NEACH
Your Trusted Resource in Payments

The Payments Institute

July 21-24, 2019 • Emory University, Atlanta GA

ACH File Formats

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Senior Vice President

Nacha

Payments Institute

For the Duration of this Presentation

- Remain seated
- We will taking a trip back in time
- We are going back to the late 60s and early 70s
  - A time just after we put a man on the moon with less computing power than that of a smart phone
- Industry was creating a faster payment system, the ACH
- Now for the show…


[fromfilm.com]

Agenda

- ACH Formats 1970s Building a Faster Payment System
- Data Specification
- Record Layouts
- Field Types and Formats
- All Entries including
  - International ACH Transactions
  - Notifications of Change
  - Returns

Payroll Example

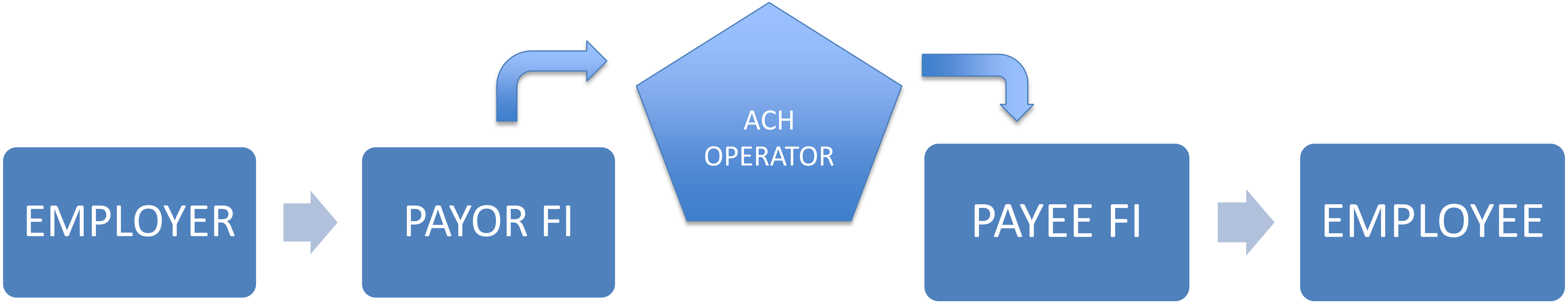
Payroll Information

- Employer/ID
- Employee/ID
- Paying Bank
- Employee's Bank
- Account Number
- Amount
- Pay Date
- Additional Information (optional)

Organizational/Tracking Information

- Ordering of Records
- Type of Entries (in Batch)
- Computer Processing Fields
  - Dates, times, addresses

Payment Flow



ACH OPERATOR

- Checks Files
- Delivers Payrolls
- Facilitates Settlement

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Raw Data

101 101000048 1031125949504140050A094101FRB KANSAS CITY RCB BANK ANYTOWN 5220ABC TEST COMPANYPAYROLL 9000000625PPDPAYROLL 041587870415
11031125900000016220818100021326 0000025600245366 MICKEY MOUSE 02011311259000000162208181000214420 0000031000243628 JOE DIRT
0201131125900000026220818100021146 0000042500243699 LANA TURNER 020113112590000003

6220818100021722 0000021600243565 MIKE TYSON 0201131125900000046220818100021458 0000031200243571 SAMUEL ADAMS
021103112590000005701OR JUANITA SLADE 8220000006000819038600000000000000000015190090000000625
1031125900000015225CENTRAL LIFE INS PREMS 1745722725PPDINS PREMS 041587870415 11031125900000026270818100021667 00000024003452233254 HARRIET
HOUSE 02011311259000000662708181000212 21 00000027003454577244 MAXWELL SMART 010103112590000007

6270818100021338 00000026003445649954 JOHN DILLINGER 020113112590000008627081810002122 9 00000024003434577893 MARKIE MARK
020113112590000009627081810002177 0 00000028003451117642 BILLY GUNN 020113112590000010627081810002189 8 00000022003455425886 FRED
FLINTSTONE 020113112590000011627081810002133 3 00000023563452569841 JOHNNY QUEST 020113112590000012

6270818100021880 00000027453451235731 ANNIE 02011311259000001382250000080008190386000000020201100000000000001745722725
10311259000000290000020000030000001400409519300000000020201100000151900

Organization and Structure

```
101 101000048 1032225949504140050A094101FRB KANSAS CITY       ABC BANK ANYTOWN
5220ABC TEST COMPANYPAYROLL           9000000625PPDPAYROLL   041587870415   1103112590000001
6220818100021326            0000025600245366        MICKEY THOMPSON      020113112590000001
6220818100021442            0000031000243628        JOE DOKES            020113112590000002
6220818100021146            0000042500243699        LANA TURNER          020113112590000003
6220818100021722            0000021600243565        MIKE A WILLIAMS      020113112590000004
6220818100021458            0000031200243571        SAMUEL SLADE         021103112590000005
701OR JUANITA SLADE
8220000006000819038600000000000000000151900900000625                      103112590000001
5225CENTRAL LIFE    INS PREMS          1745722725PPDINS PREMS 041587870415   1103112590000002
6270818100021667            000000240034522332544    HARRIET FRODENHAUSEN  020113112590000006
6270818100021221            00000027003454577244     MAXWELL SANDUSKI      010103112590000007
6270818100021338            00000026003445649954     JOHN DILLINGER        020113112590000008
6270818100021229            00000024003434577893     MARK HARRISON         020113112590000009
6270818100021770            00000028003451117642     BILLY WATUSI          020113112590000010
6270818100021898            00000022003455425886     FRED LANGSTON         020113112590000011
6270818100021333            00000023563452569841     MARION QUEST          020113112590000012
6270818100021880            00000027453451235731     ANNI FRANKEN          020113112590000013
8225000008000819038600000020201100000000001745722725                      103112590000002
9000002000003000000140040951930000000020201100000151900
```

~Representative view, not real data~

ACH Record Format Specifications

M

- Omission will cause the file, batch, or entry to be rejected by the ACH Operator

R

- Omission of this field may cause the entry to reject at the RDFI

O

- Inclusion of data in this field is at the discretion of the ODFI and the Originator

File, Batch & Entry Detail Rejection

ACH Operator will reject files, batches or entries if fields are not valid.

Sending Point must choose either a batch level or file level reject option.

Individual entries will be rejected with specific return codes, i.e., R13 – Invalid Routing Number

Data Specifications

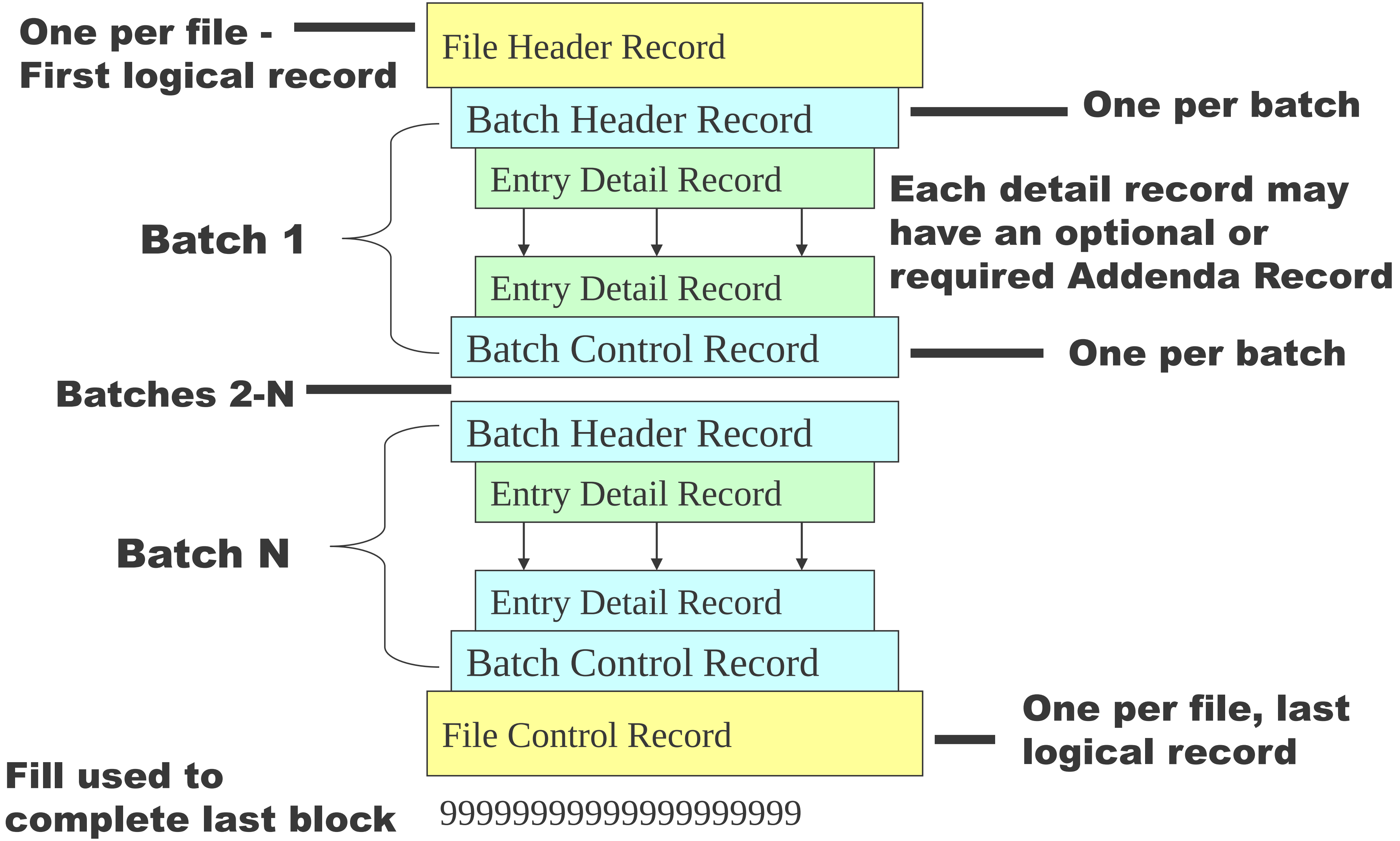
- Alphameric and Alphabetic Fields
  - Left-justified and space filled
- Numeric Fields
  - Right-justified, unsigned and zero filled
- Characters used are restricted to
  - 0-9, A-Z, a-z, space, special characters
- Field specific
  - Require specific data in them or a requirement to be left ‘blank’ (these fields are identified by ‘   ‘)

More on Data Specifications

- Upper case characters MUST be used for:
  - Standard Entry Class (SEC) Code field
  - File ID modifier field (alphabetic characters)
  - Change Code field and Refused COR Change field (alphabetic characters)
  - Return Reason Code fields (all types of returns) – (alphabetic characters)
  - Company Entry Description fields containing any of these words:
    - REVERSAL (Reversal entries)
    - RECLAIM (Commercial Reclamation entries)
    - NONSETTLED (for entries where settlement can't be completed)
    - AUTOENROLL (for ENR entries)
    - REDEPCHECK (for RCK entries)
    - NO CHECK (for XCK entries)
    - RETURN FEE (Return Fee Entries)
    - HCCLAIMPMT (Health Care EFT Transactions)
    - RETRY PYMT (Retry Payment)
  - Company Name field = CHECK DESTROYED (for XCK entries)
  - Batch Header Record IAT NOC
    - IATCOR – located in IAT Indicator Field

