CCF/CCF-II/MDH Transmission Guides

8.19 CF2DAR:
Function User's Guide

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1.0   CCF-II Summary

DTC's Computer Communication Facility II (CCF-II) is a medium enabling the transmission of data back and forth between the Depository Trust Company and its Participants/Users. The user transmits data to DTC (the Transmission file), then receives data in reply from DTC (the Acknowledgement file).

CCF-II transmissions to and from DTC utilize either:

• IBM's Remote Job Entry (RJE) software(3780 protocol); or

• IBM's Remote Job Entry/System Network Architecture (RJE/SNA) software (3780 protocol);

or

• Sterling Software's Network Data Mover (NDM) software.

In order for a CCF-II user to transmit data to DTC, s/he must prepare an input file of data in the DTC-specified format. The user then executes either RJE.   RJE/SNA- or NDM-based JCL to initiate communications with DTC's computer system.

After the transmission completes, DTC will edit the input Transmission file and return an Acknowledgement file to the user, indicating the status of the transmission and any errors that were detected in the transmitted data.

This document discusses all aspects of transmission via DTC's Computer Communication Facility II (CCF-II).

1.1   Transmitting Data To DTC

When a CCF-II user wishes to transmit data to DTC, s/he must prepare JCL as specified in either the RJE AND RJE/SNA ENVIRONMENTS VIA CCF II FUNCTION USER GUIDE OR NETWORK DATA MOVER VIA CCF II FUNCTION USERS' GUIDE

For a more complete understanding of specific JCL requirements, the RJE and RJE/SNA, or NDM Users' Guides must be consulted.

After creating a file of input data in the appropriate RJE/SNA, RJE, or NDM format, the user transmits the specified JCL to DTC, initiating a job within DTC's Computer System. The input file is edited and any records containing errors are transmitted back to the user. Valid data will be processed if no "severe" errors are detected.

The user must submit the following generic procedure name and overriding parameter in the transmitted JCL to indicate the CCF-II function being transmitted:

procedure name:

"RJExxxxx", "RJESxxxx",or "NDMxxxxx"

override parameter: "FUNC=yyyyyy"

NOTE:

RJExxxxx	=DTC's CCF-II/RJE processing procedure; "xxxxx" is the suffix referring to the transmitted function.
RJESxxxx	=DTC's CCF-II/RJE-SNA processing procedure; "xxxxx" is the suffix referring to the transmitted function.
NDMxxxxx	=DTC's CCF-II/NDM processing procedure, "xxxxx" is the suffix referring to the transmitted function.
yyyyyy	=the name of the CF2 function being transmitted.

1.2   Recovery Procedures

Restart capability is available for RJE and RJE/SNA users. Details of the procedures to be followed in the event that RESTART is necessary are provided in the RJE AND RJE/SNA ENVIRONMENTS VIA CCF II FUNCTIONS USER'S GUIDE in the section entitled "RECOVERY/RESTART PROCEDURES".

1.3   Backup for CCF-II

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

If the user is not able to enter his/her data via CCF-II because of modem or telephone line equipment failures at his/her site, s/he has the option to create a magnetic tape in the format of the specific CCF-II Transmission file involved (in this case CF2DAR) and send it via messenger to DTC. The tape should be created with these characteristics:

- •   NON-LABELLED
- •   1600 / 6250 BPI
- •   RECFM=FB
- •   LRECL=100 (RJE/SNA and NDM), or 80 (RJE)
- •   BLKSIZE=optimal

DTC will submit all data from the tape to the CCF-II system, and return the tape to the user.

Participants who, in an emergency, are not able to deliver a magnetic tape to DTC via messenger before the appropriate cutoff time for the CCF-II function involved (see "CF2DAR Transmission Cutoff Schedule"), 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 submit data to DTC, they are bound by computer and data communications equipment availability at their site. It is strongly suggested that all users maintain redundant CCF-II equipment (computers and communication controllers).

