

EFAST
Draft Electronic Filing Specification
DEL 1022

Publication EFAST-B - PART ONE
ELECTRONIC/MAGNETIC MEDIA
FILE SPECIFICATIONS AND VALIDATION CRITERIA
FOR FORMS 5500 and 5500-EZ
(PLAN YEAR 2008)

ERISA FILING ACCEPTANCE SYSTEM
(EFAST)



18 September 2008

Prepared For:
U.S. Department of Labor
Contract No. J-9-P-8-0037

Prepared By:
Vangent, Inc.
3833 Greenway Drive
Lawrence, KS 66046

Table of Contents

PART ONE

File Specification / Validation Criteria

TABLE OF CONTENTS	II
1. OVERVIEW OF PART I	4
2. REVISION HISTORY	5
3. REFERENCED DOCUMENTS	8
4. GENERAL FILING INFORMATION	9
4.1 PARTS OF A BATCH.....	10
5. THE .DOL FILE	11
5.1 FILE NAMING CONVENTIONS	11
5.2 GENERAL .DOL FILE/RECORD INFORMATION.....	11
5.3 TYPES OF RECORDS IN THE .DOL FILE	11
5.4 .DOL FILE SEQUENCE OF DATA.....	13
5.5 .DOL FILE CHARACTER SETS	13
5.6 .DOL FILE FIXED AND VARIABLE LENGTH RECORD OPTIONS.....	14
5.7 .DOL FILE RECORDS.....	16
6. UNSTRUCTURED ATTACHMENT FILES	29
6.1 NAMING CONVENTIONS	29
6.2 TRANSMISSION SEQUENCE	29
6.3 ACCEPTABLE FORMATS.....	29
7. VALIDATION CRITERIA	30
7.1 LIVE FILING VALIDATION CRITERIA.....	30
7.2 TEST FILING VALIDATION CRITERIA.....	31
8. ACKNOWLEDGEMENT FORMAT	52
8.1 ACKNOWLEDGEMENT FILE	52
8.2 GENERAL FORMAT INFORMATION	52
8.3 UNIQUE NUMBERS ASSIGNED BY THE ELECTRONIC FILING SYSTEM.....	52
8.4 RECEIVING ACKNOWLEDGEMENTS.....	53
8.5 ACK BATCH RECORD.....	53
8.6 ACK BATCH ERROR RECORD.....	54
8.7 ACK KEY RECORD	55
8.8 ACK ERROR RECORD	55
8.9 ACK RECAP RECORD.....	57
9. ELECTRONIC/MAGNETIC MEDIA SPECIFICATIONS	58
9.1 GENERAL INFORMATION	58
9.2 MODEM-TO-MODEM SPECIFICATIONS	58
9.3 MAGNETIC MEDIA SPECIFICATIONS	58

10. ENCRYPTION..... 64
 10.1 DEVELOPING YOUR OWN ENCRYPTION SYSTEM..... 64
 10.2 USING EFAST ENCRYPTION DLLS..... 66
11. THE .RDY FILE 69

APPENDIX A – TERMINOLOGY OF DOCUMENT.....84

APPENDIX B – COMMON PROBLEMS ENCOUNTERED.....85

1. Overview of Part I

This is Part I of the File Specifications, Validation Criteria and Record Layouts document for EFAST (ERISA Filing Acceptance System). Part I contains the File Specifications and Validation Criteria. Part II contains the Record Layouts. Part I and Part II, along with the Electronic Filing User's Guide, provide everything that is needed to develop 5500 series electronic filing software.

Part I of this document contains the following sections:

- Section 2, Revision History, provides a list of the revisions of this document.
- Section 3, Referenced Documents, contains a list of related documentation.
- Section 4, General Filing Information, discusses the different parts of a filing.
- Section 5, The .DOL File, gives general information about the .DOL file and explains what records are found in it.
- Section 6, Unstructured Attachment Files, explains what unstructured attachments are and what types of files can be transmitted.
- Section 7, Validation Criteria, lists the possible errors that occur during the initial validation checks on the filing.
- Section 8, Acknowledgement Format, gives the format for the acknowledgement of initial checks done on the filing.
- Section 9, Electronic/Magnetic Media Specifications, gives information such as modem speeds, phone numbers, allowable types of media, catalog records, media labeling instructions, etc.
- Section 10, Encryption, contains instructions for encrypting electronic transmissions of filings.
- Section 11, The .RDY File, instructs modem-to-modem filers on how to submit .RDY files.
- Appendix A contains a list of document terminology.
- Appendix B contains a list of common problems.

2. Revision History

Date	Section	Description of Change
9/01/2005	throughout	Changed all references from plan year 2004 to plan year 2005.
	4.1, 5.4, 5.7.4, 5.7.6.1, 5.7.7, 7.2, and 8.8.1	Removed all references to Schedule T.
	7.2.2	Form 5500 Errors: Removed #0134 and #0135 that pertain to Schedule T.
	7.2.13	Schedule R Errors: Modified #1310, changing the Yes indicator to Increase or Decrease.
	7.2.16	Schedule T Errors: Removed #1501, #1502, #1503, #1504, and #1506.
	Appendix B	Added comment in extension note to include the extension date when filing Form 2688 or Form 2758.
2/9/2006	7.2.2	Form 5500 Errors #0136 "...box 10a(3)..." changed to "...box 10a(2)..." ; #0137 changed from box 10a(4) to box 10a(3); and #0138 changed from box 10a(5) to box 10a(4) due to the elimination of the Schedule T.
3/21/2006	Cover	Changed DRAFT to FINAL.
8/7/2006	Cover	Changed FINAL to DRAFT for Plan Year 2006.
	4.1, 5.4, 5.7.4, 5.7.5, 5.7.6.1, 5.7.7, 7.2, and 8.8.1	Removed all references to Schedule P.
	7.2.2	Form 5500 Errors: Removed #0145 and #0146 that pertain to Schedule P.
	7.2.13	Removed Schedule P Errors section.
1/5/2007	Cover	Plan Year reference changed to 2006.
	5.7.7	Summary Record: The description is correctly stated as 5500 instead of 5550.
3/13/2007	Cover	Changed DRAFT to FINAL.
3/28/2007	10 10.2.1	Removed references to Windows NT/98/95 and Windows 3.1 operating systems for encryption.
4/25/2007	5.1	Updated the field number for the location of the amended checkbox on Form 5500-EZ.
	5.6.2.2	Added reference to percent field 1505 on Schedule B that can be negative.
	5.7.6	Reduced reference to attachment text fields from 410 to 390.
	5.7.7	Restored field length information for reserved field 17 to maintain record length of 112 bytes. Removed "Plan" from Form 5500-EZ reference to "Employer or Plan Administrator" for field 0024.

Date	Section	Description of Change
	7.2.2	Error Code #0106: Changed line references for Schedule H, Part I and Part II. Added Error Code #0149 for missing Schedule I.
	7.2.10	Updated Error Code #1017 from Beginning of Year to End of Year for Total End of Year Liabilities. Error Code #1020: Removed second line reference for Corporate Debt Instruments. Error Code #1023: Updated line reference for Other.
	7.2.13	Error Code #1307: Updated Rev. Proc reference.
	9.1	Changed reference from three methods to two methods to match what is listed.
	9.3.6	Updated reference to Figure 1 in Section 4.
	9.3.7	Updated examples of labeling for 3480 tapes to match the description.
6/4/2007	7.2.3	Removed error code #0203 from Form 5500-EZ.
9/13/2007	Cover	Changed FINAL to DRAFT.
9/13/2007	Throughout	Changed all references from plan year 2006 to plan year 2007.
3/20/2008	7.2.2	Form 5500 Errors: Added #0150.
		Schedule B Errors: Added #0406 - #0409.
	7.2.13	Schedule R Errors: Added #1311.
	Cover	Changed DRAFT to FINAL.
4/24/08	Section 7.2.2, page 36	Updated document in response to GOV letter EFAST-VANGENT-MS-1709
08/08/08	Throughout	Changes for Plan Year 2008
08/08/08	5.4, 8.8.1	Removed Schedule B. Added Schedules MB and SB.
08/08/08	5.6.2.2	Removed reference to negative values on Schedule B.
08/08/08	5.7.4	Field 6: Removed Schedule B.
08/08/08	5.7.5	Field 8: Changed reference to Schedule B to Schedules MB and SB. Field 10: Removed Schedule B. Added note about actuary attachments.
08/08/08	5.7.6.1	Field 6: Changed reference to Schedule B to Schedules MB and SB. Field 8: Removed Schedule B.
08/08/08	5.7.7	Field 6: Changed to reserved.
08/08/08	6	Changed reference to Schedule B to Schedules MB and SB.
08/08/08	7.2	Removed Schedule B.
08/08/08	7.2.2	Removed Errors #0103, #0128, and #0136.
08/08/08	7.2.5	Removed Schedule B Errors section and renumbered remaining sections.

Date	Section	Description of Change
08/08/08	7.2.13	Schedule R: Removed Errors #1307 and #1310.

3. Referenced Documents

The following documents are referenced in Publication EFAST-B:

EFAST-A	Electronic Filing User's Guide – General Background
ANSI x3.27-1987 (rev 1998)	Structuring Magnetic Media Transmissions
ANSI X9.52	Triple Data Encryption Algorithm
FIPS Pub 46-2	Data Encryption Standard (DES)
FIPS Pub 46-3	Triple Data Encryption Standard (DES)

4. General Filing Information

Before transmitting live filings, software developers must pass testing procedures. For more information on testing procedures, see Publication EFAST-A, User's Guide for Electronic/Magnetic Media Filing of Forms 5500 and 5500-EZ.

Each **transmission** consists of a single or multiple **batches** of filings. A transmission may be sent via modem-to-modem or via magnetic media. There is no limit to the number of batches that can be sent for each transmission. For detailed modem-to-modem and magnetic media specifications, please see Section 9.

A **batch** consists of a single or multiple **filings**. Each batch can contain up to 1,000 filings.

Transmissions must consist of only complete batches, and these batches must be transmitted in their entirety sequentially. That is, the first batch must be completely transmitted before the next batch begins. Figure 1, on the next page, shows the relationship between transmissions and batches.

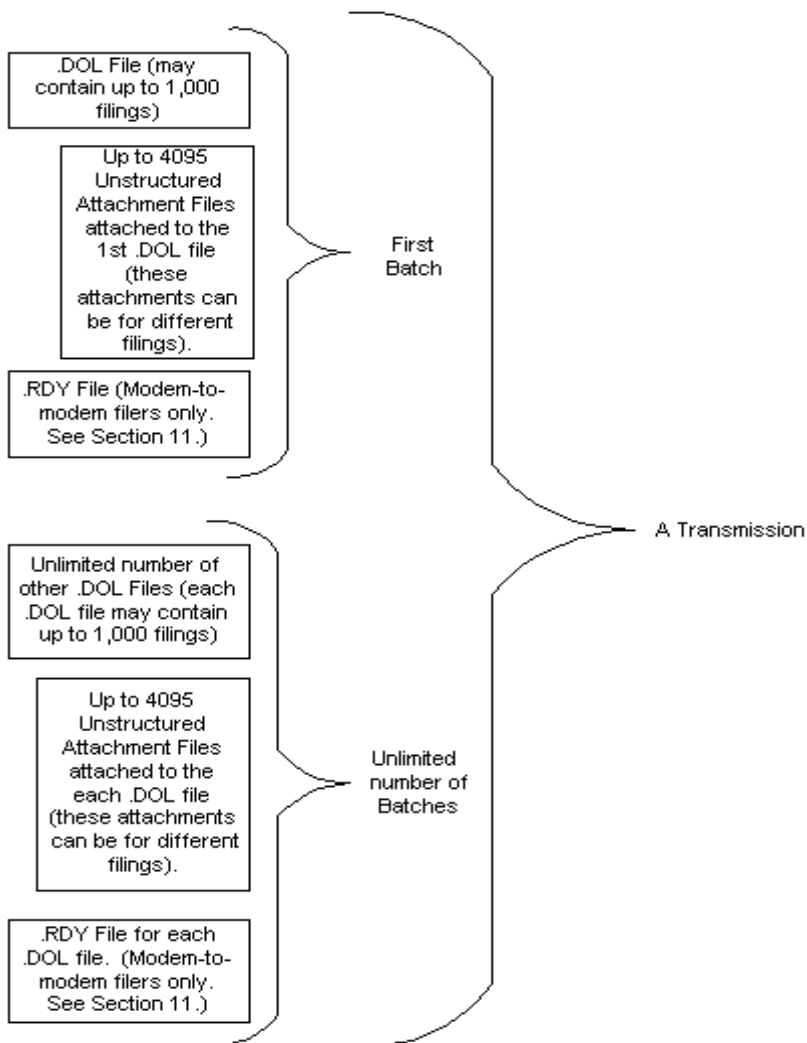


Figure 1 Transmission and Batch

4.1 Parts of a Batch

A **batch** consists of two or three different types of files: **.DOL Files**, **Unstructured Attachment Files**, and **.RDY Files**.

The **.DOL** file contains the information from the official forms and schedules (which are Form 5500, Form 5500-EZ, Schedule A, Schedule C, Schedule D, Schedule E, Schedule G, Schedule H, Schedule I, Schedule R, and Schedule SSA). It also contains Unstructured Text Records, which are unstructured attachments submitted within the .DOL file (see Section 5.7.6).

The **Unstructured Attachment Files** are files containing information that is not contained on the official forms. Examples of unstructured attachments that must be contained in separate files include Schedule H Accountant's Opinions and Schedules MB and SB Actuarial Attachments, and images of Schedules MB and SB. Please see Section 6 for more information on unstructured attachments. Images of pages for Schedules MB and SB must be included as unstructured filing attachments in PDF format.

The .RDY file is transmitted after the .DOL file and the Unstructured Attachment Files for modem-to-modem batches only. It has the same filename as the .DOL file, except it has an ".RDY" extension. This file lets the EFAST modem-to-modem processing system know when the entire batch is completely transmitted and ready to be processed. Only modem-to-modem filers should transmit this file. See Section 11 for more details.

The .DOL file can contain the information for up to 1,000 different filings. There can be up to 4,095 separate unstructured attachment files attached to this .DOL file. These unstructured attachment files can belong to any of the filings that the .DOL file contains. That is, the unstructured attachment files in a batch do not necessarily have to be attached to the same filing.

5. The .DOL File

5.1 File naming conventions

The entire .DOL filename must not exceed 30 characters (the dot and the extension not included) and must have “.DOL” as its extension. A transmitter should never submit a .DOL file that has the same filename as a previously transmitted .DOL file. That is, for each EFIN, all .DOL files transmitted should have unique names.

If .DOL files are not named uniquely, there is a possibility that data could be overwritten. Also, the name of the .DOL file is used as identification in the initial electronic acknowledgements. See Section 8.1 for details.

