CCF/CCF-II/MDH Transmission Guides

4.02 Memo Segregation via CCF-II (MEMSEG): Function User's Guide

The Depository Trust & Clearing Corporation **May 2001**

4.02 MEMSEG: Function User's Guide

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1.0 The CCF-II Memo Segregation System

The purpose of the CCF-II MEMO SEGREGATION system is to provide a facility which will monitor and control activities in issues which contain fully paid customer securities on deposit at the Depository. Participants are requested to supply MEMSEG entries only for those CUSIPs where a delivery requirement is anticipated that day or the following day's PDQ (night) cycle.

MEMO SEGREGATION is a service separate and distinct from the SEGREGATION facility currently provided at DTC, and is intended to further protect customer assets not fully safeguarded by the Segregation Systems. The SEGREGATION facility physically segregates securities in a Participant's account from all DTC services, until instructions are received from the Participant to release either all or a portion of the segregated securities. This release instruction physically swings back the securities indicated, thereby availing this position to Participant-initiated activities.

MEMO SEGREGATION (MEMSEG) creates a "MEMSEG" position within the free account. This "logical" separation allows DTC Participants to protect a designated security quantity, even if it is greater than the actual free account position in an issue. In this way, MEMSEG protects against the unintended delivery of fully paid securities that are in the free account, or that may be received during the daily processing cycle.

MEMSEG instructions can be transmitted via the Computer-to-Computer Facility (CCF), CCF-II, or the Participant Terminal System, and consist of a security quantity identified as fully paid customer securities and a CUSIP number. **The size of the protected position can be changed either by an eligible transaction, or by retransmitting the CUSIP number with an appropriate action code and security quantity to cover or overlay or adjust the "memo" segregated security quantity.**

Eligible transactions that decrement MEMSEG positions are Withdrawals-by-Transfer, Certificate-on-Demand Withdrawals, and free Deliver Orders that are not identified as stock loans or stock-loan returns. For these transaction types, DTC checks the free account, and, if there are sufficient securities, reduces it and the MEMSEG account by the same amount.

1.0 The CCF-II Memo Segregation System *(Continued)*

A free account "excess position" is calculated by subtracting the MEMSEG position from the free account security balance. The excess position is available for valued book-entry deliveries, free stock-loan deliveries and returns, syndicate deliveries, deliveries to the National Securities Clearing Corporation's Continuous Net Settlement system, and collateral loan pledges, all of which reduce only the free account.

If the "excess position" is insufficient for a transaction–even though the free account total position may be sufficient–these actives will recycle, except for loan pledges, which will drop.

The **CCF-II MEMO SEGREGATION** function will provide immediate validity editing of the transmission. The Participant will receive a return transmission indicating any errors found during the editing process.

1.1 CCF-II MEMSEG Function Availability and Cutoff Times

The **CCF-II MEMO SEGREGATION** function will be available from 4:00 A.M. until 6:30 P.M. This means that CCF-II MEMSEG transmissions will be accepted if they begin between 4:00 A.M. and 6:30 P.M. daily. Test MEMSEG transmissions will be accepted during PTS operating hours with TEST=YES on the CCFUSER control card and position 28= 'T' ("Processing Option") on the MEMSEG Header Record('HDR').

If the 6:30 P.M. cutoff time is reached during a MEMSEG transmission, processing will continue until the transmission is completed. In no event, however, will a MEMSEG transmission be accepted if it begins after the 6:30 P.M. cutoff.

2.0 CCF-II Summary

DTC's Computer-to-Computer Facility Two (CCF-II) is a medium enabling the transmission of data back and forth between the Depository Trust & Clearing Corporation and its participants/users. The user transmits data to DTC (the Transmission file), and then receives data in reply from DTC (the Acknowledgment file).

CCF-II transmissions to and from DTC utilize either:

- IBM's Remote Job Entry (RJE) software
- IBM's Remote Job Entry/System Network Architecture (RJESNA) software.
- Systems Center Network Data Mover (NDM) software

In order for a CCF-II user to transmit data to DTC, he must prepare an input file of transactions in the DTC-specified format. The user then executes RJE-, RJES- or NDM-based JCL in order to communicate 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 transactions.

