

856 Advance Ship Notice/ Supplier Implementation Guide Getting Started with EDI



Contents:

Introduction to EDI 856 Advance Ship Notice / 824 Application Advice.....	2
Introduction.....	3
What is EDI	4
What is EDIINT AS2	4
Expectations of EDI Supplier.....	5
EDI Mandatory Transaction.....	6
EDI Testing Guidelines.....	7
The Importance of the 856.....	8
EDI Requirements.....	8
Required Fields.....	9
EDI Standards 5010.....	11
General Reference Materials	14
Contact Information and EDI Standards and ISA/GS Information	14
The 856 EDI Technical Guidelines.....	15



Introduction to EDI 856 Advance ShipNotice Introduction

Getting Started with the Exchange EDI

The following document was created to speed-up your EDI implementation. If you require additional information that is not included in this packet, please contact our EDI implementation team. We will be happy to assist you.

This document provides instructions for implementing the EDI 856 Advance ship notice and 824 Application Advice.

This document is divided into the following sections:

- **Introduction to EDI** – A basic introduction of EDI and the 856 Advance ship notice and 824 Application Advice.
- **Non-Technical Reference Materials** – Includes contact and protocol information.
- **Technical Guidelines** – Your IT or technical staff will need this information to successfully implement the 856 and the 824.

While this guide is largely intended for technical personnel, the introductory information allows you to gain a full understanding of why EDI is used and what the benefits are to you. If you are not a technical resource, we recommend you read this introduction prior to turning this guide over to any IT/technical resources who may implement the 856 Advance Ship Notice and 824 Application Advice for your organization.

If you have questions about conducting business with the Exchange or EDI concerns beyond the 856, 824 please consult the Exchange web site www.shopmyexchange.com under doing business with the Exchange.



What is EDI?

Simply stated, EDI (Electronic Data Interchange) is the electronic exchange of business documents between supplier and retailer in a global standardized format. Traditionally, communications between business partners (like Purchase Orders, Advanced Ship Notice or Invoices) were conducted on paper and sent via mail or fax.

With the advent of electronic file sharing, communicating such information electronically greatly reduces the time and resources required to manage these interactions. There are various EDI standards (or formats) that a company may use. Exchange currently supports ANSI X12 (American National Standards Institute), UCS (Uniform Communications Standards) and VICS (Voluntary Inter-industry Commerce Standard).

What is EDIINT AS2 (Applicability Statement 2)

EDIINT (EDI over the Internet) is a set of communication protocols, introduced by the IETF (Internet Engineering Task Force) in 1995, used to securely transmit data over the Internet. One version of EDIINT that the Exchange offers is AS2 (Applicability Statement 2). AS2 supports EDI or other data file transmissions over the Internet using HTTP.

AS2 is a specification about how to *transport* data, not how to validate or process the content of the data. AS2 specifies the means to connect, deliver, and receive data in a secure and reliable way. Our AS2 is an asynchronous only; it is an Internet Protocol based solution that uses standard HTTP. Here's are our guidelines for AS2 [click here](#)



Expectations of EDI Suppliers

Before beginning EDI data testing you must have completed the following:

- AS2 communication testing must be completed within 10 business days
- Partner maps must be completed
- All items must be attached to your procurement code

We require full commitment from our partners. In most cases, EDI data testing should be no longer than 15 business days for partners that create their own mappings. If you use a 3rd party provider, testing should be no longer than 5 business days.



EDI Mandatory Transaction

The required documents are 850 (outbound PO), 810 (inbound Invoice), 860 (outbound Amendment), 856 (inbound ASN) with GS1-128 label documents, and 997 (acknowledgement).

Required Electronic Documents

Transaction	Standard	Description	Version
810	X-12	Invoice	5010
824	X-12	Application Advice for 810	5010
850	X-12	Purchase Order - Revision 1 (All data)	5010R1
850	X-12	Purchase Order - Revision 2 (No PID – Product Item Description)	5010R2
850	VICS	Purchase Order - Revision 5 VICS – (No Special Marking instruction for overseas shipment)	5010R5
856	X-12	Ship Notice/Manifest	5010
860	X-12	Purchase Order Change Request - Buyer Initiated	5010
997	X-12	Functional Acknowledgement	5010

(997) Acknowledgment is required within 24 hours for any outbound file from the date of the transmitted document. Failure to send 997 Functional Acknowledgment will result in non-compliance charges.

The Exchange EDI sends the 997 within 24 hours of the inbound file received.

(856) Advance Ship Notice is received inbound ASN list data content of shipment of merchandise. Advanced Ship Notice data from the supplier must follow the EDI mapping requirements to be processed successfully.

Once the supplier is in production EDI with ASN, It is required to be sent electronically for every purchase order or merchandise will fail at warehouse/store.

ASN's failing in our EDI system from supplier error may result in non-compliance charges.



Testing

- Review EDI guidelines and specifications found at:
<http://www.shopmyexchange.com/DoingBusiness/edigds/edi.htm>
- After connection setup and mapping is completed by the supplier and Exchange, testing can commence for EDI documents with the EDI Rollout associate, their group email is EDIROLLOUTREQUEST@AAFES.COM
- Submit test data for evaluation on inbound (from trading supplier) transaction sets (i.e., 810, 856) using test purchase order (sent by Exchange).
- Submit shipping label (GS1-128) Bar Code Graphics for label certification to EDIROLLOUT@AAFES.COM

Depending on the supplier, testing can be a simple or complex process. If the supplier uses a third party provider already trading EDI documents with the Exchange, many of the documents do not require testing and go directly to production. Testing should be completed for the remaining documents within five days. For suppliers using their own EDI, testing should be completed within two weeks of their connection setup and maps ready to test. The supplier is expected to dedicate the time and effort to this process to ensure timely completion.

Note:

1. Supplier is responsible for checking their VAN mailbox daily.
2. Supplier is required to send Functional Acknowledgments within 24 hours of the transmission date.
3. Supplier is responsible for all VAN (Value Added Network) charges.
4. Supplier is responsible for viewing message detailing error on all **824 Application Advice** sent as well as viewing the 997 Functional Acknowledgement.



