In this Issue

Hub & Spoke Analysis Page 1
For & From the Field Page 3
Site Analysis Page 3
Tips & Tricks Page 4

GOOD NEWS FOR PDK/PDK LITE/PDK II USERS
A big change in ONS requirements since the ordering instructions were posted in the March edition of this newsletter. See highlight on Page 3.

Hub and Spoke Analysis

The Hub and Spoke Query on the RF-ITV Tracking Portal gives depot managers, supervisors and other users the ability to view the most used shipment routes over a specified timeframe. It can also help identify problem areas as well as helping to improve business processes. This query finds all shipments that have traveled through a selected “Hub” interrogator and provides a list of interrogators, known as “Spokes,” where these shipments were last read. For simplicity in this example, we selected Interrogator TSC310300001, NEWCMBLDW1, NEW CUMBERLAND PA-SC3103 VSM JAMS which is one of the two Write sites registered at that location.

To run this query go to the RF-ITV Tracking Portal, and select Report > Analysis > Hub and Spoke Query as shown in this screen shot.

At the next screen, enter the Interrogator ID and Date Range. For this example we selected Last Calendar Year from the dropdown, and Submit.
From the Query results we selected to display All results (abbreviated below). From there, we click on the Column labeled Tag Count – Outbound Tags (from Hub to Spoke). Then click it a second time to show the results from largest to smallest. Since we are concerned with NEWCMBLDW1 shipments being shipped out of the installation, we will exclude NEWCUMBERLANDR1 as a spoke (lined out below), the read site that catches the tags going out this particular gate.

From there you can draw a mental and physical picture of the hub with it largest spokes (by number of outbound shipments received from the hub).

As we stated in the beginning, this example was limited to one Write site at the New Cumberland location shipping to various individual Read sites around the world to illustrate the Hub and Spoke query process. Since there are often more than one Write site at a location that ships to other locations with more than one Read site, a more thorough analysis may be in done by adding up the total shipments from a location as well as the total tags captured by all of the read interrogators at a location. To assist in such a thorough analysis, you can download the results to an Excel Spreadsheet by clicking on the Excel icon in the upper left of the results screen.
The RFID-IV Contract with Savi Technology Extended

The RFID-IV Contract with Savi Technology has been extended. This extension is for a maximum of one year with a period of performance from 8 April 2019 through 7 April 2020. This is a de-centralized contract on which Ordering Contracting Officers can award delivery orders based on their customers’ requirements. All funding for the extension period will be obligated on a delivery/task order basis.

The new contact is located at: https://usarmyamis.army.mil/Contracts_RFIDIV.html. Then under “Contract Information” select “Conformed Contract” to see the complete list of items and services on the contract.

Special Notice for RF-ITV PDK and PDK Lite Users

Last month we announced in this newsletter that new PDK/PDK Lite users would be required to submit an Operational Needs Statement (ONS) and receive HQDA 3/5/7 approval prior to ordering new Iridium SIM cards. We have since been notified by HQDA G4/5/7 of an exception to that policy: Any equipment (e.g., PDK /PDK Lite/PDK II) with an approved LIN does not require an ONS.

Site Analysis: DOVERAFB DE 436 APS MOBFLT GATES (Device ID TDC4A3E73FFBB)

For this month’s analysis we selected write device ID TDC4A3E73FFBB (DOVERAFBW759), located at Dover Air Force Base, Delaware. From the RF-ITV Tracking Portal we selected Track > Sustainment Cargo, entered a ‘Write Station ID’ of TDC4A3E73FFBB and for the ‘Write Date’ entered 20 through 25 March 2019. This query and criteria produced 72 tagged shipments to analyze. The result of our data analysis is:

- By comparing RF tag data such as the Consignee Department of Defense Activity Address Code (DoDAAC) or Military Assistance Program Address Code (MAPAC), Port of Debarkation (POD) on the RFID tag to the Read events of the tag and Last Reported Interrogator Name, we were able to track 55 of the 72 tagged shipments (76.4%) to their final destination.

