

PM J-AIT ITV Operations and Training Newsletter

August 2006

pm J-AIT
PRODUCT MANAGER
JOINT-AUTOMATIC IDENTIFICATION TECHNOLOGY

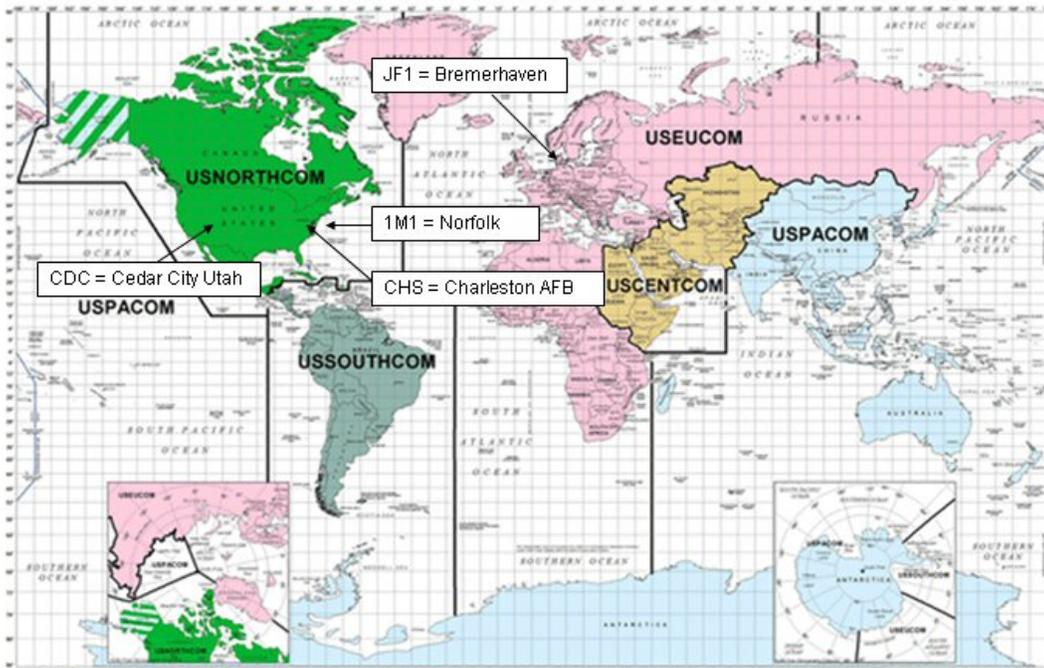
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to view the latest PM J-AIT contract(s) for AIT and Radio
Frequency Identification (RFID) hardware, software,
technical engineering services, and maintenance.

Army Institutes “Inland Location Codes” For Intra-Theater Shipments and Moves Toward End-To-End Visibility

The Army’s goal is to use Inland Location Codes (ILCs) to represent point of origin, point of destination, and other geographic locations for end-to-end (In-Transit Visibility) ITV of unit moves and sustainment shipments for ground forces within a specific theater (intra-theater). In laymen’s terms...a near-term, low-cost, easily implemented capability to track movement and provide visibility of “stuff” going from camp-to-camp in Iraq as well as fort-to-fort here in the States.

At the strategic level, there are well-established and maintained three-digit codes to identify unit, equipment, and sustainment movement through/via sea and airports. Port of Embarkation (POE) and Port of Debarkation (POD) codes have been established for all sea and airports worldwide and are available/controlled in the Defense Transportation Regulations (DTR)/Table Management Distribution System (TMDS)/TRANSCOM Reference Data Manager (TRDM).

