Army and Air Force Exchange Service

852 Product Activity Data

<div align="right">Functional Group ID=**PD**</div>

Introduction:

This X12 Transaction Set contains the format and establishes the data contents of the Product Activity Data Transaction Set (852) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to advise a trading partner of inventory, sales, and other product activity information. Product activity data enables a trading partner to plan and ship, or propose inventory replenishment quantities, for distribution centers, warehouses or retail outlets. The receiver of the transaction set will maintain some type of inventory/product movement records for its trading partners to enable replenishment calculations based on data provided by the distributor, warehouse or retailer.

Notes:

This document defines the AAFES business requirements for the Product Activity Data, when reporting store sales data.

1. All segments marked "Mandatory" and all elements preceded with an "M" are mandatory by the X-12 standards.

2. All segments marked "Optional (Recommended)" and all elements preceded with an "R" are required by AAFES and must always be transmitted.

3. All unmarked segments and elements may be transmitted as necessary, according to the user's need.

4. AAFES comments relating to segments and elements are noted in italic text with a shaded background.

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
3	0100	ST	Transaction Set Header	M	1		
4	0200	XQ	Reporting Date/Action	M	1		
Not Used	0300	XPO	Preassigned Purchase Order Numbers	O	>1		
5	0400	N9	Extended Reference Information	O	>1		
Not Used	0500	PER	Administrative Communications Contact	O	3		
			LOOP ID - N1			200	
6	0600	N1	Party Identification	O	1		n1
Not Used	0700	N2	Additional Name Information	O	1		
Not Used	0800	N3	Party Location	O	2		
Not Used	0900	N4	Geographic Location	O	1		
Not Used	1000	FOB	F.O.B. Related Instructions	O	1		
Not Used	1100	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1		
Not Used	1200	DTM	Date/Time Reference	O	>1		
Not Used	1300	N9	Extended Reference Information	O	>1		
Not Used	1400	PER	Administrative Communications Contact	O	3		

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LIN			999999	

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7	0100	LIN	Item Identification	O	1		
8	0200	CTP	Pricing Information	O	25		
Not Used	0250	SAC	Service, Promotion, Allowance, or Charge Information	O	>1		
Not Used	0300	PO4	Item Physical Details	O	1		
Not Used	0400	N9	Extended Reference Information	O	>1		
Not Used	0500	AMT	Monetary Amount Information	O	10		
Not Used	0600	PAL	Pallet Type and Load Characteristics	O	1		
Not Used	0700	QTY	Quantity Information	O	>1		
			LOOP ID - ZA			>1	
9	0800	ZA	Product Activity Reporting	M	1		n2
Not Used	0900	QTY	Quantity Information	O	>1		
Not Used	1000	CTP	Pricing Information	O	25		
Not Used	1100	SDQ	Destination Quantity	O	>1		
			LOOP ID - G95			1	
Not Used	1200	G95	Performance Requirements	O	1		
Not Used	1300	DTM	Date/Time Reference	O	2		

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
10	0100	CTT	Transaction Totals	O	1		n3
11	0200	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The reporting location is required. The reporting location is specified explicitly in the N1 segment using the code RL in N101, or implicitly using the SDQ segment (Table 2) with the location data elements. They are mutually exclusive (the SDQ and the N1 with N101 containing RL).
2. The quantity for the item identified in the LIN segment is required. Quantity is specified either in the ZA segment (ZA02) or in the SDQ segment.
3. The number of line items (CTT01) is the accumulation of the number of LIN segments. Hash total (CTT02) is not used in this transaction set.
   When sending item and activity data in the LIN loop, the CTT segment is required.