FILE STRUCTURE

Sequence of Records (Appendix One)



File Structure Data Specifications

- Sequence of ACH Records
  - File Header Record (1)
  - Company/Batch Header Record (5)
  - Entry Detail, Corporate Entry Detail Record (6)
  - Addenda Record (7)
  - Company/Batch Control Record (8)
  - File Control Record (9)
- Each ACH Record contains 94 characters
  - These characters are divided into “fields” within each record of the ACH file

Used to transmit files between Sending Points: ODFIs, THIRD PARTY SERVICE PROVIDERS, TO ACH OPERATORS

FILE HEADER & CONTROL

File Header Record “1”

FIELD	1	2	3	4	5	6	7	8	9	10	11	12	13
DATA ELEMENT NAME	RECORD TYPE CODE	PRIORITY CODE	IMMEDIATE DESTINATION	IMMEDIATE ORIGIN	FILE CREATION DATE	FILE CREATION TIME	FILE ID MODIFIER	RECORD SIZE	BLOCKING FACTOR	FORMAT CODE	IMMEDIATE DESTINATION NAME	IMMEDIATE ORIGIN NAME	REFERENCE CODE
Field Inclusion Requirement	M	R	M	M	M	O	M	M	M	M	O	O	O
Contents	‘1’	Numeric	bTTTTAAAAC	bTTTTAAAAC	YYMMDD	HHMM	UPPER CASE A-Z NUMERIC 0-9	‘094’	‘10’	‘1’	Alphameric	Alphameric	Alphameric
Length	1	2	10	10	6	4	1	3	2	1	23	23	8
Position	01-01	02-03	04-13	14-23	24-29	30-33	34-34	35-37	38-39	40-40	41-63	64-86	87-94

FIELD	1	2	3	4	5	6
DATA ELEMENT NAME	**RECORD TYPE CODE**	**PRIORITY CODE**	**IMMEDIATE DESTINATION**	**IMMEDIATE ORIGIN**	**FILE CREATION DATE**	**FILE CREATION TIME**
Field Inclusion Requirement	M	R	M	M	M	O
Contents	‘1’	Numeric	bTTTTAAAAC	bTTTTAAAAC	YYMMDD	HHMM
Length	1	2	10	10	6	4
Position	01-01	02-03	04-13	14-23	24-29	30-33

File Header Record “1”

FIELD	1	2	3	4	5	6	7	8	9	10	11	12	13
DATA ELEMENT NAME	RECORD TYPE CODE	PRIORITY CODE	IMMEDIATE DESTINATION	IMMEDIATE ORIGIN	FILE CREATION DATE	FILE CREATION TIME	FILE ID MODIFIER	RECORD SIZE	BLOCKING FACTOR	FORMAT CODE	IMMEDIATE DESTINATION NAME	IMMEDIATE ORIGIN NAME	REFERENCE CODE
Field Inclusion Requirement	M	R	M	M	M	O	M	M	M	M	O	O	O
Contents	‘1’	Numeric	bTTTTAAAAC	bTTTTAAAAC	YYMMDD	HHMM	UPPER CASE A-Z NUMERIC 0-9	‘094’	‘10’	‘1’	Alphameric	Alphameric	Alphameric
Length	1	2	10	10	6	4	1	3	2	1	23	23	8
Position	01-01	02-03	04-13	14-23	24-29	30-33	34-34	35-37	38-39	40-40	41-63	64-86	87-94

7	8	9	10	11	12	13
FILE ID MODIFIER	RECORD SIZE	BLOCKING FACTOR	FORMAT CODE	IMMEDIATE DESTINATION NAME	IMMEDIATE ORIGIN NAME	REFERENCE CODE
M	M	M	M	O	O	O
UPPER CASE A-Z NUMERIC 0-9	‘094’	‘10’	‘1’	Alphameric	Alphameric	Alphameric
1	3	2	1	23	23	8
34-34	35-37	38-39	40-40	41-63	64-86	87-94

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File Control Record “9”

FIELD	1	2	3	4	5	6	7	8
DATA ELEMENT NAME	RECORD TYPE CODE	BATCH COUNT	BLOCK COUNT	ENTRY/ADDENDA COUNT	ENTRY HASH	TOTAL DEBIT ENTRY DOLLAR AMOUNT IN FILE	TOTAL CREDIT ENTRY DOLLAR AMOUNT IN FILE	RESERVED
Field Inclusion Requirement	M	M	M	M	M	M	M	N/A
Contents	‘9’	Numeric	Numeric	Numeric	Numeric	$$$$$$$$$$¢¢	$$$$$$$$$$¢¢	Blank
Length	1	6	6	8	10	12	12	39
Position	01-01	02-07	08-13	14-21	22-31	32-43	44-55	56-94

FIELD	1	2	3	4
DATA ELEMENT NAME	RECORD TYPE CODE	BATCH COUNT	BLOCK COUNT	ENTRY/ADDENDA COUNT
Field Inclusion Requirement	M	M	M	M
Contents	‘9’	Numeric	Numeric	Numeric
Length	1	6	6	8
Position	01-01	02-07	08-13	14-21

File Control Record “9”

FIELD	1	2	3	4	5	6	7	8
DATA ELEMENT NAME	RECORD TYPE CODE	BATCH COUNT	BLOCK COUNT	ENTRY/ADDENDA COUNT	ENTRY HASH	TOTAL DEBIT ENTRY DOLLAR AMOUNT IN FILE	TOTAL CREDIT ENTRY DOLLAR AMOUNT IN FILE	RESERVED
Field Inclusion Requirement	M	M	M	M	M	M	M	N/A
Contents	'9'	Numeric	Numeric	Numeric	Numeric	$$$$$$$$$$¢¢	$$$$$$$$$$¢¢	Blank
Length	1	6	6	8	10	12	12	39
Position	01-01	02-07	08-13	14-21	22-31	32-43	44-55	56-94

5	6	7	8
ENTRY HASH	TOTAL DEBIT ENTRY DOLLAR AMOUNT IN FILE	TOTAL CREDIT ENTRY DOLLAR AMOUNT IN FILE	RESERVED
M	M	M	N/A
Numeric	$$$$$$$$$$¢¢	$$$$$$$$$$¢¢	Blank
10	12	12	39
22-31	32-43	44-55	56-94

File Header Record (1)

- The first logical record in an ACH file
- One file header record per ACH file

- What does a file header record tell us?
- Who is sending the file
- Where the file is going
- File creation date and time.

- Picture an ACH File Header as an envelope:
  - a return address to identify who is sending it,
  - an address to tell us where it is going, and
  - a stamp from post office with date and time.

ACH File Header/Trailer (Control) Records

File Header

Record Type Code
M (1)

Immediate Destination
M (4-13)

File Creation Date
M (24-29)

File ID Modifier
M (34)

Blocking Factor
M (38-39)

Immediate Destination Name
O (41-63)

Reference Code
O (87-94)

101 900102008 0999123450506011138A094101ELECTRONICPAYNETWORK MY BANK

Priority Code
M (2-3)

Immediate Origin
M (14-23)

File Creation Time
O (30-33)

Record Size
M (35-37)

Format Code
M (40)

Immediate Origin Name
O (64-86)

File Control

Record Type Code
M (1)

Block Count
M (8-13)

Entry Hash
M (22-31)

Total Credits
M (44-55)

9000001000001000000020009101298000000000000000000095000

Batch Count
M (2-7)

Entry/Addenda Count
M (14-21)

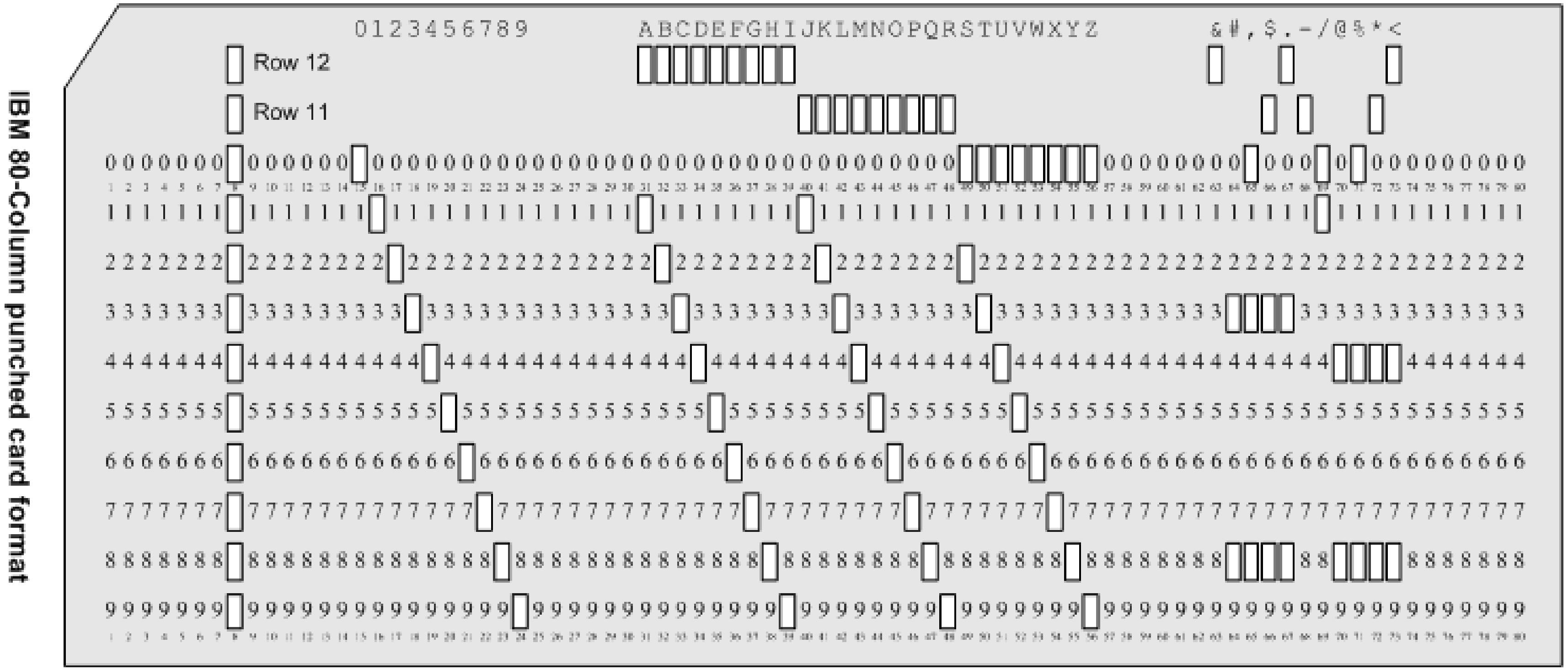
Total Debits
M (32-43)

Reserved
N/A (56-94)

Where did it start?