The Importance of the 856

Receiving the Advanced ship notice electronically allows us to process the receiving of the merchandise faster. Merchandise information is entered into our systems and set out on the floors in timely manner. When ASN is not received, merchandise can be delayed getting into our system and stores on time, etc.

ASN contains information about items being shipped, including purchase order number, ship date, Ship To and Final Destination Facility and supplier UPC number.

Receiving the 856 ASN electronically will result in:

- Correct merchandise being received.
- ASN can be reconciled with purchase orders and invoice.

EDI Requirements

The Exchange requires the EDI to be tested and complete to production using these guidelines.

- When supplier uses an EDI Provider (Ex: 3rd party provider) the mandatory documents 850, 860, 810 and 824 are added straight to EDI production system, we allow five business days to complete the 856 (ASN) with the UCC128 label testing.
- When supplier does their own mapping and testing, the supplier is expected to be tested and moved to EDI production within 15 business days (three weeks)
- Supplier is expected to be fully committed and engaging during the testing of EDI documents.
- Suppliers will receive a 997 within 24 hours of the Exchange sending the EDI transmission to Supplier.
- We expect the return of the 997 within 24 hours of supplier receiving the document, by not complying with the 24 hour time frame, will result in non-compliance charges.
- Suppliers are required to maintain compatible electronic document version numbers in accordance with the Exchange current software.

All documents must be sent with the Exchange required fields as the minimum standard in order to be in compliance with our guidelines.



Required Fields

The next section, the EDI 856 Technical Guidelines, provides the EDI standard and technical documentation for the universal standards. To simplify the process for you, below is a list of fields that the Exchange requires in the 856 transaction. You may want to refer to both this section and the next for complete technical guidelines, but this summary will allow you to focus on exactly what is needed for a successful 856.

- Suppliers must transmit a complete and correct Advance Ship Notice and Shipping Label. This ensures the merchandise is received in timely manner at the store or warehouse.
- Shipment Notice number is required and must not be duplicated more than one time for the same PO number within 18 months.
- Carrier Detail (Quantity and Weight) as well as (Routing) are required on every shipment.
- You must provide the Supplier Bill of Lading number or Carrier Reference number.
- Date of shipment is required on all Advance Ship Notice.
- You must provide the Ship To or Mark for facility, 7 digit Exchange facility number, 4-digit Alpha Numeric or 13 digit Global Location Number (GLN), facility number retrieved from the PO.
- You must provide the Exchange **10 digit Purchase Order number** which sets up all other processes for the handling and receipt of your merchandise.
- Date of the PO is also required.
- MAN (Marks and Numbers) are required for all ASN shipment; SSCC number is a GS1-128 Serial Shipping Container Code that is 20 digit in length, must start with 00 the 3rd to the 10th digits cannot all be zeroes.
- Number cannot be re-used within 6 month period.

- You must provide the **Products** we order as specified **by UPC** (Universal Product Code) or similar universal product identifiers like the European Article Number EAN or Global Trade Item Number GTIN. The UPC (Universal Product Code) must match the UPC number submitted on the Purchase Order. No substitute items are allowed on the Advance ship notice unless buying office has approved and adjusted the Exchange system to allow for the receipt of the item.
- Number of units shipped are required as well as the unit of measure (CA, EA, BX, CT or PL etc.)
- Case pack is required on shipments with unit of measure as (CA, BX, CT or PL) Case pack must be divisible by the number of units shipped.
- Total Line Items in HL must matched Line Items number in CTT01

EDI STANDARDS

All 856 fields below are required by the Exchange EDI Standards and used to calculate compliance.

Data Element	Business Definition	Maps to Technical Guideline...	Example Data Elements	Hierarchical Level Within the Invoice
Transaction Set Header	Identifies type of document (810/Invoice)	ST	ST*856*0780~	Header
Shipment Information, Ship Notice Structure	Beginning Segment, includes Ship Notice number, Date, Time and ASN structure Code	BSN	BSN**23456*20161020*1234*0001~	Heading
Shipment Level	Hierarchical Level -Shipment	HL-Shipment	HL*001*S	Heading
Carrier Detail (Quantity and weight)	Used to specify the transportation details relative to commodity, weight and quantity	TD1	TD1*CTN25*3****G*6.9*LB~	Heading
Carrier Detail (Routing & Transit time)	Used to specify the carrier and sequence of routing	TD5	TD5****M*FEDEXGROUND~	Heading
REF Information (Bill of Lading Number or carrier Reference Number)	Identifying information, includes the Bill of Lading number or Carrier's Reference number	REF	REF*CN*SPR02712345~REF*BM*123453936811941~	Heading
DTM Date/Time Reference	To specify pertinent dates and times Ship date and Scheduled Delivery date	DTM	DTM*011*20150422~	Heading
FOB Transportation Instruction	Transportation instructions relating to the shipment.	FOB	FOB*CC~	
Party Identification (Ship From)	The facility number, address of the location where the product is being shipped (shipping point).	N1	N1*ST**92*1059902~N1*SF*VENDORNAME*1*VENDORDUNS#~	Heading
HL Hierarchy Order Level	Order Level is used identify dependencies among and the content of relates group data	HL -OrderLevel	HL*2*1*O~	Heading