- Of the 17 shipments whose arrival at final destination could not be determined/confirmed using data on the RF-ITV Tracking Portal:

Need to Order RFID Tags?
Defense Logistics Agency (DLA) has the following tags with NSN 6350-01-633-7731/7732/7338/7342 and 631-2568 listed as non-stocked items and you may not get the tags for up to sixty days or longer. Currently, DLA has only 6350-01-579-3126 (Data rich tag with DLA Label) in stock. Tags can be mounted without the optional mounting brackets.

TIPS Write Product Key
The Total Asset Visibility (TAV) In-Transit Processing Station - Write (TIPS-Write) software version 4.10.0 comes with a product key solution that has been implemented to prevent unauthorized installation and execution of the RF-ITV TAV TIPS Software. In order to install the software, users must call the Service Desk to obtain a product key for installation. Without a product key, the software cannot be installed.

TIPS Write Product Key
The Total Asset Visibility (TAV) In-Transit Processing Station - Write (TIPS-Write) software version 4.10.0 comes with a product key solution that has been implemented to prevent unauthorized installation and execution of the RF-ITV TAV TIPS Software. In order to install the software, users must call the Service Desk to obtain a product key for installation. Without a product key, the software cannot be installed.

FOR & FROM THE FIELD

The RFID-IV Contract with Savi Technology Extended

The RFID-IV Contract with Savi Technology has been extended. This extension is for a maximum of one year with a period of performance from 8 April 2019 through 7 April 2020. This is a de-centralized contract on which Ordering Contracting Officers can award delivery orders based on their customers’ requirements. All funding for the extension period will be obligated on a delivery/task order basis.

The new contact is located at: https://usarmyamis.army.mil/Contracts_RFIDIV.html. Then under “Contract Information” select “Conformed Contract” to see the complete list of items and services on the contract.

Special Notice for RF-ITV PDK and PDK Lite Users

Last month we announced in this newsletter that new PDK/PDK Lite users would be required to submit an Operational Needs Statement (ONS) and receive HQDA 3/5/7 approval prior to ordering new Iridium SIM cards. We have since been notified by HQDA G4/5/7 of an exception to that policy: Any equipment (e.g., PDK /PDK Lite/PDK II) with an approved LIN does not require an ONS.

Site Analysis: DOVERAFB DE 436 APS MOBFLT GATES (Device ID TDC4A3E73FFBB)

For this month’s analysis we selected write device ID TDC4A3E73FFBB (DOVERAFBW759), located at Dover Air Force Base, Delaware. From the RF-ITV Tracking Portal we selected Track > Sustainment Cargo, entered a ‘Write Station ID’ of TDC4A3E73FFBB and for the ‘Write Date’ entered 20 through 25 March 2019. This query and criteria produced 72 tagged shipments to analyze. The result of our data analysis is:

- By comparing RF tag data such as the Consignee Department of Defense Activity Address Code (DoDAAC) or Military Assistance Program Address Code (MAPAC), Port of Debarkation (POD) on the RFID tag to the Read events of the tag and Last Reported Interrogator Name, we were able to track 55 of the 72 tagged shipments (76.4%) to their final destination.

- Of the 17 shipments whose arrival at final destination could not be determined/confirmed using data on the RF-ITV Tracking Portal:
Six RF tags were never “Read” moving through the distribution pipeline after the initial write event (never read on or leaving Dover Air Force Base). We were unable to confirm due to the lack of RF-ITV Tracking Portal data, but it appears these shipments may have been canceled and the tags not erased or somehow the RF tags were separated from or never attached to the shipments. A review of the RF-ITV Tracking Portal and IGC (Integrated Data Environment (IDE) and Global Transportation Network (GTN) Convergence) indicated that none of the TCNs were repopulated/reused on a new RFID tag/shipment.