Currently there are 3 Digit codes assigned to all Air and Seaports in the DTR:



Aerial Ports: 3 position (all Alpha for example: **CDC, CHS**)

Surface Ports: 3 position (Num, Alpha, Num: **1M1** or Alpha, Alpha, Num: **JF1**)

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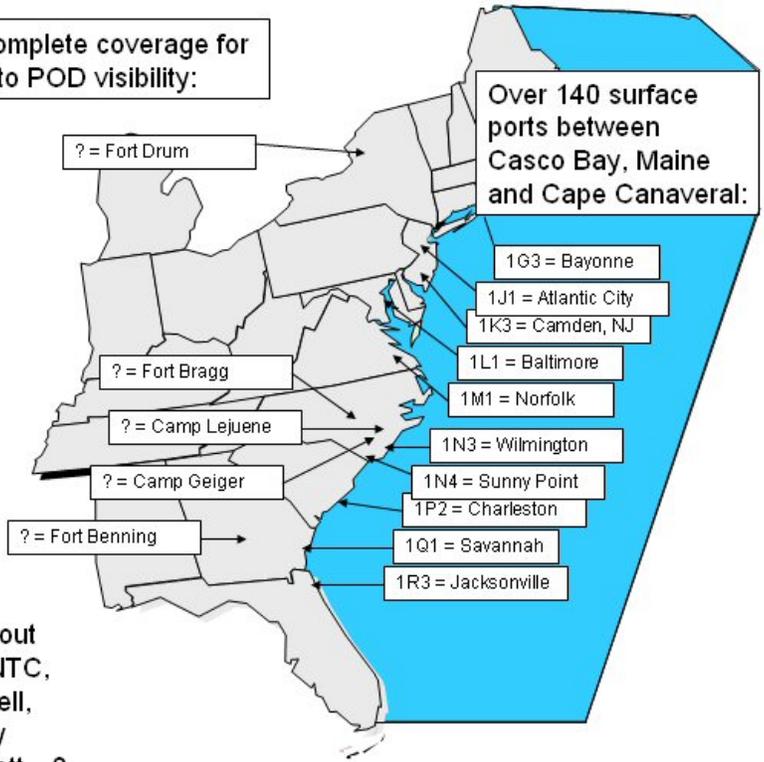
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If this newsletter has been forwarded to you and you would like to be added to the distribution list, please send your request via E-mail to PM J-AIT (Jerry Rodgers) at jerry.d.rodgers@us.army.mil.

There are existing fields in the RFID tag license plate area for these POE/POD codes as well as capabilities on the ITV server to query/sort this data. Additionally, for tracking/management purposes, numerous systems such as the Global Transportation Network (GTN) and Battle Command Sustainment and Support System (BCS3) receive tag data records (to include the POE/POD codes) from the ITV server.

The shortfall for the ground forces at the operational level, whether they are at their home station training the forces or have deployed to a theater, is their follow-on movements and sustainment do not necessarily move via sea or air and therefore can not use established sea and airport POE/POD codes. Currently, there are no three-digit data element codes which can be used to “roll-up” unit move data or sustainment shipments for total “unit” tracking/visibility at ground force inland locations. Although the entire east coast is blanketed with POE/POD codes for the tracking and visibility of strategic movements, there are no three-digit location codes to identify a unit from Fort Benning traveling to Fort Drum or any other ground force location in CONUS—that is until now.

There is complete coverage for POE to POD visibility:



Over 140 surface ports between Casco Bay, Maine and Cape Canaveral:

So what’s happening now under the current situation of no established three-digit inland location codes, coupled with the Soldiers’ strong desire to track/consolidate/manage their unit move or sustainment?

But what about the JRTC, NTC, Fort Campbell, MCD Albany or Fort Pickett...?

One situation involves the user leaving the POE/POD fields blank on the RF tag (such is the case in the vast majority of intra-theater shipments), providing no inland origin or destination information to GTN or location sorting data to BCS3 (via the ITV server data feeds). The other situation that has been seen on the ITV server is for the individual to make up an inland code that makes sense to them. Below is a CONUS example (Fort Bragg to the Joint Readiness Training Center at Fort Polk) of how a soldier’s initiative to maintain visibility of a unit move by making up an origin/destination code creates a downstream negative impact on GTN:

- A made-up logical POE/POD that everyone will understand is **BRG** for Bragg and **PLK** for Fort Polk. However, based on established airport POE/POD codes, GTN shows the movements as **Whitesburg, Kentucky to M. Graham Clark Airfield, Point Lookout, Maryland.**

Instead of....



in GTN and ITV, it looks like this...



In the CENTCOM Area of Responsibility (AOR), the need for, and therefore the use of, user “made-up” codes has been even greater than CONUS. No map will be needed for you to see the devastating impact of the below pseudo codes being posted to the ITV and subsequently passed to GTN.