Purchase Order Reference	Provides reference to a specific purchase order number	PRF	PRF*0071234567***20050415~	Heading
N1 Party Identification	Segment identify a party by type of organization, name and code (Final location to ship merchandise)	N1	N1*Z7**92*1771001~	Heading
HL Hierarchy – Tare Level	Tare level is used to identify dependencies among and the content of the related groups of data	HL – Tare Level	HL*2*1*T~	Detail Level
MAN for Tare Level	Used with Tare level identifies the shipping containers	MAN – 20 digit GS1-128 Serial Shipping Container Code	MAN01*GM*12345678912345678912~	Detail
HL Hierarchy – PACK Level	Description of levels of detail information,	HL – PACK level	HL*3*2*P~	Detail Level
MAN for PACK Level	Used with Tare level identifies the shipping containers	MAN – 20 digit GS1-128 Serial Shipping Container Code	MAN01*GM*12345678912345678912~	Detail Level
HL Hierarchy Item Level	Identify dependencies among the content of the related groups of data segments.	HL – Item Level	HL*4*3*I~	Detail Level
LIN Item Identification	Specify basic item identification data	LIN	LIN**UP*037977100266~	Summary
SN1 – Item Detail Shipment	Specify line item detail relative to shipment	SN1 Item Detail Shipment Unit of measure EACHES, CASES ETC	SN1**18*EA	Summary
PO4 Item Physical Detail	Specify the physical qualities, packing, weights and dimensions to the item.	PO4 Item Detail If element SN103 = CA or BX or CT or PL, the PO401 element is required	PO4*12~	Summary
PID Product/Item Description	Describes a product on the shipment	PID	PID*F****PILLOW PRINTED MEMORY	Summary
CTT Transaction Totals	Total number of Lines on the order	CTT	CTT*X	Summary
SE Transaction Trailer	Number of segments including ST to SE	SE	SE*X*X	Summary

All 824 Application Advice fields below are required by the Exchange EDI Standards and used to calculate compliance

Data Element	Business Definition	Maps to Technical Guideline...	Example Data Elements	Hierarchical Level Within the Invoice
Transaction Set Header	Identifies type of document (810/Invoice)	ST	ST*824*0001~	Header
Error Information, Reference, Date of the 824	Beginning Segment , includes Information Reference number, date of the 824	BGN	BGN*00*2015092500353549070012345638*20150930*20150930~	Heading
N1 Party Identification (identify party to receive error message)	Supplier name and 9 or 13 digit DUNS number	N1 Code FR is used in 5010 version	N1*FR*HQ-Army/Air Force Exch svc*92*1018542~ or N1*TO*Test 824*1*123456789~	Heading
Original Transaction Identification	Identifies error transaction sets, ID, qualifier, Ref Identification, Control number and Control Identifier	OTI	OTI*IR*IV*00456789*****20*200001*810~	Detail
TED Technical Error	Segment determines the error within the data, error code and free form text	TED	TED*010*TDS01 HAS OVERCHARGE AMT; \$41 FOR INV; 00456789~	Detail
NTE Note, specific instruction	Segment is only generated when description is more than 60 characters	NTE	NTE01*GEN*Description	Detail
RED Related Data	Segment is used to provide additional information of the 824	RED	RED01*Description*Code~	Detail
SE Transaction Trailer	Number of segments including ST to SE	SE	SE*number*number	Summary

General Reference Materials

Contact Information

If you have any questions or concerns regarding your EDI communication with the EXCHANGE, please contact us using the following contact information.

EDI Operations Team (Production) email address – **EDIERRORSUPPORT@AAFES.COM**

EDI Rollout Team (Testing) email address – **EDIROLLOUTREQUEST@AAFES.COM**

EDI Standards and ISA/GS Information

Standards/Version: X12 005010

X12 Standards

Sub-element Sep: > (Hex 6E)

Element Sep: * (Hex 5C)

Segment Term: ~ (Hex 15)

ISA Header Information

PRODUCTION ID'S

Exchange Receiver Qualifier: 14

Exchange Receiver ID: 001695568GP

TESTING ID'S

Exchange Receiver Qualifier: 14

Exchange Receiver ID: 001695568GT

NOTE: We acknowledge all transactions at Group Level within 24 hours of receipt. Please acknowledge any transactions you receive from us in the same manner.

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Notes:

The following document identifies the AAFES Business Requirements for the Ship Notice/Manifest. This definition contains all data that AAFES will utilize in the processing of this document. All segments marked "RECOMMENDED", and elements marked with "R" are required by AAFES and should always be transmitted. All elements marked "M" are mandatory by the standards. All unmarked segments and elements may be transmitted as necessary in their respective segments.

For each level in the hierarchical structure, the following segments are expected by AAFES:

*S - Shipment = TD1, TD5, REF, DTM, FOB, NI
 O - Order = PRF, NI (Ultimate Receiver)
 T - Tare = MAN
 P - Pack = MAN
 I - Item = LIN, SN1, PO4, TD5*

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
18	0100	ST	Transaction Set Header	M	1		
19	0200	BSN	Beginning Segment for Ship Notice	M	1		
Not Used	0400	DTM	Date/Time Reference	O	10		

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - HL			200000	
20	0100	HL	Hierarchical Level - SHIPMENT	M	1		
Not Used	0200	LIN	Item Identification	O	1		
Not Used	0300	SN1	Item Detail (Shipment)	O	1		
Not Used	0400	SLN	Subline Item Detail	O	1000		
Not Used	0500	PRF	Purchase Order Reference	O	1		
Not Used	0600	PO4	Item Physical Details	O	1		
Not Used	0700	PID	Product/Item Description	O	200		