Note: Even an amended file’s filename must be unique. The filename is not used to identify amended filings, so please verify that the amended check box on the first page of Form 5500 (field B(2)) or Form 5500-EZ (field A(2)) is selected if submitting an amended filing.

5.2 General .DOL File/Record Information

The .DOL file must be an ASCII text file.

Each record within a transmission must be preceded by two four-byte fields. The first four-byte field is the Byte Count for the record. This byte count contains a count of the number of bytes within the record including the four bytes for the counter itself, four bytes for the Record Beginning Mark (****), and one byte for the Record Terminus Character (#). The second four-byte field is the Record Beginning Mark, which must be four asterisks (****).

Every record must have the Record Terminus Character (#) as its last byte.

A .DOL file consists of a variable number of fixed length and variable length records. The size and format of the record for each page of each form and schedule are specified in Part II Record Layouts.

No page of a schedule or form should be generated if there are no entries on that page record. A blank page (Record ID only) may cause the filing to be deemed non-acceptable, except in cases where a form requires that one page be present when the other page is present.

Page one of Form 5500 or of Form 5500-EZ must have a record present. For the Schedules, only the pages (in the proper sequence) which contain significant data must have a record present.

If page 2 and/or any succeeding page of any schedule contains significant data, page 1 of that schedule must also be present and must contain significant data.

5.3 Types of Records in the .DOL File

A .DOL file consists of a **TRANS Record**, the Encryption Record (if applicable), the **Filings**, and a **RECAP Record**.

The **Filings** consist of a single **Header Record**, all **Filing Records** (one for each page of the 5500 or 5500-EZ), **Schedule Records** (one for each page of each schedule), **Unstructured Attachment Indicator Records** (one for each file attached to the filing), Unstructured Text

Records (one for each textual attachment submitted inside the DOL file), and a single **Summary Record**.

There should be no spaces, carriage returns, or any other characters between records in a .DOL file.

Figure 2 illustrates the different portions of a .DOL file:

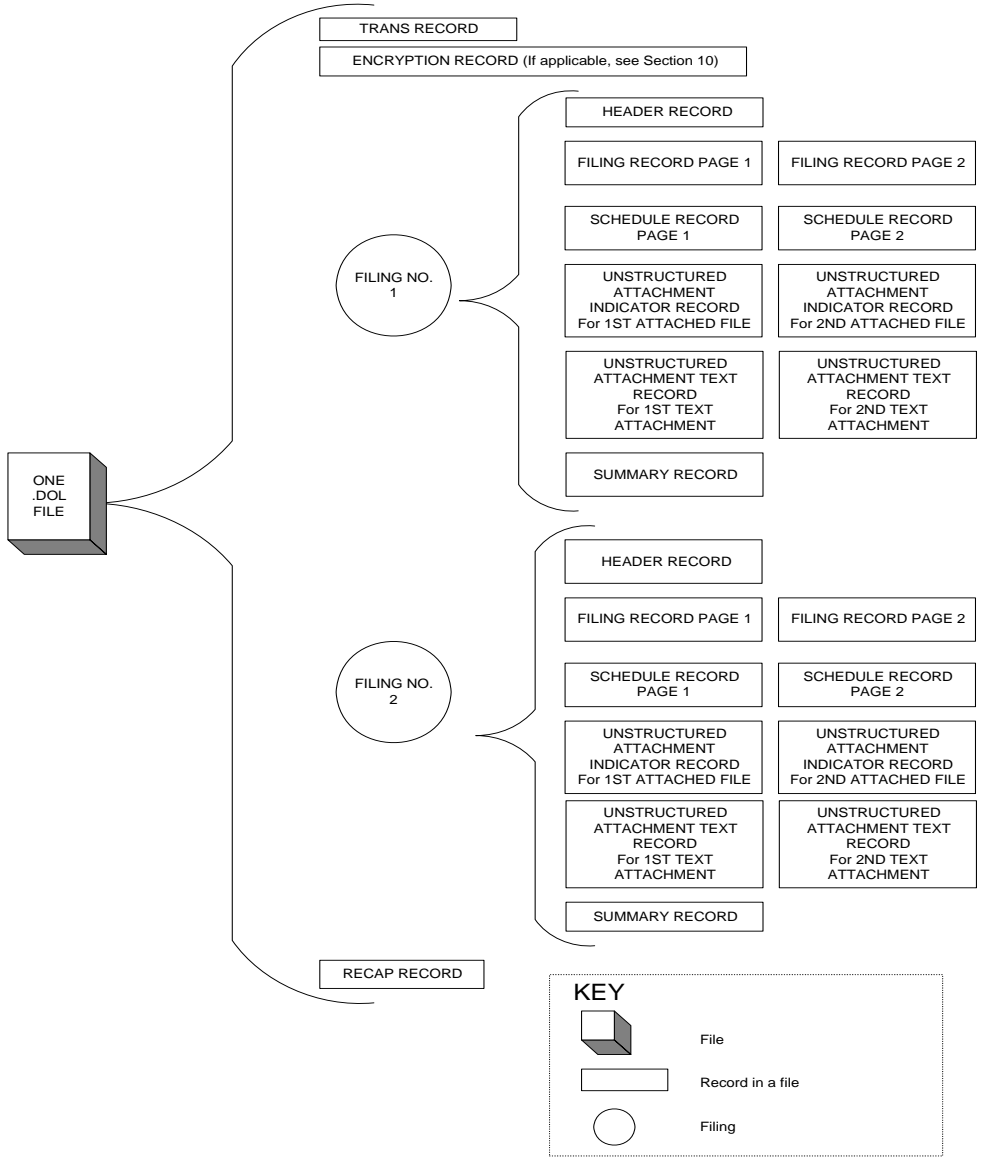


Figure 2 – The .DOL File

5.4 .DOL File Sequence of Data

The .DOL must be transmitted in the following sequence:

1. The TRANS record.
2. The Encryption Record (if applicable, see Section 10).
3. The Header Record for the first filing.
4. All the Filing Records for the first filing.
5. All the Schedule Records for the first filing.
6. All the Unstructured Attachment Indicator Records for the first filing.
7. All the Unstructured Attachment Text Records for the first filing.
8. The Summary Record for the first filing.
9. The Header Record for the next filing.
10. All the Filing Records for the next filing.
11. All the Schedule Records for the next filing.
12. All the Unstructured Attachment Indicator Records for the next filing.
13. All the Unstructured Attachment Text Records for the next filing.
14. The Summary Record for the next filing.

Note: For each DOL file, the information for up to 1,000 filings may be transmitted in this manner.

Schedules A, C, D, E, G, H, I, R, and SSA must be in alphabetical sequence. All records must appear in the proper sequence, with the proper control information, and the counts of the schedules must balance with the Summary Record or the filing may be deemed non-acceptable.

Schedules MB and SB are to be included as unstructured filing attachments in PDF format and not in the data stream with the other forms and schedules.

5.5 .DOL File Character Sets

This section identifies the types of characters that are valid for an electronically filed return.

All .DOL files must be in ASCII character code.

The following four characters: “[“, “]”, “*”, and “#” are **reserved as delimiters and cannot appear as data characters**. The left (l) and right (r) brackets enclose Field Sequence Numbers. Asterisk (*) characters mark the beginning of a record. The Pound Sign (#) (Record Terminus Character) indicates the end of a record.

ALL ALPHABETIC DATA MUST BE IN UPPER CASE! Preparation software must ensure that lower case alphabetic characters are not entered.

“**SEE ATTACHED**” or any similar wording is **not acceptable** as an entry for any field. Section 6 provides guidance on submitting attached files.

Except where designated, do not enter blanks or spaces between data elements.

The symbol **␣** may be used in this publication to represent a blank character position.

5.5.1 Allowable Characters

See Section 5.6.1 for fixed format allowable characters.

See Section 5.6.2 for variable format allowable characters.

5.6 .DOL File Fixed and Variable Length Record Options

TRANS, Header, Unstructured Attachment Indicator, Summary, and RECAP Records must always be transmitted in fixed format. Filing and Schedule Records must be in variable format.

5.6.1 Fixed Format Option

The fixed length option requires the TRANS, Header, Unstructured Attachment Indicator, Summary, and RECAP Records to be transmitted exactly as defined in Part II Record Layouts. All fields must be present. If a field contains no data, it must be blank-filled or zero-filled.

5.6.1.1 Numeric Fields – Fixed Format

All numeric fields must use numeric characters only: 0 – 9.

Unsigned numeric fields must be right-justified and zero-filled unless otherwise specified.

Signed numeric fields can also contain literal values. When entering a literal value, left-justify and blank-fill the field.

Special fields:

Date

M = Month, D = Day, Y = Year (YYYY, MMYYYY, MMDDYYYY, YYYYMMDD). Leading zeros cannot be dropped.

Zip Code

Zip Codes should be left-justified and zero-filled. If there are only five Zip Code characters, the remaining positions should be zero-filled.

5.6.1.2 Alphanumeric Fields – Fixed Format

Alphanumeric fields must be left-justified and blank-filled. All alpha characters must be in upper case.

For literal values, the exact character string from Field Description in Part II Record Layouts should be entered.

Non-significant fields should be blank-filled.

5.6.2 Variable Format Option

The variable length option provides for the transmission of only **control information, significant data fields, and significant data within individual fields. Filing, Schedule, and Unstructured Attachment Text Records** must always be in variable format. All other records must be in fixed format.

The following data field conventions must be followed when transmitting variable format records:

5.6.2.1 Form and Schedule Records – Variable Format

When transmitting in variable format, each Filing, Schedule, and Unstructured Attachment Text Record will begin with a byte count and a record beginning mark, followed by the control information for that record. These fields (fields 1-11 for Filing and Schedule, fields 1-15 for Unstructured Attachment Text) are in the same fixed format shown in Sections 5.7.3, 5.7.4, and 5.7.6.1.

Following this control information are the data fields. Each data field is preceded by the applicable four-digit Field Sequence Number, which is enclosed by square bracket field delimiters. The Record Terminus Character (#) follows the last data field in the record. It appears immediately after the last data field. The start of the next record must immediately follow the terminus character (no blanks, spaces, or other characters are allowed between records).

5.6.2.2 Numeric Fields – Variable Format

All numeric fields must use numeric characters only: 0 – 9.

Unsigned numeric fields: Leading zeros may be dropped.

Signed numeric fields (money amounts): Leading zeros are dropped. For a positive value, the trailing blank that indicates a gain is dropped. For a negative value in a field that can contain either a gain or a loss, the minus sign (-) can be entered in the first or last position of the signed numeric field.

Signed numeric fields that can also contain literal values. Enter signed numeric fields as described above. When entering a literal value, left-justify the field; it is not necessary to enter trailing blanks.

Special fields:

Date

M = Month, D = Day, Y = Year (YYYY, MMYYYY, MMDDYYYY, YYYYMMDD). Leading zeros cannot be dropped.

Money Amount

Enter whole dollar amounts (do not enter cents).

Leading zeros are dropped. For a positive value, the trailing blank that indicates a gain is dropped. For a negative value in a field that can contain either a gain or a loss, the minus sign (-) can be present in the first or last position of the signed numeric field.

Omit non-significant fields.

Percent Fields

Most percent fields are four positions in length. Decimal points and any other non-numeric characters should not be entered in any percent field. Some of the percent fields will contain one or more implied fixed decimal positions (all fields that contain implied decimal positions are indicated as such in Part II, Record Layouts). Data entered in these fields will be considered as right justified and zero filled to the left of the implied decimal and left justified and zero filled to the right of the implied decimal. For example, 7.5 % should be entered as “0750” in a field with two implied decimal places and as “0075” in a field with one implied decimal place. All percent fields that do NOT have implied decimals should be right justified and zero filled.

5.6.2.3 Alphanumeric Fields – Variable Format

Left-justify data in the field. Do not enter leading or trailing blanks.

For literal values, the exact character string from Field Description in Part II Record Layouts must be entered.

Omit non-significant fields.

5.7 .DOL File Records

5.7.1 TRANS Record Format

The first record in each .DOL file is the TRANS Record. Each .DOL file has one and only one TRANS Record. The Trans Record is always in fixed format. The TRANS Record is never encrypted. The following is the format for the TRANS Record:

TRANS Record

no.	Identification	Length	Type	Start pos.	Description
1	Byte Count	4	N	1	Byte Count of Transmission Record. Value = “0064”
2	Record Beginning Mark	4	A/N	5	Value = “*****”
3	Record ID	5	A/N	9	Value = “TRANS”
4	Record Type Indicator	5	A/N	14	Indicates whether .DOL file is a live or test filing. Value = “LIVEb” or “TESTb”
5	Transmitter’s EFIN	6	N	19	
6	Transmitter’s EIN	9	N	25	
7	Reserved	1		34	

TRANS Record

8	Type of Transmission	1	A/N	35	D = Floppy Diskette, M = Modem, T = Magnetic Tape, C = CD-ROM.
9	Reserved	20		36	
10	Reserved	8	N	56	
	Terminus Character	1	A/N	64	Value = #

5.7.2 Header Record Format

The Header Record is always in fixed format. It must be encrypted in .DOL files sent modem-to-modem. The format for the Header Record is as follows:

Header Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description/Origin</u>
1	Byte Count	4	N	1	Byte count of Header Record. Value = "0036"
2	Record Beginning Mark	4	A/N	5	Value = "*****"
3	Record ID	5	A/N	9	Value = "HDRbb"
4	File Type	1	A/N	14	The type of Filing and Schedule Records being submitted. Must be "V" = Variable.
5	Software Developer ID Code	3	A/N	15	
6	Reserved	6		18	
7	Filing Type	2	A/N	24	Value "55" = Form 5500 or "EZ" = Form 5500-EZ.
8	Form Year	4	N	26	Form year of 5500 or 5500-EZ, that is listed in the upper-right corner of the form. Format: YYYY
9	Reserved	6		30	
	Terminus Character	1	A/N	36	Value = "#"

5.7.3 Filing Record Format

Following the Header Record are the Filing Records. Each page of each Form 5500 or Form 5500-EZ has its own Filing Record. The Filing Records must be in variable format. All Filing Records must be encrypted in .DOL files sent modem-to-modem.

Please note that the pagination of Filing Records corresponds to the machine-print 5500 series forms.

The following “control” information occurs at the beginning of each Filing Record:

Filing Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	Byte Count of Filing Record.
2	Record Beginning Mark	4	A/N	5	Value: “*****”
3	Control Information Start Indicator	1	A/N	9	Value: “[“
4	Record ID	5	A/N	10	Value: “FILbb”
5	Reserved	5		15	
6	Form Type	3	A/N	20	Value: “55b” (for Form 5500) or “55Z” (for 5500-EZ).
7	Reserved	3		23	
8	Page Indicator	2	A/N	26	Value “PG”
9	Page Number	3	N	28	Page number of Form 5500 or Form 5500-EZ.
10	Reserved	1		31	
11	Control Information End Indicator	1	A/N	32	Value: “]”
--	<i>Data Fields begin here.</i>	<i>NA</i>	<i>NA</i>	33	<i>The first data field that appears on the page of Form 5500 or Form 5500-EZ begins here. This field is listed here for reference and is not a part of the control information.</i>

For the complete format of all the Filing Records, see Part II, Record Layouts.