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

2.1 Transmitting Transactions to DTC

When a CCF-II user wishes to transmit data to DTC, he must prepare JCL as specified in either the CCF-II/RJE User's Guide, CCF-II/NDM USER'S GUIDE or CCF-II/RJESNA USER'S GUIDE

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

After creating a file of input transactions in the appropriate RJE or NDM format, the user transmits the DTC-specified JCL in order to initiate a job within DTC's Computer System. The input file records are then edited and any records in error will be transmitted back to the user. Valid transactions 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 processed:

procedure name: "RJExxxxx" "RJESxxxx" "NDMxxxxx"

override parameter: "FUNC=yyyyyy"

where:

RJExxxxx = DTC's CCF-II/RJE processing procedures; "xxxxx" is the suffix referring to the transmitted function.

RJESxxxx = DTC's CCF-II/REJSNA processing procedure; refer to the User's Guide for the proper suffix.

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.

2.2 Initiating a MEMSEG Transmission

The user then executes RJE- or NDM- based JCL to DTC to initiate MEMSEG transmissions. The basic format of the JCL "EXEC" statement appears in the appropriate CCF-II User's Guide.

2.3 Testing the MEMSEG Function

By placing a "T" or a "P" in the processing option field (position 28) of the transmission header record, the user may specify whether the transmission is for "Test" or "Production" purposes.

Production All Memo Segregation transactions in a "production" (live) MEMSEG transmission that comply with MEMSEG edit criteria and are deemed fully valid affect the "MEMSEG" position within a Participant's free account.

Test No Memo Segregation transactions in a MEMSEG "test" transmission affect the Participant's free account. These transactions are listed (at DTC) and, if invalid, are returned to the Issuing Participant. "Test" listings are available from DTC upon request. DTC has created the "test" option to facilitate development of CCF-II functions on the Participants' computer systems.

2.4 Recovery Procedures

Restart capability is available for CCF-II 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".

2.5 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 transactions via CCF-II because of modem or telephone line equipment failures at his site, he has the option of creating a magnetic tape in the format of the specific CCF-II Transmission file involved (in this case Memo Segregation - MEMSEG) and send it to DTC via messenger. The tape should be created with these characteristics:

- NON-LABELLED
- 1600 / 6250 bpi
- RECFM = FB
- LRECL = 80
- BLKSIZE = Efficient Block Size

DTC will input the transactions from the tape and then return it to the user.
Participants who, in the emergency, will not be able to deliver a magnetic tape to DTC via messenger before the appropriate cutoff time for the CCF-II function involved (see "CCF-II MEMSEG Function Availability and Cutoff Time" on page 3), 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 to accommodate equipment failures at any participant site. It is strongly suggested that all users maintain redundant CCF-II equipment (computers and communication controllers)

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

3.0 The MEMSEG Transmission File (Input)

The CCF-II Memo Segregation file consists of four different types of record, each of which contains 80 characters. The first two and the last record on the Transmission file, the "Security", "Header" and "Trailer" records, are for control purposes. The MEMSEG "Data" record provides instructions for a MEMSEG segregation transaction. A description of each MEMSEG record type appears in the following section.

3.1 MEMSEG Transmission Records

1. CCF-II Transmission Security record: specifies the SIGNON ID. of the transmitter utilizing DTC's MEMSEG function, his 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 MEMSEG Transmission record. The Security ("PSW") record is for input purposes only, and is therefore not returned in DTC's Acknowledgement file.

2. Transmission Header record: identifies the transmitter of the Memo Segregation transactions and confirms that the transmission was not previously submitted. The Header ("HDR") record must be the first record in the MEMSEG Transmission file, however, it is NOT to be included in record count tabulations.

3. Memo Segregation Transaction Data record: contains detailed information regarding a single MEMSEG transaction. The MEMSEG Data record has record type "DAT".

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

3.2 MEMSEG Transmission Editing

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

A "security" error will cause the entire MEMSEG Transmission file to be refused. 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 MEMSEG Acknowledgment file will contain a single record, the Error ("ERR") record.

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

Any of the following "severe" errors will cause the entire MEMSEG transmission to be cancelled. All records are returned unaccepted, but as much editing as possible will be done, and error flags will be set to provide the user with maximum Acknowledgement information:

- the transmission is received later than the last MEMSEG cutoff time (6:30 p.m.).
- a record type is invalid (not "PSW", "HDR", "DAT" or "TLR");
- a record sequence error is detected (e.g. the last record is not the "TLR");
- a numeric Trailer record field contains non-numeric data; or
- a Trailer record total does not match the DTC-calculated total for all Data/Remarks records received. This may occur if the Trailer total is incorrect or the corresponding field on any Data record contains non-numeric data.

3.3 MEMSEG Transaction Editing

The CCF-II Memo Segregation system will accept one data record for each MEMSEG transaction.