Used 80 characters record
Added a 15 trace number
Starts at zero

0 + 80 + 15 = 94 characters



Every ACH record in 94 Characters long. Period.

What is the Block Count?

- A “block” consists of 10 records, each record is 94 characters, which equals 940 characters (94 character records x 10 records)
- If the last block has less than 940 characters of information, the remainder of the block must be filled with 9s

9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999

Blocking Factor "The Why"

The origin of "blocking factor was to enable the machines to catch up to the data. The physical tape ran at a different speed than the computer could read, so every so often (10 records) the computer wanted to check that it was in the right place.

Figure 89. IBM 729 Magnetic Tape Unit   Figure 90. IBM 7330 Magnetic Tape Unit

Other Standards & Values

FIELD	STANDARD
File Header – Record Type Code	“1”
Priority Code	“01”
Record Size	“094”
Blocking Factor	“10”
File Control – Record Type Code	“9”
Batch Count	Total # of Batches in File
Block Count	Total # of Blocks in File
Entry/Addenda Count	Total # of Entries & Addenda Records
Entry Hash	Math confirming Batches are unaltered
Total Debit & Total Credit $$	2 Fields Total dollars for each
Reserved	One of many Reserved fields – blank and unused

Payment information – Payrolls, Business Payments, Social Security Payments, Any Payment (except IATs)

BATCH HEADER & CONTROL

Company/Batch Header (5)

- Contains information about the Company/Originator and the type of detail records to follow:
- One Batch Header Record per Batch
  - Can be multiple batches within file
- Service Class Code
  - Identifies that batch has debit/credit entries or both
- Company Name & Company Identification
  - Identifies the Originator – Who secured authorization
- Standard Entry Class (SEC) Code
  - Type of entry/product – Rules that apply
- Company Entry Description
  - Describes purpose of entry, i.e., gas bill, payroll, mortgage

Company/Batch Header Record “5”

FIELD	1	2	3	4	5	6	7	8	9	10	11	12	13
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	COMPANY NAME	COMPANY DISCRETIONARY DATA	COMPANY IDENTIFICATION	STANDARD ENTRY CLASS CODE	COMPANY ENTRY DESCRIPTION	COMPANY DESCRIPTIVE DATE	EFFECTIVE ENTRY DATE	SETTLEMENT DATE (JULIAN)	ORIGINATOR STATUS CODE	ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
Field Inclusion Requirement	M	M	M	O	M	M	M	O	R	Inserted by ACH Operator	M	M	M
Contents	'5'	Numeric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	YYMMDD	Numeric	Alphameric	TTTTAAAA	Numeric
Length	1	3	16	20	10	3	10	6	6	3	1	8	7
Position	01-01	02-04	05-20	21-40	41-50	51-53	54-63	64-69	70-75	76-78	79-79	80-87	88-94

FIELD	1	2	3	4	5	6
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	COMPANY NAME	COMPANY DISCRETIONARY DATA	COMPANY IDENTIFICATION	STANDARD ENTRY CLASS CODE
Field Inclusion Requirement	M	M	M	O	M	M
Contents	'5'	Numeric	Alphameric	Alphameric	Alphameric	Alphameric
Length	1	3	16	20	10	3
Position	01-01	02-04	05-20	21-40	41-50	51-53

Company/Batch Header Record “5”

FIELD	1	2	3	4	5	6	7	8	9	10	11	12	13
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	COMPANY NAME	COMPANY DISCRETIONARY DATA	COMPANY IDENTIFICATION	STANDARD ENTRY CLASS CODE	COMPANY ENTRY DESCRIPTION	COMPANY DESCRIPTIVE DATE	EFFECTIVE ENTRY DATE	SETTLEMENT DATE (JULIAN)	ORIGINATOR STATUS CODE	ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
Field Inclusion Requirement	M	M	M	O	M	M	M	O	R	Inserted by ACH Operator	M	M	M
Contents	'5'	Numeric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	YYMMDD	Numeric	Alphameric	TTTTAAAA	Numeric
Length	1	3	16	20	10	3	10	6	6	3	1	8	7
Position	01-01	02-04	05-20	21-40	41-50	51-53	54-63	64-69	70-75	76-78	79-79	80-87	88-94

7	8	9	10	11	12	13
COMPANY ENTRY DESCRIPTION	COMPANY DESCRIPTIVE DATE	EFFECTIVE ENTRY DATE	SETTLEMENT DATE (JULIAN)	ORIGINATOR STATUS CODE	ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
M	O	R	Inserted by ACH Operator	M	M	M
Alphameric	Alphameric	YYMMDD	Numeric	Alphameric	TTTTAAAA	Numeric
10	6	6	3	1	8	7
54-63	64-69	70-75	76-78	79-79	80-87	88-94

Batch Control Record “8”

FIELD	1	2	3	4	5	6	7	8	9	10	11
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	ENTRY/ ADDENDA COUNT	ENTRY HASH	TOTAL DEBIT ENTRY DOLLAR AMOUNT	TOTAL CREDIT ENTRY DOLLAR AMOUNT	COMPANY IDENTIFICATION	MESSAGE AUTHENTICATION CODE	RESERVED	ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
Field Inclusion Requirement	M	M	M	M	M	M	R	O	N/A	M	M
Contents	‘8’	Numeric	Numeric	Numeric	$$$$$$$$$$¢¢	$$$$$$$$$$¢¢	Alphameric	Alphameric	Blank	TTTTAAAA	Numeric
Length	1	3	6	10	12	12	10	19	6	8	7
Position	01-01	02-04	05-10	11-20	21-32	33-44	45-54	55-73	74-79	80-87	88-94

FIELD	1	2	3	4	5
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	ENTRY/ ADDENDA COUNT	ENTRY HASH	TOTAL DEBIT ENTRY DOLLAR AMOUNT
Field Inclusion Requirement	M	M	M	M	M
Contents	‘8’	Numeric	Numeric	Numeric	$$$$$$$$$$¢¢
Length	1	3	6	10	12
Position	01-01	02-04	05-10	11-20	21-32

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Batch Control Record "8"

FIELD	1	2	3	4	5	6	7	8	9	10	11
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	ENTRY/ ADDENDA COUNT	ENTRY HASH	TOTAL DEBIT ENTRY DOLLAR AMOUNT	TOTAL CREDIT ENTRY DOLLAR AMOUNT	COMPANY IDENTIFICATION	MESSAGE AUTHENTICATION CODE	RESERVED	ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
Field Inclusion Requirement	M	M	M	M	M	M	R	O	N/A	M	M
Contents	'8'	Numeric	Numeric	Numeric	$$$$$$$$$$¢¢	$$$$$$$$$$¢¢	Alphameric	Alphameric	Blank	TTTTAAAA	Numeric
Length	1	3	6	10	12	12	10	19	6	8	7
Position	01-01	02-04	05-10	11-20	21-32	33-44	45-54	55-73	74-79	80-87	88-94

6	7	8	9	10	11
TOTAL CREDIT ENTRY DOLLAR AMOUNT	COMPANY IDENTIFICATION	MESSAGE AUTHENTICATION CODE	RESERVED	ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
M	R	O	N/A	M	M
$$$$$$$$$$¢¢	Alphameric	Alphameric	Blank	TTTTAAAA	Numeric
12	10	19	6	8	7
33-44	45-54	55-73	74-79	80-87	88-94

Company/Batch Header - continued

- Effective Entry Date (wish date)
  - The date the originator intends the entries to settlement
- Settlement Date (inserted by ACH Operator)
  - Based on Effective Entry Date and Process Date
- Originator Status Code (ACH Operator edits)
  - 0 - ADV file - prepared by an ACH Operator
  - 1 - Originator is an FI (from the operators point of view)
  - 2 - Originator is a Government Agency or other agency not subject to ACH Rules
- Originating DFI Identification
  - ODFI’s ABA number (first 8-digits) -- FI transmitting entry

Information in this record <u>applies to all detail records</u> in batch

Service Class Code

- **What does the Service Class Code do?**
  - Identifies the general classification of dollar entries to be exchanged (i.e., debit and/or credit entries)
- **Different types of Service Class Codes**
  - 200 ACH Entries Mixed Debits and Credits
  - 220 ACH Credits Only
  - 225 ACH Debits Only
  - 280 ACH Automated Accounting Advices

Other Standards & Fields

- Message Authentication Code (MAC)
  - Standard Encryption (public key/private key) used to authenticate the batch.
  - Uses a standard called DES, simply a Data Encryption Standard (DES)
  - Looked high & low for more information
  - As an Optional Field, it is important to the Originator. Not edited, or important to Originators & ODFIs or Originators & Third Party Senders
  - Best Guess – an added security feature to ensure that batch is valid

Standard Entry Class(SEC) Code

- Identifies the payment type (product) found within an ACH batch- using a 3-character code
  - Examples: PPD, CCD, CTX, ARC, POP, BOC
- The SEC Code pertains to all items within batch
  - Determines format of the detail records
  - Determines addenda records (required or optional, PLUS one or up to 9,999 records)
  - Determines rules to follow (return timeframes)
- SEC codes are used throughout the NACHA Rules Book referencing fields by data element name
    - Some SEC codes require specific data in predetermined fields within the ACH record

Standard Entry Class (SEC) Codes

SEC Code	# Addenda Records	Optional-Mandatory	Debit or Credit Tran-Codes or Both	Consumer or Corporate or BOTH (Receiver)
ACK	1	O	Credit	Corporate
ADV	0	N/A	Both	N/A
ARC	0	N/A	Debit	BOTH (Receiver)
ATX	1	O	Credit	Corporate
BOC	0	N/A	Debit	BOTH (Receiver)
CCD	1	O	Both	Corporate
CIE	1	O	Credit	Corporate
COR	1	M	Both	ALL
CTX	9,999	O	Both	Corporate
DNE	1	M	Credit	Consumer
ENR	9,999	M	Credit	Consumer

SEC Codes - continued

SEC Code	# Addenda Records	Optional-Mandatory	Debit or Credit Tran-Codes or Both	Consumer or Corporate or Receiver
IAT	Incoming - up to 12 Outgoing - up to 9	M – 7 O – up to 2 remit O – up to 5 foreign correspondent	Both	Both
MTE	1	M (unless pre-note)	Both	Consumer
POS	1	M (unless pre-note)	Debit	Consumer
PPD	1	O (unless pre-note)	Both	Consumer
POP	0	N/A	Debit	BOTH (Receiver)
RCK	0	N/A	Debit	Consumer
SHR	1	M (unless pre-note)	Debit	Consumer
TEL	0	N/A	Debit	Consumer
TRC	0	N/A	Both	Both
TRX	9,999	M	Both	Both
WEB	1	O	Debit	Consumer
XCK	0	N/A	Debit	Both

File Structure – Addenda Records

- Addenda records
  - Additional "payment-related information" pertaining to the entry detail record to which they are attached (check stub info)
- Addenda Record Requirement
  - Mandatory, Optional or None
  - Determined by Standard Entry Class (SEC) Code
- Number of Addenda Record(s)
  - Determined also by Standard Entry Class code
    - 1 Addenda Record
    - Up to 9,999 Addenda Records

Addenda Record Present or Not Present

What SEC codes have mandatory addenda?