IN NO EVENT will DTC accept responsibility for a Participant's inability to submit any type of CCF-II transmission to the Depository.

2.0   The CF2DAR Function

A CCF-II user may use the CF2DAR function to transmit Dividend Automatic Receipting data to DTC.

The CF2DAR user will receive an acknowledgement file indicating any errors that have been detected in the transmitted data.

The CCF-II system will pass all valid CF2DAR data from accepted transmissions for further internal processing.

If the user considers the CF2DAR data transmitted via CCF-II to be critical, he should prepare procedures to be used when CCF-II is unavailable. For additional information see "Recovery Procedures" and "Backup for CCF-II" in Section 8.02.01.00.

2.1   CF2DAR Transmission Cutoff Schedule

The CCF-II system's CF2DAR function is available from 3:00 AM to 7:30 PM. Any transmission not completed before final cutoff time will be rejected.

2.2   Initiating a CF2DAR Transmission

For technical information on JCL requirements for initiating a CF2DAR transmission please consult the NDM or CCF-II USER'S GUIDES, also available from DTC.

2.3   CF2DAR Transmission and Acknowledgement Files

CF2DAR Transmission files consist of 100-byte records. When transmission takes place via RJE/SNA or NDM, the actual CF2DAR records (100-byte) are transmitted to DTC.

A CF2DAR Transmission file which is transmitted via RJE (3780)is received by DTC in 80-bytes, card-image records. The user transmits two card images per CF2DAR record. DTC reformats the card image records into the 100-byte CF2DAR format for edit processing.

CF2DAR Acknowledgement files consist of 130-character records. During RJE/SNA, transmissions, the actual CF2DAR records (130-character) are transmitted from DTC to the user.

A CF2DAR Acknowledgement file transmitted via RJE (3780) is also reformatted into the 80-byte, card-image records. DTC converts from the 130-character format and transmits to the user two card-image records per CF2DAR Acknowledgement record.

All CF2DAR record format descriptions appearing in this document pertain to the 100- and 130-character CF2DAR records. For additional information on RJE card-image record formats please consult the RJE and RJE/SNA ENVIRONMENT VIA CCF II FUNCTION USER'S GUIDE, also available from DTC.

2.4   Testing the CF2DAR Function

By placing a "T" or a "P" in the processing option field (position 36) of the transmission header record, the user may specify whether the transmission is for "Test" or "Production" purposes. Test transmissions are edited by DTC and invalid data is returned to the transmitting Participant. DTC has created the "test" option to facilitate development of CCF-II functions on the Participant's computer systems.

3.0   The CF2DAR Transmission File (Input)

The CCF-II CF2DAR Transmission file may be comprised of four different types of records. The first two and the last record on the Transmission file, the "Security", "Header" and "Trailer" records, are for control purposes.

The four record types which may appear in the CCF-II CF2DAR data file, along with the basic rules for their processing within the CCF-II system, appear on the following pages.

3.1   CF2DAR Transmission Records

1. **CCF-II Transmission Security "PSW" record:** specifies the Signon ID. of the transmitter utilizing DTC's CF2DAR function, his/her legitimate password, and the transmission's unique identifying number. The Security ("PSW") record must be the first record in the file, but is considered a CCF-II record rather than a CF2DAR Transmission record. The Security ("PSW") record is for input purposes only, and is therefore not returned in the Acknowledgement file.

2. **Transmission Header "HDR" record:** identifies the transmitter of the CF2DAR data, and uniquely identifies the transmission as not previously transmitted on this day. The Header ("HDR") record must be the first record in the CF2DAR Transmission file (after the "PSW" record), however it is **Not** to be included in record count tabulations. **If a header record is transmitted as anything but the first record of a transmission, or contains ANY error, or if the header record is missing, the entire transmission will be cancelled by DTC.**

3. **CF2DAR Data "DAT" records:** are identified by record type "DAT".