A transaction "edit" error will cause that Data record to be rejected. If any of the following "edit" errors occurs, the MEMSEG transaction is rejected, and the returned Acknowledgement record will contain appropriately set error flags:

- a field contains invalid data;
- a field is not properly formatted (e.g. non-numeric data in a numeric field); or
- an unused field is not properly initiated (see next page).

As long as no "security", "header/TranID" or "severe" errors are detected, DTC will accept and process all MEMSEG transactions that are deemed valid.

4.0 MEMSEG Transmission Record Formats

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

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

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

Failure to comply with the above criteria will cause a MEMSEG record to be rejected.

Please ensure that all MEMSEG fields which are not used, whether "Filler", "Optional", "Reserved" or "Not Allowed", are initialized as described above. Any such field which contains low-values is considered an edit error, and will result in rejection of the MEMSEG record.

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

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 is not returned in DTC's Acknowledgement filer. Its format is described below.

CCF-II Transmission Security Record ("PSW")

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Must be "PSW", identifying the Security/Password record.
4	4	Character	SIGNON ID	Must be a valid DTC Participant number ("nnnn") or Group User ID. ("Gnnn").
8	2	Character	Filler	DTC use only; do not use.
10	6	Character	DTC-Assigned Password	Obtained from DTC's Participant Interface Planning Group.
16	6	Character	Activity Type	Must be "MEMSEG" specifying the nature of the transmission.
22	3	Numeric	Transmission ID	Identifies this transmission as unique for the submitting SIGNON ID. Must agree with TranID in the "HDR" record to follow.
25	56	Character	Filler	DTC use only; do not use.

4.2 The MEMSEG Transmission HEADER Record ("HDR")

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The MEMSEG Header ("HDR") record is considered the first record in the Memo Segregation file. Its format appears in the table below

MEMSEG Transmission Header Record ("HDR")				
Position	**Length**	**Format**	**Field Name**	**Field Description**
1	3	Character	Record Identifier	Must be "HDR", identifying the MEMSEG Header record.
4	4	Character	Filler	DTC use only; do not use.
8	4	Character	SIGNON ID	Identifies the transmitting participant or service bureau, "Gnnn" for Group Users or "nnnn" for Participants.
12	6	Numeric	Transmission Date	MMDDYY format.
18	6	Character	Activity Type	Must be "MEMSEG", identifying a Memo Segregation transmission.
24	3	Numeric	Transmission ID	Identifies this transmission as unique for the submitting SIGNON ID. Must agree with TRANID in the "PSW" record.
27	1	Character	Filler	DTC use only. Do not use.
28	1	Character	Processing Option	Indicating whether the transmission is for live (Production) or testing purposes. "T" = Test transmission "P" = Production transmission
29	52	Character	Filler	DTC use only; do not use.

4.3 The MEMSEG Transmission Data Record ("DAT")

Each MEMSEG Data ("DAT") record represents a single MEMSEG Segregation transaction. The record format appears in the table below.

MEMSEG Transmission Data Record ("DAT") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Must be "DAT", identifying the MEMSEG Data record.
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	Participant Number	Must match the "HDR" record"s SIGNON ID or be an eligible member for the Group User SIGNON ID that initiated the MEMSEG transmission.
12	2	Character	Filler	DTC use only; do not use.
14	9	Character	CUSIP Number	CUSIP Number of the security to be segregated.
23	1	Character	Filler	DTC use only; do not use.
24	9	Numeric	Security Quantity	The total number of securities to be Segregated.
33	1	Character	Action Code	The code representing the MEMSEG segregation action to be taken. " ","0" [blank or zero] Segregate this number of securities, or overlay the previous segregation with this amount. "A" Add these securities to the quantity previously segregated. "S" Subtract these securities from the quantity previously segregated.
34	1	Character	Version Control	Current value is: "D" Security Quantity for Stocks and Bonds 1 = 1.
35	46	Character	Filler	DTC use only; do not use.

4.4 The MEMSEG Transmission TRAILER Record ("TLR")

The Trailer record is required as the last record of each MEMSEG transmission. It includes control totals for the number of Data records and number of securities within the transmission. Its format is described in the following table.