COR DNE ENR IAT POS MTE SHR TRX

$\underbrace{\text{COR DNE ENR}}_{\text{Non-value}}$

$\underbrace{\text{POS MTE SHR}}_{\text{Terminal Information}}$

What SEC codes allow 9,999 addenda?

CTX ENR TRX

Originator Status Code

1 = Originator (ODFI) is a financial institution

2 = Originator is a Federal Government entity

Company Batch Header/Control Records

Company Batch Header Record

Record Type Code M (1)

Company Name M (5-20)

Company I.D. Number M (41-50)

Company Entry Description M (54-63)

Effective Entry Date R (70-75)

Originator Status Code M (79)

Batch Number M (88-94)

5200MY BEST COMP. **INCLUDES OVERTIME** 1419871234PPDPAYROLL 060205050602 1099912340000001

Service Class Code M (2-4)

Company Discretionary Data O (21-40)

Standard Entry Class Code M (51-53)

Company Descriptive Date O (64-69)

Settlement Date N/A (76-78)

Originating DFI I.D. # M (80-87)

Company Batch Control Record

Record Type Code M (1)

Entry/Addenda Count M (5-10)

Total Debit $ Amount M (21-32)

Company I.D. Number M (45-54)

Reserved N/A (74-79)

Batch Number M (88-94)

82000000020009101298000000000000000000095000141987123 4 099912340000001

Service Class Code M (2-4)

Entry Hash M (11-20)

Total Credit $ Amount M (33-44)

Message Authentication Code O (55-73)

Originating DFI Identification # M (80-87)

Individual payments and related information

BATCHES & MORE ADDENDA

Entry Detail Record “6”

FIELD	1	2	3	4	5	6	7	8	9	10	11
DATA ELEMENT NAME	RECORD TYPE CODE	TRANSACTION CODE	RECEIVING DFI IDENTIFICATION	CHECK DIGIT	DFI ACCOUNT NUMBER	AMOUNT	INDIVIDUAL IDENTIFICATION NUMBER	INDIVIDUAL NAME	DISCRETIONARY DATA	ADDENDA RECORD INDICATOR	TRACE NUMBER
Field Inclusion Requirement	M	M	M	M	R	M	O	R	O	M	M
Contents	‘6’	Numeric	TTTTAAAA	Numeric	Alphameric	$$$$$$$$¢¢	Alphameric	Alphameric	Alphameric	Numeric	Numeric
Length	1	2	8	1	17	10	15	22	2	1	15
Position	01-01	02-03	04-11	12-12	13-29	30-39	40-54	55-76	77-78	79-79	80-94

FIELD	1	2	3	4	5
DATA ELEMENT NAME	RECORD TYPE CODE	TRANSACTION CODE	RECEIVING DFI IDENTIFICATION	CHECK DIGIT	DFI ACCOUNT NUMBER
Field Inclusion Requirement	M	M	M	M	R
Contents	‘6’	Numeric	TTTTAAAA	Numeric	Alphameric
Length	1	2	8	1	17
Position	01-01	02-03	04-11	12-12	13-29

Entry Detail Record “6”

FIELD	1	2	3	4	5	6	7	8	9	10	11
DATA ELEMENT NAME	RECORD TYPE CODE	TRANSACTION CODE	RECEIVING DFI IDENTIFICATION	CHECK DIGIT	DFI ACCOUNT NUMBER	AMOUNT	INDIVIDUAL IDENTIFICATION NUMBER	INDIVIDUAL NAME	DISCRETIONARY DATA	ADDENDA RECORD INDICATOR	TRACE NUMBER
Field Inclusion Requirement	M	M	M	M	R	M	O	R	O	M	M
Contents	'6'	Numeric	TTTTAAAA	Numeric	Alphameric	$$$$$$$$¢¢	Alphameric	Alphameric	Alphameric	Numeric	Numeric
Length	1	2	8	1	17	10	15	22	2	1	15
Position	01-01	02-03	04-11	12-12	13-29	30-39	40-54	55-76	77-78	79-79	80-94

6	7	8	9	10	11
AMOUNT	INDIVIDUAL IDENTIFICATION NUMBER	INDIVIDUAL NAME	DISCRETIONARY DATA	ADDENDA RECORD INDICATOR	TRACE NUMBER
M	O	R	O	M	M
$$$$$$$$¢¢	Alphameric	Alphameric	Alphameric	Numeric	Numeric
10	15	22	2	1	15
30-39	40-54	55-76	77-78	79-79	80-94

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Addenda Record “7”

FIELD	1	2	3	4	5	6	7	8
DATA ELEMENT NAME	RECORD TYPE CODE	ADDENDA TYPE CODE	RETURN REASON CODE	ORIGINAL ENTRY TRACE NUMBER	DATE OF DEATH	ORIGINAL RECEIVING DFI IDENTIFICATION	ADDENDA INFORMATION	TRACE NUMBER
Field Inclusion Requirement	M	M	M	M	O	R	O	M
Contents	‘7’	‘99’	Alphameric	Numeric	YYMMDD	TTTTAAAA	Alphameric	Numeric
Length	1	2	3	15	6	8	44	15
Position	01-01	02-03	04-06	07-21	22-27	28-35	36-[illegible]	80-94

FIELD	1	2	3	4
DATA ELEMENT NAME	RECORD TYPE CODE	ADDENDA TYPE CODE	RETURN REASON CODE	ORIGINAL ENTRY TRACE NUMBER
Field Inclusion Requirement	M	M	M	M
Contents	‘7’	‘99’	Alphameric	Numeric
Length	1	2	3	15
Position	01-01	02-03	04-06	07-21

Addenda Record “7”

FIELD	1	2	3	4	5	6	7	8
DATA ELEMENT NAME	RECORD TYPE CODE	ADDENDA TYPE CODE	RETURN REASON CODE	ORIGINAL ENTRY TRACE NUMBER	DATE OF DEATH	ORIGINAL RECEIVING DFI IDENTIFICATION	ADDENDA INFORMATION	TRACE NUMBER
Field Inclusion Requirement	M	M	M	M	O	R	O	M
Contents	‘7’	‘99’	Alphameric	Numeric	YYMMDD	TTTTAAAA	Alphameric	Numeric
Length	1	2	3	15	6	8	44	15
Position	01-01	02-03	04-06	07-21	22-27	28-35	36-79	80-94

5	6	7	8
DATE OF DEATH	**ORIGINAL RECEIVING DFI IDENTIFICATION**	**ADDENDA INFORMATION**	**TRACE NUMBER**
O	R	O	M
YYMMDD	TTTTAAAA	Alphameric	Numeric
6	8	44	15
22-27	28-35	36-79	80-94

Entry Detail Record (6)

- Identifies Receiver’s account information
- Can be multiple detail records in each batch
- Transaction Code
  - Identifies whether entry is a debit or credit
  - Identifies what type of account: demand, savings, loan
- RDFI ABA #
  - The routing number of the Receiver’s FI
- Individual DFI Account Number
  - Receiver’s account number at its FI

Transaction Code

- What does the Transaction Code do?
  - Identifies the entry as a debit or credit entry AND to what type of account (Savings, DDA, Loan)

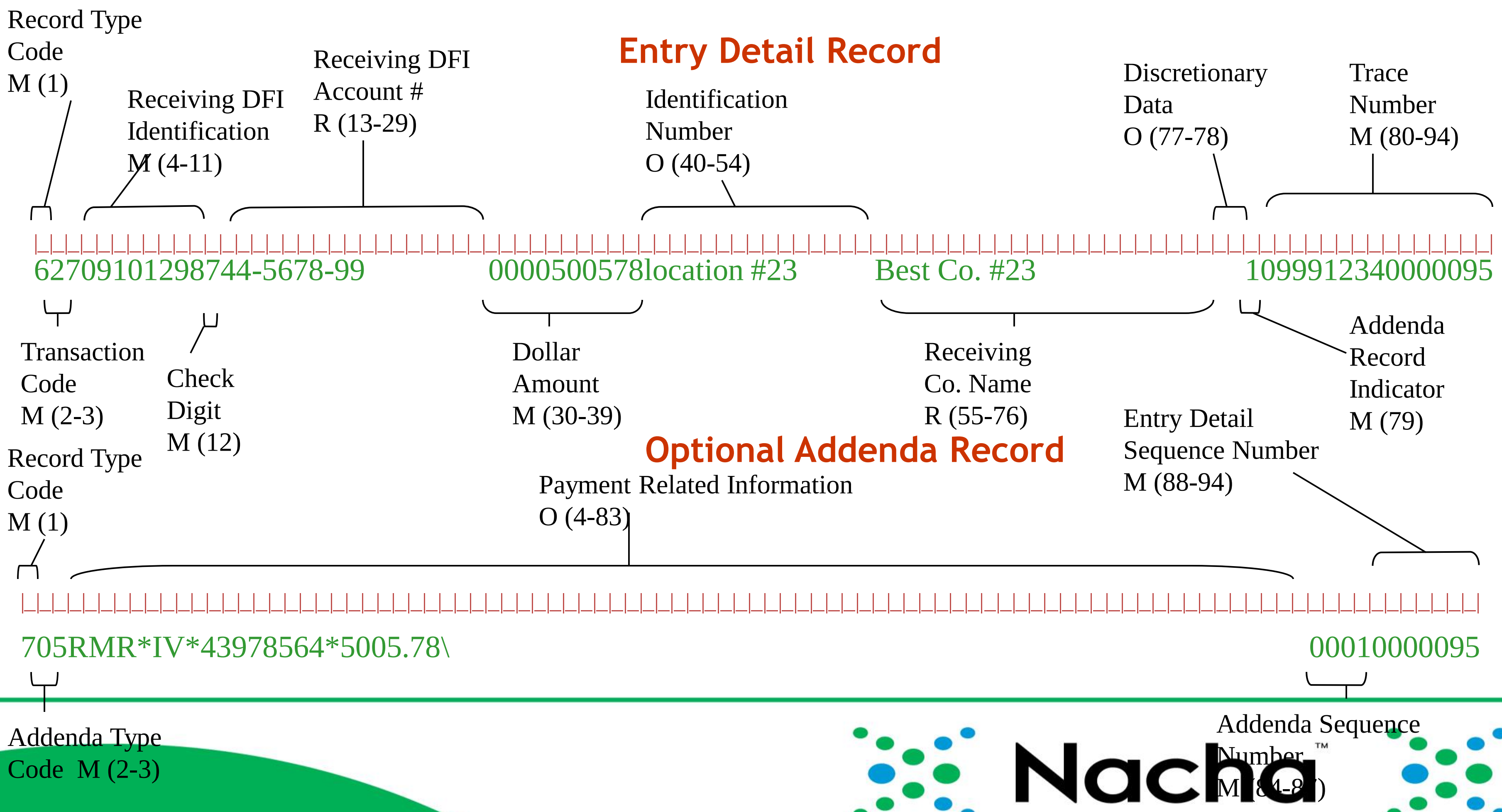
Description	*Automated Payment/Deposit*	*Return or NOCs*	*Prenotes*	*Zero Dollar Amount w/remittance data CCD &CTX entries only*
Demand Credit	22	21	23	24*
Savings Credit	32	31	33	34*
Demand Debit	27	26	28	29
Savings Debit	37	36	38	39
GL Credit	42	41	43	44
GL Debit	47	46	48	49
Loan Credit	52	51	53	54
Loan Debit	55 (Reversals Only)	56	N/A	N/A

*These transaction codes also represent Acknowledgement Entries for ACK and ATX entries only.