Army and Air Force Exchange Service

Not Used	0800	MEA	Measurements	O	40
Not Used	0900	PWK	Paperwork	O	25
Not Used	1000	PKG	Marking, Packaging, Loading	O	25
21	1100	TD1	Carrier Details (Quantity and Weight)	O	20
22	1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12
LOOP ID - TD3					12
24	1300	TD3	Carrier Details (Equipment)	O	1
Not Used	1350	AT9	Trailer or Container Dimension and Weight	O	1
Not Used	1400	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5
Not Used	1450	TSD	Trailer Shipment Details	O	1
25	1500	REF	Reference Identification	O	>1
Not Used	1510	PER	Administrative Communications Contact	O	3
LOOP ID - LH1					100
Not Used	1520	LH1	Hazardous Identification Information	O	1
Not Used	1530	LH2	Hazardous Classification Information	O	4
Not Used	1540	LH3	Hazardous Material Shipping Name	O	12
Not Used	1550	LFH	Freeform Hazardous Material Information	O	20
Not Used	1560	LEP	EPA Required Data	O	>1
Not Used	1570	LH4	Canadian Dangerous Requirements	O	1
Not Used	1580	LHT	Transborder Hazardous Requirements	O	3
Not Used	1590	LHR	Hazardous Material Identifying Reference Numbers	O	10
Not Used	1600	PER	Administrative Communications Contact	O	5
Not Used	1610	LHE	Empty Equipment Hazardous Material Information	O	1
LOOP ID - CLD					200
Not Used	1700	CLD	Load Detail	O	1
Not Used	1800	REF	Reference Identification	O	200
Not Used	1850	DTP	Date or Time or Period	O	1
Not Used	1900	MAN	Marks and Numbers	O	>1
26	2000	DTM	Date/Time Reference	O	10
27	2100	FOB	F.O.B. Related Instructions	O	1
Not Used	2150	PAL	Pallet Information	O	1
LOOP ID - N1					200
28	2200	N1	Name	O	1
29	2300	N2	Additional Name Information	O	2
Not Used	2400	N3	Address Information	O	2
30	2500	N4	Geographic Location	O	1
31	2510	HL	Hierarchical Level - ORDER	O	1
32	2520	PRF	Purchase Order Reference	O	1
33	2530	N1	Name	O	1
34	2540	N2	Additional Name Information	O	1
35	2560	N4	Geographic Location	O	1
36	2570	HL	Hierarchical Level - TARE	O	1
37	2580	MAN	Marks and Numbers	O	1
38	2590	HL	Hierarchical Level - PACK	O	1
39	2592	LIN	Item Identification	O	1
41	2593	SN1	Item Detail	O	1
42	2595	MAN	Marks and Numbers	O	1
43	2597	HL	Hierarchical Level - ITEM	O	1

Army and Air Force Exchange Service

44	2598	LIN	Item Identification	O	1
46	2599	SN1	Item Detail	O	1
47	2600	PO4	Item Physical Details	O	1
48	2600	PID	Product/Item Description	O	1
49	2600	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1
Not Used	2600	REF	Reference Identification	O	12
Not Used	2700	PER	Administrative Communications Contact	O	3
Not Used	2800	FOB	F.O.B. Related Instructions	O	1
Not Used	2900	SDQ	Destination Quantity	O	50
Not Used	3000	ETD	Excess Transportation Detail	O	1
Not Used	3100	CUR	Currency	O	1
LOOP ID - SAC					>1
Not Used	3200	SAC	Service, Promotion, Allowance, or Charge Information	O	1
Not Used	3250	CUR	Currency	O	1
Not Used	3300	GF	Furnished Goods and Services	O	1
Not Used	3350	YNQ	Yes/No Question	O	10
LOOP ID - LM					10
Not Used	3400	LM	Code Source Information	O	1
Not Used	3500	LQ	Industry Code	M	100
LOOP ID - V1					>1
Not Used	3600	V1	Vessel Identification	O	1
Not Used	3700	R4	Port or Terminal	O	>1
Not Used	3800	DTM	Date/Time Reference	O	>1

Summary:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
50	0100	CTT	Transaction Totals	O	1		n1
51	0200	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Segment: **ST** **Transaction Set Header**
Position: 0100
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes:

- 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
- 2 The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition.

Comments:

Notes: ST*856*0001~

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M		143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	M 1 ID 3/3
M		329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M 1 AN 4/9

Segment: **BSN** Beginning Segment for Ship Notice
Position: 0200
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Syntax Notes: 1 If BSN07 is present, then BSN06 is required.
Semantic Notes: 1 BSN03 is the date the shipment transaction set is created.
 2 BSN04 is the time the shipment transaction set is created.
 3 BSN06 is limited to shipment related codes.
Comments: 1 BSN06 and BSN07 differentiate the functionality of use for the transaction set.
Notes: BSN*00*02931092*20080612*1615*0001~

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	BSN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original	M 1 ID 2/2
M	BSN02	396	Shipment Identification A unique control number assigned by the original shipper to identify a specific shipment <i>Ship Notice number.</i>	M 1 AN 2/30
M	BSN03	373	Date Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	M 1 DT 8/8
M	BSN04	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M 1 TM 4/8
R	BSN05	1005	Hierarchical Structure Code Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set 0001 Shipment, Order, Packaging, Item <i>Pick and Pack Structure</i> 0002 Shipment, Order, Item, Packaging <i>Standard Carton Pack Structure.</i>	O 1 ID 4/4

Segment: **HL** Hierarchical Level - SHIPMENT
Position: 0100
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:
Semantic Notes:
Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
- 2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: *At the "SHIPMENT" level the following segments are expected by AAFES:
TD1, TD5, REF, DTM, FOB, NI*

*HL*1**S~*

Data Element Summary

Ref.	Data Element	Name	Attributes
M	HL01	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL02	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
M	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure S Shipment	M 1 ID 1/2
	HL04	Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to the level being described Refer to 004030 Data Element Dictionary for acceptable code values.	O 1 ID 1/1

Segment: **TD1** Carrier Details (Quantity and Weight)
Position: 1100
Loop: HL Mandatory
Level: Detail
Usage: Optional (Recommended)
Max Use: 20
Purpose: To specify the transportation details relative to commodity, weight, and quantity
Syntax Notes:

- 1 If TD101 is present, then TD102 is required.
- 2 If TD103 is present, then TD104 is required.
- 3 If TD106 is present, then TD107 is required.
- 4 If either TD107 or TD108 is present, then the other is required.
- 5 If either TD109 or TD110 is present, then the other is required.

Semantic Notes:
Comments:
Notes: *This segment is required by AAFES only if the Shipment hierarchical level is utilized.*

*TD1*CTN25*I****G*30*LB~*

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
R	TD101	103	Packaging Code Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required	O 1 AN 3/5
R	TD102	80	Lading Quantity Number of units (pieces) of the lading commodity	X 1 N0 1/7
R	TD106	187	Weight Qualifier Code defining the type of weight	O 1 ID 1/2
R	TD107	81	Weight Numeric value of weight	X 1 R 1/10
R	TD108	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	X 1 ID 2/2

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)
Position: 1200
Loop: HL Mandatory
Level: Detail
Usage: Optional (Recommended)
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:

- 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.
- 2 If TD502 is present, then TD503 is required.
- 3 If TD507 is present, then TD508 is required.
- 4 If TD510 is present, then TD511 is required.
- 5 If TD513 is present, then TD512 is required.
- 6 If TD514 is present, then TD513 is required.
- 7 If TD515 is present, then TD512 is required.