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. When used, this implementation convention reference takes precedence over the implementation reference specified in the GS08.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	ST01	143	**Transaction Set Identifier Code**	M	1	ID 3/3
			Code uniquely identifying a Transaction Set			
			852 Product Activity Data			
M	ST02	329	**Transaction Set Control Number**	M	1	AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			

	Segment:	**XQ** Reporting Date/Action
	Position:	0200
	Loop:	
	Level:	Heading
	Usage:	Mandatory
	Max Use:	1
	Purpose:	To specify reporting dates, actions to be taken and an identifying number
	Syntax Notes:	
	Semantic Notes:	**1** XQ02 is the reporting date. If reporting a date range, then XQ02 is the start date and XQ03 is the end date.
		2 XQ04 is a unique report identifier assigned by the sender.
	Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	XQ01	305	**Transaction Handling Code**	M	1	ID 1/2
			Code designating the action to be taken by all parties			
			H　　　　　　　Notification Only			
M	XQ02	373	**Date**	M	1	DT 8/8
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year			
			Reporting Range start date			
R	XQ03	373	**Date**	O	1	DT 8/8
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year			
			Reporting range end date			

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	Segment:	**N9** Extended Reference Information

Position: 0400
Loop:
Level: Heading
Usage: Optional (Recommended)
Max Use: >1
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier
Syntax Notes:
1 At least one of N902 or N903 is required.
2 If N906 is present, then N905 is required.
3 If either C04003 or C04004 is present, then the other is required.
4 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:
1 N906 reflects the time zone which the time reflects.
2 N907 contains data relating to the value cited in N902.
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	N901	128	**Reference Identification Qualifier** Code qualifying the Reference Identification	M	1	ID 2/3
			IA Internal Vendor Number			
R	N902	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier *AAFES 8-digit procurement vendor number*	X	1	AN 1/50

Segment:	**N1** Party Identification	
Position:	0600	
Loop:	N1 Optional (Recommended)	
Level:	Heading	
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.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	N101	98	**Entity Identifier Code**	M	1	ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual			
			RL Reporting Location			
R	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)			
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix			
			92 Assigned by Buyer or Buyer's Agent			
			UL Global Location Number (GLN)			
			A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system			
R	N104	67	**Identification Code**	X	1	AN 2/80
			Code identifying a party or other code			

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Segment:	**LIN** Item Identification			
Position:	0100			
Loop:	LIN	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.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
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)	
EO	EAN/UCC - 8	
	Data structure for the 8 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN)	
IB	International Standard Book Number (ISBN)	
UA	U.P.C./EAN Case Code (2-5-5)	
UK	GTIN 14-digit Data Structure	
	Data structure for the 14 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Item 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.)	

	Ref. Des.	Data Element	Name	Attributes		
M	LIN03	234	**Product/Service ID**	M	1	AN 1/48

Identifying number for a product or service

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<table>
<tr><td>Segment:</td><td colspan="2">CTP Pricing Information</td></tr>
<tr><td>Position:</td><td colspan="2">0200</td></tr>
<tr><td>Loop:</td><td>LIN</td><td>Optional (Recommended)</td></tr>
<tr><td>Level:</td><td colspan="2">Detail</td></tr>
<tr><td>Usage:</td><td colspan="2">Optional (Recommended)</td></tr>
<tr><td>Max Use:</td><td colspan="2">25</td></tr>
<tr><td>Purpose:</td><td colspan="2">To specify pricing information</td></tr>
<tr><td>Syntax Notes:</td><td>1</td><td>If either CTP04 or CTP05 is present, then the other is required.</td></tr>
<tr><td></td><td>2</td><td>If CTP06 is present, then CTP07 is required.</td></tr>
<tr><td></td><td>3</td><td>If CTP09 is present, then CTP02 is required.</td></tr>
<tr><td></td><td>4</td><td>If CTP10 is present, then CTP02 is required.</td></tr>
<tr><td></td><td>5</td><td>If CTP11 is present, then CTP03 is required.</td></tr>
<tr><td>Semantic Notes:</td><td>1</td><td>CTP07 is a multiplier factor to arrive at a final discounted price. A multiplier of .90 would be the factor if a 10% discount is given.</td></tr>
<tr><td></td><td>2</td><td>CTP08 is the rebate amount.</td></tr>
<tr><td>Comments:</td><td>1</td><td>See Figures Appendix for an example detailing the use of CTP03 and CTP04.
See Figures Appendix for an example detailing the use of CTP03, CTP04 and CTP07.</td></tr>
</table>

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
R	CTP02	236	**Price Identifier Code**	X	1	ID 3/3
			Code identifying pricing specification			
			PRP Promotional price			
			UCP Unit cost price			
R	CTP03	212	**Unit Price**	X	1	R 1/17
			Price per unit of product, service, commodity, etc.			