4. **Transmission Trailer "TLR" record:** contains control information for all CF2DAR detail records in the transmission. The CF2DAR "TLR" record must be included as the **LAST** record of the CF2DAR transmission, however it is **NOT** to be included in record count tabulations. Totals appearing in the CF2DAR Trailer record will be verified by DTC. **If a trailer record is transmitted as anything**

but the last record of a transmission, or contains ANY error, or if the trailer record is missing, the entire transmission will be cancelled by DTC.

3.2 CF2DAR Transmission Editions

There are four basic levels of CF2DAR Transmission file error editing.

A **"security"** error will cause the entire CF2DAR Transmission file to be rejected. This happens when the Security ("PSW") record fails to properly identify the transmitter to DTC's CCF-II system. **When a "security"error is detected, the CF2DAR Acknowledgement file will contain a single record, the Error ("ERR") record.**

A "**header**" error will cause the remainder of the CF2DAR Transmission file to be rejected. If the Header "HDR" record fails to properly identify the transmission (i.e. Tran ID is invalid), or contains other edit errors, the transmission is rejected. **When a "header" error is detected, the CF2DAR Acknowledgement file will contain only three records, the Control ("CTL") record, the Rejected Header ("HDR") record, and the Audit ("ADT") record.**

A **"data"** error will cause the entire transmission to be rejected.

A **"trailer"** error will cause the entire transmission to be rejected.

4.0   CF2DAR Transmission Record Formats

Note: Please ensure that the following standard CCF-II editing criteria are adhered to for all CF2DAR Transmission records:

Numeric fields (Numeric) -- MUST be right-justified, with leading ZEROES. MUST contain numeric data only. If unused, MUST be initialized to ZERO.

Character field (Character) -- should be left-justified, with trailing spaces. If unused, MUST be initialized to spaces.

Failure to comply with the above criteria may cause a CF2DAR record to be rejected.

Please ensure that all CF2DAR fields which are not used, whether "Filler", "Optional", "Reserved" or "Not Allowed", are initialized as described above. Any such field which contains LOW-VALUES or HIGH VALUES is considered an edit error, and may result in record rejection.

4.1 The CCF-II Transmission Security ("PSW") Record

The CCF-II Security record transmitted to DTC introduces and identifies the transmitter to the CCF-II system. This is done via the Signon ID and Password, which must always be valid and up-to-date.

Where security is a consideration at the user's site, the record may be concatenated in front of the data file from another source.

The Security record is for input purposes only, and therefore not returned in DTC's Acknowledgement file. Its format is described below.

CCF-II Transmission Security ("PSW")

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	This field must contain the value "PSW", identifying the Security/Pass word record.
4	4	Character	Signon ID	Signon ID. must be a valid DTC Participant number (format: "nnnn") or Group User I.D. (format "Gnnn").
8	2	Character	Filler	DTC use only. Do not use.
10	6	Character	Password Field	Passwords are obtainable through DTC's Participant Interface Planning Group.
16	6	Character	Activity Type	Specifies the nature of the transmission. In this case, Activity Type must be "CF2DAR".
22	3	Numeric	Transmission ID Number	Identifies this transmission. Must be numeric, greater than zero, and unique for the submitter for the day. Must agree with Tran ID in the "HDR" record to follow.

CCF-II Transmission Security ("PSW")

Position	Length	Format	Field Name	Field Description
25	76	Character	Filler	DTC use only. Do not use.

4.2 The CF2DAR Transmission Header ("HDR") Record

The CF2DAR Header ("HDR") record is considered the first record in the transmission file. Its format appears in the table below.

CF2DAR Transmission Header ("HDR") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Must contain the value "HDR", identifying the first record of the CF2DAR transmission file.
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	Signon ID	Identifies the transmitting agent. Must be a valid DTC Signon, i.e. "Gnnn" for Group Users or "nnnn" for Participants.
12	2	Character	Individual User (Signon Department)	This field may be used in the future to identify a Participant's source department. At present, it must contain either spaces or zeroes.
14	6	Character	Filler	DTC use only. Do not use.
20	6	Numeric	Process Date	This field must contain the date the transmission is sent to DTC. Format is MMDDYY.
26	6	Character	Activity Type	Must contain "CF2DAR".
32	3	Numeric	Transmission ID. Number	Must be a (non-zero) number that uniquely identifies each transmission initiated by the same Signon ID. Must agree with the Tran ID number in the "PSW" record (pos 22-24).