MEMSEG Transmission Trailer Record ("TLR")				
Position	**Length**	**Format**	**Field Name**	**Field Description**
1	3	Character	Record Identifier	Must be "TLR", indicating the Trailer record.
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	SIGNON ID	SIGNON ID of the transmitting Participant or Group User.
12	6	Character	Activity Type	Must be "MEMSEG".
18	3	Numeric	Transmission-ID	Must match TranID of MEMSEG "HDR" record.
21	5	Numeric	Total Data Record Count	The total number of DATA records in this MEMSEG transmission. This total EXCLUDES THE TRAILER RECORD. It must be right-justified with leading zeroes, and must equal the DTC-calculated total Data record count.
26	13	Numeric	Total Security Quantity	The total Security Quantity for all Data records in this MEMSEG transmission. Must be right-justified with leading zeroes, and must equal the DTC-calculated total security quantity.
39	42	Character	Filler	DTC use only; do not use.

5.0 The MEMSEG Acknowledgement File (Output)

The CCF-II Memo Segregation Acknowledgement file consists of six different types of record, each of which consists of 80 characters. The "Error", "Control" and "Audit" records are for control purposes. The remaining Acknowledgement records are Rejected "Header", "Data" and "Trailer" records, returned with embedded error flags to indicate the type and severity of edit error that is detected.

The MEMSEG Acknowledgement file is composed of:

- 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 MEMSEG Transmission is accepted as fully valid, the MEMSEG Acknowledgement File is returned to the user, containing summary information in the Control ("CTL") and Audit ("ADT") records.

5.1 MEMSEG Acknowledgement Records

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

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

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

3. MEMSEG Acknowledgement Rejected Header record: if a "header" or "severe" edit error is detected, the Rejected Header ("HDR") follows the "CTL" record in the Acknowledgement file. A "header" edit violation results in the "HDR" being the only Rejected record type on the Acknowledgement file (i.e. no further editing is done by DTC). A "severe" edit error implies that the input "HDR" was accepted, but that the entire transmission has been rejected, and more Rejected records will follow.

4. MEMSEG Acknowledgement Rejected Data ("DAT") records: any MEMSEG transactions that contains "edit" error is rejected, and returned as an Acknowledgement Rejected Data "DAT" record with error flags embedded. The record may also be rejected and returned if the MEMSEG transmission contains "severe" edit errors.

5. MEMSEG Acknowledgement Rejected Trailer record: if a "severe" edit error is detect, the Rejected Trailer ("TLR") will be the penultimate record in the Acknowledgement file. The Rejected "TLR" record provides details of any errors detected in the input Trailer record.

6. MEMSEG Acknowledgement Audit record: appears as the last record of the Acknowledgement file, if no "security" edit errors are detected. The "ADT" record provides summary totals for all accepted MEMSEG Transmission records.

6.0 MEMSEG Acknowledgement Record Format

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

A CCF-II 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 Error ("ERR") record is described in the table appearing

CCF-II Acknowledged Error Record ("ERR") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Will be "ERR", indicating the Error record.
4	4	Character	Filler	DTC use only; do not use.
8	4	Character	SIGNON ID	SIGNON ID from JCL parameter.
12	8	Character	Filler	DTC use only; do not use.
20	6	Numeric	Transmission Date	Transmission Date: for Acknowledgement File (current date - MMDDYY).
26	6	Character	Activity Type	Activity Type from JCL parameter
32	3	Numeric	Transmission ID	Transmission ID from JCL parameter.
35	2	Character	Filler	DTC use only; do not use.
37	3	Numeric	Error Status Code	Indicating the nature of the security violation detected by DTC's CCF-II system. 222 Invalid Password detected 300 Invalid Activity Type detected. 333 Signon Ineligible for Activity Type.
40	5	Character	Filler	DTC use only; do not use.
45	6	Numeric	DTC Transmission Arrival Time	HHMMSS format.

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

CCF-II Acknowledged Error Record ("ERR") (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
51	6	Numeric	DTC Edit Completion Time	HHMMSS format.
57	24	Character	Error Description	A brief description of the security violation.

6.2 The MEMSEG 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 MEMSEG Acknowledgement file. The Control record, summarizing DTC's processing of the MEMSEG transmission file, in described below.

MEMSEG Acknowledgement Control Record ("CTL") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Will be "CTL", indicating the Control record.
4	4	Character	Filler	DTC use only; do not use.
8	4	Character	SIGNON ID.	SIGNON ID.: From JCL parameter.
12	8	Character	Filler	DTC use only; do not use.
20	6	Numeric	Processing Date	The date the transmission was processed by DTC (MMDDYY).
26	6	Character	Activity Type	Activity Type will be "MEMSEG".
32	3	Numeric	Transmission ID	Transmission ID.: From JCL parameter.
35	1	Character	Filler	DTC use only; do not use.
36	1	Character	Processing Option	Processing Option from "HDR" record.
37	3	Character	Transmission Processing Status Code	Indicates the status of the MEMSEG Transmission, as processed by CCF-II. 000 Transmission fully accepted. No invalid transactions. 010 Transmission partially accepted. Invalid transactions to follow. *** Status codes above 099 indicate that Header, Trailer or Cutoff Time errors occurred. The entire MEMSEG transmission will be returned.