Entry Detail Record (6) - continued

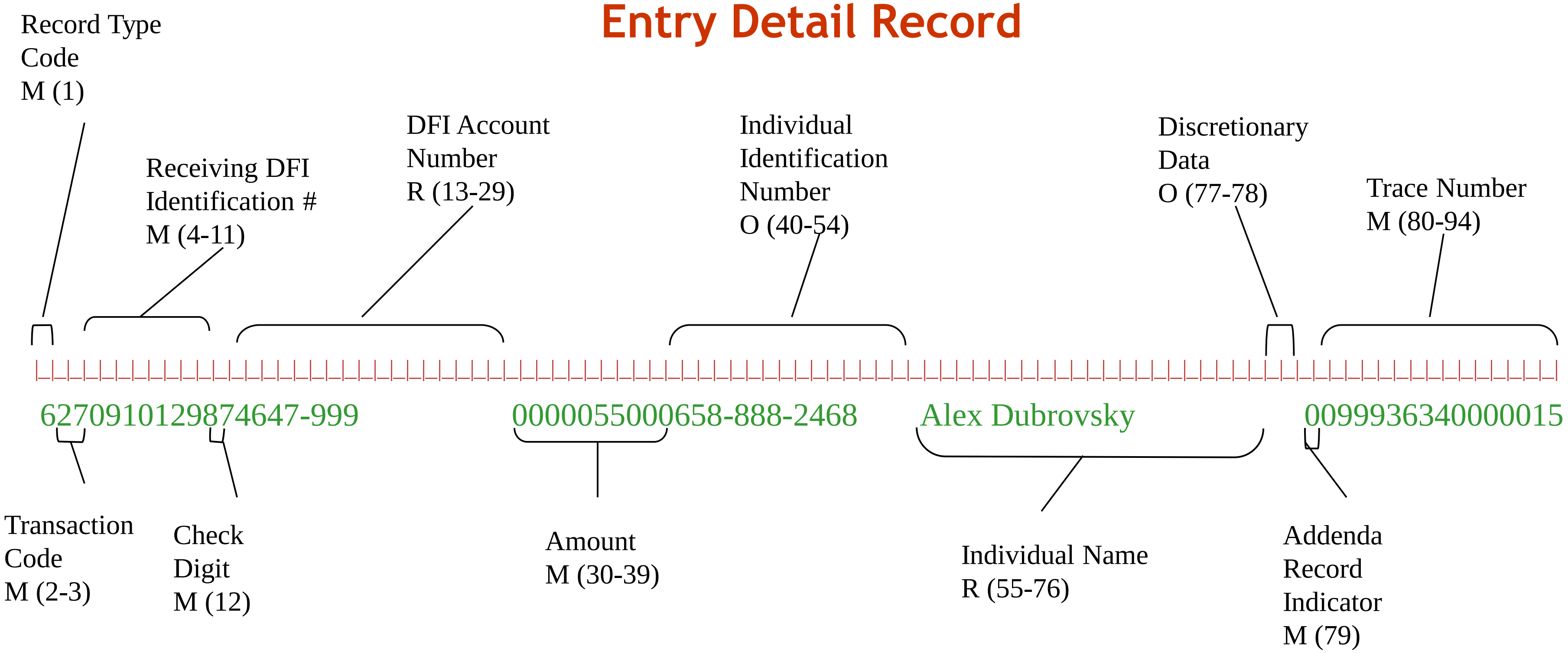
- Individual Identification Number
  - Field name and requirements/rules change, based on SEC Code
  - Individual ID-(optional for PPD), becomes check serial number field for ARC, POP, BOC and RCK (mandatory) – contains check serial number
- Individual Name
  - Receiver’s name (OPTIONAL for ARC , BOC and POP)
  - Can be Receiving Company Name (OPTIONAL for ARC, POP and BOC)
- Amount
  - Debit or Credit amount to be posted to Receiver’s account – details are indicated by transaction code in entry detail record
- Addenda Record Indicator
  - Indicates whether an addenda record will follow
  - 0 = none, 1= 1 or more (including up to 9,999)
- Trace Number
  - 15-digit number (first 8-digits identify the ODFI, and other 7 are unique)

Corporate Credit or Debit Entry (CCD)



PPD, TEL*, WEB*

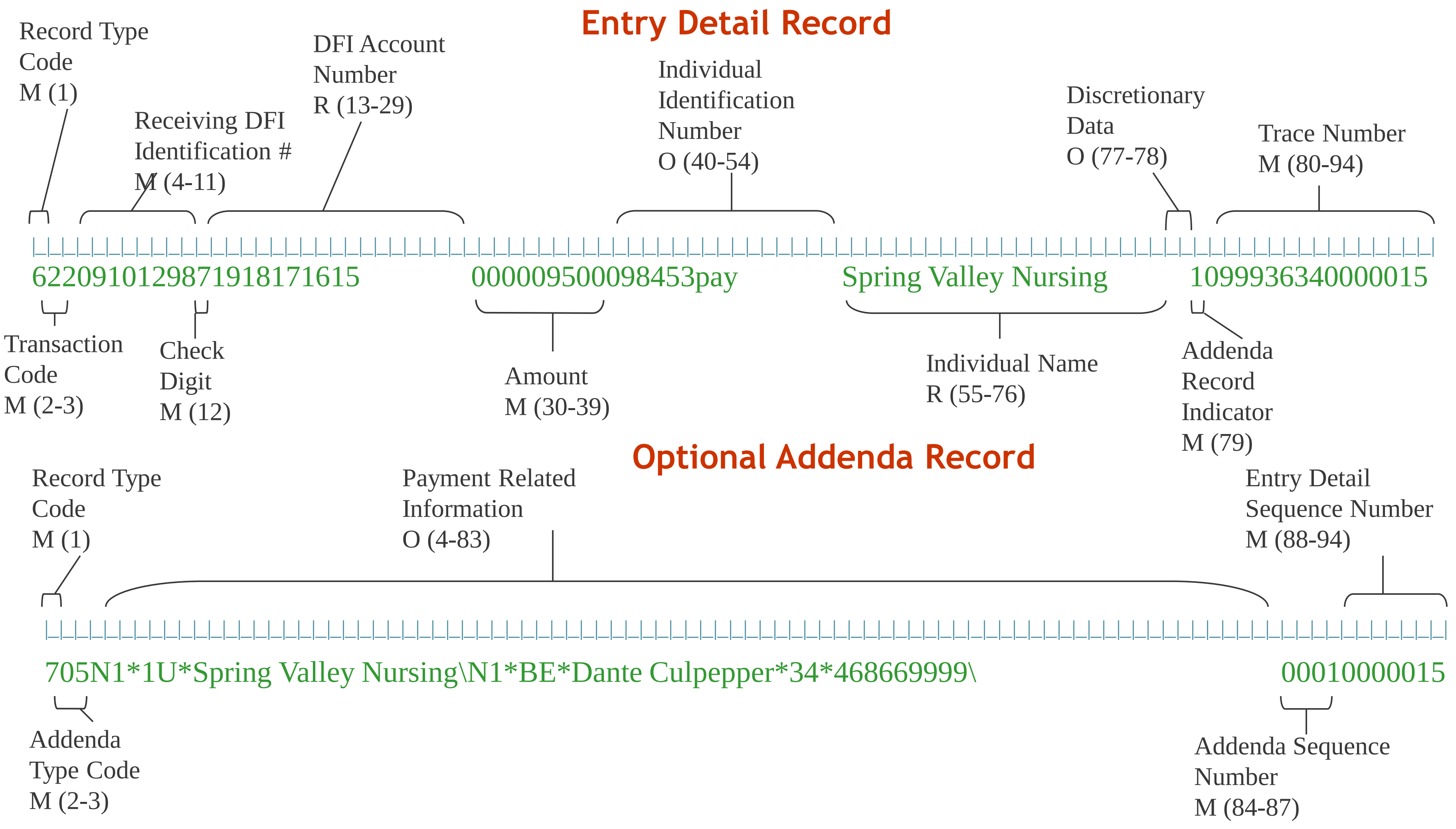
Entry Detail Record



*Discretionary Data Field = Payment Type Code Field in the TEL & WEB format

*Individual Name Field for TEL and WEB entries is **Mandatory**

Pre-authorized Payment and Deposit Entry (PPD)



Point of Sale Entry (POS)

Entry Detail Record

Record Type Code
M (1)

Receiving DFI Identification #
M (4-11)

DFI Account Number
R (13-29)

Individual Identification Number
O (40-54)

Card Transaction Type Code
M (77-78)

Trace Number
M (80-94)

627091012987191817161 5   0000095000984537869098 8 Randall Cunningham   01 1099912340000015

Transaction Code
M (2-3)

Check Digit
M (12)

Amount
M (30-39)

Individual Name
R (55-76)

Addenda Record Indicator
M (79)

Addenda Record

Record Type Code
M (1)

Reference Information #1
O (4-10)

Terminal I.D. Code
R (14-19)

Transaction Date
R (26-29)

Terminal Location
R (36-62)

Terminal State
R (78-79)

7029900078   2345AB6688771201010104Walmart 101 Main Street   Podunkville   MN099912340000015

Addenda Type Code
M (2-3)

Reference Information #2
O (11-13)

Transaction Serial Number
R (20-25)

Authorization Code or Card Expiration Date O (30-35)

Terminal City
R (63-77)

Trace Number
M (80-94)

Addenda Record (7)

- Addenda Records are used by the originator to supply additional payment related information (check stub data)
- When entry detail is being returned, addenda records associated with the entry detail or corporate entry detail records are not included (EXCEPTION – IAT entries)
- Addenda record information is used for transmitting payment related information ONLY. Any other use is prohibited.