CF2DAR Transmission Header ("HDR") (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
35	1	Character	Transmission Option	Must contain "A", identifying a new transmission.
36	1	Character	Processing Option	Indicates whether transmission is for live (Production) or Testing purposes. "T" = Test transmission; "P" = Production transmission.
37	64	Character	Filler	DTC use only. Do not use.

4.3 CF2DAR Data Record

In order for a transmission to be accepted, all data records must be valid.

CF2DAR Data Record (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Must contain the value "DAT", indicating a Data Record.
4	8	Character	DDA Number	May not contain Low or High Values: may not be all spaces or all zeroes.
12	20	Character	DDA Name	May not contain Low or High Values: may not be all spaces or all zeroes.
32	2	Character	Filler	DTC use only. Do not use.
34	9	Character	CUSIP Number	The number identifying the security.
43	1	Character	Filler	DTC use only. Do not use.
44	8	Numeric	Record Date	CCYYMMDD.
52	8	Numeric	Payable Date	CCYYMMDD. Date is validated to ensure date exists.
60	15	Numeric	Payment Amount	MUST BE Unsigned numeric, and greater than Zero. Format is 9(13)V99.
75	1	Character	Payment Type	Must be: "D" = Dividend "I" = Bond Interest "P" = Principal Only

CF2DAR Data Record (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
76	1	Character	Payment Frequency	Should be: "M" = Monthly "Q" = Quarterly "S" = Semi Annually "A" = Annually
77	9	Numeric	Cash Rate	MUST BE Unsigned numeric. Format 9(4)V9(5).
86	15	Character	Filler	DTC use only. Do not use.

4.4   The CF2DAR Transmission Trailer Record ("TLR")

The trailer record is required as the LAST record of each CF2DAR transmission. The 100-character CF2DAR Trailer record is described in the table below.

CF2DAR Transmission Trailer Record ("TLR")

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Must contain a value of "TLR", identifying the Trailer record.
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	Signon ID	Identifies the transmitter of the CF2DAR file. It must match exactly the Signon ID. specified in the file's Header ("HDR") record.
12	6	Character	Activity Type	Must match the "HDR" record's Activity Type "CF2DAR"
18	3	Numeric	Transmission ID. Number	Must match the "HDR" record's Transmission I.D. Number.
21	8	Numeric	Total Record Count	The total number of CF2DAR data records in this transmission. This total excludes the Header and Trailer records, and must equal DTC's calculation of the total record count. Must be UNSIGNED Numeric.
29	17	Numeric	Total Payment Amount	The total payment amount for all CF2DAR data records in this transmission. Must equal the DTC-calculated total quantity. Must be UNSIGNED NUMERIC. 9(15)V99
46	55	Character	Filler	DTC use only. Do not use.

5.0   The CF2DAR Acknowledgement File (Output)

The CCF-II Acknowledgement file consists of six possible types of records. The "Error", "Control" and "Audit" records are for control purposes. The remaining Acknowledgement records are Rejected records, sent back with error flags to indicate the type and severity of edit error that is detected. Rejected "HDR", "DAT", and "TLR" records have appended error flags, which are transmitted as part of the input record. *These appended error flags, result in the expanded 130-character Acknowledgement record length.*

The CF2DAR Acknowledgement file is composed of either:

- an Error ("ERR") record (if a "security" violation occurs);

OR

- a Control ("CTL") record; AND

- Zero or more Rejected "HDR", "DAT" and "TLR" records; AND

- an Audit ("ADT") record describing the data accepted.

If the CCF-II "PSW" record fails DTC's security validation, the Acknowledgement file contains only an Error ("ERR") record.