6.2 The MEMSEG Acknowledgement Control Record ("CTL") *(Continued)*

MEMSEG Acknowledgement Control Record ("CTL") (Part 2 of 2)				
Position	**Length**	**Format**	**Field Name**	**Field Description**
37				Transmission Processing Status Code (continued): "333" Participant invalid for Group User Signon ID. "444" No file was transmitted/received. "555" Transmission received outside cutoff parameters. "600" Header and Trailer records invalid. "666" Function MEMSEG temporarily unavailable. "700" Trailer Total Record Count does not match DTC calculation. "777" Trailer Total Security Quantity does not match DTC calculation. "800" Trailer Record missing. "888" Trailer record contains invalid data. "900" Header record missing. "900" Header and Trailer records missing. "999" Header record contains invalid data.
40	5	Numeric	Returned Record Count	The total number of erroneous records returned to the transmitter.
45	6	Numeric	DTC Transmission Arrival Time	HHMMSS format.
51	6	Numeric	DTC Edit Completion Time	HHMMSS format.
57	24	Character	Filler	DTC use only; do not use.

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

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

"Severe" edit errors also cause the Rejected "HDR" record to appear in the Acknowledgement file, but in these situations each of the Rejected "HDR" record's error flags will contain zeroes. A Rejected "HDR" record with no error flags set on (i.e. set to a non-zero value) implies that a "severe" edit error was detected, and that each subsequent record of the MEMSEG Transmission (input) file will, in turn, appear as a rejected record in the MEMSEG Acknowledgement file.

The format of the Rejected Header record follows.

MEMSEG Acknowledgement Rejected Header Record ("HDR") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Will be "HDR", indicting the rejected Header record.
4	25	Character	Input Header Record	This area contains the information received in positions 4-28 of the MEMSEG Transmission file's "HDR" record.
29	6	Numeric	Header Record's Error Flags	A series of six, 1-byte fields to provide indication of the type and severity of error that may have occurred.
29	1	Numeric	Flag #1	Record Identifier: "0" = first Record received is "HDR". "1" = first Record received is not "HDR".
30	1	Numeric	Flag #2	SIGNON ID: "0" = Signon ID is valid. "1" = Signon ID does not match JCL Signon ID.
31	1	Numeric	Flag #3	Transmission Date: "0" = Valid Transmission date. "1" = Non-numeric Transmission date. "2" = Transmission date does not match DTC Processing date.
32	1	Numeric	Flag #4	Activity Type: "0" = Activity type is "MEMSEG" "1" = Activity type not "MEMSEG".

6.3 The MEMSEG Acknowledgement Rejected Header Record ("HDR") *(Continued)*

MEMSEG Acknowledgement Rejected Header Record ("HDR") (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
33	1	Numeric	Flag #5	Transmission ID: "0" = TranID is accepted. "1" = TranID is non-numeric. "2" = TranID is zero. "3" = TranID is not unique today. "4" = TranID does not match JCL TranID.
34	1	Numeric	Flag #6	Processing Option: "0" = Processing Option valid. "1" =Processing Option not "T" or "P".
35	44	Character	Filler	DTC use only; do not use.

6.4 The MEMSEG Acknowledgement Rejected Data Record ("DAT")

Whenever a MEMSEG Data ("DAT") record contains an edit error, it is returned in the Acknowledgement file, with one or more of its 5 embedded error flags set to indicate the type of error encountered. The format of the Rejected Data Record appears below.