Addenda Record (7) - continued

- Can be multiple addenda records
  - 1 or up to 9,999 (or no addenda records at all) based on SEC (Standard Entry Class) Code found in Batch Header
- Addenda Type Code
  - Describes specific explanation of information and format for the addenda info contained in the same record
- Addenda Sequence Number
  - Sequence number assigned to each addenda record consecutively
  - The first addenda record must always be a “1” (0001)
- Entry Detail Sequence Number
  - Number “matches” the last seven digits of the unique trace number (field 13) of the entry detail or corporate entry detail record to which it belongs

Addenda Type Code

- What does the Addenda Type Code do?
  - Defines the specific explanation and format for the addenda information contained in the same record
- Addenda Type Codes

Addenda Type Code	Interpretation/Explanation
02	For POS, SHR or MTE Entries
05	Addenda Record (ACK, ATX, CCD, CIE, CTX, DNE, ENR, PPD, TRX and WEB Entries)
98	Notification of Change and Refused Notification of Change Entry
99	Return, Dishonored Return and Contested Dishonored Return Entries

Corporate Trade Exchange Entry (CTX)

Entry Detail Record

Record Type Code M (1)

Receiving DFI Identification # M (4-11)

DFI Account Number R (13-29)

Identification Number O (40-54)

Receiving Co. Name/I.D. # R (59-74)

Discretionary Data O (77-78)

Trace Number M (80-94)

```
6220910129871918171615        000552411298453pay          0009395554443            1099912340000055
```

Transaction Code M (2-3)

Check Digit M (12)

Amount M (30-39)

# of Addenda Records M (55-58)

Reserved N/A (75-76)

Addenda Record Indicator M (79)

Optional Addenda Record

Record Type Code M (1)

Payment Related Information O (4-83)

Sequence Number M (88-94)

```
705ISA*00*0000000000*00*0000000000*ZZ*012345678912345*ZZ*543278912546328*980415*1136*U00010000055
705 *00304*SEE889740*0*T\GS*RA*012345678912345*5432198765*030415*1136*SEE889740*X*003000020000055
70540\ST*820*000010\BPR*C*55241.12*C*ACH*CTX*01*0916798765*DA*00006355*904403620*01*000030000055
70591712345*DA*5400596*030531\TRN*1*04401620000052\REF*72*A32507\DTM*097*980530\N1*PR00040000055
705*ABC COMPANY\N1*PE*XYZ FOODS INC.*93*A69UIPISAVES\N3*240 WASHINGTON AVE. SO00050000055
705UTH*SUITE 1425\N4*PODUNKVILLE *MN*556081234\ENT*1\RMR*IV*87945216547**21188.85*00060000055
70521354.10*00\REF*PO*87946598\DTM*122*980402\ADX*3*.10*L6\REF*98*A32599\REF*TD*B\RM00070000055
705R*IV*8794217863**34052.27*34052.27\DTM*165*980403\SE*27*0000000001\GE*1*88889340\IEA*00080000055
7051*888889340\                                                                          00090000055
```

Addenda Type Code M (2-3)

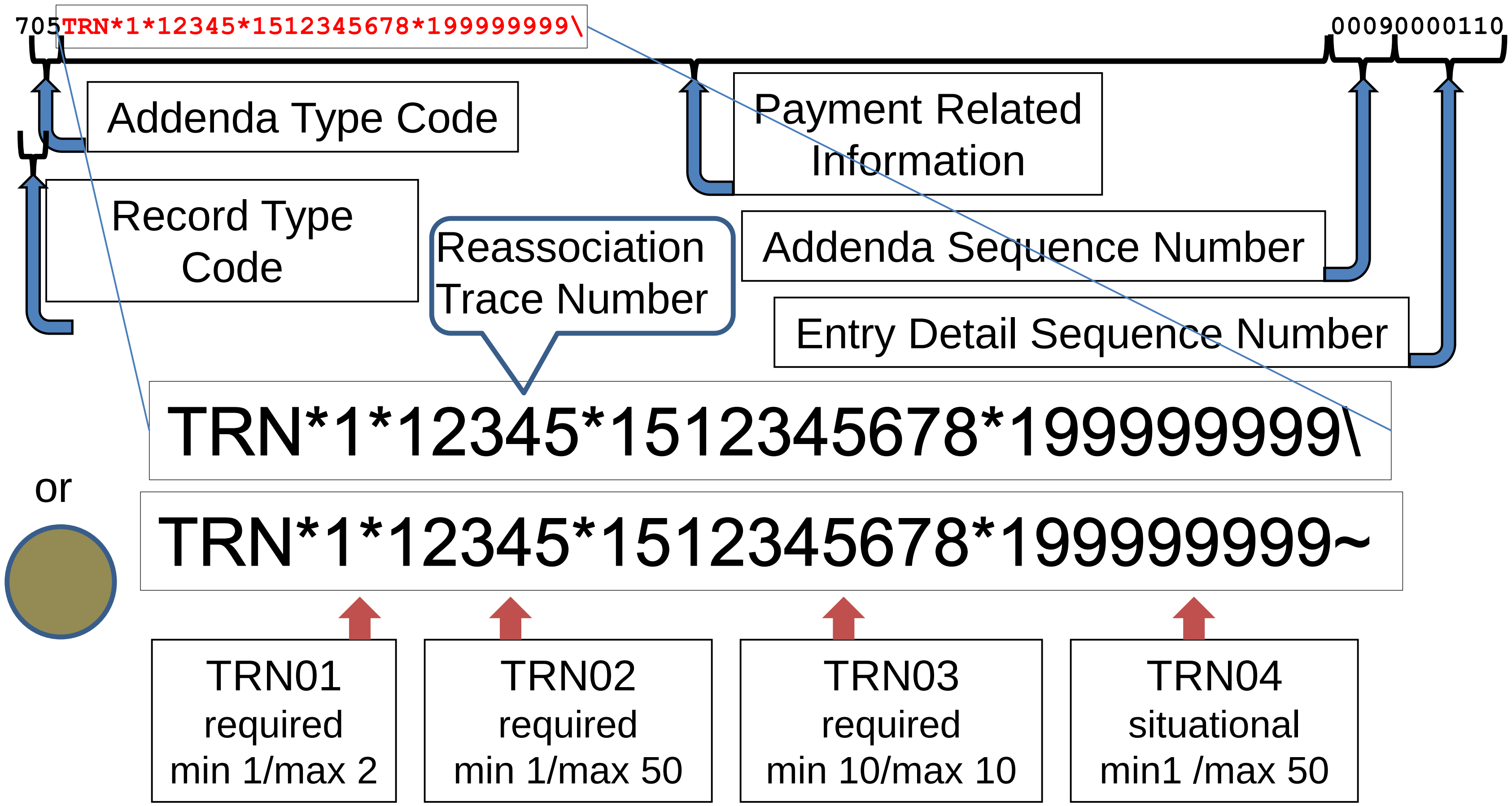
Addenda Sequence Number M (84-87)

Payment-Related Information

- A data element is the smallest unit
  - Delimiter = * (asterisk) – used between the data elements
- A data segment consists of logically-related data elements in a defined sequence
  - Terminator = \ (backslash) or ~(tilde) – used between the data segments

```
705ISA*00*0000000000*00*0000000000*ZZ*012345678912345*ZZ*5 43 2 789 12546328*980415*1136*U00010000055
705 *00304*SEE889740*0*T\GS*RA*012345678912345*5 4 32198765*030415*1136*SEE889740*X*003000020000055
70540\ST*820*000010\BPR*C*55241.12*C*ACH*CTX*01*09 1 67 9 87 65*DA*00006355*904403620*01*000030000055
70591712345*DA*5400596*030531\TRN*1*0440 1 6 20000052\REF*72*A32507\DTM*097*980530\N1*PR00040000055
705*ABC COMPANY\N1*PE*XYZ FOODS INC.*93*A6 9 U I P I SAVES \ N3*240 WASHINGTON AVE. SO00050000055
705UTH*SUITE 1425\N4*PODUNKVILLE *MN*5560 8 1 2 3 4 \ ENT*1\RMR*IV*87945216547**21188.85*00060000055
70521354.10*00\REF*PO*87 9 4 65 9 8 \DTM*122*980402\ADX*3*.10*L6\REF*98*A32599\REF*TD*B\RM00070000055
705R*IV*8794217863**34052.27*34052.27\DTM*165*9 8 04 03 \SE*27*0000000001\GE*1*88889340\IEA*00080000055
7051*888889340~                                                                            00090000055
```

TRN Data Segment



Company Batch Control (8)

- Summarizes entry detail records (ACH entries) within each batch
- One Batch Control Record per batch
  - can be multiple batches in each ACH file
- Entry addenda counts
  - Entry Detail (6) and Addenda Records (7) are counted to receive a total within that specific batch (batch header/batch control records are NOT included as part of this total)
- Entry hash totals
  - Hash is the arithmetic sum of the 8-digit routing number of each RDFI within each Entry Detail Record (6) - if sum is more than 10 characters in length, the digits on the left are removed
- Total dollar controls
  - Sum of debit and credit totals of all Entry Detail Records in batch

File Control Record (9)

- The last logical record in an ACH file
  - Only one File Control Record per ACH file
- Batch count
  - Total number of batches within file
- Block count **
  - Sum of all physical blocks within the file (10 Records = 1 Block)
- Entry addenda counts
  - Sum of entry/addenda count totals (from all batch control records)
- Entry hash totals
  - Arithmetic sum of entry hash totals (from all batch control records)
- Total dollar controls
  - Sum of all debit and credit totals (from all batch control records)

****A "block" consists of 10 records, each record is 94 characters, which equals 940 characters (94 character records x 10 records)**

Payments Institute™

Other subtitle is IATs and Operator (edits) Rejects

PRESENTATION HALF-WAY POINT

(IAT) Company Batch Header Record (5)

- Batch Header format for IAT is different

Formatting changes with the new IAT standard entry class code, specific to cross-border entries or new fields introduced with IAT are outlined in red.