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	Segment:	**ZA** Product Activity Reporting
	Position:	0800
	Loop:	ZA Mandatory
	Level:	Detail
	Usage:	Mandatory
	Max Use:	1
	Purpose:	To provide activity details concerning product being reported
	Syntax Notes:	**1** If either ZA02 or ZA03 is present, then the other is required.
		2 If either ZA04 or ZA05 is present, then the other is required.
		3 If either ZA06 or ZA07 is present, then the other is required.
	Semantic Notes:	**1** ZA08 determines if the product activity code in ZA01 refers to a product that is categorized as In-bond merchandise. A "Y" indicates that the activity code applies to a product that is In-bond; an "N" indicates that the activity code does not refer to a product that is In-bond.
	Comments:	
	Notes:	*ZA*QA*1*EA~*
		ZA*QL*0*EA~
		ZA*QM*0*EA~
		ZA*QP*0*EA~
		ZA*QS*1*EA*173* 20150912~
		ZA*QU*0*EA~

<div align="center">

Data Element Summary

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	Ref. Des.	Data Element	Name		Attributes		
M	ZA01	859	**Activity Code**		M	1	ID 2/2
			Code identifying activity details for the product being reported				
			QA	Current Inventory Quantity Available for Shipment or Sale			
				Indicates the quantity currently available to be sold or shipped			
			QL	Minimum Inventory Quantity			
				The minimum inventory quantity for replenishment purposes			
			QM	Maximum Inventory Quantity			
				The maximum inventory quantity for replenishment purposes			
			QP	Quantity On Order, Not Yet Received			
				Total quantity expected to be received from supplier for current reporting period, but not yet received			
			QS	Quantity Sold			
			QU	Quantity Returned By Consumer			
R	ZA02	380	**Quantity**		X	1	R 1/15
			Numeric value of quantity				
R	ZA03	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				
			EA	Each			
	ZA04	374	**Date/Time Qualifier**		X	1	ID 3/3
			Code specifying type of date or time, or both date and time				
			173	Week Ending			
				Currently only sent for QS (Quantity Sold).			
	ZA05	373	**Date**		X	1	DT 8/8
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
				Currently only sent for QS (Quantity Sold).			

Segment:	**CTT** Transaction Totals		
Position:	0100		
Loop:			
Level:	Summary		
Usage:	Optional (Recommended)		
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.	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	CTT01	354	**Number of Line Items**	M 1 N0 1/6
			Total number of line items in the transaction set	

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	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.

Data Element Summary

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

Transaction Set Notes

ZA*QA*1*EA~
ZA*QL*0*EA~
ZA*QM*0*EA~
ZA*QP*0*EA~
ZA*QS*1*EA*173* 20150912~
ZA*QU*0*EA~

- Quantity On-Hand (QA): Total QTY as of transmission date. On-Hand data pulls up until the date of transmission.

- Quantity Sold (QS): Total QTY based on reporting date/range at XQ Segment (Daily: Prior day or Weekly: Sunday – Saturday). There is no relationship between QTY Sold (QS) and QTY On-Hand (QA)

- Quantity On-Order (QP): If there are no approved / processed purchase orders for the item (No due-ins QTY) during the reporting period, the ZA02 element will indicate as zero value

- Quantity Returned (QU): If there are no returns during the reporting period, the ZA02 element will indicate as zero value

Transaction Example

```
ST*852*11045~
XQ*H*20150906*20150912~
N9*IA*12345678~
N1*RL*LAJES FLD MAIN STORE*92*1047701~
LIN**UP*XXXXXXXXXXXX~
CTP**UCP*11~
ZA*QA*1*EA~
ZA*QL*0*EA~
ZA*QM*0*EA~
ZA*QP*0*EA~
ZA*QS*0*EA*173*20150912~
ZA*QU*0*EA~
LIN**UP*XXXXXXXXXXXX~
CTP**UCP*9.25~
ZA*QA*0*EA~
ZA*QL*0*EA~
ZA*QM*0*EA~
ZA*QP*0*EA~
ZA*QS*1*EA*173*20150912~
ZA*QU*0*EA~
CTT*2~
SE*22*11045~
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