5.7.4 Schedule Record Format

Following the Filing Records are the Schedule Records. Each page of each schedule has its own Schedule Record. The Schedule Records must be in variable format. All Schedule Records must be encrypted in .DOL files sent modem-to-modem.

Please note that the pagination of Schedule Records corresponds to the machine-print 5500 series forms.

The following “control” information occurs at the beginning of each Schedule record:

Schedule Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	Byte Count of Schedule Record.
2	Record Beginning Mark	4	A/N	5	Value: “*****”
3	Control Information Start Indicator	1	A/N	9	Value: “[“
4	Record ID	5	A/N	10	Value “SCH bb ”
5	Occurrence of Schedule	3	N	15	The sequential number of times in a filing the Schedule occurs. For example, the first Schedule A in a filing would have a value here of 001. The second Schedule A in the same filing would have a value of 002. For more information on repeating schedules, please see Section 4.1 of Part II the Record Layouts document.
6	Schedule Type	3	A/N	18	Schedule A = “A bb ”, Schedule C = “C bb ”, Schedule D = “D bb ”, Schedule E = “E bb ”, Schedule G = “G bb ”, Schedule H = “H bb ”, Schedule I = “I bb ”, Schedule R = “R bb ”, Schedule SSA = “SSA”
7	Occurrence of Page Number	5	N	21	The sequential number of times the Page Number occurs for each occurrence of a schedule. For example, the fourth time Page 4 of Schedule G appears would have an Occurrence of Page Number value of 00004. Page numbering must be based on machine-print 5500 forms. Note: The 4-digit format remains acceptable.
8					Combined with Line 7 above.
9	Page Indicator	2	A/N	26	Value “PG”
10	Page Number	3	N	28	Page Number of the Schedule.
11	Reserved	1		31	

Schedule Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
12	Control Information End Indicator	1	A	32	Value: "]"
--	<i>Data Fields begin here.</i>	NA	NA	33	<i>The first data field that appears on the schedule page begins here. This field is listed here for reference and is not a part of the control information.</i>

For the complete format of all the Schedule Records, see Part II, Record Layouts.

5.7.5 Unstructured Attachment Indicator Record

The Unstructured Attachment Indicator Records indicate what separate files are attached to the filing. There must be a separate record for each file attached to the filing. These records must be in fixed format. All Unstructured Attachment Indicator Records must be encrypted in .DOL files sent modem-to-modem. The following is the format for the Unstructured Attachment Indicator Record:

Unstructured Attachment Indicator Record

<u>No.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte count	4	N	1	Byte count of Unstructured Attachment Indicator Record. Value = "0100"
2	Record Beginning Mark	4	A/N	5	Value = "*****"
3	Record ID	5	A/N	9	Value: "UAI bb " (Unstructured Attachment Indicator)
4	Reserved	2		14	
5	Transmission Filename	34	A/N	16	The filename that the file is transmitted as. This filename does not include the path of the file. Format 30.3, where the extension of the file must be in hexadecimal format.

Unstructured Attachment Indicator Record

<u>No.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
6	Format of Attachment	3	A/N	50	A three-digit code that indicates what format the attachment is in. The codes are: "TXT" ASCII character (text) format, "DOC" Microsoft Word document format, "WPD" Corel WordPerfect document format, "PDF" Adobe Portable Document Format (PDF), "HTM" Hypertext-Markup Language (HTML) format, "XLS" Microsoft Excel format, and "WKx" Lotus 1-2-3 format (where x can be any integer.)
7	Reserved	1		53	
8	Attachment Type Indicator	3	A/N	54	A three-digit code that signifies the attachment type. Bbb = Schedule MB or SB Actuarial Attachment. Abb = Schedule H Accountant's Opinion (AR/AO). Zbb = Other Attachment. All attachments that are not Schedules MB or SB Actuarial Attachments or Schedule H Accountant's Opinion Attachments are classified as "Other."
9	Occurrence of Schedule	3	N	57	The sequential number of the occurrence of schedule in the filing to which the file is attached. This number is given by field 5 of the Schedule Record to which the file is attached. If the attachment is attached to a form or schedule that does not occur multiple times, this value is 001. If the attachment is attached to the entire filing, and not to any specific form or schedule, this number should be 000.

Unstructured Attachment Indicator Record

No.	Identification	Length	Type	Start pos.	Description
10	Form/Schedule Attached to	3	A/N	60	<p>5bb = 5500 , “Zbb” = 5500-EZ Schedule A = “Abb” , Schedule C = “Cbb” , Schedule D = “Dbb” , Schedule E = “Ebb” , Schedule G = “Gbb” , Schedule H = “Hbb” , Schedule I = “Ibb” , Schedule R = “Rbb” , Schedule SSA = “SSA”.</p> <p>If the attachment is attached to the entire filing, and not to any specific form or schedule, this field should be bbb. Note: Previous years allowed attaching the Actuarial Attachments to Schedule B. With the removal of Schedule B, the Actuarial Attachments must be attached to the Filing instead of a form or schedule.</p>
11	Occurrence of Page	4	N	63	The number of the occurrence of the page in the schedule to which the file is attached for pages that can occur multiple times; for all other pages, this value is 0001. This number is given by field 7 of the Schedule Record to which the file is attached. If file is not attached to any page, this should read “0000”.
12	Page Indicator	2	N	67	Value = “PG”
13	Page of Form/Schedule attached to	3	N	69	Page number of the form or schedule to which the file is attached. If file is not attached to any page, this should read “000”.
14	Field Indicator	2	A/N	72	Value = “FD”
15	Field attached to	4	N	74	Four-digit field number to which the file is attached. If file is not attached to any field, this should read “0000”.
16	Reserved	22		78	
	Terminus Character	1	A/N	100	Value = “#”

5.7.6 Unstructured Attachment Text Record

The Unstructured Attachment Text Record is a way to submit smaller ASCII text attachments to the filing, without having to send separate files.

All Unstructured Attachment Text Records must be encrypted in .DOL files sent modem-to-modem. The following is the format of the Unstructured Attachment Text Records.

Unstructured Attachment Text records consist of two parts: 1) the **control information** which must be in fixed format and consists of the first fourteen fields, and 2) the **attachment text** which must be in variable format and consists of fields 100 through 390.

5.7.6.1 Control Info

Unstructured Attachment Text Record

no.	Identification	Length	Type	Start pos.	Description
1	Byte count	4	N	1	Byte count of Unstructured Attachment Text Record.
2	Record Beginning Mark	4	A/N	5	Value = “*****”
3	Control Information Start Indicator	1	A/N	9	Value: “[“
4	Record ID	5	A/N	10	Value: “UAT bb ” (Unstructured Attachment Text)
5	Reserved	60		15	
6	Attachment Type Indicator	3	A/N	75	A three-digit code that signifies the attachment type. Bbb = Schedule MB or SB Actuarial Attachment . Abb = Schedule H Accountant’s Opinion (AR/AO). Zbb = Other Attachment. All attachments that are not Schedule MB or SB Actuarial Attachments or Schedule H Accountant’s Opinion Attachments, including images for Schedules MB and SB are classified as “Other.”
7	Occurrence of Schedule	3	N	78	The sequential number of the occurrence of schedule in the filing to which the file is attached. This number is given by field 5 of the Schedule Record to which the file is attached. If the attachment is attached to a form or schedule that does not occur multiple times, this value is 001. If the attachment is attached to the entire filing, and not to any specific form or schedule, this number should be 000.

Unstructured Attachment Text Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
8	Form/Schedule Attached to	3	A/N	81	5 bb = 5500 , “Z bb ” = 5500-EZ Schedule A = “A bb ” , Schedule C = “C bb ” , Schedule D = “D bb ” , Schedule E = “E bb ” , Schedule G = “G bb ” , Schedule H = “H bb ” , Schedule I = “I bb ” , Schedule R = “R bb ” , Schedule SSA = “SSA”. If the attachment is attached to the entire filing, and not to any specific form or schedule, this field should be bbb .
9	Occurrence of Page	4	N	84	The number of the occurrence of the page in the schedule to which the file is attached for pages that can occur multiple times; for all other pages, this value is 0001. This number is given by field 7 of the Schedule Record to which the file is attached. If file is not attached to any page, this should read “0000”.
10	Page Indicator	2	N	88	Value = “PG”
11	Page of Form/Schedule attached to	3	N	90	Page number of the form or schedule to which the file is attached. If file is not attached to any page, this should read “000”.
12	Field Indicator	2	A/N	93	Value = “FD”
13	Field attached to	4	N	95	Four-digit field number to which the file is attached. If file is not attached to any field, this should read “0000”.
14	Reserved	1		99	
15	Control Information End Indicator	1	A/N	100	Value: “J”

5.7.6.2 Variable Format Data Fields

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
100	Attachment Text Line 1	80	A/N		
110	Attachment Text Line 2	80	A/N		
120	Attachment Text Line 3	80	A/N		
130	Attachment Text Line 4	80	A/N		

no.	Identification	Length	Type	Start pos.	Description
140	Attachment Text Line 5	80	A/N		
150	Attachment Text Line 6	80	A/N		
160	Attachment Text Line 7	80	A/N		
170	Attachment Text Line 8	80	A/N		
180	Attachment Text Line 9	80	A/N		
190	Attachment Text Line 10	80	A/N		
200	Attachment Text Line 11	80	A/N		
210	Attachment Text Line 12	80	A/N		
220	Attachment Text Line 13	80	A/N		
230	Attachment Text Line 14	80	A/N		
240	Attachment Text Line 15	80	A/N		
250	Attachment Text Line 16	80	A/N		
260	Attachment Text Line 17	80	A/N		
270	Attachment Text Line 18	80	A/N		
280	Attachment Text Line 19	80	A/N		
290	Attachment Text Line 20	80	A/N		
300	Attachment Text Line 21	80	A/N		
310	Attachment Text Line 22	80	A/N		
320	Attachment Text Line 23	80	A/N		
330	Attachment Text Line 24	80	A/N		
340	Attachment Text Line 25	80	A/N		
350	Attachment Text Line 26	80	A/N		
360	Attachment Text Line 27	80	A/N		
370	Attachment Text Line 28	80	A/N		
380	Attachment Text Line 29	80	A/N		
390	Attachment Text Line 30	80	A/N		
	Terminus Character	1	A/N		Value = “#”

5.7.7 Summary Record Format

Each filing must have a single Summary Record at its end. It must be in fixed format. The Summary Record must be encrypted in .DOL files sent modem-to-modem. The following is the format for the Summary Record:

Summary Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	Byte count of Summary Record. Value = "0112"
2	Record Beginning Mark	4	A/N	5	Value = "****"
3	Record ID	5	A/N	9	Value = "SUM bb "
4	Total pages in 5500 or 5500-EZ	2	N	14	Total number of pages in Form 5500 or 5500-EZ for this filing.
5	Count of Schedules A	3	N	16	The number of Schedule A Schedules that are a part of this filing.
6	Reserved	1		19	
7	Count of Schedules C	1	N	20	The number of Schedule C Schedules that are a part of this filing.
8	Count of Schedules D	1	N	21	The number of Schedule D Schedules that are a part of this filing.
9	Count of Schedules E	1	N	22	The number of Schedule E Schedules that are a part of this filing.
10	Reserved	1		23	
11	Count of Schedules G	1	N	24	The number of Schedule G Schedules that are a part of this filing.
12	Count of Schedules H	1	N	25	The number of Schedule H Schedules that are a part of this filing.
13	Count of Schedules I	1	N	26	The number of Schedule I Schedules that are a part of this filing.
14	Reserved	3		27	
15	Count of Schedules R	1	N	30	The number of Schedule R Schedules that are a part of this filing.
16	Count of Schedules SSA	1	N	31	The number of Schedule SSA Schedules that are a part of this filing.
17	Reserved	3		32	
18	Total pages of all Schedules	7	N	35	The total of all the pages for all the schedules for the filing. This count does not include Form 5500 or Form 5500-EZ.
19	Count of Unstructured Attachment Indicator Records	4	N	42	The count of all Unstructured Attachment Indicator records. Value 0000 – 4095.

Summary Record

no.	Identification	Length	Type	Start pos.	Description
20	Count of Unstructured Attachment Text Records	4	N	46	The count of all Unstructured Attachment Text records. Value 0000 – 4095.
21	Filing Sequence Number	3	N	50	The position of this filing within the batch of filings. The first filing in a batch would have a filing sequence number of 001. Maximum: 1000. If 1000, enter “000.”
22	Reserved	1		53	
23	Reserved	1		54	
24	First PIN	16	A/N	55	First Signer’s Personal Identification Number. For Form 5500 it must be the Plan Administrator’s PIN. For Form 5500-EZ, it must be the Employer or Plan Administrator’s PIN.
25	First Signer ID	9	N	71	First Signer’s Signer ID. For testing, this field should be filled with the Software Developer’s EIN.
26	Reserved	1		80	
27	Second PIN	16	A/N	81	Second Signer’s Personal Identification Number. For Form 5500, it must be the Employer/Plan Sponsor or DFE’s PIN.
28	Second Signer ID	9	N	97	Second Signer’s Signer ID. For testing, this field should be filled with the Software Developer’s EIN.
29	Reserved	6		106	
	Terminus Character	1	A/N	112	Value = “#”

5.7.8 RECAP Record Format

The last record in a DOL file is the RECAP Record. The RECAP Record is always in fixed format. It is never encrypted. It is formatted as follows:

RECAP Record

no.	Identification	Length	Type	Start pos.	Description
1	Byte count	4	N	1	Byte count of Recap Record. Value = “0064”
2	Record Beginning Mark	4	A/N	5	Value = “*****”
3	Record ID	5	A/N	9	Value = “RECAP”

RECAP Record

4	Record Type Indicator	5	A/N	14	Value = "LIVE" or "TEST"
5	Transmitter's EFIN	6	N	19	
6	Transmitter's EIN	9	N	25	
7	Total Number of 5500 Filings	6	N	34	The total of field 7 and field 8 cannot exceed 001000.
8	Total Number of 5500-EZ Filings	6	N	40	The total of field 7 and field 8 cannot exceed 001000.
9	Total Number of Unstructured Attachments sent as separate files	4	N	46	Value 0000 – 4095.
10	Total Number of Records (not including TRANS and RECAP)	12	N	50	
11	Reserved	2		62	
	Terminus Character	1	A/N	64	Value = "#"

6. Unstructured Attachment Files

Any information that cannot be contained on the 5500 series Forms and Schedules may be submitted as an unstructured attachment. Examples of unstructured attachments include Schedules MB or SB Actuarial attachments, Schedule H Accountant's Opinion attachments, and extension forms. There are two types of unstructured attachments: 1) Unstructured attachments submitted as separate files to the DOL file and 2) unstructured attachments submitted within the DOL file.