Four RFID tags were last read at the Port of Embarkation (POE), Dover Air Force Base, Delaware. Based on other shipments in our data selection with similar destinations, transportation priority and arrival date at the POE, these shipments should have reached their respective POD and final destination by the conclusion of this analysis. The assumption is the RFID tags were either never associated to the shipment prior to movement or the RF tags were separated from the shipment while waiting for transportation.

Seven tags/shipments were last read at interim airfields (i.e., Ali Al Salem Air Base Kuwait and Al Udeid Air Base Qatar) that were not the POD or final destination of the shipments.

- In all instances the POE and POD code were found to be valid and used properly.
- Of the 72 tags we analyzed, 71 had valid Consignor and Consignee DoDAACs or MAPACs listed in the required field. The one remaining shipment, both the Consignor and Consignee DoDAAC fields were left blank.
- The commodity data for the 72 tags written by the consignor was completely blank and provided no information. However, we were able to find a portion of the cargo’s nomenclature and some of the NSNs in the TCMD data for the 72 shipments. Complete commodity data in the proper fields allows users more options for query searches, provides information for origin/historical determination and provides more complete data sharing with other ITV systems.
- The Registration page (Site Details) information was checked by verifying that naming convention rules were followed when the device was named. The e-mail address provided on the write site’s registration page for the POC was returned as invalid. We were able to make contact with the ‘new’ write site POC via the listed phone number. Instructions were provided on the process to update the registration page with current contact information.

---

**RF-ITV Tips and Tricks**

### Searching Through Archived Shipments

Reuse of RFID tags (re-writing them with new shipment data) is highly encouraged because the practice can save units a significant amount of time and money. Typically, RFID tags are readily available in most shipping/receiving areas, therefore they can be utilized instantly for new shipments. Please note...when an RFID tag is reused, subsequent data queries on the RF-ITV Tracking Portal for that particular tag number will display only the most recently uploaded shipment data (i.e., none of the data from previous shipments will be displayed). In addition to tracking current shipments, the Tracking Portal has a tool available to track previous shipments and assist users with locating lost or delayed shipments, as well as analyzing the steps and route a particular shipment went through from start to finish. The last option can be a great tool to find out if costs for further shipments could be cut by selecting an alternative route or predicting the arrival date of the next such shipment. To see previous shipments assigned to an RFID tag, Transportation Control Number (TCN) or Document Number, a simple search through the ‘Archived Shipments’ section would provide all archived data for the RFID Tag in question. This “Tips and Tricks” article steps through the ‘Archived Shipments’ process with RFID tag 18710593013987; the same procedure works using the TCN or Document Number.
If an RFID Tag is reused and previous data is required, a simple RFID TAG query would return only the current shipment assigned to the Tag.

First, log onto the RF-ITV Tracking Portal (https://national.rfitv.army.mil) via CAC, and from the Track drop-down menu, select Sustainment Cargo.

Once the Sustainment Cargo section is open, scroll down to the bottom left corner of the page and click on the Archived Shipment box.

The next screen will present several data elements to select from in order to build a search query (an entry field will appear after clicking on each data element).
When the **Tag ID** field is chosen and the **Tag Number** entered, it is important to enter the date range for the search in order to filter through all archived data for that particular RFID tag.

In the example for RFID Tag **18710593013987**, seven ** Archived Date** recorded shipments were found. Click on the desired shipment to view details.
Once the **Archive Date** is selected, all available data for this shipment is displayed, the same as with the regular query done for the current shipment, with the search indicated as **Archive DTG: (Date range)**.