If the CF2DAR Transmission is accepted as fully valid, the Acknowledgement file contains two records, the Control ("CTL") and Audit ("ADT") records, providing summary information about the transmission.

If the CF2DAR Transmission is rejected for reasons other than security violations, the Acknowledgement file contains all rejected records bracketed by the "CTL" and "ADT" records.

5.1   CF2DAR Acknowledgement Records

The six record types that may appear in the CCF-II Acknowledgement file, along with basic rules for their appearance, are provided below.

1.   **CCF-II Acknowledgement Error record:** whenever the CF2DAR Security "PSW" record's Signon and/or password fail DTC's security check, the Acknowledgement file contains only an "Error" ("ERR") record.

2.   **CF2DAR Acknowledgement Control record:** if no security violations are detected, a Control ("CTL") record is the first record of the Acknowledgement File.

3.   **CF2DAR Acknowledgement Rejected Header record:** if a "header" edit error is detected, the Rejected Header ("HDR") record, containing appended error indicators, follows the "CTL" record in the Acknowledgement file. A "header" edit violation results in the "HDR" being the only Rejected record on the Acknowledgement file (i.e. no further editing is done by DTC).

4.   **Rejected CF2DAR data records:** if a CF2DAR data record fails an edit, the record is rejected and returned as an Acknowledgement Rejected data record, with error flags appended.

5.   **CF2DAR Acknowledgement Rejected Trailer record:** if an edit error is detected in the trailer, the Rejected Trailer ("TLR") will be returned. The Rejected "TLR" record's appended error flags provide details of any errors detected in the input Trailer record. NOTE: If the Trailer record is rejected, the Acknowledgement file will contain the Control record, the Header record, ALL DATA RECORDS REGARDLESS OF THE VALIDITY OF THE INDIVIDUAL DATA RECORD (see individual error flags for validity), the rejected Trailer record, and the Audit record.

6.   **CF2DAR Acknowledgement Audit Record:** appears as the last record of the Acknowledgement file. The "ADT" record provides summary totals for all accepted CF2DAR Transmission records.

5.2 Acknowledgement Error Flags

Error flags are appended to Rejected Acknowledgement records. Each of these flags is set to represent the severity and/or type of error that may have been detected in a specific field of any of the CF2DAR data records.

General rules for Acknowledgement Error Flag codes are:

- 0   -   data was accepted as valid;

- 1-9   -   a format or logical edit error was detected.

6.0   CF2DAR Acknowledgement Record Formats

6.1   The CCF-II Acknowledgement Error Record ("ERR")

A CF2DAR Error ("ERR") record is created by the CCF-II system whenever a security violation occurs. **If the Security ("PSW") input record contains erroneous information, the Error "ERR" record is returned as the ONLY Acknowledgement record.**

The format of the 130-character Error ("ERR") record follows.

Acknowledgement Error Record ("ERR")   (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Contains the value "ERR", to identify the ONLY record returned in the CF2DAR Acknowledgment file when a security violation is detected.
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	Signon ID.	Signon ID. contains the value received in the CF2DAR Transmission Security ("PSW") record, regardless of the validity of the data.
12	8	Character	Filler	DTC use only. Do not use.
20	6	Numeric	Process Date	The date the CF2DAR file was received and edited. Format MMDDYY.
26	6	Character	Activity Type	The Activity Type (CF2DAR) submitted in the "PSW" record.
32	3	Numeric	Transmission ID. Number	The Transmission ID. Number specified in the "PSW" record.

Acknowledgement Error Record ("ERR")   (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
35	2	Character	Filler	DTC use only. Do not use.
37	3	Character	Error Status	Indicates the nature of the security violation detected by DTC's CCF-II system.
				150 Card image SEQUENCE ERROR detected. Refer to CCF-II/RJE System User Guide, or contact DTC.
				222 INVALID PASSWORD detected. Use corrected password or obtain correct password by contacting DTC.
				333 INELIGIBLE SIGNON detected. Signon ID. submitted is ineligible for CF2DAR function. Contact DTC.
40	5	Character	Filler	DTC use only. Do not use.
45	6	Numeric	Arrival Time	The time this CF2DAR transmission arrived at DTC. Format HHMMSS.
51	6	Numeric	Edit Completion Time	The time DTC's editing for this CF2DAR transmission completed. Format HHMMSS.
57	70	Character	Error Description	A plain-language description of the security violation.
127	4	Character	Filler	DTC use only. Do not use.

