. |
| | 1 | Transmission completed past cutoff time. |

CONTROL RECORD TRANSMISSION STATUS CODES

The Control Record sent to the User will contain a Transmission Status Code, which represents the transmission status found during processing.

The codes are as follows:

- 000 Transmission Accepted.
- 100 Invalid DMA Detail Records.
- 200 Invalid or missing DMA File Header.
- 250 Invalid or missing DMA File Trailer.
- 300 Invalid or missing DMA Batch Header.
- 400 Invalid or missing DMA Batch Trailer.
- 420 Invalid or missing DMA Security Detail.
- 430 Invalid or missing DMA Certificate Addendum.
- 444 No file transmitted/received.
- 555 After processing cutoff time.
- 600 Invalid record identifier.
- 666 Function temporarily not available.
- 700 DMA transaction count specified on CCF-II Trailer Record does not match program count.
- 800 CCF-II Trailer Record missing.
- 888 CCF-II Trailer Record invalid.
- 900 CCF-II Header Record missing.
- 999 CCF-II Header Record invalid.

Transmission status codes with a value higher than zero will cause all transmitted records to be rejected.

DATA RECORDS

In the event of an error during transmission or processing, the following records will be transmitted, indicating the problem encountered in positions 37-39.

| Error Message Output Records | | | | |
|------------------------------|--------|-----------|-------------------|----------------------------------------------------------------------------------------------------------------------|
| Position | Length | Format | Field Name | Field Description |
| 1 | 3 | Character | Record ID | Constant value "ERR". |
| 4 | 8 | Character | Signon ID | Right aligned, left zero filled. |
| 12 | 8 | Character | Filler | DTC use only; do not use. |
| 20 | 6 | Character | Processing Date | |
| 26 | 6 | Character | Function Name | Constant value "CF2DMX". |
| 32 | 3 | Character | Transmission ID | |
| 35 | 2 | Character | Filler | DTC use only; do not use. |
| 37 | 3 | Numeric | Error Status | "150" = 80-byte card image sequence error (RJE only) "222" = Invalid password "333" = Ineligible for function. |
| 40 | 5 | Numeric | Filler | DTC use only. Must be initialized to zeroes. |
| 45 | 6 | Numeric | Transmission Time | Time transmission arrived. |
| 51 | 6 | Numeric | Error Step Time | Time error message step completed. |
| 57 | 24 | Character | Error Description | Description of error. |

CONDITIONS FOR CANCELLATION OF AN ENTIRE TRANSMISSION

The following conditions will cause the entire CF2DMX transmission to be canceled:

- Control errors were detected during the transmission
- Invalid record length is transmitted to DTC.
- Participant number on Transaction Data Record is not eligible either as a User or service bureau for the Participant.
- Missing or embedded DMA Header Record.
- Missing or embedded DMA Trailer Record.
- Missing or embedded CCF-II Header Record.
- Missing or embedded CCF-II Trailer Record.
- Total record count or share quantity field on Trailer Record is miscalculated or non-numeric.

Conditions for Rejection of Specific Detail Records

The following conditions will result in the rejection of Detail Records, which will, in turn, cause the transmission to be rejected:

- Participant Number is not numeric.
- Participant fields are out of sequence.
- Detail Record is out of sequence.

CUTOFF TIMES

Transmissions of CF2DMX transactions will be accepted from 4:00 a.m. until 2:00 p.m. (Eastern Time) daily. test CF2DMX transmissions (Processing Option = "T" in the CCF-II Header Record) will be accepted during PTS operating hours. In no event will DMA transactions be accepted after the cutoff times specified above.

Should the cutoff time be reached during a transmission, that transmission WILL NOT be accepted.

RECOVERY PROCEDURES

Restart capability is available for CF2DMX Users. Details of the procedures to be followed in the event that RESTART is necessary are provided in the *CCF-II SYSTEM User's Guide* in the section entitled "Recovery/Restart Procedures".

BACKUP FOR CCF-II

If, for any reason, a User is unable to use CCF-II to enter his transactions as scheduled, DTC Network Operations should be notified immediately.

If the User is not able to enter his DMA transactions via CCF-II because of modem or telephone line equipment failures at his site, the User has the following option:

Create a tape in the format of DMAR transactions and bring it to DTC via messenger. Tape should be:

Non-Labeled

1600 or 6250 BPI

RECFM = FB

LRECL = 80 (for RJE) 750 (for NDM, SNA)

BLKSIZE = Efficient Block Size

DTC will input the transactions from the tape and return it to the User.

Participants that, in an emergency, will not be able to deliver a magnetic tape to DTC via messenger before 2:00 p.m. for CF2DMX, are responsible for making other arrangements for backup in case of modem or telephone equipment failures.

Participants should realize that when using CCF-II to input transactions to DTC, they are bound by computer and data communications equipment availability at their site. DTC cannot afford to delay its entire processing cycle in order to accommodate equipment failures at any Participant site. It is strongly recommended that all CF2DMX Users maintain redundant CCF-II equipment (computers, communications controllers, etc.).

DTC will, in no event, accept any responsibility for a Participant's inability to enter CF2DMX transactions.

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