![Archive DTG Notification](image)

This shipment was queried by **TAG_ID: 18710593013987**

<table>
<thead>
<tr>
<th>Load TICN</th>
<th>Container</th>
<th>Consignor ([From])</th>
<th>POE</th>
<th>POD</th>
<th>Consignee ([To])</th>
<th>Hazmat</th>
<th>TP</th>
<th>Operation</th>
<th>Service</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20060704772204XXX</td>
<td>KWAGAMXM994</td>
<td>SW83600</td>
<td>52I</td>
<td>53D</td>
<td>WW465X8</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Free Text**

**Location/Tracking - Last reported at STUTTGARTTR2 at 02-MAY-17 10:38**

<table>
<thead>
<tr>
<th>First Reported Date</th>
<th>Last Reported Date</th>
<th>Event Code</th>
<th>RF HU(S) Battery Status</th>
<th>Site ID</th>
<th>Site Name</th>
<th>Site Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02-MAY-17 10:38</td>
<td>02-MAY-17 10:38</td>
<td>READ 22</td>
<td>LOW BATT</td>
<td>53990</td>
<td>STUTTGARTTR2</td>
<td>STUTTGART DE PANZER KASERNE MAIN GATE</td>
</tr>
<tr>
<td>02-MAY-17 08:40</td>
<td>02-MAY-17 08:40</td>
<td>READ 3</td>
<td>LOW BATT</td>
<td>43635</td>
<td>GERMERSHEIM1</td>
<td>GERMERSHEIM DE GAD GATE 1 OUTBOUND</td>
</tr>
<tr>
<td>02-MAY-17 08:37</td>
<td>02-MAY-17 08:37</td>
<td>READ 74</td>
<td>LOW BATT</td>
<td>43422</td>
<td>GERMERSHEIM7</td>
<td>GERMERSHEIM DE GAD BUILDING 793</td>
</tr>
<tr>
<td>02-MAY-17 08:15</td>
<td>02-MAY-17 08:15</td>
<td>WRITE1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Commodity - Summary (10 Items)**

<table>
<thead>
<tr>
<th>Document Number</th>
<th>TICN</th>
<th>HSN</th>
<th>Nomenclature</th>
<th>RIC</th>
<th>LIN</th>
<th>Quantity</th>
<th>UOM</th>
<th>Shipment Condition Code</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20060704772204</td>
<td>M20060704772204XX</td>
<td>8105015171364</td>
<td>BAG, PLASTIC</td>
<td>SCP</td>
<td>00015</td>
<td>BX</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WS98X702600005</td>
<td>SW31237048000500XX</td>
<td>8460014997344</td>
<td>TRAVEL CART</td>
<td>SCP</td>
<td>00002</td>
<td>EA</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WS98X702600007</td>
<td>SW31237048000500XX</td>
<td>8460014997344</td>
<td>TRAVEL CART</td>
<td>SCP</td>
<td>00002</td>
<td>EA</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W907CH7010800001</td>
<td>SW31237108000780XX</td>
<td>8345000561435</td>
<td>FLAG, NATIONA</td>
<td>SCP</td>
<td>00020</td>
<td>BA</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W907CH70970002</td>
<td>SW31237106000780XX</td>
<td>7510016169670</td>
<td>PROTECTOR, DO</td>
<td>SCP</td>
<td>00010</td>
<td>BX</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VJ112270950414A</td>
<td>VJ4112270950414XX</td>
<td>6640002550471</td>
<td>DISINFECTANT</td>
<td>SCP</td>
<td>00018</td>
<td>BT</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VJ6122712180102</td>
<td>VJ4122712190120XX</td>
<td>6640001655778</td>
<td>BOTTLE, URINE</td>
<td>SMS</td>
<td>00002</td>
<td>PG</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2J4AF7089X0012</td>
<td>W2J4AF7089X0020XX</td>
<td>0000SUPPLIES</td>
<td>SUPPLIES</td>
<td>SCP</td>
<td>00001</td>
<td>EA</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W8103471110001</td>
<td>W81034711100019XX</td>
<td>0000SUPPLIES</td>
<td>SUPPLIES</td>
<td>SCP</td>
<td>00001</td>
<td>EA</td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This query can provide other metrics for historical or Quality Assurance (QA) purposes. For instance, the archive keeps records of whether a tag was closed or not. This can be helpful in determining if business processes needs to be changed, e.g., too many RFID tags are not being closed at the examined location, indicating the cargo flow may no longer pass by the interrogator.