6.2   The CF2DAR Acknowledgement Control Record ("CTL")

Whenever a Security record is fully validated (i.e. no security violations are detected), the Control ("CTL") record will be the first record of the CF2DAR Acknowledgement file. The 130-character Control record, summarizing DTC's processing of the CF2DAR transmission file, is described below.

CF2DAR Acknowledgement Control Record ("CTL") (Part 1 of 4)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Contains the value "CTL", to identify the first record of the CF2DAR Acknowledgement file (when no security violations are detected).
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	Signon ID.	Signon ID. from "HDR" record, regardless of its validity.
12	2	Character	Individual User (Signon Department)	Individual User from "HDR" record, regardless of its validity.
14	6	Character	Filler	DTC use only. Do not use.
20	6	Numeric	Process Date	The date the CF2DAR Input Transmission file was processed by DTC. Format MMDDYY.
26	6	Character	Activity Type	Activity Type (CF2DAR) from "HDR" record, regardless of its validity.
32	3	Numeric	Transmission ID. Number	Tran ID Number from "HDR" record, regardless of its validity.
35	1	Character	Transmission Option	Transmission Option from "HDR" record, regardless of its validity.

CF2DAR Acknowledgement Control Record ("CTL") (Part 2 of 4)

Position	Length	Format	Field Name	Field Description
36	1	Character	Processing Option	Processing Option from "HDR" record, regardless of its validity.

CF2DAR Acknowledgement Control Record ("CTL") (Part 3 of 4)

Position	Length	Format	Field Name	Field Description
37	3	Character	Transmission Processing Status Code	Indicates the status of the CF2DAR Transmission, as processed by DTC's CCF-II system.

			000	TRANSMISSION FULLY ACCEPTED. No invalid CF2DAR transactions.
			***	**Status codes above 099 indicate that the entire CF2DAR transmission will be returned.**
			100	Transmission rejected. INVALID DATA RECORDS. Invalid CF2DAR transactions will follow.
			111	Transmission rejected. NO DATA RECORDS.
			444	Transmission rejected. NO FILE WAS RECEIVED.
			445	Transmission rejected. ONLY PSW RECORD FOUND.
			555	Transmission rejected. RECEIVED OUTSIDE CUTOFF PARAMETERS.
			600	Transmission rejected. FUNCTION WAS NOT "CF2DAR".
			666	Transmission rejected. FUNCTION CF2DAR UNAVAILABLE.
			777	Transmission rejected. TRAILER TOTALS DO NOT MATCH DTC's calculated totals.

(Continued on next page)

CF2DAR Acknowledgement Control Record ("CTL") (Part 4 of 4)

Position	Length	Format	Field Name	Field Description
37			Status Code (continued)	800 Transmission rejected. TRAILER RECORD NOT RECEIVED. 801 Transmission rejected. TRAILER RECORD EMBEDDED. 888 Transmission rejected. TRAILER CONTAINS INVALID DATA. 997 Transmission rejected. SECOND HEADER FOUND 998 Transmission rejected. HEADER RECORD NOT RECEIVED. 999 Transmission rejected. HEADER CONTAINS INVALID DATA.
40	8	Numeric	Returned Error Count	The total number of erroneous DETAIL records returned to the transmitter. This count EXCLUDES returned Header and Trailer records, if they exist.
48	6	Numeric	Arrival Time	The time this CF2DAR transmission arrived at DTC. Format HHMMSS.
54	6	Numeric	Edit Completion Time	The time DTC's editing for this CF2DAR transmission completed. Format HHMMSS.
60	71	Character	Filler	DTC use only. Do not use.