Images of pages for Schedules MB and SB in PDF format must be included as unstructured filing attachments.

A filing may have up to 4,095 unstructured attachments submitted as separate files, in addition to 4,095 unstructured attachments submitted within the DOL file.

Unstructured attachments are attached to the entire DOL file, not to a specific filing. Please see Section 4.1 for details.

6.1 Naming Conventions

Each unstructured attachment file must have the same filename as the .DOL file. The extension of these unstructured attachment files must be a three-digit hexadecimal number (001-FFF). This number must be unique for each file in a transmission.

For example, if the NEWPLAN.DOL file contained two filings with two attachments each, those attachments would be named NEWPLAN.001, NEWPLAN.002, NEWPLAN.003, and NEWPLAN.004. Please note three-digit hexadecimal number is a counter of the attachment's place in a transmission, not its place in a filing.

6.2 Transmission Sequence

All unstructured attachments must be transmitted after the .DOL file to which they are attached and before the next .DOL file in the transmission (for both modem and magnetic media). See Figure 1 for an illustration. See Sections 9.3.5 and 9.3.6 for instructions on loading to magnetic media.

6.3 Acceptable Formats

The following table lists the acceptable formats of the unstructured attachment files, as well as the minimum version required for each format:

<u>FORMAT</u>	<u>MINIMUM VERSION</u>
ASCII character (text) format	--
Microsoft Word document format	6.0
Corel WordPerfect document format	6.0
Adobe Portable Document Format (PDF)	3.0
Hypertext-Markup Language (HTML) format	--
Microsoft Excel format	5.0
Lotus 1-2-3 format	3.0

7. Validation Criteria

The electronic filing system has two sets of validation criteria: one for live filings, and one for test filings.

7.1 Live Filing Validation Criteria

The electronic filing system performs **initial** checks and sends **initial** electronic acknowledgements for live filings. These initial validation criteria include basic format checks, virus checks, etc. If a filing is deemed non-acceptable for these **initial** checks, it is not processed any further.

If a filing passes these initial checks, that filing is passed on to a further processing system. However, the electronic filing system does not report any information about the tests done in that further processing system. That is, **the electronic system does NOT report final acceptance or rejection of live filings.**

7.1.1 Live Filing Rejection Errors

Following are **initial** rejection errors that may occur when filing electronic/external media filing.

Initial Live

- #0003 Non-Standard Form or Schedule. You have submitted a Form or Schedule which cannot be processed in our Annual Report processing environment. Forms and Schedules that do not conform to our standard processing environment are not acceptable for processing. For future filings, please submit the correct version or format.
- #0008 Decryption Failure. The filing could not be properly decrypted. Check to see that a valid encryption key was used, properly entered, and that it has not expired. Also check to make sure that the correct transmitter's EFIN and correct indicator was used (Live, Test). Please make corrections and resubmit this filing.
- #0010 Improper Format. The file or batch received contained an improperly formatted field(s). Possibilities for this error include: Field number indicators, byte count, or field formatted improperly. Please contact the software vendor.
- #0011 PIN/Signer ID Authentication Failure. This filing contains an invalid Personal Identification Number (PIN) or a Signer ID in the summary record of the filing. Check to see that the PIN and Signer ID which were used were properly entered. Also check to make sure that the correct indicator is used (Live, Test). Please make corrections and resubmit this filing.
- #0012 Filing Batch Contains Virus. Attachments within the filing batch were infected with at least one computer virus. Please check the filing and attachments and resubmit the filing batch.

Initial Live

- #0013 Invalid Code. This filing contains an invalid Software Developer ID Code in the header of the filing. Either the Software Developer ID Code is incorrect, or the Software Developer associated with the code has not passed PATS for the form year for which you are filing. Please contact the software vendor.
- #0017 Invalid Field. The file received contains an invalid field. Please contact the software vendor.
- #0025 Indeterminable Batch Type. The transmitted batch is not labeled as either a Live or Test batch. Please make corrections and retransmit the batch or contact the software vendor.
- #0026 Filing Count Conflict. The number of filings listed in the RECAP record and the actual number of filings in the filing batch are not consistent. Please contact the software vendor.
- #0028 Invalid Form Year. The Form Year listed in the header record is invalid or a test filing batch was submitted with two or more different Form Years. Please contact the software vendor.
- #0099 Errors Exceed Maximum. There are more than 297 errors in this filing. Only the first 297 errors can be reported. Please make necessary changes and retransmit the filing.

7.2 Test Filing Validation Criteria

Following are acknowledgement rejection error codes and their respective explanations for test (PATS) filings. The list of errors in this section is a completely comprehensive list of test filing validation criteria. So, unlike live filings, test filings are given final acknowledgement from the electronic filing system.

Rejections that occur during the test electronic/external media filing of Forms 5500 and 5500-EZ are grouped into several categories: General, General Transmission, and by form or schedule. The forms and schedules included are Form 5500, Form 5500-EZ, Schedule A, Schedule C, Schedule D, Schedule E, Schedule G, Schedule H, Schedule I, Schedule R, and Schedule SSA.

7.2.1 General Rejection Errors

Following are general rejection errors that may occur when filing electronic/external media filing.

General

<u>Error Code</u>	<u>Explanation</u>
#0001	Invalid Zip Code. Zip code in the address of the Plan Sponsor in line 2a of Form 5500 is not a valid zip code for the state indicated on the same line. Please check for the accuracy of the zip code.
#0002	Invalid Zip Code. The zip code in the address of the Plan Sponsor in line 2a of Form 5500-EZ is not a valid zip code for the state indicated on the same line. Please check for the accuracy of the zip code.
#0003	Non-Standard Form or Schedule. You have submitted a Form or Schedule that cannot be processed in our Annual Report processing environment. Forms and Schedules that do not conform to our standard processing environment are not acceptable for processing. For future filings, please submit the correct version or format.
#0005	Page Exists Containing No Data. No page of a schedule should be generated if there are no entries on that page record. A blank page (record ID only) may cause the filing to be deemed non-acceptable for processing. Please see Section 5.2.
#0006	Form/Schedule Missing Page(s). Every page of Form 5500 or Form 5500-EZ must have a record present. For the Schedules, only the pages (in proper sequence) that contain significant data must have a logical record present.
#0007	Incomplete Schedule. If page 2 and/or any succeeding page of any schedule contains significant data, page 1 of that schedule must also be present and must contain significant data (any filing data is present on the first page).
#0008	Decryption Failure. The filing could not be properly decrypted. Check to see that a valid encryption key was used, properly entered, and that it has not expired. Also check to make sure that the correct transmitter's EFIN and correct indicator was used (Live, Test). Please make corrections and resubmit this filing.
#0010	Improper Format. The file or batch received contained an improperly formatted field(s). Possibilities for this error include: Field number indicators, byte count, or field formatted improperly. Please contact the software vendor.
#0011	PIN/Signer ID Authentication Failure. This filing contains an invalid Personal Identification Number (PIN) or a Signer ID in the summary record of the filing. Check to see that the PIN and Signer ID which were used were properly entered. Also check to make sure that the correct indicator is used (Live, Test). Please make corrections and resubmit this filing.

General

<u>Error Code</u>	<u>Explanation</u>
#0012	Filing Batch Contains Virus. Attachments within the filing batch were infected with at least one computer virus. Please check the filing and attachments and resubmit the filing batch.
#0013	Invalid Code. This filing contains an invalid Software Developer ID Code in the header of the filing. Either the Software Developer ID Code is incorrect, or the Software Developer associated with the code has not passed PATS for the form year for which you are filing. Please contact the software vendor.
#0014	Invalid Field Length. The file received contains a field(s) that is of invalid length. Please contact the software vendor.
#0015	Invalid Field Information. A field in the file received contains invalid information. Please contact the software vendor.
#0016	Duplicate Field. The file received contains duplicate fields. Please contact the software vendor.
#0017	Invalid Field. The file received contains an invalid field. Please contact the software vendor.
#0018	Invalid Header Information. The file received contains a header record with invalid information. Please contact the software vendor.
#0019	Invalid Byte Count. The file received contains an invalid byte count. Please contact the software vendor.
#0020	Forms Out of Order. The file received contains forms that were in the incorrect order. Please contact the software vendor.
#0021	Number of Forms Exceed Limit. The file received contains more forms than allowable by electronic/external media filing. Please contact the software vendor.
#0023	Missing Attachment. The unstructured attachment indicator record indicates there is an unstructured attachment but it cannot be located. Check to make sure the file name of the attachments is correct and resubmit the filing. If the problem persists, please contact the software vendor.
#0024	Invalid EFIN. An invalid EFIN was used to transmit the filing batch. Possibilities for this error include: transmission EFIN did not match EFIN in TRANS or RECAP record; non software developer type submitted a test batch; non transmitter type submitted a live batch. Please make corrections and resubmit this filing.

General

<u>Error Code</u>	<u>Explanation</u>
#0025	Indeterminable Batch Type. The transmitted batch is not labeled as either a Live or Test batch. Please make corrections and retransmit the batch or contact the software vendor.
#0026	Filing Count Conflict. The number of filings listed in the RECAP record and the actual number of filings in the filing batch are not consistent. Please contact the software vendor.
#0027	Fields out of order. The filing or batch received contained field number indicators that were out of order. Please contact the software vendor.
#0028	Invalid Form Year. The Form Year listed in the header record is invalid or a test filing batch was submitted with two or more different Form Years. Please contact the software vendor.
#0029	Number of Test Filings Incorrect. The number of test (PATs) filings is incorrect. Please make corrections and resubmit this test batch.
#0099	Errors Exceed Maximum. There are more than 297 errors in this filing. Only the first 297 errors can be reported. Please make necessary changes and retransmit the filing.

7.2.2 Form 5500 Errors

The following errors will occur after specific checks on Form 5500.

Form 5500

<u>Error Code</u>	<u>Explanation</u>
#0101	Invalid District Office Code. The District Office Code (the first two numerals of the EIN in line 2b of Form 5500) is not a valid code. Please check the accuracy of the EIN that you have entered on this filing.
#0102	Invalid Plan Fiscal Dates. Either the Year Ending Date is an earlier date than the Year Beginning Date or the time period covered by these dates is longer than 12 months. The Beginning Date must be earlier than the Ending Date. This Fiscal Year cannot be longer than 12 months.
#0104	Incorrect Entity Type. You may have not checked the appropriate Entity Type box or may have checked more than one box in Line A. Only one box on Line A is allowed to be checked.

Form 5500

<u>Error Code</u>	<u>Explanation</u>
#0105	Missing DFE Type. On Form 5500, you checked Box A(4) to indicate that your filing is a DFE, however, you did not specify the type of DFE. Please enter the applicable code C, E, G, M, or P.
#0106	Missing Schedule H. You have specified that you are filing as a DFE, however, there is no information entered on Schedule H, Part I, line 1f, or Schedule H, Part II, line 2d.
#0107	Incorrect Indicator. You checked box B(3) to indicate that this is the final Form 5500 for the plan. However, you either indicated on line 7f that beneficiaries retained benefits under the plan at the end of the year or indicated on line 1f(b) of Schedule H or line 1a(b) of Schedule I that the plan held assets at the end of the year. Box B(3) should be checked only if, during the year, distribution of all assets under the plan was completed or a trustee was appointed for a terminated defined benefit plan pursuant to ERISA section 4042. If these conditions have not been met, you must submit a complete filing, even if the plan was terminated or frozen or you made no contribution to the plan.
#0109	Incorrect Code. Your Plan Number in line 1(b) indicates that your plan is a pension plan, but you did not enter the correct plan characteristic code in line 8a. Please check the filing for the correct Plan Number, Welfare Benefit, Entity Type, and Type of Direct Filing Entity.
#0111	Missing Date. The Plan Effective Date on Form 5500, line 1c cannot be blank.
#0112	Incorrect EIN or PN. You indicated on line 5(b) of Schedule H or Schedule I that assets or liabilities were transferred from the Plan to another during the plan year. You showed the same EIN and Plan Number on line 5b(2) and (3) for the receiving plan(s) that appear on Form 5500 lines 1(b) and 2(b). You must show the EIN(s) and Plan Number(s) for the receiving plan(s) on lines 5b(2) and (3).
#0113	Invalid Business Code. You failed to enter a valid business code on line 2d. Please check the instructions for Form 5500 and enter the appropriate business code.
#0114	Missing Information. Your filing shows that you did not complete the required information regarding the Plan Administrator. Please check to make sure that the Administrator's name is entered or that "Same" is entered if the Plan Sponsor and Administrator are one and the same.
#0119	Missing EIN. Your Form 5500 shows that you did not complete the required information regarding the Plan Administrator EIN.
#0120	Missing Form. On your Form 5500, line 6, the number of participants you reported indicates that you should include Schedule H in the filing. Please add a Schedule H or correct the number of beginning plan participants on line 6.

Form 5500

<u>Error Code</u>	<u>Explanation</u>
#0121	Incorrect Calculation. The amount you entered on Form 5500, page 2, line 7d is not equal to the sum of lines 7a, 7b, and 7c. Please check your addition.
#0122	Incorrect Calculation. The amount you entered on Form 5500, page 2, line 7f, is not equal to the sum of lines 7d and 7e. Please check your addition.
#0123	Missing Information. You did not indicate a subtotal for the number of live participants at the end of the plan year on Form 5500, line 7d. Or you did not indicate a total for the number of participants at the end of the plan year on Form 5500, line 7f. Please enter the correct numbers on line 7d and 7f.
#0124	Missing Information. Your filing shows you did not complete the required information regarding the Number of Participants Covered under the Plan on line 6 of Form 5500.
#0125	Incorrect Plan Number. You indicated on Form 5500, box 8a, that the plan provided pension benefits. However, the Plan Number you assigned to the plan on line 1b is 501 or higher, indicating that the plan provides only welfare benefits. The Plan Number assigned to any plan that provides pension benefits must be 001, or if there is more than one such plan, the next available number in sequence. If you checked box 8a incorrectly, please check the correct box.
#0126	Missing Code. You failed to indicated on Form 5500, line 8a, the characteristic codes for the plan from the list in the instructions for Form 5500. Please include the proper code(s).
#0127	Missing Indicator. You failed to indicate on Form 5500, line 8 the types of benefits (i.e. pension or welfare) provided by the plan and the characteristic codes for the plan from the list provided in the instructions for Form 5500. Please complete line 8 by entering this information.
#0129	Missing Indicator. You have not indicated on Form 5500, Part II, line 9(a) and/or line 9(b) the type of plan funding arrangement.
#0130	Missing Amount. You have indicated that your plan contains a trust as the funding and/or benefit arrangement, however, you did not attach Schedule H or I, or the Schedule H or I you did attach was not properly calculated. Please attach the appropriate Schedule H or I or check your calculations.
#0131	Missing Information. You have indicated on Schedule H that your plan assets contain pooled-separate accounts, however, the appropriate boxes are not checked on Form 5500, Part II, line 9(a). Please check your responses to the plan funding arrangement on Form 5500 or change your pooled-separate account entries on Schedule H.