Semantic Notes:

- 1 TD515 is the country where the service is to be performed.

Comments:

- 1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

Notes: *If routing information is available, recommend the TD5 segment be sent.*
AAFES requires this segment if the Shipment Hierarchical Level is utilized, and may be utilized in the Item Hierarchical Level if the shipment differs from the order. Optional at Order level.
TD5**M*CARRIER/ROUTING INFORMATION~**

Data Element Summary

Ref.	Data Element	Name	Attributes
	133	Routing Sequence Code	O 1 ID 1/2
		Code describing the relationship of a carrier to a specific shipment movement	
	66	Identification Code Qualifier	X 1 ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
	67	Identification Code	X 1 AN 2/80
		Code identifying a party or other code	
R	91	Transportation Method/Type Code	X 1 ID 1/2
		Code specifying the method or type of transportation for the shipment	
		A Air	
		AP Air (Package Carrier)	
		D Parcel Post	
		H Customer Pickup	
		J Motor	
		K Backhaul	
		LT Less Than Trailer Load (LTL)	
		M Motor (Common Carrier)	
		MP Motor (Package Carrier)	
		O Containerized Ocean	
		R Rail	
		T Best Way (Shippers Option)	
		U Private Parcel Service	
R	387	Routing	X 1 AN 1/35
		Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	

The carrier name is required for all shipments.

TD506	368	Shipment/Order Status Code	X	1	ID 2/2
		Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction			
TD510	732	Transit Time Direction Qualifier	O	1	ID 2/2
		Code specifying the value of time used to measure the transit time			
		CD	Calendar Days (Includes weekends and Holidays)		
TD511	733	Transit Time	X	1	R 1/4
		The numeric amount of transit time			

Segment: **TD3** Carrier Details (Equipment)
Position: 1300
Loop: TD3 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify transportation details relating to the equipment used by the carrier
Syntax Notes:

- 1 Only one of TD301 or TD310 may be present.
- 2 If TD302 is present, then TD303 is required.
- 3 If TD304 is present, then TD305 is required.
- 4 If either TD305 or TD306 is present, then the other is required.

Semantic Notes:

Comments:

Notes: *This segment is optional at Shipment Level.*

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
TD301	40	Equipment Description Code Code identifying type of equipment used for shipment Refer to 004030 Data Element Dictionary for acceptable code values.	X 1 ID 2/2
TD303	207	Equipment Number Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	X 1 AN 1/10

Segment: **REF** Reference Identification
Position: 1500
Loop: HL Mandatory
Level: Detail
Usage: Optional (Recommended)
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
 2 If either C04003 or C04004 is present, then the other is required.
 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.
Comments:
Notes:

*The REF*BM and REF*CN are both required.*

Examples:
For Parcel Shipments:
 *REF*BM = Tracking Number*
 *REF*CN = Tracking Number*

For TL/LTL Shipments:
 *REF*BM = Bill of Lading Number*
 *REF*CN = PRO Number (if exists)*
 *If PRO Number does not exist then REF*CN = Bill of Lading Number*

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128 Reference Identification Qualifier Code qualifying the Reference Identification	M 1 ID 2/3
		BM Bill of Lading Number <i>This code is used for the Bill of Lading Number and must be sent for all Warehouse/Store orders.</i> <i>Use the Tracking Number with this qualifier when shipping via Small Parcel Service.</i>	
		CN Carrier's Reference Number (PRO/Invoice)	
R	REF02	127 Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <i>This element must be only "A-Z", "a-z", "0-9" and "-".</i> <i>When REF01 = BM, REF02 = Bill of Lading Number</i> <i>When REF01 = CN, REF02 = Carrier's Reference Number</i>	X 1 AN 1/50

Segment: **DTM** **Date/Time Reference**
Position: 2000
Loop: HL Mandatory
Level: Detail
Usage: Optional (Recommended)
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: *This segment is required by AAFES if the Shipment Hierarchical level is utilized.*

*DTM*011*20080612~*

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 011 Shipped 036 Expiration Date coverage expires 067 Current Schedule Delivery	M 1 ID 3/3
R	DTM02	373	Date Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	X 1 DT 8/8

Segment: **FOB** **F.O.B. Related Instructions**
Position: 2100
Loop: HL Mandatory
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify transportation instructions relating to shipment
Syntax Notes:

- 1 If FOB03 is present, then FOB02 is required.
- 2 If FOB04 is present, then FOB05 is required.
- 3 If FOB07 is present, then FOB06 is required.
- 4 If FOB08 is present, then FOB09 is required.

Semantic Notes:

- 1 FOB01 indicates which party will pay the carrier.
- 2 FOB02 is the code specifying transportation responsibility location.
- 3 FOB06 is the code specifying the title passage location.
- 4 FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and FOB06/FOB07.

Comments:
Notes: *This segment is required by AAFES only at the Shipment Level.*
*FOB*PP~*

Data Element Summary

Ref.	Data Element	Name	Attributes
M	FOB01	146 Shipment Method of Payment	M 1 ID 2/2
		Code identifying payment terms for transportation charges	
		Refer to 004030 Data Element Dictionary for acceptable code values.	

Segment: **N1** Name
Position: 2200
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:
 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:
Comments:
 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
 2 N105 and N106 further define the type of entity in N101.