6.3 The CF2DAR Acknowledgement Rejected Header Record ("HDR")

Whenever a "header" edit error is detected the remainder of the CF2DAR Transmission file is refused. In this case, the CF2DAR Acknowledgement file will contain only three records -- the "CTL", the Rejected "HDR", and the "ADT" records. A "Header" edit error is distinguished by a non-zero value in one (or more) of the Rejected "HDR" record's error flags.

The format of the 130-character Rejected Header record follows.

CF2DAR Acknowledgement Rejected Header Record ("HDR") (Part 1 of 3)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Should contain the value "HDR", if the CF2DAR Transmission file arrived in proper sequence. In any case, the information contained in positions 1-3 of the first CF2DAR transmission record will appear here.
4	97	Character	Input Header Record	Contains the information received in positions 4-36 of the CF2DAR Transmission file's "HDR" record (or the first record received).
101-110	10	Numeric	Header Record's Error Flags	A series of ten, 1-byte fields to provide indication of the type and severity of error that may have occurred.
101	1	Numeric	Flag #1	"0" = First Record Type was "HDR". "2" = Second "HDR" record found. "9" = First Record Type not "HDR".

CF2DAR Acknowledgement Rejected Header Record ("HDR") (Part 2 of 3)

Position	Length	Format	Field Name	Field Description
102	1	Numeric	Flag #2	"0" = Signon ID. was accepted. "1" = Signon ID. unacceptable.
103	1	Numeric	Flag #3	"0" = Individual User (for Signon) accepted. "1" = Individual User not spaces or zeroes.
104	1	Numeric	Flag #4	"0" = Process date was accepted. "1" = Process date not numeric. "2" = Process date not same as transmission date.
105	1	Numeric	Flag #5	"0" = Activity Type was "CF2DAR". "1" = Activity Type not "CF2DAR".
106	1	Numeric	Flag #6	"0" = Tran ID was accepted. "1" = Tran ID invalid. "2" = Tran ID was not unique today.
107	1	Numeric	Flag #7	"0" = Transmission Option was "A". "1" = Transmission Option not "A".
108	1	Numeric	Flag #8	"0" = Processing Option was "T" or "P". "1" = Processing Option not "T" or "P".
109	2	Numeric	Flags #9-10	Flags #9-10 are unused and will be set to Zero.

CF2DAR Acknowledgement Rejected Header Record ("HDR") (Part 3 of 3)

Position	Length	Format	Field Name	Field Description
111	20	Character	Filler	DTC use only. Do not use.

6.4 CF2DAR Rejected Data Records

Whenever an edit error is detected in a CF2DAR data record, it is returned in the Acknowledgement file, with one or more of its 11 appended error flags set to indicate the type of error encountered.

The format of the 130-character Rejected CF2DAR Data record follows.

CF2DAR Rejected Data Record (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Rejected Input Record Type	If not "DAT" the record was rejected because the record type is invalid.
4	97	Character	Rejected Input Record	Contains the remainder of the rejected input record.
101-111	**11**	**Numeric**	**Data Error Flags**	**A series of 11 1-byte fields to provide indication of the type and severity of error that may have occurred.**
101	1	Numeric	Flag #1	"0" = Record type is valid. "1" = Record type is invalid. "2" = Second HEADER found. "9" = This was the first record. It should have been a "HDR".
102	1	Numeric	Flag #2	"0" = Received before Cutoff time. "1" = Received after Cutoff.
103	1	Numeric	Flag #3	"0" = DDA Number accepted. "1" = DDA Number is all zeroes, SPACES, high or low values.