Form 5500

<u>Error Code</u>	<u>Explanation</u>
#0132	Missing Code. You have not indicated a valid plan funding and/or benefit arrangement code(s) on Form 5500, line 9(a) or 9(b). Please provide the plan funding and/or benefit arrangement by marking the appropriate code(s) on line 9(a) or 9(b).
#0133	Missing Form. You have marked Form 5500, page 3, box 10a(1), but Schedule R is not part of this filing.
#0137	Missing Schedule. Form 5500, page 3, box 10a(3) indicates that a Schedule E is attached to the filing, but no Schedule E was found.
#0138	Missing Schedule. Form 5500, page 3, box 10a(4) indicates that a Schedule SSA is attached to the form, but no Schedule SSA was found.
#0139	Missing Form. You marked Form 5500, page 3, box 10b(1), but Schedule H is not part of this filing.
#0140	Missing Form. You marked Form 5500, page 3, box 10b(3), but Schedule A is not part of this filing.
#0141	Discrepancy in Form Count. You have indicated a number of Schedule As on Form 5500, page 3, box 10b(3), but different number of Schedule As are part of this filing.
#0142	Missing Form. You marked Form 5500, page 3, box 10b(4), but Schedule C is not part of this filing.
#0143	Missing Form. You marked Form 5500, page 3, box 10b(5), but Schedule D is not part of this filing.
#0144	Missing Form. You marked Form 5500, page 3, box 10b(6), but Schedule G is not part of this filing.
#0148	Incorrect Code. If only Code 4 is indicated on line 9a and 9b in Part II of Form 5500, then BOY or EOY total assets or total income for small or large plans must be zero, unless a non-standard schedule is attached.
#0149	Missing Form. You marked Form 5500, page 3, box 10b(2), but Schedule I is not part of this filing.
#0150	Missing Indicator. Line C of Part I of Form 5500 is not checked and line A of Form 5500 contains "1" and line 8a contains the characteristic codes as indicated by line C. Please include the proper indicator for line C.

7.2.3 Form 5500-EZ Errors

The following errors will occur after specific checks on Form 5500-EZ.

Form 5500-EZ

<u>Error Code</u>	<u>Explanation</u>
#0201	Incorrect Time Period. The dates you show for the beginning and end of your plan year cover a period of more than 12 months. If the dates are incorrect, please enter the correct dates. If, however, the dates are correct, you must file two filings – one for twelve months and one for the short period.

7.2.4 Schedule A Errors

The following errors will occur after specific checks on Schedule A.

Schedule A

<u>Error Code</u>	<u>Explanation</u>
#0301	Incorrect Plan Number. The Plan Number on Schedule A must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule A is the same Plan Number as shown on Form 5500.
#0302	Incorrect EIN. The Employer Identification Number (EIN) on Schedule A must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule A is the same EIN as is on Form 5500.

7.2.5 Schedule C Errors

The following errors will occur after specific checks on Schedule C.

Schedule C

<u>Error Code</u>	<u>Explanation</u>
#0501	Incorrect Date. The Plan Year Beginning date on Schedule C does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule C is reported for the same period as indicated on Form 5500.

Schedule C

<u>Error Code</u>	<u>Explanation</u>
#0502	Incorrect Date. The Plan Year Ending date on Schedule C does not match the Plan Year Ending date on the Form 5500. Please make sure the information you indicated on Schedule C is reported for the same period as indicated on Form 5500.
#0503	Incorrect Plan Number. The Plan Number on Schedule C must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule C is the same Plan Number as shown on Form 5500.
#0504	Incorrect EIN. The Employer Identification Number (EIN) on Schedule C must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule C is the same EIN as shown on Form 5500.
#0505	Missing Information. The Name, Position, or an Explanation for termination has been provided on Part II of Schedule C, however, the Employer Identification Number is missing. Please provide the EIN.
#0506	Missing Information. The EIN, Position or Explanation for termination has been provided on Part II of Schedule C, however, the Name of the terminated service is missing. Please provide the name.

7.2.6 Schedule D Errors

The following errors will occur after specific checks on Schedule D.

Schedule D

<u>Error Code</u>	<u>Explanation</u>
#0601	Incorrect Date. The Plan Year Beginning date on Schedule D does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule D is reported for the same period as indicated on Form 5500.
#0602	Incorrect Date. The Plan Year Ending date on Schedule D does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule D is reported for the same period as indicated on Form 5500.
#0603	Incorrect Plan Number. The Plan Number on Schedule D must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule D is the same Plan Number as shown on Form 5500.

Schedule D

<u>Error Code</u>	<u>Explanation</u>
#0604	Incorrect EIN. The Employer Identification Number (EIN) on Schedule D must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule D is the same EIN as shown on Form 5500.
#0605	Missing Information. Information has been entered on Schedule D, part I, line a, b, c, d, or e, but not each line has been completed. If information is entered on one line in Schedule D, part I, all five lines must be completed.

7.2.7 Schedule E Errors

The following errors will occur after specific checks on Schedule E.

Schedule E

<u>Error Code</u>	<u>Explanation</u>
#0701	Incorrect Date. The Plan Year Beginning date on Schedule E does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule E is reported for the same period as indicated on Form 5500.
#0702	Incorrect Date. The Plan Year Ending date on Schedule E does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule E is reported for the same period as indicated on Form 5500.
#0703	Incorrect Plan Number. The Plan Number on Schedule E must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule E is the same Plan Number as shown on Form 5500.
#0704	Incorrect EIN. The Employee Identification Number (EIN) on Schedule E must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule E is the same EIN as shown on Form 5500.
#0705	Incorrect Calculation. The total dividends paid to participants reported on Schedule E, page 3, line 18 (e) does not equal the sum of all amounts entered in column (e). Please check your addition.
#0706	Incorrect Calculation. The total dividends used to repay exempt loans on Schedule E, page 3, line 18(f), column (1), does not equal the sum of all amounts entered in column (f)(1). Please check your addition.

Schedule E

<u>Error Code</u>	<u>Explanation</u>
--------------------------	---------------------------

#0707	Incorrect Calculation. The total dividends used to repay exempt loans on Schedule E, page 3, line 18(f), column (2), does not equal the sum of all amounts entered in column (f)(1). Please check your addition.
-------	--

7.2.8 Schedule F Errors

Schedule F cannot be filed electronically.

7.2.9 Schedule G Errors

The following errors will occur after specific checks on Schedule G.

Schedule G

<u>Error Code</u>	<u>Explanation</u>
--------------------------	---------------------------

#0901	Incorrect Date. The Plan Year Beginning date on Schedule G does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule G is reported for the same period as indicated on Form 5500.
#0902	Incorrect Date. The Plan Year Ending date on Schedule G does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule G is reported for the same period as indicated on Form 5500.
#0903	Incorrect Plan Number. The Plan Number on Schedule G must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule G is the same Plan Number as shown on Form 5500.
#0904	Incorrect EIN. The Employee Identification Number (EIN) on Schedule G must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule G is the same EIN as shown on Form 5500.

7.2.10 Schedule H Errors

The following errors will occur after specific checks on Schedule H.

Schedule H

<u>Error Code</u>	<u>Explanation</u>
#1001	Missing Schedule. Plan assets containing pooled-separate accounts or “other” accounts have been entered on Schedule H, however, this filing is missing Schedule A. Please review all your responses and if the plan contains insurance or pooled-separate account assets, complete the appropriate number of Schedules A.
#1002	Incorrect Information. Schedule H Line 4i = No and any Schedule H, Part I, lines 1c(2)(b) through 1d(2)(b) contain an amount.
#1003	Incorrect Date. The Plan Year Beginning date on Schedule H does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule H is reported for the same period as indicated on Form 5500.
#1004	Incorrect Date. The Plan Year Ending date on Schedule H does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule H is reported for the same period as indicated on Form 5500.
#1005	Incorrect Plan Number. The Plan Number on Schedule H must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule H is the same Plan Number as shown on Form 5500.
#1006	Incorrect EIN. The Employer Identification Number (EIN) on Schedule H must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule H is the same EIN as shown on Form 5500.
#1007	Missing Indicators. According to your Schedule H, your plan assets contain insurance contracts, however the appropriate boxes are not checked on Form 5500, Part ii, lines 9(a)(1) or 9(b)(1). Please check your responses to the plan funding or benefit arrangements on Form 5500 or else change your insurance or pooled separate account entries on Schedule H.
#1008	Incorrect Total. The total assets Beginning of Year amounts that are entered are not correct when added or subtracted in calculating the amount on Schedule H, Part I, line 1f(a), Total Assets.
#1009	Incorrect Total. The Total Beginning of Year Liabilities on Schedule H, Part I, line 1k(a) does not equal the sum of Beginning of Year Claims Payable, Beginning of Year Operating Payables, Beginning of Year Acquisition Indebtedness, and Beginning of Year Other Liabilities.
#1010	Incorrect Total. The Net Assets Beginning of Year, Schedule H, Part I, line 11(a) does not equal Beginning of Year Total Assets, Schedule H, Part I, line 1f(a) minus Beginning of Year Total Liabilities, Schedule H, Part I, line 1k(a).

Schedule H

<u>Error Code</u>	<u>Explanation</u>
#1011	Incorrect Amount. The End of Year Value of Interest in Pooled-Separate Accounts on Schedule H, line 1c(10)(b) does not correspond to the sum of the Current Value of Plans Interest in Separate Account at year-end for all Schedule(s) A. Please check your Pooled-Separate Account amounts entered on both Schedule H and Schedule(s) A to ensure consistency in reporting.
#1012	Incorrect Amount. The End of Year Value of Interest in Master Trust accounts on Schedule H, line 1(c)(11)(b), does not equal the sum of all End of Year Dollar Value of Interest amounts indicated in line (e) on Schedule D for all Master Trusts. Please check End of Year Value of Interest in Master Trust accounts on Schedules H and D to ensure consistency in reporting the amounts.
#1013	Incorrect Amount. The End of Year Value of Interest in 103-12 Investment Entities on Schedule H, line 1c(12)(b) does not equal the sum of all End of Year Dollar Value of Interest amounts indicated in column (e) on Schedule D for all 103-12 Investment Entities. Please check the End of Year Value of Interest in 103-12 Investment Entities on Schedules H and D to ensure consistency in reporting.
#1014	Missing Information. Schedule H Line 3b = 1, however Form 5500, Part I, line A(4) is blank.
#1015	Incorrect Amount. End of Year Value of Unallocated Contract Funds indicated on Schedule H, line 1(c)(14)(b), is not consistent with what you have entered on Schedule A, line 6(f), Unallocated Contract Balance at End of the Current Year. Please check your entries on Schedule H, line 1(c)(14)(b) and Schedule A to ensure consistency in reporting the amounts.
#1016	Incorrect Total. The total assets End of Year amounts that are entered are not correct when added or subtracted in calculating the amount on Schedule H, Part I, line 1f(b), Total Assets.
#1017	Incorrect Total. The Total End of Year Liabilities on Schedule H, Part I, line 1k(b) does not equal the sum of End of Year Claims Payable, End of Year Operating Payables, End of Year Acquisition Indebtedness, and End of Year Other Liabilities.
#1018	Incorrect Total. The Net Assets End of Year, Schedule H, Part I, line 1l(b) does not equal End of Year Total Assets, Schedule H, Part I, line 1f(b) minus End of Year Total Liabilities, Schedule H, Part I, line 1k(b).
#1019	Incorrect Total. Total Contributions, Schedule H, Part II, line 2a(3)(b) does not equal the sum of Employers Contributions, line 2a(1)(A)(a); Participants Contributions, line 2a(1)(B)(a); Other Contributions, line 2a(1)(C)(a); and Non-cash Contributions, line 2a(2)(a). Please Check your calculations.

Schedule H

<u>Error Code</u>	<u>Explanation</u>
#1020	Incorrect Total. The Total Interest, Schedule H, Part II, line 2b(1)(G)(b) does not equal the sum of Interest-bearing cash, line 2b(1)(A)(a); U.S. Government Securities, line 2b(1)(B)(a); Corporate Debt Instruments, line 2b(1)(C); Loans, line 2b(1)(D)(a); Participant Loans, line 2b(1)(E)(a); and Other, line 2b(1)(F)(a). Please check your calculations.
#1021	Incorrect Total. The Total Dividends, Schedule H, Part II, line 2b(2)(c)(b) does not equal the sum of Preferred Stock, line 2b(2)(A)(a), and Common Stock, line 2b(2)(B)(a). Please check your calculations.
#1022	Incorrect Total. The Net Gain(Loss) on Sale of Assets, Schedule H, Part II, line 2b(4)(C)(b) does not equal Aggregate Proceeds, line 2b(4)(A)(a), minus Aggregate Carrying Amount, line 2b(4)(B)(a). Please check your calculations.
#1023	Incorrect Total. Total Unrealized Appreciation of Assets, Schedule H, Part II, line 2b(5)(C)(b), does not equal Unrealized Appreciation/Depreciation of Real Estate, line 2b(5)(A)(a) minus Other, line 2b(5)(B)(a). Please check your calculations.
#1024	Incorrect Total. Total Income, Schedule H, line 2d(b) does not equal the sum of Total Contributions, line 2a(3)(b); Total Interest, line 2b(1)(G)(b); Total Dividends, line 2b(2)(C)(b); Rents, line 2b(3)(b); Net Gain, line 2b(4)(C)(b); Net Investment Gain/Loss, lines 2b(5)(C)(b), 2b(6)(b), 2b(7)(b), 2b(8)(b), 2b(9)(b), and 2b(10)(b); and Other Income, line 2c(b). Please check your calculations.
#1025	Missing Information. An amount is entered on Schedule H, page 3, line 2e(2)(a), however Form 5500, page 2, line 9b(1) is not marked.
#1026	Incorrect Total. Total Benefit Payments, Schedule H, line 2e(4)(b) does not equal the sum of Directly to Participants, line 2e(1)(a); To Insurance carriers, line 2e(2)(a); and Other line 2e(3)(a). Please check your calculations.
#1027	Incorrect Total. Total Administrative Expenses, Schedule H, line 2i(5)(b) does not equal the sum of Professional Fees, line 2i(1)(a); Contract Administrator Fees, line 2i(2)(a); Investment Advisory and Management Fees, line 2i(3)(a); and Other, line 2i(4)(a). Please check your calculations.
#1028	Incorrect Total. Total Expenses, Schedule H, line 2j(b) does not equal the sum of Total Benefit Payments, line 2e(4)(b); Corrective Distributions, line 2f(b); Deemed Distributions, line 2g(b); Interest Expense, line 2h(b); and Total Administrative Expenses, line 2i(5)(b). Please check your calculations.
#1029	Incorrect Total. Net Income, Schedule H, line 2k(b) does not equal Total Income, Schedule H, line 2d(b) minus Total Expenses, Schedule H, line 2j(b). Please check your calculations.