MEMSEG Acknowledgement Rejected Data Record ("DAT") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Record Identifier from input record ("DAT", if field is valid).
4	34	Character	Input Data Record	This area contains the information received in positions 4-37 of the MEMSEG Data record.
38 - 42	5	Numeric	Data Record's Error Flags	A series of five, 1-byte fields to provide indication of the type and severity of error that may have occurred.
38	1	Numeric	Flag #1	Record Identifier: "0" = Record Identifier is valid. "1" = Record Identifier is not "DAT".
39	1	Numeric	Flag #2	Participant Number: "0" = Participant Number is valid. "1" = Participant Number not valid for Group User Sign-on ID "2" = Participant Number is non-numeric. "3" = Participant Number does not match Sign-on ID. "4" = Participant is ineligible for DTC processing. "5" = Participant is frozen for DTC processing
40	1	Numeric	Flag #3	CUSIP Number: "0" = CUSIP is valid. "1" = CUSIP is invalid. "2" = CUSIP is ineligible for DTC processing "3" = CUSIP is bond and format (odd lot debt) indicator does not equal "D"
41	1	Numeric	Flag #4	Security Quantity: "0" = Security Quantity is valid. "1" = Security Quantity is non-numeric. "2" = Security Quantity is zero for Action Codes "A" or "S".

6.4 The MEMSEG Acknowledgement Rejected Data Record ("DAT") *(Continued)*

MEMSEG Acknowledgement Rejected Data Record ("DAT") (Part 2 of 2)

Position	Length	Format	Field Name	Field Description
42	1	Numeric	Flag #5	Action Code: "0" = Action Code is valid. "1" = Action Code is invalid (not blank, "0", "A" or "S").
43	38	Character	Filler	DTC use only; do not use.

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

A "severe" edit error will cause the Rejected "TLR" record to be returned in the Acknowledgement file. If each of the Rejected "TLR" record's error flags contains zeroes, the MEMSEG transmission was rejected due to a non-Trailer related "severe" edit error. If any of the Rejected "TLR" record's error flags does not contain zeroes, the Trailer record was the source of the "severe" edit error.

The format of the Rejected Trailer record follows.

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

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Record Identifier should be "TLR"
4	40	Character	Input Trailer Record	This area contains the information received in positions 4-43 of the MEMSEG Trailer record.
44	6	Numeric	Trailer Record's Error Flags	A series of seven, 1-byte fields to provide indication of the type and severity of error that may have occurred.
44	1	Numeric	Flag #1	Record Identifier: "0" = Record Identifier is valid. "1" = Record Identifier is not "TLR".
45	1	Numeric	Flag #2	SIGNON ID: "0" = Signon ID is valid. "1" = Signon ID does not match JCL parameter.
46	1	Numeric	Flag #3	Activity Type: "0" = Activity Type is valid. "1" = Activity type not "MEMSEG".
47	1	Numeric	Flag #4	Transmission ID: "0" = TranID is valid. "1" = TranID is non-numeric. "2" = TranID does not match JCL parameter
48	1	Numeric	Flag #5	Total Data Record Count: "0" = Total Record Count is valid. "1" = Total Record Count is non-numeric. "2" = Total Record Count does not match DTC Calculated total.

4.02.06.05 The MEMSEG Acknowledgement REJECTED TRAILER Record ("TLR") *(Continued)*

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

Position	Length	Format	Field Name	Field Description
49	1	Numeric	Flag #6	Total Security Quantity: "0" = Total Security Quantity is valid. "1" = Total Security Quantity is non-numeric. "2" = Total Security Quantity does not match DTC-calculated total.
50	31	Character	Filler	DTC use only; do not use.

6.6 The MEMSEG Acknowledgement Audit Record ("ADT")

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

The Audit ("ADT") record has a similar format to the MEMSEG input Transmission Trailer record. Its identifying fields, however, are derived from the input Transmission Header record (when it is present), and its totals are derived from ACCEPTED Data records only.

When transmitted, the Audit ("ADT") record is the final MEMSEG Acknowledgement record. The MEMSEG "ADT" Audit record is described in the table below.

MEMSEG Acknowledgement Audit Record ("ADT") (Part 1 of 2)

Position	Length	Format	Field Name	Field Description
1	3	Character	Record Identifier	Record Identifier: Will be "ADT".
4	4	Character	Filler	DTC use only. Do not use.
8	4	Character	SIGNON ID.	SIGNON ID.: From JCL parameter.
12	6	Character	Activity Type	Activity Type: Will be "MEMSEG".
18	3	Numeric	Transmission ID.	Transmission ID. From JCL parameter.
21	2	Character	Filler	DTC use only. Do not use.
23	5	Numeric	Total Accepted Record Count	The total number of Data records in this MEMSEG transmission that were accepted, as calculated by DTC.
28	2	Character	Filler	DTC use only; do not use.
30	13	Numeric	Total Accepted Security Quantity	The total Security Quantity from all the accepted Data records in this MEMSEG transmission, as calculated by DTC.
43	38	Character	Filler	DTC use only; do not use.