FIELD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
DATA ELEMENT NAME	RECORD TYPE CODE	SERVICE CLASS CODE	IAT INDICATOR	FOREIGN EXCHANGE INDICATOR	FOREIGN EXCHANGE REFERENCE INDICATOR	FOREIGN EXCHANGE REFERENCE	ISO DESTINATION COUNTRY CODE	ORIGINATOR IDENTIFICATION	STANDARD ENTRY CLASS CODE	COMPANY ENTRY DESCRIPTION	ISO ORIGINATING CURRENCY CODE	ISO DESTINATION CURRENCY CODE	EFFECTIVE ENTRY DATE	SETTLEMENT DATE (JULIAN)	ORIGINATOR STATUS CODE	GO IDENTIFICATION/ ORIGINATING DFI IDENTIFICATION	BATCH NUMBER
Field Inclusion Requirement	M	M	O	M	R	R	M	M	M	M	M	M	R	Inserted by ACH Operator	M	M	M
Contents	'5'	Numeric	Alphameric	Alphameric	Numeric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	Alphameric	YYMMDD	Numeric	Alphameric	TTTTAAAA	Numeric
Length	1	3	16	2	1	15	2	10	3	10	3	3	6	3	1	8	7
Position	01-01	02-04	05-20	21-22	23-23	24-38	39-40	41-50	51-53	54-63	64-66	67-69	70-75	76-78	79-79	80-87	88-94

Mandatory Fields
Addenda Records - IAT

Addenda Record (Maximum 12)	Addenda Type Code	Mandatory Fields					
1 – Mandatory	10	Receiving Co Name Individual Name	Entry Detail Sequence #				
2 – Mandatory	11	Originator Name	Originator Street	Entry Detail Sequence #			
3 – Mandatory	12	Originator City/State	Originator Country & Postal Code	Entry Detail Sequence #			
4 – Mandatory	13	ODFI Name	ODFI ID # Qualifier	ODFI ID	ODFI Branch Country Code	Entry Detail Sequence #	
5 – Mandatory	14	RDFI Name	RDFI ID # Qualifier	RDFI ID	RDFI Branch Country Code	Entry Detail Sequence #	
6 – Mandatory	15	Receiver Street	Entry Detail Sequence #				
7 – Mandatory	16	Receiver City/State	Receiver Country & Postal Code	Entry Detail Sequence #			
Remittance Info Optional – up to 2	17	Payment Related Info	Addenda Sequence Number	Entry Detail Sequence #			
Foreign Correspondent Optional – up to 5	18	Foreign Correspondent Name	Foreign Correspondent Bank ID # Qualifier	Foreign Correspondent Bank ID #	Foreign Correspondent Branch Country Code	Addenda Sequence Number	Entry Detail Sequence #

IAT Addenda (2)

IAT Addenda Record #2 (MANDATORY) – Originator Information (Company Name goes on Consumer Statement)						
Field	1	2	3	4	5	6
Data Element Name	Record Type Code	Addenda Type Code	Originator Name	Originator Street Address	Reserved	Entry Detail Sequence Number
Field Inclusion Requirement	M ‘7’	M ‘11’	M	M	N/A	M
Length	[1]	[2]	[35]	[35]	[14]	[7]
Position	01-01	02-03	04-38	39-73	74-87	88-94

<u>**RDFIs**</u>: if the “company name” isn’t appearing on your statement, your system needs to **extract this mandatory information <u>from the 2nd Addenda</u> <u>AND</u> MUST be provided on the periodic statement**

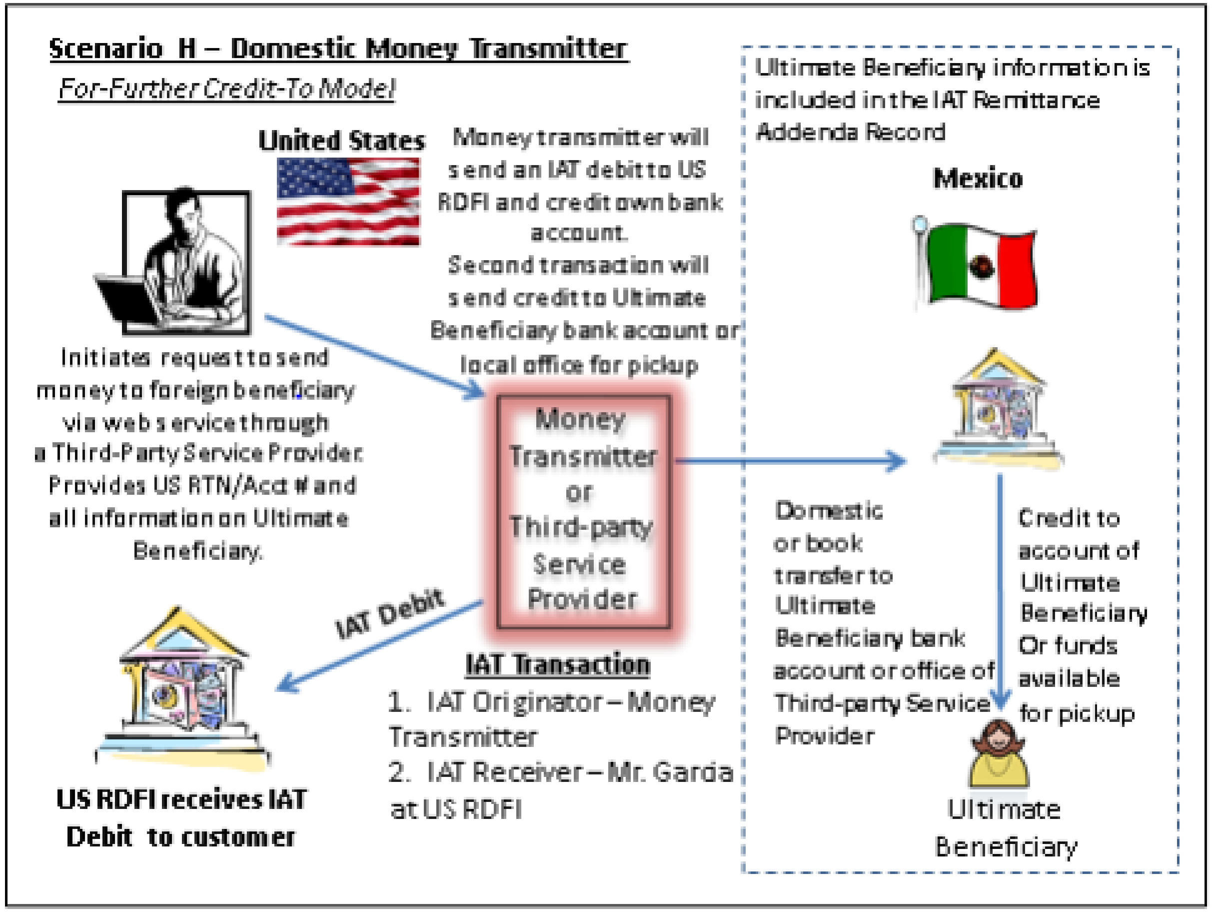
ADDENDA 1: RECEIVING COMPANY NAME/INDIVIDUAL NAME: [redacted], BOOKSELLER
FOREIGN PAYMENT AMOUNT: 595.07
FOREIGN TRACE NUMBER:
TRANSACTION TYPE CODE: BUS

ADDENDA 2: ORIGINATOR NAME: Abebooks Inc
ORIGINATOR STREET ADDRESS: Suite 500, 655 Tyee Rd

ADDENDA 1: RECEIVING COMPANY NAME/INDIVIDUAL NAME: [redacted]
FOREIGN PAYMENT AMOUNT: 1,087.63
FOREIGN TRACE NUMBER:
TRANSACTION TYPE CODE: PEN

ADDENDA 2: ORIGINATOR NAME: DEUTSCHE POSTBK
ORIGINATOR STREET ADDRESS: [redacted]-EBERT-ALLEE [redacted]

Scenario H – Operating Guidelines



- “for-further-credit-to”
- In some cases, when a service provider is used to Originate a transaction, the Ultimate Beneficiary is not normally identified in the IAT
- In this case, the additional beneficiary is identified in 2 additional “7””17” addenda records.

Reason for Payment (IAT)

- OFAC requested that the reason for payment be included in IAT payment transactions
- IAT "Reason for Payment"
  - Identified in the Transaction Type Code Field, -- pre-defined codes (examples)
    - ANN – annuity
    - BUS – Business/Commercial
    - DEP – Deposit
    - PEN – Pension
- Additional Transaction Type Code Values are listed in Appendix Two of the ACH Rules

Transaction Type Codes (IAT)

- Expanded use of Transaction Type Code field for Inbound IAT transactions:
  - Contain a "secondary SEC code" for WEB, TEL, ARC, POP, BOC, RCK, POS, MTE and SHR
- Information needed for specific SEC Codes can be found in the Remittance Information Addenda Record (banking conventions have been developed)
  - For ARC, BOC or RCK - check serial number
  - For POP - the check serial number and Terminal City and Terminal State/ Foreign Country
  - For POS, MTE and SHR – Terminal information

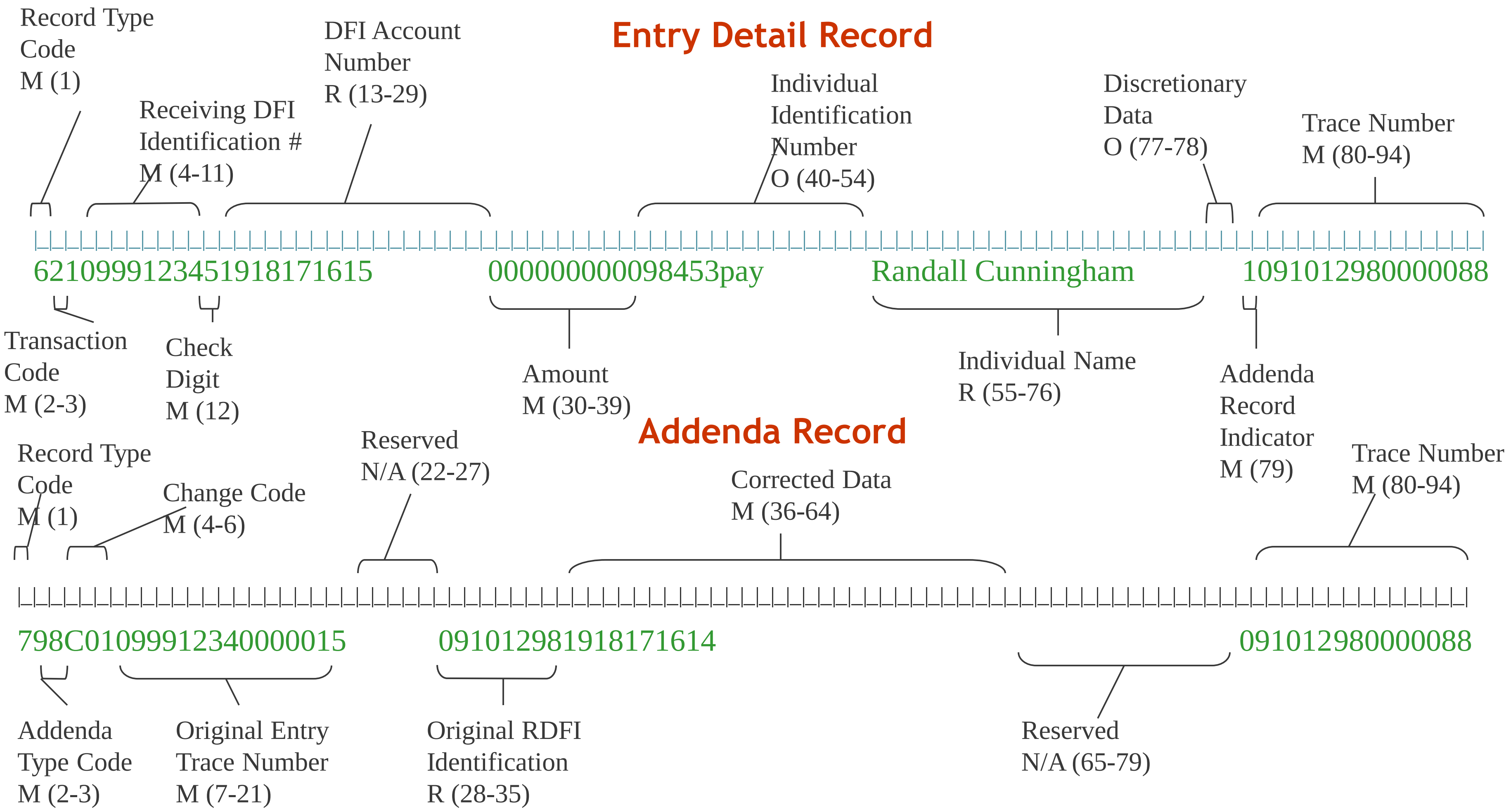
IAT Return Entries

- All IAT returns MUST include the seven (7) mandatory addenda records from the original forward IAT entry
- Return information is included within one additional addenda record (Addenda 8)
- Foreign Correspondent Bank and Remittance Information is not included with the return
- IAT format does not permit dishonored and contested dishonored returns
  - These issues must be addressed outside the network!