Notes: *This segment is only utilized in the Shipment and Order Hierarchical Levels.*

*NI*ST*DAN DANIEL DIST CTR*92*1059902~
 NI*SF*ABC COMPANY*1*123456789~*

Data Element Summary

Ref.	Data Element	Name	Attributes
M	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual BY Buying Party (Purchaser) CS Consolidator SF Ship From ST Ship To	M 1 ID 2/3
	N102	93 Name Free-form name	X 1 AN 1/60
R	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix 92 Assigned by Buyer or Buyer's Agent <i>This qualifier is used to identify the AAFES facility number.</i>	X 1 ID 1/2
R	N104	67 Identification Code Code identifying a party or other code <i>Element may contain either the duns number, duns with suffix, or AAFES facility number.</i>	X 1 AN 2/80

Segment: **N2 Additional Name Information**
Position: 2300
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify additional names
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	N201	93	Name Free-form name	M 1 AN 1/60
	N202	93	Name Free-form name	O 1 AN 1/60

Segment: **N4 Geographic Location**
Position: 2500
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes:

- 1 Only one of N402 or N407 may be present.
- 2 If N406 is present, then N405 is required.
- 3 If N407 is present, then N404 is required.

Semantic Notes:
Comments:

- 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
- 2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
N401	19	City Name Free-form text for city name	O 1 AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	X 1 ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O 1 ID 3/15
N404	26	Country Code Code identifying the country	X 1 ID 2/3

Segment: **HL Hierarchical Level - ORDER**
Position: 2510
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:
Semantic Notes:
Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
- 2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: *HL*2*I*O~*

Data Element Summary

Ref.	Data Element	Name	Attributes
M	HL01	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL02	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
M	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure O Order	M 1 ID 1/2
	HL04	Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to the level being described Refer to 004030 Data Element Dictionary for acceptable code values.	O 1 ID 1/1

Segment: **PRF** Purchase Order Reference
Position: 2520
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes: 1 PRF04 is the date assigned by the purchaser to purchase order.
Comments:
Notes:

This segment is required by AAFES only in the Order Hierarchical Level.
 PRF*0004567890***20080612~

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	PRF01	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser	M 1 AN 1/22
R	PRF04	373	Date Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year <i>Date of the purchase order.</i>	O 1 DT 8/8

Segment: **N1** Name
Position: 2530
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
 2 N105 and N106 further define the type of entity in N101.
Notes: *This segment is only utilized in the Shipment and Order Hierarchical Levels.*
*N1*BY**92*1059902~ (same as ship-to in shipment level)*
*N1*Z7**92*1363160~ (mark for information)*

Data Element Summary

Ref.	Data	Attributes	
<u>Des.</u>	<u>Element</u> <u>Name</u>		
M	N101 98 Entity Identifier Code	M	1 ID 2/3
	Code identifying an organizational entity, a physical location, property or an individual		
	BY Buying Party (Purchaser)		
	MA Party for whom Item is Ultimately Intended		
	Z7 Mark-for Party		
	The party for whom the needed material is intended		
	N102 93 Name	X	1 AN 1/60
	Free-form name		
R	N103 66 Identification Code Qualifier	X	1 ID 1/2
	Code designating the system/method of code structure used for Identification Code (67)		
	1 D-U-N-S Number, Dun & Bradstreet		
	9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
	92 Assigned by Buyer or Buyer's Agent		
	<i>This qualifier is used to identify the AAFES facility number.</i>		
R	N104 67 Identification Code	X	1 AN 2/80
	Code identifying a party or other code		
	<i>Element may contain either the duns number, duns with suffix, or AAFES facility number.</i>		

Segment: N2 Additional Name Information
Position: 2540
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify additional names
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	N201	93	Name Free-form name	M 1 AN 1/60
	N202	93	Name Free-form name	O 1 AN 1/60

Segment: **N4 Geographic Location**
Position: 2560
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes:

- 1 Only one of N402 or N407 may be present.
- 2 If N406 is present, then N405 is required.
- 3 If N407 is present, then N404 is required.

Semantic Notes:
Comments:

- 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
- 2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
N401	19	City Name Free-form text for city name	O 1 AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	X 1 ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O 1 ID 3/15
N404	26	Country Code Code identifying the country	X 1 ID 2/3

Segment: **HL** Hierarchical Level - TARE
Position: 2570
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:
Semantic Notes:
Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
- 2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Will accept either Tare or Pack Hierarchical Level or both.

HL*3*2*T~

Data Element Summary

Ref.	Data Element	Name	Attributes
M	HL01	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL02	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
M	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure T Shipping Tare	M 1 ID 1/2
	HL04	Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to the level being described Refer to 004030 Data Element Dictionary for acceptable code values.	O 1 ID 1/1

Segment:	MAN Marks and Numbers
Position:	2580
Loop:	N1 Optional (Recommended)
Level:	Detail
Usage:	Optional (Recommended)
Max Use:	1
Purpose:	To indicate identifying marks and numbers for shipping containers
Syntax Notes:	<ol style="list-style-type: none"> 1 If either MAN04 or MAN05 is present, then the other is required. 2 If MAN06 is present, then MAN05 is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container. 2 When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range. 3 When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.
Comments:	<ol style="list-style-type: none"> 1 When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06. 2 MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.
Notes:	<i>This segment is utilized in the Tare and Pack Hierarchical Levels. May be used in either Tare, Pack or both levels.</i>
	<i>MAN*GM*00001234567891234567~</i>

Data Element Summary

Ref.	Data	Element	Name	Attributes
M	MAN01	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) GM SSSC-18 and Application Identifier <i>Required by AAFES.</i> UC U.P.C. Shipping Container Code	M 1 ID 1/2
M	MAN02	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	M 1 AN 1/48
	MAN03	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	O 1 AN 1/48
	MAN04	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) GM SSSC-18 and Application Identifier UC U.P.C. Shipping Container Code	X 1 ID 1/2
	MAN05	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	X 1 AN 1/48
	MAN06	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	O 1 AN 1/48

Segment: **HL Hierarchical Level - PACK**
Position: 2590
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:
Semantic Notes:
Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
- 2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Will accept either Tare or Pack Hierarchical Level or both.