Schedule H

<u>Error Code</u>	<u>Explanation</u>
#1030	Missing Information. Schedule H indicates that this plan had a transfer of assets from this plan, however, you did not complete the information contained in Part IV, line 5b. Please make sure you have included the Plan Name, Employer Identification Number, and Plan Number to which assets or liabilities were transferred.
#1031	Missing Information. Schedule H, line 4a, is not marked “Yes” or “No”. An answer to this question is required.
#1032	Missing Amount. Schedule H, line 4a is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1033	Missing Information. Schedule H, line 4b is not marked “Yes” or “No”. An answer to this question is required.
#1034	Missing Schedule. Schedule H, line 4b is marked “Yes” however Schedule G, Part I is not part of this filing.
#1035	Missing Amount. Schedule H, line 4b is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1036	Missing Information. Schedule H, line 4c, is not marked “Yes” or “No”. An answer to this question is required.
#1037	Missing Schedule. Schedule H, line 4c is marked “Yes” however Schedule G, Part II is not part of this filing.
#1038	Missing Amount. Schedule H, line 4c is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1039	Missing Information. Schedule H, line 4d, is not marked “Yes” or “No”. An answer to this question is required.
#1040	Missing Schedule. Schedule H, line 4d is marked “Yes” however Schedule G, Part III is not part of this filing.
#1041	Missing Amount. Schedule H, line 4d is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1042	Missing Information. Schedule H, line 4e, is not marked “Yes” or “No”. An answer to this question is required.
#1043	Missing Amount. Schedule H, line 4e is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.

Schedule H

<u>Error Code</u>	<u>Explanation</u>
#1044	Missing Information. Schedule H, line 4f, is not marked “Yes” or “No”. An answer to this question is required.
#1045	Missing Amount. Schedule H, line 4f is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1046	Missing Information. Schedule H, line 4g, is not marked “Yes” or “No”. An answer to this question is required.
#1047	Missing Amount. Schedule H, line 4g is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1048	Missing Information. Schedule H, line 4h, is not marked “Yes” or “No”. An answer to this question is required.
#1049	Missing Amount. Schedule H, line 4h is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1050	Missing Information. Schedule H, line 4i, is not marked “Yes” or “No”. An answer to this question is required.
#1051	Missing Information. Schedule H, line 4j, is not marked “Yes” or “No”. An answer to this question is required.
#1052	Missing Information. Schedule H, line 4k, is not marked “Yes” or “No”. An answer to this question is required.
#1053	Missing Plan Name. This plan had a transfer of assets, however only the Employer Identification Number(s) (EIN) and Plan Number(s) (PN) of the plans having received the assets are listed on Schedule H, line 5b. Please add the corresponding Name(s) of the Plan to line 5b.
#1054	Missing Plan EIN. This plan had a transfer of assets, however only the Plan Name(s) and Plan Number(s) of the plans having received the assets are listed on Schedule H, line 5b. Please add the corresponding Employer Identification Number (EIN) of the Plan to line 5b.
#1055	Missing Plan Number. This plan had a transfer of assets; however, only the Plan Name(s) and Employer Identification Number(s) (EIN) of the plans having received the assets are listed on Schedule H, line 5b. Please add the corresponding Plan Number(s) (PN) of the Plan to line 5b.

Schedule H

<u>Error Code</u>	<u>Explanation</u>
#1056	Missing Schedule. If BOY Value of Funds Held in Insurance Company or EOY Value of Funds Held in Insurance Company are present (Schedule H), then Schedule A must be attached unless Part I, B4 on Form 5500 indicates a short plan year or the Schedules A are in non-standard form.
#1057	Missing Information. You indicated that an Accountant's Opinion was not attached because Schedule H, Line 3d(1) is checked, but Form 5500, Part I, Line A(4) does not contain "C", "P", or "M".

7.2.11 Schedule I Errors

The following errors will occur after specific checks on Schedule I.

Schedule I

<u>Error Code</u>	<u>Explanation</u>
#1101	Incorrect Date. The Plan Year Beginning date on Schedule I does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule I is reported for the same period as indicated on Form 5500.
#1102	Incorrect Date. The Plan Year Ending date on Schedule I does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule I is reported for the same period as indicated on Form 5500.
#1103	Incorrect Plan Number. The Plan Number on Schedule I must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule I is the same Plan Number as shown on Form 5500.
#1104	Incorrect EIN. The Employer Identification Number (EIN) on Schedule I must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule I is the same EIN as shown on Form 5500.
#1105	Incorrect Total. Net Plan Assets Beginning of Year on Schedule I, line 1c(a) does not equal Total Plan Assets Beginning of Year, Schedule I, line 1a(a), minus Total Liabilities, Schedule I, line 1b(a). Please check your calculations.
#1106	Incorrect Total. The amount on Schedule I, Total Plan Assets End of Year, line 1a(b), is less than the sum of the amounts on lines 3a, 3b, 3c, 3d, 3e, 3f, and 3g. Please check your calculations.

Schedule I

<u>Error Code</u>	<u>Explanation</u>
#1107	Incorrect Total. Net Plan Assets End of Year on Schedule I, line 1c(b) does not equal Total Plan Assets End of Year, Schedule I, line 1a(b), minus Total Liabilities, Schedule I, line 1b(b). Please check your calculations.
#1108	Incorrect Total. Total Income, Schedule I, line 2d(b) does not equal the sum of Employers Contributions, line 2a(1)(a); Participants Contributions, line 2a(2)(a); Others, line 2a(3)(a); Non-cash Contributions, line 2b(a); and Other Income, line 2c(a). Please check your calculations.
#1109	Incorrect Total. Total Expenses, Schedule I, line 2i(b) does not equal the sum of Benefits Paid, line 2e(a); Corrective Distributions, line 2f(a); Deemed Distributions, line 2g(a); and Other Expenses, line 2h(a). Please check your calculations.
#1110	Incorrect Total. Net Income, Schedule I, line 2j(b), does not equal Total Income, Schedule I, line 2d(b) minus Total Expenses, Schedule I, line 2i(b). Please check your calculations.
#1111	Missing Information. Schedule I, line 4a, is not marked “Yes” or “No”. An answer to this question is required.
#1112	Missing Amount. Schedule I, line 4a is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1113	Missing Information. Schedule I, line 4b, is not marked “Yes” or “No”. An answer to this question is required.
#1114	Missing Amount. Schedule I, line 4b is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1115	Missing Information. Schedule I, line 4c, is not marked “Yes” or “No”. An answer to this question is required.
#1116	Missing Amount. Schedule I, line 4c is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1117	Missing Information. Schedule I, line 4d, is not marked “Yes” or “No”. An answer to this question is required.
#1118	Missing Amount. Schedule I, line 4d is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1119	Missing Information. Schedule I, line 4e is not marked “Yes” or “No”. An answer to this question is required.

Schedule I

<u>Error Code</u>	<u>Explanation</u>
#1120	Missing Amount. Schedule I, line 4e is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1121	Missing Information. Schedule I, line 4f is not marked “Yes” or “No”. An answer to this question is required.
#1122	Missing Amount. Schedule I, line 4f is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1123	Missing Information. Schedule I, line 4g is not marked “Yes” or “No”. An answer to this question is required.
#1124	Missing Amount. Schedule I, line 4g is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1125	Missing Information. Schedule I, line 4h is not marked “Yes” or “No”. An answer to this question is required.
#1126	Missing Amount. Schedule I, line 4h is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1127	Missing Information. Schedule I, line 4i is not marked “Yes” or “No”. An answer to this question is required.
#1128	Missing Amount. Schedule I, line 4i is marked “Yes” but there is no corresponding amount. Please enter the appropriate amount.
#1129	Missing Information. Schedule I, line 4j is not marked “Yes” or “No”. An answer to this question is required.
#1130	Missing Plan Name. This plan had a transfer of assets, however only the Employer Identification Number(s) (EIN) and Plan Number(s) (PN) of the plans having received the assets are listed on Schedule I, line 5b. Please add the corresponding Name(s) of the Plan to line 5b.
#1131	Missing Plan EIN. This plan had a transfer of assets, however only Plan Name(s) and Plan Number(s) of the plans having received the assets are listed on Schedule I, line 5b. Please add the corresponding Employer Identification Number (EIN) of the Plan to line 5b.
#1132	Missing Plan Number. This plan had a transfer of assets, however only the Plan Name(s) and Employer Identification Number(s) (EIN) of the plans having received the assets are listed on Schedule I, line 5b. Please add the corresponding Plan Number(s) (PN) of the Plan to line 5b.

Schedule I

<u>Error Code</u>	<u>Explanation</u>
--------------------------	---------------------------

#1133	Missing Information. Schedule I, Line 4k is not marked “Yes” or “No.” An answer to this question is required.
-------	---

7.2.12 Schedule P Errors

Schedule P cannot be file electronically.

7.2.13 Schedule R Errors

The following errors will occur after specific checks on Schedule R.

Schedule R

<u>Error Code</u>	<u>Explanation</u>
--------------------------	---------------------------

#1301	Incorrect Date. The Plan Year Beginning date on Schedule R does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule R is reported for the same period as indicated on Form 5500.
#1302	Incorrect Date. The Plan Year Ending date on Schedule R does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule R is reported for the same period as indicated on Form 5500.
#1303	Incorrect Plan Number. The Plan Number on Schedule R must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule R is the same Plan Number as shown on Form 5500.
#1304	Incorrect EIN. The Employer Identification Number (EIN) on Schedule R must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule R is the same EIN as shown on Form 5500.
#1306	Incorrect Total. The amount on Schedule R, line 6c is not equal to the amount on Schedule R, line 6a minus the amount on Schedule R, line 6b. Please check your calculations and make the applicable corrections.
#1308	Inconsistent Information. Form 5500, line 8a is marked and a characteristic code of either 2B or 2C has been entered for line 8a, however no amount has been entered on either line 6a or 6b of Schedule R.

Schedule R

<u>Error Code</u>	<u>Explanation</u>
--------------------------	---------------------------

#1311	Incorrect Indicator. You have indicated No on line 8 of Schedule R and you have also indicated either Increase or Decrease. Please remove the Increase or Decrease indicator from line 8 of Schedule R.
-------	---

7.2.14 Schedule SSA Errors

The following errors will occur after specific checks on Schedule SSA.

Schedule SSA

<u>Error Code</u>	<u>Explanation</u>
--------------------------	---------------------------

#1401	Incorrect Date. The Plan Year Beginning date on Schedule SSA does not match the Plan Year Beginning date on Form 5500. Please make sure the information you indicated on Schedule SSA is reported for the same period as indicated on Form 5500.
-------	--

#1402	Incorrect Date. The Plan Year Ending date on Schedule SSA does not match the Plan Year Ending date on Form 5500. Please make sure the information you indicated on Schedule SSA is reported for the same period as indicated on Form 5500.
-------	--

#1403	Incorrect Plan Number. The Plan Number on Schedule SSA must be the same as the Plan Number on Form 5500. Please ensure that the Plan Number on Schedule SSA is the same Plan Number as shown on Form 5500.
-------	--

#1404	Incorrect EIN. The Employer Identification Number (EIN) on Schedule SSA must be the same as the EIN on Form 5500. Please ensure that the EIN on Schedule SSA is the same EIN as shown on Form 5500.
-------	---

#1405	Missing Code. Schedule SSA, line 4(b) or 4(c) indicates a separated participant, however an Entry Code has not been entered I Schedule SSA, line 4(a) to explain why it was reported. Please provide this entry code.
-------	---

7.2.15 Schedule T Errors

Schedule T cannot be filed electronically.

8. Acknowledgement Format

8.1 Acknowledgement File

For each batch of filings transmitted, the electronic filing system generates an acknowledgement file. The acknowledgement file is an ASCII text file. This acknowledgement file has the same name as the .DOL file of the transmitted batch. Thus, a transmitter transmitted a DOL file named: **01252001_001.DOL**. The electronic filing system generates an acknowledgement file with the name of **01252001_001.ACK**. For more information on DOL file naming conventions, see Section 5.1.

These acknowledgement files are placed in a directory named according to the transmitter's six-digit EFIN directory.

This acknowledgement file is either an **initial** acknowledgement for all **live** batches submitted or a **final** acknowledgement for all **test** batches submitted. For more information, see Section 7.

For more information about the technical specifications for the acknowledgement file, including the phone number to dial, see Section 9.2.

8.2 General Format Information

Acknowledgement records are of fixed length format but the varying number of filings in a batch and the varying number of errors means that there are varying numbers of records in each acknowledgement batch. Each record contains 72 bytes.

The acknowledgement file itself is one file consisting of a number of records. The batch is first acknowledged in an ACKB Record. If the batch cannot be decrypted, contains a virus or is in an invalid format, the ACKB Record is followed by an ACKT Record listing the error(s) acknowledgement file in the batch. No filings are acknowledged if an ACKT exists.

If the batch is deemed acceptable for processing, an ACK Key Record exists for each filing within the transmitted batch. The ACK Key Record is followed by ACK Error Record(s) for each filing deemed non-acceptable within the batch. Once all filings are acknowledged, a RECAP Record exists to summarize the acknowledgement file.

8.3 Unique Numbers Assigned by the Electronic Filing System

8.3.1 DLN

The DLN (Document Locator Number) is a unique fourteen digit number that the EFAST Electronic Filing System assigns to each filing it processes. Both live and PATS filings receive DLNs, regardless of whether the filings are deemed acceptable or non-acceptable for processing.

The DLN of each filing deemed non-acceptable is included in the acknowledgements the EFAST Electronic Filing System issues. You may need this number in order for the EFAST Electronic System to provide quick and accurate user support. This number is formatted as follows:

- **Digits 1 and 2** are always 55 (the code for EF).
- **Digit 3** always is 0.
- **Digits 4 and 5** indicate the type of filing: 31 = 5500EZ and 37 = 5500.

- **Digit 6** indicates the last digit of the processing year. The digit “4” indicates the year 2004. The digit “5” indicates the year 2005, and so on. This number changes each January 1.
- **Digits 7, 8 and 9** indicate the Julian processing date of the transaction.
- **Digits 10, 11, 12, 13, and 14** are the sequential number of the filing for the day.

8.3.2 Batch ID

The Batch ID is a unique ten digit number that the EFAST Electronic Filing System assigns to each batch it processes. Both live and PATS batches receive Batch IDs regardless of whether the batch is deemed acceptable or non-acceptable for processing.

The Batch ID of each batch deemed non-acceptable is included in the acknowledgements the EFAST Electronic Filing System issues. You may need this number in order for the EFAST Electronic System to provide quick and accurate user support.

