Breaking down the Rocknel Passthough 856 EDI TRANSACTION

The 856 is an Advanced Shipment Notification (ASN). As the name states it is sent in before a shipment in order to notify Rocknel of what is being physically sent and how it's being sent.

EDI Transaction

```
    ISA  00*      *00*      *ZZ*MEIRA      *ZZ*ROCKNEL      *171009*0624*U*00401*000000119*0*T*>~
    GS   SH*MEIRA*ROCKNEL*20171009*062435*119*X*004010~
 1 ST    856*0001~
 2 BSN 00*AR1710031*20171009*0624~
 3 DTM 011*20171009*0624~
 4 DTM 017*20171009*0624~
 5 HL    1**S~
 6 MEA PD*G*55*LB~
 7 TD1  CTN25*9~
 8 TD5  B*02*LAWS*M~
 9 TD3  TL**654321~
10 REF BM*AR1710031~
11 REF PK*AR1710031~
12 N1    ST**92*ROCKNEL~
13 N1    SF**01*MEIRA~
14 HL    2*1*I~
15 LIN   *BP*AKT911B403-XX~
16 SN1  *3000*EA*66300~
17 PRF  PASP170822~
18 CLD 5*600*CTN25~
19 REF LS*10041233~
20 REF LS*10041234~
21 REF LS*10041235~
22 REF LS*10041236~
23 REF LS*10041237~
24 HL    3*1*I~
25 LIN   *BP*12-185C-1-4-XX~
26 SN1  *2500*EA*66300~
27 PRF  PASP170822~
28 CLD 5*500*CTN25~
29 REF LS*10041238~
30 REF LS*10041239~
31 REF LS*10041240~
32 REF LS*10041241~
33 REF LS*10041242~
34 CTT 3*5500~
35 SE    35*0001~
    GE   1*119~
    IEA  1*000000119~
```

At first and maybe second glance it looks like gibberish but once you understand the key points it's pretty easy to see what's going on. For the moment let's examine the .csv file that was used to generate this 856 document.

SERIAL	INVOICE_NO	PALETTE_NO	CUST_ODR_NO	ITEM_NO	CONTROL_NO	QTY_PER_BOX	CASE_QTY
10041233	AR1710031	K-00981	PASP170822	AKT911B403-XX	5239150001	600	5
10041234	AR1710031	K-00981	PASP170822	AKT911B403-XX	5239150002	600	5
10041235	AR1710031	K-00981	PASP170822	AKT911B403-XX	5239150003	600	5
10041236	AR1710031	K-00981	PASP170822	AKT911B403-XX	5239150004	600	5
10041237	AR1710031	K-00981	PASP170822	AKT911B403-XX	5239150005	600	5
10041238	AR1710031	K-00981	PASP170822	12-185C-1-4-XX	5238976001	500	5
10041239	AR1710031	K-00981	PASP170822	12-185C-1-4-XX	5238976002	500	5
10041240	AR1710031	K-00981	PASP170822	12-185C-1-4-XX	5238976003	500	5
10041241	AR1710031	K-00981	PASP170822	12-185C-1-4-XX	5238976004	500	5
10041242	AR1710031	K-00981	PASP170822	12-185C-1-4-XX	5238976005	500	5

Effectively 5 boxes of AKT911B403-XX at 600 Pieces per box and 5 boxes of 12-185C-1-4-XX at 500 pieces per box are being sent to Rocknel on Purchase Order "PASP170822".

This is noted on the item level Segments of the 856 HL2 and HL3.

```
14 HL    2*1*I~
15 LIN   *BP*AKT911B403-XX~
16 SN1  *3000*EA*66300~
17 PRF  PASP170822~
18 CLD 5*600*CTN25~
19 REF  LS*10041233~        HL2
20 REF  LS*10041234~
21 REF  LS*10041235~
22 REF  LS*10041236~
23 REF  LS*10041237~
```
```
24 HL    3*1*I~
25 LIN   *BP*12-185C-1-4-XX~
26 SN1  *2500*EA*66300~
27 PRF  PASP170822~
28 CLD 5*500*CTN25~
29 REF  LS*10041238~        HL3
30 REF  LS*10041239~
31 REF  LS*10041240~
32 REF  LS*10041241~
33 REF  LS*10041242~
```

To fully understand the two Hierarchical Levels below is a breakdown of the segment fields.