HL*4*3*P~

Data Element Summary

Ref.	Data Element	Name	Attributes
M	HL01	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL02	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
M	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure P Pack	M 1 ID 1/2
	HL04	Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to the level being described Refer to 004030 Data Element Dictionary for acceptable code values.	O 1 ID 1/1

Segment: **LIN** **Item Identification**
Position: 2592
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes:

- 1 LIN01 is the line item identification

Comments:

- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item.
For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: *This segment is optional at the Pack Hierarchical Level.*

```
LIN**UP*123456789012~
LIN**EN*1234567890123~
LIN**UK*12345678901234~
LIN**UA*012345678901~
```

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
LIN01	350	Assigned Identification	O 1 AN 1/20
		Alphanumeric characters assigned for differentiation within a transaction set	
M	LIN02	Product/Service ID Qualifier	M 1 ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		EN	EAN/UCC - 13 Data structure for the 13 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN)
		UA	U.P.C./EAN Case Code (2-5-5)
		UK	EAN/UCC - 14 Data structure for the 14 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN)
		UP	UCC - 12 Data structure for the 12 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN). Also known as the Universal Product Code (U.P.C.)
M	LIN03	Product/Service ID	M 1 AN 1/48
		Identifying number for a product or service	
	LIN04	Product/Service ID Qualifier	X 1 ID 2/2
		Code identifying the type/source of the descriptive number used in	

Army and Air Force Exchange Service

Product/Service ID (234)

LT Lot Number

UP UCC - 12

Data structure for the 12 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN). Also known as the Universal Product Code (U.P.C.)

VA Vendor's Style Number

VC Vendor's (Seller's) Catalog Number

LIN05 234 Product/Service ID X 1 AN 1/48
Identifying number for a product or service

Segment: **SN1** Item Detail
Position: 2593
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: 1 If either SN105 or SN106 is present, then the other is required.
Semantic Notes: 1 SN101 is the ship notice line-item identification.
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104.
Notes: *This segment is optional at Pack Hierarchical Level.*

*SN1**6*EA~ (eaches)*
*SN1**6*CA~ (cases)*

Data Element Summary

Ref.	Data Des.	Data Element	Name	Attributes
M	SN102	382	Number of Units Shipped Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M 1 R 1/10
M	SN103	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M 1 ID 2/2
	SN105	330	Quantity Ordered Quantity ordered	X 1 R 1/15
	SN106	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004030 Data Element Dictionary for acceptable code values.	X 1 ID 2/2

Segment:	MAN Marks and Numbers
Position:	2595
Loop:	N1 Optional (Recommended)
Level:	Detail
Usage:	Optional (Recommended)
Max Use:	1
Purpose:	To indicate identifying marks and numbers for shipping containers
Syntax Notes:	<ol style="list-style-type: none"> 1 If either MAN04 or MAN05 is present, then the other is required. 2 If MAN06 is present, then MAN05 is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container. 2 When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range. 3 When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.
Comments:	<ol style="list-style-type: none"> 1 When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06. 2 MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.
Notes:	<i>This segment is utilized in the Tare and Pack Hierarchical Levels. May be used in either Tare, Pack or both levels.</i>
	<i>MAN*GM*00001234567891234567~</i>

Data Element Summary

Ref.	Data	Element	Name	Attributes
M	MAN01	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) GM SSSC-18 and Application Identifier <i>Required by AAFES.</i> UC U.P.C. Shipping Container Code	M 1 ID 1/2
M	MAN02	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	M 1 AN 1/48
	MAN03	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	O 1 AN 1/48
	MAN04	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) GM SSSC-18 and Application Identifier UC U.P.C. Shipping Container Code	X 1 ID 1/2
	MAN05	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	X 1 AN 1/48
	MAN06	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	O 1 AN 1/48

Segment: **HL** Hierarchical Level - ITEM
Position: 2597
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:
Semantic Notes:
Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
- 2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: HL*5*4*I~

Data Element Summary

Ref.	Data Element	Name	Attributes
M	HL01	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL02	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
M	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure I Item	M 1 ID 1/2
	HL04	Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to the level being described Refer to 004030 Data Element Dictionary for acceptable code values.	O 1 ID 1/1

Segment: **LIN** Item Identification
Position: 2598
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: 1 LIN01 is the line item identification
Comments:

- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: *Required by AAFES at the Item Hierarchical Level.*

```
LIN**UP*123456789012~
LIN**EN*1234567890123~
LIN**UK*12345678901234~
LIN**UA*012345678901~
```

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
LIN01	350	Assigned Identification	O 1 AN 1/20
M	LIN02	235 Product/Service ID Qualifier	M 1 ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		EN EAN/UCC - 13	
		Data structure for the 13 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN)	
		UA U.P.C./EAN Case Code (2-5-5)	
		UK EAN/UCC - 14	
		Data structure for the 14 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN)	
		UP UCC - 12	
		Data structure for the 12 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN). Also known as the Universal Product Code (U.P.C.)	
		<i>Required by AAFES.</i>	
M	LIN03	234 Product/Service ID	M 1 AN 1/48
		Identifying number for a product or service	
	LIN04	235 Product/Service ID Qualifier	X 1 ID 2/2

Army and Air Force Exchange Service

Code identifying the type/source of the descriptive number used in
Product/Service ID (234)

LT Lot Number

UP UCC - 12

Data structure for the 12 digit EAN.UCC (EAN
International.Uniform Code Council) Global Trade
Identification Number (GTIN). Also known as the
Universal Product Code (U.P.C.)

VA Vendor's Style Number

VC Vendor's (Seller's) Catalog Number

LIN05 234 Product/Service ID X 1 AN 1/48
Identifying number for a product or service

Segment: **SN1** Item Detail
Position: 2599
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional (Recommended)
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: 1 If either SN105 or SN106 is present, then the other is required.
Semantic Notes: 1 SN101 is the ship notice line-item identification.
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104.
Notes: Required by AAFES at Item Hierarchical Level. The unit of measure must match the unit of measure transmitted on the purchase order.