8.4 Receiving Acknowledgements

To receive acknowledgements:

- Set up a Dial-up networking connection to the MCI service on Windows 95/98, or set up a RAS session via Windows NT. You must have Version 1.3 or greater of Dial-up Networking installed on your Windows 95/98 operating system. Phone number: 888 273-9539.
- Use the EFIN for the user name and the password for the password.
- Establish an FTP connection to the EFAST server. IP address: 192.168.20.70. Use the EFIN for the user name and the password for the password. You must enable binary transfer mode.
- The system automatically transfers you to your user directory. At this time, all *.ack files may be downloaded via FTP.

8.5 ACK Batch Record

Following is the format for the ACKB Record of the acknowledgement file. The Acknowledgement file always begins with this record and provides information on the filing batch submitted.

ACK Batch Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	“0072”
2	Start of Record Sentinel	4	A/N	5	“*****”
3	Record ID	4	A/N	9	Value “ACKB”
4	Acceptance Code of Batch	1	A/N	13	“A” = Acceptable. “R” = Non-acceptable.
5	Batch ID	10	N	14	A unique ten digit number that the EFAST Electronic Filing System assigns to each batch.
6	.DOL Filename	30	A/N	24	Filename minus the .DOL extension.
7	EFIN	6	N	54	Transmitter’s EFIN

ACK Batch Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
8	Date Received	8	N	60	Date batch was received. Format: MMDDYYYY
9	Reserved	4		68	
	Record Terminus Character	1	A/N	72	Value “#”

8.6 ACK Batch Error Record

The ACKT Error Record exists only if field 2 of the ACKB is R. The ACKT then provides more information on the rejection. The RECAP Record always follows the ACKT Record since no filings are acknowledged if the batch is deemed non-acceptable.

ACK Batch Error Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	“0072”
2	Record Beginning Mark	4	A/N	5	“*****”
3	Record ID	4	A	9	Value “ACKT”
4	Error Reject Code1	4	N	13	
5	Record Number	2	N	17	
6	Error Reject Code2	4	N	19	
7	Record Number	2	N	23	
8	Error Reject Code3	4	N	25	
9	Record Number	2	N	29	
10	Error Reject Code4	4	N	31	
11	Record Number	2	N	35	
12	Error Reject Code5	4	N	37	
13	Record Number	2	N	41	
14	Error Reject Code6	4	N	43	
15	Record Number	2	N	47	
16	Error Reject Code7	4	N	49	
17	Record Number	2	N	53	
18	Error Reject Code8	4	N	55	
19	Record Number	2	N	59	
20	Error Reject Code9	4	N	61	
21	Record Number	2	N	65	

ACK Batch Error Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
22	Reserved	5		67	
	Record Terminus Character	1	A/N	72	Value “#”

8.7 ACK Key Record

An ACK Key Record exists for each filing submitted in a filing batch. The character **␣** represents one blank.

ACK Key Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	“0072”
2	Start of Record Sentinel	4	A/N	5	“*****”
3	Record ID	4	A/N	9	Value “ACK␣”
4	Acceptance Code	1	A/N	13	“A” = Acceptable. “R” = Non-acceptable
5	Date Processed	8	N	14	MMDDYYYY
6	Error Count	3	N	22	Number of errors contained in the following error record
7	Document Locator Number (DLN)	14	N	25	Numeric
8	Sponsor’s EIN	9	N	39	
9	Plan Number	3	N	48	Numeric
10	Reserved	21		51	
	Record Terminus Character	1	A/N	72	Value “#”

8.8 ACK Error Record

The ACK Error Record exists in the acknowledgement file following each ACK Key Record that contains an R in field 5. Fields 2-6 of the Error Record may repeat up to 3 times per record with blanks filling any fields that contain non-significant data. This is represented by including naming the repeating fields a, b, and c. The record itself can repeat up to 99 times listing a total of 297 errors depending upon how many errors exist in a filing.

ACK Error Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	“0072”
2	Start of Record Sentinel	4	A/N	5	“*****”
3	Record ID	4	A/N	9	Value “ACKR”

ACK Error Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
4	Error Reject Code1	4	N	13	
5	Error Form Record Number1	2	N	17	
6	Error Form Occurrence1	3	N	19	
7	Page Occurrence1	4	N	22	
8	Error Field Sequence Number1	4	N	26	
9	Error Reject Code2	4	N	30	
10	Error Form Record Number2	2	N	34	
11	Error Form Occurrence2	3	N	36	
12	Page Occurrence2	4	N	39	
13	Error Field Sequence Number2	4	N	43	
14	Error Reject Code3	4	N	47	
15	Error Form Record Number3	2	N	51	
16	Error Form Occurrence3	3	N	53	
17	Page Occurrence3	4	N	56	
18	Error Field Sequence Number3	4	N	60	
19	Reserved	8		64	
	Record Terminus Character	1	A/N	72	Value “#”

8.8.1 Error Form Record Number Codes

The following table lists the two-digit error form record number codes for each form and schedule:

Form Name	Form Record Number
Form 5500	02
Form 5500EZ	04
Schedule A	06
Schedule C	10
Schedule D	12
Schedule E	14
Schedule G	24
Schedule H	18
Schedule I	20
Schedule R	22

Form Name	Form Record Number
Schedule SSA	30
Unstructured Attachment Indicator (UAI)	32
Inline Unstructured Attachment (UAT)	34
Trans Record	36
Header Record	38
Summary Record	40
Recap Record	42
Crypt Record	44

Schedules MB and SB are not included in the data stream. They are to be attached as unstructured filing attachments in PDF format.

8.9 ACK Recap Record

This record is a summary of the acknowledgements in the filing batch and is always present as the final record in an acknowledgement batch.

ACK Recap Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	“0072”
2	Start of Record Sentinel	4	A/N	5	“*****”
3	Record ID	6	A/N	9	Value “RECAPb”
4	Total Filing Count	6	N	15	
5	Total Filings Deemed Acceptable	6	N	21	
6	Total Filings Deemed Unacceptable	6	N	27	
7	Transmitter’s EFIN	6	N	33	
8	Date Batch Received	8	N	39	Format: MMDDYYYY
9	Reserved	25		47	
	Record Terminus Character	1		72	Value “#”

9. Electronic/Magnetic Media Specifications

9.1 General Information

Filers can transmit two different ways:

1. Through a direct modem-to-modem connection and
2. On magnetic media

Those interested in filing electronically should submit EFAST-1: Application for EFAST Electronic Signature and Codes for EFAST Transmitters and Software Developers. After this application is accepted, the transmitter will be issued an EFIN, Password, and Encryption Key. Only modem-to-modem filers will need to use the password and encryption key.

For more information on the application process and general EFAST participation, see Publication EFAST-A, Electronic Filing User's Guide.

9.2 Modem-to-modem Specifications

To transmit filings:

- Set up a Dial-up networking connection to the MCI service on Windows 95/98, or set up a RAS session via Windows NT. You must have Version 1.3 or greater of Dial-up Networking installed on your Windows 95/98 operating system. Phone number: 888 273-9539.
- Use the EFIN for the user name and the password for the password.
- Establish an FTP connection to the EFAST server. IP address: 192.168.20.70. Use the EFIN for the user name and the password for the password. You must enable binary transfer mode.
- The system automatically transfers you to your user directory. At this time, the filing batches may be uploaded via FTP.

All modem-to-modem filings must be encrypted. The encryption .DLL will automatically encrypt all necessary portions of the .DOL file as well as all the Unstructured Attachment files for modem-to-modem filings. For more information about encryption, see Section 10.

9.3 Magnetic Media Specifications

Only complete filings and their attachments can be submitted on magnetic media (i.e., filings cannot span tapes or diskettes).

All Magnetic Media must be formatted using ASCII text. Filings submitted on magnetic media must not be encrypted.

9.3.1 ACCEPTABLE TYPES OF MEDIA

9.3.1.1 Diskette

High density (1.44 MB) diskettes in standard MS-DOS format.

9.3.1.2 CD-ROM

5-1/4 inch CD-ROM disks written using the ISO-9660, hierarchical file system (HFS), or Hybrid HFS - ISO 9660 file system standard.

9.3.1.3 Magnetic Tape

The block size for all magnetic tapes must be under 60,000 bytes. The acceptable tape formats are as follows:

9-track magnetic tape:

MEDIA:	REEL TAPE - 1/2 INCH - 9 TRACK
DENSITY:	1600 BPI – 6250 BPI
CHARACTER SET:	ASCII
RECORD LENGTH:	(choose a convenient size – i.e. 8,192)
BLOCK SIZE:	(block size = record size - i.e. 8,192 where block size < 60,000)
INTERNAL LABEL:	Internal Labels are required. Standard Label Preferred VOL1, HDR1, HDR2, EOF OR EOVS Tapemarks Separating labels from data
EXTERNAL LABEL:	All magnetic tape must have external labels. See Section 9.3.7 of this document for labeling instructions.

All tapes that arrive without labels consisting of the fields listed above will not be processed. The following specifications also apply to the 9-track tape:

- Type of tape - 0.5” (12.7mm) wide Mylar base, computer grade magnetic tape on reels of up to 2400 feet (731.52m) within the following specifications:
- Tape thickness - 1.5 mils.
- Reel diameter - 10.5 inch (26.67 cm), 8.5 inch (21.59cm), or 7 inch (17.78cm).
- Parity - odd.
- Inter **record** gap - .3 inch for 6250 BPI. / .6 inch for 1600 BPI.

3480 and 3490 cartridge:

MEDIA:	3480 Cartridge - 18 Track / 3490 Cartridge – 36 Track
DENSITY:	38,000 BPI
CHARACTER SET:	ASCII
RECORD LENGTH:	(choose a convenient size – i.e. 8,192)
BLOCK SIZE:	(block size = record size - i.e. 8,192 where block size < 60,000)
INTERNAL LABEL:	Internal Labels are required. Standard label preferred VOL1, HDR1, HDR2, EOF or EOY tapemarks Separating labels from data
EXTERNAL LABEL:	All magnetic tapes must have external labels. See Section 9.3.7 of this document for labeling instructions.

All tapes that arrive without labels consisting of the fields listed above will not be processed.

8 mm DAT -ANSI/EIA/ ISO/IEC standard, 8 mm wide magnetic tape cartridge;

4 mm DAT - Standard 90M or 60M, 4 mm wide magnetic tape cartridge.

9.3.2 Magnetic Tape File Characteristics

For all magnetic tapes, use fixed block – 8,192 or 16,384 or 32,768 bytes. The block size for all magnetic tapes must be under 60,000 bytes.

9.3.3 Magnetic Tape Sequence

For magnetic tapes, the tape header should precede the normal sequence for DOL files (see Section 5.4 for more information). An example magnetic tape's layout follows:

- (1) TAPE HEADER
- (2) [filing1].DOL
- (3) [filing1_attach1].001
- (4) [filing1_attach2].002
- (5) [filing2].DOL
- (6) [filing2_attach1].001
- (7) [filing2_attach2].002
- (8) etc...

9.3.4 Creating Magnetic Tapes

All magnetic tapes that are to be submitted to the EFAST system should be ASCII Format and both internally and externally labeled with a fixed block size of 8192 or 16384 or 32768. Refer to the file sequence in Section 9.3.3.

In order to transfer the .DOL to the tape, you must first choose a block size for the tape. Then, write the binary .DOL file to the tape. Fill each fixed block on the tape completely with data from the .DOL file before beginning to write to the next block. If the size of your .DOL file is not a multiple of the fixed block size you have chosen (and, in most cases, it will not be), the size of the last block on the tape should match the size of the remaining data.

Example:

You have a .DOL file that is 16,385 bytes, and you choose to put that file on a tape which has a fixed block size of 8192.

The first block on the magnetic tape would contain the first 8192 bytes from the .DOL file. The second block on the magnetic tape would contain the second 8192 bytes from the .DOL file. The third block on the magnetic tape would contain the final single byte from the .DOL file.

That is,

Block 1 =	8192 bytes
Block 2 =	8192 bytes
Block 3 =	1 byte
Total =	16,385 bytes

All users of tape media, whether they use the STK Redwood, STK 9840, IBM 3590, IBM 3490E, DAT, Exabyte, DLT, or any other type of media, **must use magnetic labels**. The format of these labels is defined by ANSI Standard X 3.27, and major computer suppliers such as IBM provide relevant documentation. One such manual published by IBM is:

Using Magnetic Tape Labels and File Structure
SC26-4565 (1991)

Reading tapes after creation for verification.

Labeled Tapes

Finding the maximum block size of a tape:

The maximum block size can be found by issuing a “Scan Tape” command. In the case of a labeled tape, the block size can be found in the HDR2 label. For example, HDR2F0819200132... shows a file of fixed length records with a maximum block size of 8192.

Finding the record length of a tape:

If the tape is labeled, again the information can be found in the HDR2 label. For example, HDR2F0819200132... shows a file of fixed length records with a record length of 132.

Unlabeled Tapes

If the tape is unlabeled, and without knowledge of how the tape was written, the only way to find out the size of the records is by inspecting the tape and counting the bytes. This is why it is important to use labels.

9.3.5 INSTRUCTIONS FOR SUBMITTING FILINGS ON MAGNETIC TAPES

All magnetic tape submissions should be formatted according to ANSI Standard **X3.27-1987 (rev 1998)**.

See Section 9.3.3 for magnetic media sequence.

The filename of each .DOL file must be unique. See Section 5.1. The filename of the unstructured attachment files must correspond to the guidelines in Section 6.1.

9.3.6 INSTRUCTIONS FOR SUBMITTING FILINGS ON CD-ROM OR DISKETTE

All files transmitted on CD-ROM or Diskette must be in the root directory of the media.

Files on CD-ROM or diskette must be submitted in the following order: First .DOL file and all the unstructured attachments attached to that .DOL file, next .DOL file and all the unstructured attachments attached to that .DOL file, etc. Figure 1, Section 4.

The filename of each .DOL file must be unique. See Section 5.1. The filename of the unstructured attachment files must correspond to the guidelines in Section 6.1.

9.3.7 LABELING ON ALL MEDIA

A transmitter must place a label on both the packaging of the media and on each piece of media itself. These labels should be identical. They should both have the following information on separate lines of the label:

- **Media Type** – This indicates the kind of media being submitted; the choices are: Diskette, CD-ROM, 9-Track Magnetic Tape, 3480/3490 Cartridge, 8mm DAT, or 4mm DAT.
- **ASCII character set indication** – If you are submitting 9-Track or 3480/3490 magnetic tapes, you must indicate that the tape is in the ASCII character set. All other media does not require this indication.
- **Record length indication** – If you are submitting 9-Track or 3480/3490 magnetic tapes, you must indicate the tape's record length. All other media does not require this indication.
- **Block size indication** – If you are submitting 9-Track or 3480/3490 magnetic tapes, you must indicate the tape's block size. All other media does not require this indication.
- **Media ID** – This line must always read: "EFAST Processing System".
- **Transmitter's Name** – The name of the company submitting magnetic media.
- **Transmitter's Contact Name** – The contact name at the company submitting magnetic media.
- **Transmitter's EIN** – EIN of the company submitting magnetic media.
- **Transmitter's EFIN** – EFIN of the company submitting magnetic media.
- **Date Created** – The date that the data or information was created and stored on media. Format: MM-DD-YYYY .
- **Sensitivity Indicators** – **Media containing sensitive information should be labeled "For Official Use Only, Sensitive Benefit Plan Data"** .
- **Plan Year** – This line indicates what plan year filings the tape holds.