CF2DAR Rejected Data Record (Part 2 of 2)

Position	Length	Format	Field Name			Field Description
104	1	Numeric	Flag #4	"0"	=	DDA Name accepted.
				"1"	=	DDA Name is all zeroes, SPACES, high or low values.
105	1	Numeric	Flag #5	"0"	=	Not used.
106	1	Numeric	Flag #6	"0"	=	Not used.
107	1	Numeric	Flag #7	"0"	=	Payable date a valid date.
				"1"	=	Payable date not numeric.
				"2"	=	Payable date CC invalid.
				"3"	=	Payable date YY invalid.
				"4"	=	Payable date MM invalid.
				"5"	=	Payable date DD invalid.
108	1	Numeric	Flag#8	"0"	=	Payment amount accepted.
				"1"	=	Payment amount not numeric.
				"2"	=	Payment amount equals zero.
109	1	Numeric	Flag #9	"0"	=	Payment Type valid.
				"1"	=	Payment Type invalid.
110	1	Numeric	Flag #10	"0"	=	Not used
111	1	Numeric	Flag #11	"0"	=	Cash rate accepted.
				"1"	=	Cash rate not numeric.
112	19	Character	Filler			DTC use only. Do not use.

6.5   The CF2DAR Acknowledgement Rejected Trailer ("TLR") Record

An edit error in the trailer will cause the Rejected "TLR" record to be returned in the Acknowledgement file.

The format of the 130-character Rejected Trailer record follows.

CF2DAR Acknowledgement Rejected Trailer ("TLR") Record (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Will contain the value "TLR".
4	97	Character	Trailer Record	Contains the information received in positions 4-45 of the CF2DAR Transmission File's "TLR".
101	10	Numeric	Trailer Error Flags	A series of ten, 1-byte fields to provide indication of the type and severity of error that may have occurred.
101	1	Numeric	Flag #1	"0" = Trailer is last record. "1" = Embedded trailer found. "9" = Trailer was FIRST record in file. FIRST record should be a HEADER.
102	1	Numeric	Flag #2	"0" = Signon ID valid. "1" = Signon ID does not agree with "PSW" or "HDR".
103	1	Numeric	Flag #3	"0" = Activity type valid. "1" = Activity type not "CF2DAR".
104	1	Numeric	Flag #4	"0" = Tran ID. "1" = Tran ID does not agree with "PSW" or "HDR".

CF2DAR Acknowledgement Rejected Trailer ("TLR") Record (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
105	1	Numeric	Flag #5	"0" = Total valid. "1" = Total not numeric. "2" = Total invalid.
106	1	Numeric	Flag #6	"0" = Total valid. "1" = Total not numeric. "2" = Total invalid.
107	4	Numeric	Flags #7-10	Flags #7-10 are unused and will be set to Zero.
111	20	Character	Filler	DTC use only. Do not use.

6.6 The CF2DAR Acknowledgement Audit ("ADT") Record

The Audit ("ADT") record is the last record of the CF2DAR Acknowledgement file, except when the incoming transmission contains "security" violations. If no "security" error is detected, the Acknowledgement file's "CTL" and "ADT" records will bracket any Acknowledgement Rejected records that are returned.

When transmitted, the Audit ("ADT") record is the final CF2DAR Acknowledgement record. The 130-character CF2DAR "ADT" Audit record is described in the table below.

CF2DAR Acknowledgement Audit ("ADT") Record

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Type	Will contain the value "ADT" identifying the Audit record.
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	Signon ID.	Identifies the transmitter, as derived from the CF2DAR Transmission file's Header ("HDR") record.
12	6	Character	Activity Type	Will contain the value "CF2DAR".
18	3	Numeric	Transmission ID. Number	Copied from the "HDR" record's Transmission ID. Number.
21	8	Numeric	Total Accepted Record Count	The total number of records in this CF2DAR transmission that were accepted, as calculated by DTC.
29	17	Numeric	Total Payment Amount	The total payment amount of all the accepted records in this CF2DAR transmission, as calculated by DTC. Will be unsigned numeric. Format is 9(15)V99.

CF2DAR Acknowledgement Audit ("ADT") Record

Position	Length	Format	Field Name	Field Description
46	85	Character	Filler	DTC use only. Do not use.