Hierachical Level:Segment identifier indicates the start of a Hierachical Level Segment
HL ID Number:Identifies the number of the Hierachical Level segment
Parent Loop ID:Identifies the parent container to which this HL provides detail to
Level Type :Identifies the type of details listed in this HL segment
In this case the HL type is ITEM meaning the HL will give info about items

14 HL   2*1*I~

Item Identification
BP = Buyer's Part Number (This is stating Rocknel's part number is in use)
Part Number ROCKNEL Part Number (Rocknel is the Buyer of the part)

15 LIN *BP*AKT911B403-XX~

Item Detail (Shipment)
Number of Units Shipped
Unit or Basis of Measurement Code: EA means EACH Hierachical Level
Cumulative Quantity: Not used but required.Default set to 66300 effectively meaningless for Rocknel

16 SN1 *3000*EA*66300~

Purchase Order Reference
Purchase Order Number: PO Number which was used to order the parts

17 PRF PASP170822~

Load Detail: Load Detail Segement Identifer
Number of line items:Number of boxes per HL segment
Quantity per line item
Unit of measure code: CTN25 is container

18 CLD 5*600*CTN25~

Reference Number: Refrence Segement Identifer
Refrence Qualifer: LS = Bar-Coded Serial Number
Reference Number: Container Serial Number

19 REF LS*10041233~

It's key to note however that Unlike HL2 and HL3 HL1 does not contain parts and part numbers as the level type of HL1 is SHIPMENT rather than ITEM which contains information about the shipment as a whole rather than the item. HL1 is the parent field of the item level HL segments in this example.

```
 5 HL    1**S~
 6 MEA PD*G*55*LB~
 7 TD1  CTN25*9~
 8 TD5  B*02*LAWS*M~
 9 TD3  TL**654321~
10 REF  BM*AR1710031~
11 REF  PK*AR1710031~
12 N1    ST**92*ROCKNEL~
13 N1    SF**01*MEIRA~
```

HL1

The format of HL1 is a little different. A detailed view of this can be seen below.

Hierachical Level: Segment identifier indicates the start of a Hierachical Level Segment

HL ID Number: Identifies the number of the Hierachical Level segment

Parent Loop ID: Identifies the parent container to which this HL provides detail to
(note: In this case it is blank because there is no higher level)

5 HL 1**S~ **Level Type**: Identifies the type of details listed in this HL segment
In this case the HL type is SHIPMENT meaning the HL will give info about the shipment

Measurement: This segment identifies mesurement related information

Measurement Reference ID Code: PD identifies Physical Dimensions

Measurement Qualifier: Identifies the type of measurement. "G" is Gross Weight.

Measurement Value: The Measured Value

Unit or Basis for Measurement Code: LB is Pounds

6 MEA PD*G*55*LB~

TD1: Segment Lists Carrier Details for Quantity and Weight

Packaging Code: CTN25 is Corrugated Carton

Lading Quantity: Number of pallets in shipment *note default to 9 because pallet count
is not required for upload*

7 TD1 CTN25*9~

TD5: Segment Lists Carrier Details for Transit Information

Routing Seguqence Code: "B" is Origin/Deliver Carrier

Identification Code Qualifer: 02 Standard Carrier Alpha Code

Carrier Code: LAWS is a fake carrier code created as a requirement

Transportation Method: M is MOTOR (COMMON CARRIER) *note this is fixed*

8 TD5 B*02*LAWS*M~

TD3: Segment List Carrier Details for Equipment

Equipment Desc. Code: "TL" = Trailer *note: this is fixed even if another method is used

Equipment Number: This contains the Trailer number or air bill

9 TD3 TL**654321~ number *it is fixed as that info is not contained in the .csv

Refrence (SHIPMENT LEVEL): Segement identifies a shipment level refrence

Reference No. Qualifier: "BM" for bill of lading

10 REF BM*AR1710031~ **Refrence Number**: This is set to the AR/BR number.

Refrence (SHIPMENT LEVEL): Segement identifies a shipment level refrence

Refrence No. Qualifier: "PK" for packing slip

Refrence Number: This is set to the AR/BR number.

11 REF PK*AR1710031~

Name 1: Identifies the name 1 Segment

Entity Identifer Code: "ST" Ship to

Free form name: not given

Identification Code Qualifer: "92" Assigned by Buyer

Identification Code: ROCKNEL

12 N1 ST**92*ROCKNEL~

Name 1: Identifies the name 1 Segment

Entity Identifer Code: "SF" Ship From

Free form name: not given

Identification Code Qualifer: "01" for DUNS

Identification Code: MEIRA

13 N1 SF**01*MEIRA~

For a quick summary of what was detailed so far:

EDI Transaction

```
  ISA  00*      *00*     *ZZ*MEIRA      *ZZ*ROCKNEL     *171009*0624*U*00401*000000119*0*T*>~
  GS   SH*MEIRA*ROCKNEL*20171009*062435*119*X*004010~
1 ST   856*0001~
2 BSN  00*AR1710031*20171009*0624~
3 DTM  011*20171009*0624~
4 DTM  017*20171009*0624~
5 HL   1**S~
6 MEA  PD*G*55*LB~
7 TD1  CTN25*9~
8 TD5  B*02*LAWS*M~
9 TD3  TL**654321~
10 REF  BM*AR1710031~
11 REF  PK*AR1710031~
12 N1   ST**92*ROCKNEL~
13 N1   SF**01*MEIRA~
14 HL   2*1*I~
15 LIN  *BP*AKT911B403-XX~
16 SN1  *3000*EA*66300~
17 PRF  PASP170822~
18 CLD  5*600*CTN25~
19 REF  LS*10041233~
20 REF  LS*10041234~
21 REF  LS*10041235~
22 REF  LS*10041236~
23 REF  LS*10041237~
24 HL   3*1*I~
25 LIN  *BP*12-185C-1-4-XX~
26 SN1  *2500*EA*66300~
27 PRF  PASP170822~
28 CLD  5*500*CTN25~
29 REF  LS*10041238~
30 REF  LS*10041239~
31 REF  LS*10041240~
32 REF  LS*10041241~
33 REF  LS*10041242~
34 CTT  3*5500~
35 SE   35*0001~
   GE   1*119~
   IEA  1*000000119~
```

HL1
Contains: SHIP TO
    SHIP FROM
    BILL OF LADING
    PACKING SLIP
    MEASUREMENTS

HL2
Contains: PART
    Total Quantity PER HL
    Purchase Order
    Container Count
    Quantity PER container
    Box Serial Numbers

HL3
Contains: PART
    Total Quantity PER HL
    Purchase Order
    Container Count
    Quantity PER container
    Box Serial Numbers

The last two pieces of the puzzle are the header and the footer:

EDI Transaction

```
  ISA  00*       *00*       *ZZ*MEIRA      *ZZ*ROCKNEL      *171009*0624*U*00401*000000119*0*T*>~
  GS   SH*MEIRA*ROCKNEL*20171009*062435*119*X*004010~
1 ST   856*0001~
2 BSN  00*AR1710031*20171009*0624~
3 DTM  011*20171009*0624~
4 DTM  017*20171009*0624~
```

HEADER

FOOTER

```
34 CTT  3*5500~
35 SE   35*0001~
   GE   1*119~
   IEA  1*000000119~
```

The header and footer basically delineate the start end and type of order. See on next page for a detailed breakdown:

Also see: (http://ecomgx17.ecomtoday.com/edi/856.htm)

HEADER:

ISA: Interchange Control Header Segment Identifier
Authorization Information Qualifier:"00" is "no auth information present"
Security Information Qualifer:"00" is blank
Interchange Qualifer:"ZZ" is Mutually Defined
Interchange Sender ID: "MEIRA" is the sender
Interchange Qualifer:"ZZ" is Mutually Defined
Interchange Receiver ID: Rocknel is the Receiver
System Generated Date Time: YYMMDD*HHMM
Interchange Standards Identifer:"U" is U.S. EDI X12
Interchange Version ID:"00401" is Version 4010
Interchange Control Number: EDI Sequence number (unique increment)
Acknowledgment Requested: "0" is none
Test Indicator: T=TEST P=PRODUCTION
Segment Terminator: "~"

ISA 00*   *00*   *ZZ*MEIRA   *ZZ*ROCKNEL   *171009*0624*U*00401*000000119*0*T*>~

GS : Functional Group Header Segment Identifer
Functional ID: "SH" IS Ship Notice / Manifest (856)
Application Sender's Code:MEIRA
Application Receiver's Code:ROCKNEL
Data Interchange Date
Data Interchange Control Number:119
Responsible Agency Code:X=X12
Version:004010

GS SH*MEIRA*ROCKNEL*20171009*062435*119*X*004010~

ST:Transaction Set Identifier
Transaction Set Identifier Code: 856 advanced shipment notice
Transaction Set Control Number: "0001" Matches Trading Partner Setting

1 ST 856*0001~

BSN:Beginning Segment for Ship Notice Identifer
Transaction Set Purpose Code:"00" Original
Shipment Identification:Unique Number Identifying a specific Shipment
Date:CCYYMMDD
TIME:HHMM

2 BSN 00*AR1710031*20171009*0624~

DTM: Date/Time Refrence IDENTIFER
Date/Time Qualifier:11 = Shipped
Date:CCYYMMDD
TIME:HHMM

3 DTM 011*20171009*0624~

DTM: Date/Time Refrence IDENTIFER
Date/Time Qualifier:017=Estimated Delivery
Date:CCYYMMDD
TIME:HHMM

4 DTM 017*20171009*0624~

FOOTER:

CCT: TRASACTION TOTAL Identifer
Number of Line items:Count of HL segments
Total: Sum of Parts

34 CTT 3*5500~

SE:Transaction Set Trailer identfier
Number of Included Segments:Checksum linecount
Transaction Set Control Number:MUST MATCH ST COUNTER

35 SE 35*0001~

GE: Functional Group End Identifer
Number of Transaction Sets Included:1
Group Control Number:Match Data interchange Control number in GS segement

GE 1*119~

IEA: Interchange Control Trailer
Number of Included Functional Groups:1
Interchange Control Number: Matches ISA Counter as checksum

IEA 1*000000119~