- **Destination Agency Name** – This line should always read: “**To: Department of Labor**”.
- **Date created** – If you are submitting 9-Track or 3480/3490 magnetic tapes, you must indicate the date the tape was created. All other media does not require this indication.
- **Total number of batches** – If you are submitting 9-Track or 3480/3490 magnetic tapes, you must indicate the total number of batches contained on the tape. All other media does not require this indication.
- **Total number of filings** – If you are submitting 9-Track or 3480/3490 magnetic tapes, you must indicate the total number of filings contained on the tape. All other media does not require this indication.

The following is an example label for filings sent in on a diskette:

Diskette
EFAST Processing System
From: Hart Smith, Inc.
Contact: John Smith
EIN: 01-4585684
EFIN: 175682
Created: 07-06-2008
FOR OFFICIAL USE ONLY, SENSITIVE BENEFIT PLAN DATA
2008 Plan Year Data
To: Department of Labor

The following is an example label for filings sent in on a 3480 magnetic tape:

3480
Code set: ASCII
Record length: 8,192
Block size: 8,192
EFAST Processing System
From: Hart Smith, Inc.
Contact: John Smith
EIN: 01-4585684
EFIN: 175682
Created: 07-06-2008
FOR OFFICIAL USE ONLY, SENSITIVE BENEFIT PLAN DATA
2008 Plan Year Data
To: Department of Labor
Total # of batches: 22
Total # of filings: 503

10. Encryption

Prior to transmission into the EFAST host system, all .DOL files and their attachment files sent modem-to-modem must be encrypted.

Files may be encrypted in one of two ways:

1. Developers may choose to develop their own encryption systems that are compatible with the system outlined in Section 10.1. The developers of such a system are responsible for ensuring compatibility with the EFAST system by adhering to this document and any documents to which this document refers.
2. Developers can use Windows based dynamic link libraries (DLLs) which perform all the necessary encryption operations. This option is detailed in Section 10.2.

10.1 Developing Your Own Encryption System

10.1.1 Required Encryption Algorithm

The cryptographic algorithm that is required is the Triple Data Encryption Algorithm. The X9 ANSI committee has documented this algorithm in their publication ANSI X9.52. Further documentation is available from the National Institute of Standards and Technology (NIST). Such documents are called Federal Information Processing Standards Publications (FIPS Pub). FIPS Pub 46-2 and Draft FIPS Pub 46-3 document the Data Encryption Standard (DES) and Triple DES respectively.

At the time of this writing, the NIST provided access to FIPS Pub 46-2 on the web at <http://www.itl.nist.gov/fipspubs/fip46-2.htm>; the NIST also provided access to the Draft FIPS Pub 46-3 on the web at <http://csrc.nist.gov/cryptval/des/fr990115.htm>.

10.1.2 Triple DES Encryption Requirements

The EFAST system currently supports the Triple DES encryption algorithm. The information required by the encryption algorithm follows:

Encryption Mode:	Cipher Block Chaining (CBC) mode
Block Size:	8 byte blocks (each byte is 8 bits)
Initialization Vector (Hexadecimal):	BD 6C C2 FE 32 3E B2 C9
Cryptographic Key:	192-bit keys are issued once an application is accepted

Note: A Triple DES encryption key is three successive DES encryption keys. Each DES key is a 56-bit key with 8-bits of parity. Therefore, an EFAST Triple DES key has a key-space of 168-bits and 24 parity bits.

10.1.3 Required Steps to Encrypt an EFAST .DOL File and Attachments

10.1.3.1 Encryption Record

Every encrypted EFAST file must have an encryption record inserted just prior to the encrypted data. That record is formatted as follows:

Encryption Record

<u>no.</u>	<u>Identification</u>	<u>Length</u>	<u>Type</u>	<u>Start pos.</u>	<u>Description</u>
1	Byte Count	4	N	1	Byte Count of Encryption Record. Value = "0040"
2	Record Beginning Mark	4	A/N	5	Value = "*****"
3	Record ID	5	A/N	9	Value = "CRYPT"
4	Type of Encryption	4	A/N	14	Four-digit code that indicates the type of encryption used to encrypt the file. For pilot, will always be "TDEA" (Which stands for Triple Data Encryption Algorithm).
5	Length of encrypted data	10	N	18	Byte count of encrypted data, including padded bytes.
6	Number of bytes padded to the end of the encrypted data	6		28	Count of how many extra bytes needed to be padded to the end of the encrypted data. In the .DOL file, the "encrypted data" is the entirety of information between the TRANS and RECAP records. In an unstructured attachment, the "encrypted data" is the entirety of the data of the file.
7	Reserved	6		34	
	Terminus Character	1	A/N	40	Value = #

Note: The Encryption Record contains fields for the Length of Encrypted Data (Data Length) and the Number of Bytes Padded (Padded Length). Block encryption algorithms require that encrypted data be a multiple of the block size for that block encryption algorithm. If the length of the encrypted data is a multiple of the block size, then the Padded Length must be zero. Otherwise, the encrypted data written to .DOL file or the Filing Attachment File must be padded out to a multiple of the block size and the Data Length field must be adjusted to reflect the change. Also, the Padded Length field must be set to the number of bytes that were padded/added. For example, if you need to encrypt 123 bytes, the Length of encrypted data field (Field 5) must read 128, and the Number of bytes padded to the end of the encrypted information (Field 6) must read 5.

10.1.3.2 Steps for Encrypting

The steps for encrypting follow (repeat this procedure for each batch):

- 1) Prepare the .DOL file and all of its associated attachments so that they are completed and ready to be filed
- 2) Repeat step 2.a for each attachment to be filed with the .DOL File
 - a) Encrypt the Attachment

- i) Write out the Encryption Record (NOT ENCRYPTED)
 - ii) Write out the Encrypted Attachment file data
- 3) Encrypt the .DOL File
 - a) Write out the TRANS record (NOT ENCRYPTED)
 - b) Write out the Encryption Record (NOT ENCRYPTED)
 - c) Write out the Encrypted Filing data
 - i) The Encrypted Filing data includes all the data in the unencrypted .DOL file that follows the TRANS record, and precedes the RECAP record.
 - d) Write out the RECAP record (NOT ENCRYPTED)

Figure 3, below, diagrams an encrypted batch with one .pdf attachment:

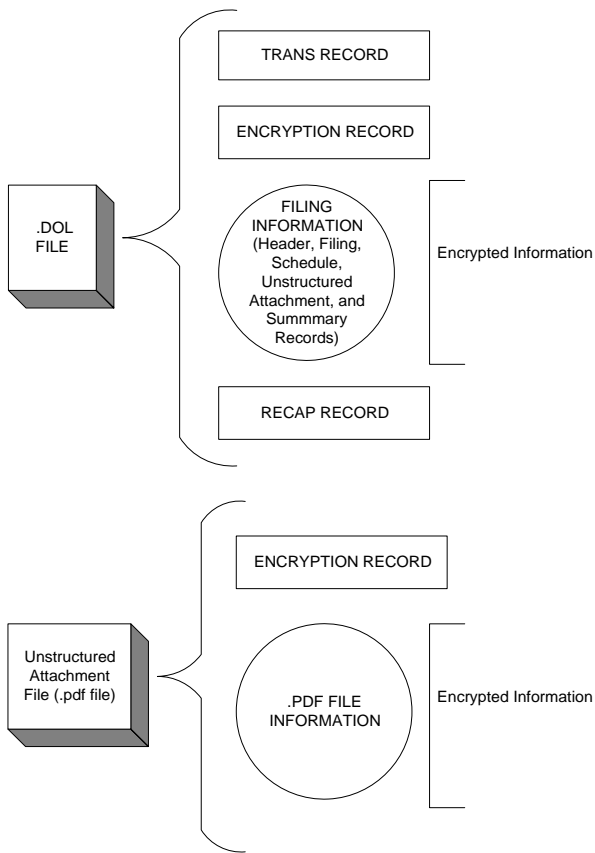


Figure 3 Encrypted Batch

10.2 Using EFAST Encryption DLLs

10.2.1 Available EFAST Encryption Libraries

EFAST Encryption libraries that handle the entire encryption process are available for PCs running operating systems and programming languages capable of invoking Microsoft Windows based, 32-bit dynamic link libraries. These libraries handle the **complete** process as outlined in

Section 10.1, including creating encryption records, and encrypting only the required portions of the batch.

The Windows EFAST encryption libraries consist of a commercial encryption algorithm library and an EFAST custom encryption library. The commercial encryption library is used by the EFAST custom encryption library. The EFAST encryption library exposes an encryption algorithm and a decryption algorithm which developers can call directly to completely handle their EFAST encryption needs.

The decryption algorithm is available for decrypting files that have been encrypted, thus checking the encryption process. However, only the encryption algorithm is needed. The Encryption Algorithm and the Decryption Algorithm are detailed on the next page.

The parameter types can be found in the .h file (see Section 10.2.2).

10.2.1.1 Encryption Algorithm:

EFAST_EncryptDOL(Key, PlainTextPath, CipherTextPath, DOLBatchFile)

Parameters:

Key:	Encryption Key
PlainTextPath:	Path to the unencrypted files
CipherTextPath:	Path to where the encrypted files are to be written
DOLBatchFile:	.DOL File Name (NO PATH)

Returns:

An integer code which indicates either Success or a reason for the Failure

Description:

EFAST_EncryptDOL() parses the passed in .DOL file and looks for attachment file records. Each attachment file is encrypted as attachment file records are found. Finally, the .DOL file is encrypted.

Note: PlainTextPath and CipherTextPath MUST be in different locations on the system. The file names for the encrypted files are the same as the file names for the unencrypted files.

10.2.1.2 Decryption Algorithm:

EFAST_DecryptDOL(Key, CipherTextPath, PlainTextPath, DOLBatchFile)

Parameters:

Key:	Encryption Key
CipherTextPath:	Path to the encrypted files

PlainTextPath: Path to where the unencrypted files are to be written
DOLBatchFile: .DOL File Name (NO PATH)

Returns:

An integer code which indicates either Success or a reason for the Failure

Description:

EFAST_DecryptDOL () first decrypts the passed in .DOL file and then parses it looking for attachment file records. Each attachment file is decrypted as attachment file records are found.

Note: PlainTextPath and CipherTextPath MUST be in different locations on the system. The file names for the encrypted files are the same as the file names for the unencrypted files.

10.2.2 Language Support

Currently, development files exist to support EFAST Encryption Library integration into C/C++ applications. Support for other languages and development systems can be added as needed during scale up.

In addition to the encryption .DLL, developers will need the following encryption libraries to encrypt filings:

EFCRYP32.DLL	- EFAST Encryption DLL
EFCRYP32.H	- C/C++ Header File
EFCRYP32.BAS	- Visual Basic 5 and 6 definition file.
EFCRYP32.LIB	- Borland C++ Builder Link Library for EFAST Encryption DLLs
TDCIPH32.DLL	- Required Encryption Library

The EFCRYPT32.DLL, EFCRYP32.H, EFCRYP32.BAS, and EFCRYP32.LIB Windows libraries are freely available by emailing:

ron.zook@vangent.com

The TDCIPH32.DLL Windows library is available for purchase from Bokler Software:

www.bokler.com

The name of the required Bokler Software product is: **TDESSCIPHER/DLL**

11. The .RDY File

The last file in each modem-to-modem batch must be an “.RDY” file. This .RDY file has the same filename as the .DOL file, except it has an “.RDY” extension. For example, the .DOL file ABCINCPLAN111.DOL file would submit a ABCINCPLAN111.RDY file. This .RDY file may be a zero-byte file. The modem-to-modem processing system will not process a batch unless it receives a .RDY file.

Appendix A - Terminology of Document

For the purposes of this document, the following terms and meanings apply:

Alpha (or alphabetic) = A through Z.

Numeric = 0 through 9.

Alphanumeric = A through Z, 0 through 9, blanks (spaces), and any special characters except the four RESERVED ASCII characters “[”, “]”, “*”, and “#.”

“**SIGNIFICANT DATA**” is data other than all zeros or all spaces.

“**Sign**” or “**Signed**” is used to identify an amount field that carries a position for a “sign” (an indication that the field is positive or negative).

YYYYMMDD = Year, Month, Day (month must be 01-12 and days must match month).

PN = Plan Number.

Reserved = A reserved field on any of the record layouts indicates that that field is reserved for future use. These fields must not be transmitted in variable records and must be blank-filled in fixed records.

Appendix B - Common Problems Encountered

The following section lists how to avoid the most common problems encountered with the EFAST electronic filing system.

- All alphanumeric data needs to be entered in CAPITAL LETTERS. (See Section 5.5).
- Header (HDR) and Summary (SUM) records are REQUIRED for EACH filing. (See Section 5.3).
- If page 2 and/or any succeeding page of any schedule contains significant data, page 1 of that schedule must also be present and must contain significant data. (See Section 5.2).
- Field 0220 on Form 5500 is a required date field. (See EFAST-B, Part II).
- You must format the records listed in Section 5.7 correctly. Otherwise, multiple errors may be reported.
- There cannot be any extra carriage returns at the end of any record (including the last record of the file). (See Section 5.6.2.1).
- If submitting magnetic media, You must provide appropriate external labeling. (See Section 9.3.7). Be sure to include a company contact name on all external labels. All magnetic tapes must be submitted with appropriate internal labeling. (See Section 9.3.4).
- Extension Forms such as Form 5558, 4868, 7004, 2688, and 2758 must be filed as an unstructured attachment. (See Sections 5.7.5 & 6.)
- If filing for an extension using any of the above forms, the following text should be written in the unstructured attachment: “A paper copy of Form 5558, Application for Extension of Time to File Certain Employee Plan Returns*, has been filed with the IRS for this plan.” This statement is made under penalty of perjury: The form referred to in this statement MUST have been filed with the IRS.
- (* - Substitute the Form number and Form name of the Extension that was filed. If Form 2688 or Form 2758 are filed, the extension date must also be included in this text.)
- External Media filers can retrieve an Acknowledgement by following modem dial up procedures.
- A Signer is not associated to EIN. Box D on the EFAST-1 only updates Transmitters, and/or Software Developers. If you want to update a Signer, you have to submit an EFAST-1 or call the Consolidated HelpDesk.
- The following fields cannot be blank for ELF filings. If there is no value, enter 0 in the field:
- Form 5500, page 2: Fields 0620, 0660, and 0680.

This page intentionally left
blank.