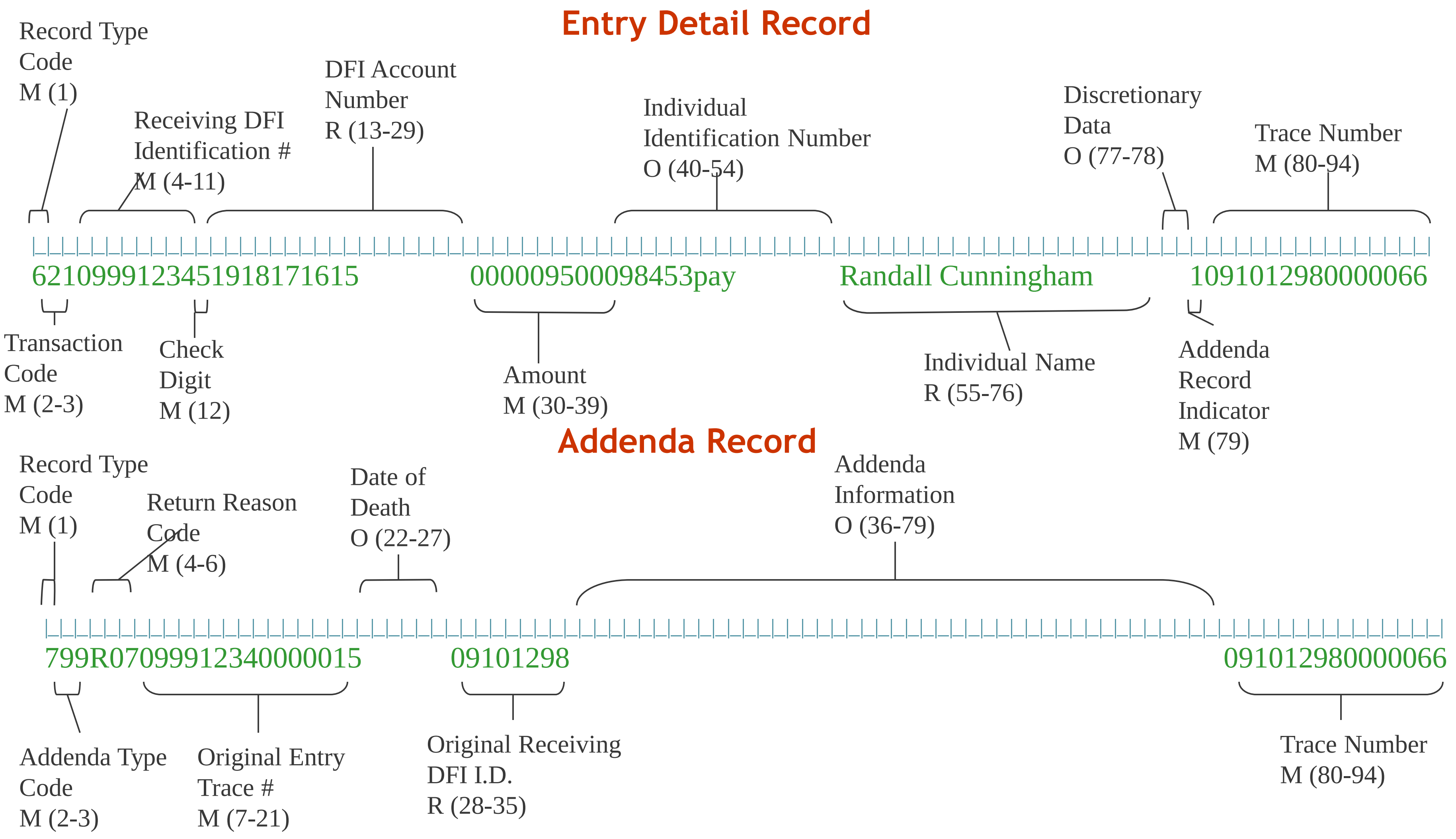
IAT Notification of Change - NOC

- NOCs are “optional” for IAT entries
- Foreign countries may NOT support NOCs
  - Different Payment Systems in Foreign Countries
- NOC entries will not require the original 7 mandatory addenda records to be returned with the NOC
- When creating the NOC, the Company Batch Header Record – (field 3) – IAT Indicator must contain “IATCOR’
- Some Change Codes are not available
- Refused NOC transactions are not supported

Notification of Change Entry (COR)



Returns


Entry Detail Record
Record Type Code M (1)
Receiving DFI Identification # M (4-11)
DFI Account Number R (13-29)
Individual Identification Number O (40-54)
Discretionary Data O (77-78)
Trace Number M (80-94)
6210999123451918171615
000009500098453pay
Randall Cunningham
1091012980000066
Transaction Code M (2-3)
Check Digit M (12)
Amount M (30-39)
Individual Name R (55-76)
Addenda Record Indicator M (79)
Addenda Record
Record Type Code M (1)
Return Reason Code M (4-6)
Date of Death O (22-27)
Addenda Information O (36-79)
799R07099912340000015
09101298
091012980000066
Addenda Type Code M (2-3)
Original Entry Trace # M (7-21)
Original Receiving DFI I.D. R (28-35)
Trace Number M (80-94)

REVERSAL

- **Entry Detail Record #6**
  - Transaction Code
    - Identifies whether entry is a debit or credit
    - Identifies what type of account demand, savings, loan

- **Addenda Record #7**
  - Does not have to travel with Reversal

- **File Control Record #9**
  - Total dollar controls
    - The sum of all debit and credit totals of all batch control records within the file (for reversal: need to change Debit/Credit totals around)

Errors That Will Cause A File To Reject

- File cannot be read:
  - Data read failures
  - Improper block size
  - Presence of invalid header labels
  - Hardware/software errors
- File contains an undefined record type
- Invalid sending point or Operator R/T#
- The sequence is not correct
- Mandatory fields in the File Header are not valid
  - File ID modifier not uppercase A-Z or 0-9
  - Record size not 094
  - Blocking factor not 10
  - Format code not 1

Errors That Will Cause A File To Reject (cont.)

- The Immediate Origin, File Creation Date, File Creation Time, and File ID Modifier are equal to that of a previously accepted file
- The file is "Out of Balance" meaning:
  - Summation of the counts, hash totals and total $'s on the Batch Control Record(s) does not agree with the File Control
  - The number of Blocks or Batches does not agree with the File Control counts

Errors That Will Cause A Batch To Be Rejected

(If Sending Point chooses the Batch Level reject option, any condition that would cause only a Batch to be rejected will allow the ACH Operator to accept the file but to reject the Erroneous Batch)

- Invalid characters
- ODFI identification is not a valid ODFI
- Service Class Code is invalid
- Trace Numbers are not in ascending order
- Transaction Codes are invalid
- The Amount field is non-numeric (unless COR, DNE, ENR)
- The Batch is “out of balance” (hash totals, counts, dollars)
- The sequence of records in the Batch is incorrect

Errors That Will Cause A Batch To Reject (cont.)

- Company Name is all spaces or zeros
- Company Entry Description is all spaces or zeros
- Company Identification is all spaces or zeros
- OSC is not = 2 for DNE if trancode is 23 or 33
- SEC code is invalid
- Service Class Code in Batch Header is different that in Batch Control
- Return and non-return entries are in the same batch

Errors That Will Cause A Batch To Reject (cont.)

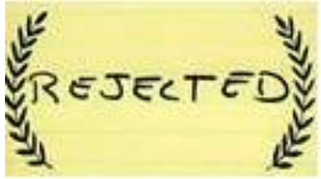
- First 8 positions of the Trace # are not the same as in the Origin # in the Batch Header
- Trancode is not valid for the Service Class Code
- Trancode is not valid for the SEC code (live dollars with prenotes, etc. – updated for newer trancodes recently)
- Returns, dishonored returns, and/or contested dishonored returns are in the same batch
- The batch number in the Batch Header and/or Batch control are non-numeric
- The batch number in the Batch Header is not the same as in the Batch Control

Errors That Will Cause An IAT Batch To Be Rejected

- The Foreign Exchange Indicator is all spaces or all zeros (IAT Entries)
- The OSO Destination Country Code is all spaces or all zeros (IAT Entries)
- The Originator Identification is all spaces or all zeros (IAT Entries)
- The ISO Originating Currency Code is all spaces or all zeros (IAT Entries)
- The ISO Destination Currency Code is all spaces or all zeros (IAT Entries)
- The Gateway Identification/Originating DFI Identification in the Company/Batch Header Record is not the routing number of a valid Gateway or ODFI (IAT Entries)

Errors That Will Cause An Entry To Be Rejected

(These error conditions will never cause the entire file to be rejected but will always cause the Entry Detail Record to be returned using an Addenda Record with an Addenda Type Code of “99”)



- R13 – Entry contains a Receiving DFI Identification or GO Identification that is not a valid ACH routing number
- R18 - Improper Effective Entry Date
- R19 - Amount Field Error (non-numeric, or not zero in a Prenote, DNE, ENR, NOC, or zero dollar Entry, or, more than $25,000 for an ARC, POP, BOC Entry)
- R25 - Addenda Error (17 reasons tied to Addenda Record Indicator, number of addenda records, invalid Addenda Type Codes, and invalid Addenda Sequence Numbers)

Errors That Will Cause An Entry To Be Rejected (cont.)

- R26 - Mandatory Field Error -16 reasons - mostly tied to Return Codes or improperly completed fields, also Check Serial # errors, Terminal City/State errors, or in a Dishonored Return bearing Return Reason Code R69 (Field Error) the Addenda Information Field contains all spaces or all zeros
- R27 - Trace Number Error
  - Original Entry Trace Number not present in Addenda of a return or NOC
  - Trace # on an Addenda does not match Trace # on preceding Entry Detail Record
- R28 - Routing Number Check Digit Error
- R30 - RDFI not participant in a Check Truncation program
- R32 - The RDFI is not able to settle the Entry
- R34 - Limited Participation DFI (regulator based: by Fed or state)
- R35 - Return of Improper Debit Entry (CIE debit or loan debit)
- R36 – Return of improper Credit Entry (With exception of Reversals, credits are not permitted for use with: ARC, POP, TEL, WEB, & RCK)

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