*SN1**6*EA~ (eaches)*
*SN1**6*CA~ (cases)*

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SN102	382	Number of Units Shipped Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M 1 R 1/10
M	SN103	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M 1 ID 2/2
	SN105	330	Quantity Ordered Quantity ordered	X 1 R 1/15
	SN106	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	X 1 ID 2/2

- Segment:** **PO4** Item Physical Details
- Position:** 2600
- Loop:** N1 Optional (Recommended)
- Level:** Detail
- Usage:** Optional
- Max Use:** 1
- Purpose:** To specify the physical qualities, packaging, weights, and dimensions relating to the item
- Syntax Notes:**
- 1 If either PO402 or PO403 is present, then the other is required.
 - 2 If PO405 is present, then PO406 is required.
 - 3 If either PO406 or PO407 is present, then the other is required.
 - 4 If either PO408 or PO409 is present, then the other is required.
 - 5 If PO410 is present, then PO413 is required.
 - 6 If PO411 is present, then PO413 is required.
 - 7 If PO412 is present, then PO413 is required.
 - 8 If PO413 is present, then at least one of PO410 PO411 or PO412 is required.
 - 9 If PO417 is present, then PO416 is required.
 - 10 If PO418 is present, then PO404 is required.
- Semantic Notes:**
- 1 PO415 is used to indicate the relative layer of this package or range of packages within the layers of packaging. Relative Position 1 (value R1) is the innermost package.
 - 2 PO416 is the package identifier or the beginning package identifier in a range of identifiers.
 - 3 PO417 is the ending package identifier in a range of identifiers.
 - 4 PO418 is the number of packages in this layer.
- Comments:**
- 1 PO403 - The "Unit or Basis for Measure Code" in this segment position is for purposes of defining the unit of measure of the "Size" identified in the PO402. For example: If the carton contains 24 12-Ounce packages, it would be described as follows: Data element 356 = "24"; Data element 357 = "12"; Data element 355 = "OZ".
 - 2 PO413 defines the unit of measure for PO410, PO411, and PO412.
- Notes:** *This segment is required at the item level when SN103 = CA, BX, CT or PL.*
- PO4*24*

Data Element Summary

Ref.	Data Element	Name	Attributes
R	PO401	356 Pack	O 1 N0 1/6
		The number of inner containers, or number of eaches if there are no inner containers, per outer container	
		<i>When SN103 = CA, BX, CT or PL, this element is required.</i>	
	PO402	357 Size	X 1 R 1/8
		Size of supplier units in pack	
	PO403	355 Unit or Basis for Measurement Code	X 1 ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
	PO408	385 Gross Volume per Pack	X 1 R 1/9
		Numeric value of gross volume per pack	
	PO409	355 Unit or Basis for Measurement Code	X 1 ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		CF Cubic Feet	

Segment: **PID** **Product/Item Description**
Position: 2600
Loop: N1 Optional (Recommended)
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To describe a product or process in coded or free-form format
Syntax Notes:

- 1 If PID04 is present, then PID03 is required.
- 2 At least one of PID04 or PID05 is required.
- 3 If PID07 is present, then PID03 is required.
- 4 If PID08 is present, then PID04 is required.
- 5 If PID09 is present, then PID05 is required.

Semantic Notes:

- 1 Use PID03 to indicate the organization that publishes the code list being referred to.
- 2 PID04 should be used for industry-specific product description codes.
- 3 PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
- 4 PID09 is used to identify the language being used in PID05.

Comments:

- 1 If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
- 2 Use PID06 when necessary to refer to the product surface or layer being described in the segment.
- 3 PID07 specifies the individual code list of the agency specified in PID03.

Notes: *Optional at Item level.*
PID*F**GENERAL PURPOSE~**

Data Element Summary

Ref.	Data Element	Name	Attributes
M	PID01	Item Description Type	M 1 ID 1/1
		F Free-form	
	PID05	Description	X 1 AN 1/80
		A free-form description to clarify the related data elements and their content	

Segment:	TD5 Carrier Details (Routing Sequence/Transit Time)
Position:	2600
Loop:	N1 Optional (Recommended)
Level:	Detail
Usage:	Optional (Recommended)
Max Use:	1
Purpose:	To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:	<ol style="list-style-type: none"> 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required. 2 If TD502 is present, then TD503 is required. 3 If TD507 is present, then TD508 is required. 4 If TD510 is present, then TD511 is required. 5 If TD513 is present, then TD512 is required. 6 If TD514 is present, then TD513 is required. 7 If TD515 is present, then TD512 is required.
Semantic Notes:	1 TD515 is the country where the service is to be performed.
Comments:	1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.
Notes:	<p><i>If routing information is available, recommend the TD5 segment be sent.</i></p> <p><i>AAFES requires this segment if the Shipment Hierarchical Level is utilized, and may be utilized in the Item Hierarchical Level if the shipment differs from the order. Optional at Order level.</i></p> <p><i>TD5****M*CARRIER/ROUTING INFORMATION~</i></p>

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
		133	Routing Sequence Code	O 1 ID 1/2
			Code describing the relationship of a carrier to a specific shipment movement	
		66	Identification Code Qualifier	X 1 ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		67	Identification Code	X 1 AN 2/80
			Code identifying a party or other code	
R		91	Transportation Method/Type Code	X 1 ID 1/2
			Code specifying the method or type of transportation for the shipment	
R		387	Routing	X 1 AN 1/35
			Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	
		368	Shipment/Order Status Code	X 1 ID 2/2
			Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction	
		732	Transit Time Direction Qualifier	O 1 ID 2/2
			Code specifying the value of time used to measure the transit time	
			CD Calendar Days (Includes weekends and Holidays)	
		733	Transit Time	X 1 R 1/4
			The numeric amount of transit time	

Segment: **CTT** Transaction Totals
Position: 0100
Loop:
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.
 2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.
Notes: CTT*10~

Data Element Summary

Ref.	Data		Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	
M	CTT01	354 Number of Line Items	M 1 N0 1/6

Number of line items (CTT01) is the total number of HL segments.

Segment: **SE** Transaction Set Trailer
Position: 0200
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: SE*32*0001~

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M 1 N0 1/10
M	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M 1 AN 4/9