CODE	THE USER MEANT	BUT: ACTUAL POE/POD LOCATION
ARI	ARIFJAN	ARICA, CHILE
BAL*	BALAD	BATMAN, TURKEY
BIA	BIAP (BAGHDAD INT AIRPORT)	BASTIA, CORSICA, FRANCE
TAJ	TAJI	AITAPE, NEW GUINEA
FAL	FALLUJAH	ROMA, ITALY
SPE	SPEICHER	SEPULOT MALAYSIA
ALA	ALASAD	ALMA ATA, CIS (AIRPORT) KAZAKSTAN
ALA	ALASAD	CAPE CHRISTIAN, NEWFOUNDLAND (SEAPORT)
TAL	TALLIL	TANANA, ALASKA, USA
QWE	Q-WEST	NONE ASSIGNED
TAQ	TAQADDUM	NONE ASSIGNED

*A quick look at the ITV server showed that BAL (actually **Balad**) was improperly used in the POE/ POD code 837 times in the past 30 days (intra-theater shipments) but telling GTN it was **Batman Turkey**

The Army G4 has determined that ILCs are the near-term solution for the intra-theater tracking/visibility problem and views this as a big process improvement in their distribution management. G4 plans to implement rapidly the use of ILCs in the port code fields of RFID tags, in interface transactions, and in the RF-ITV server to provide ITV for intra-theater movements. G4 has requested that PM J-AIT upload the ILCs they have developed to the ITV server for user reference and then assist the Army in disseminating this information.

The goal is not to replace established POE/POD codes in the DTR, but rather to supplement them. The plan is to segregate these ILCs by making them all numeric-numeric-alpha. Neither air nor sea port codes use numeric-numeric-alpha in their construction, ensuring no reuse/duplication of the codes. It has been requested of TRANSCOM that these new inland codes eventually be synchronized through a new three-character location code table in DTR/TMDS/TRDM or by addition to an existing table.

A “Special Edition” of this newsletter will be released later this month providing the complete list of ILCs which will include the codes for CONUS, USFK, and EUCOM intra-theater moves as well as outlining procedures for requesting an addition/change/deletion to the listing of ILC’s. Until that time, the below list of ILCs has been approved for immediate use by Army units for CENTCOM AOR intra-theater RFID tagged (ground) shipments:

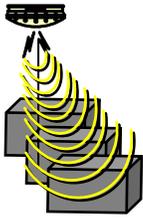
<u>ILC</u>	<u>Country</u>	<u>Inland Location</u>	<u>City</u>
81A	AFGHANISTAN	BAGRAM, AFGHANISTAN	BAGRAM, AFGHANISTAN
81F	AFGHANISTAN	FOB SALERNO, AFGHANISTAN	FOB SALERNO AFGHANISTAN
81J	AFGHANISTAN	KANDAHAR, AFGHANISTAN	KANDAHAR, AFGHANISTAN
81P	PAKISTAN	CHAMAN, PAKISTAN	CHAMAN, PAKISTAN
81Q	PAKISTAN	KARACHI, PAKISTAN	KARACHI, PAKISTAN
81S	PAKISTAN	QASIM, PAKISTAN	QASIM, PAKISTAN
81T	PAKISTAN	TORKHAM, PAKISTAN	TORKHAM, PAKISTAN
81V	KYRGYZSTAN	MANAS, KYRGYZSTAN	MANAS, KYRGYZSTAN
82A	BAHRAIN	JUFFAIR (BANZ WAREHOUSE), BAHRAIN	JUFFAIR, BAHRAIN
82B	BAHRAIN	BMMI (CLASS 1), BAHRAIN	MANAMA, BAHRAIN
82C	BAHRAIN	JUFFAIR (DYNCORP), BAHRAIN	JUFFAIR, BAHRAIN
82D	BAHRAIN	MANAMA, BAHRAIN	MANAMA, BAHRAIN
82E	BAHRAIN	MINA SALMAN, BAHRAIN	MINA SALMAN, BAHRAIN

<u>ILC</u>	<u>Country</u>	<u>Inland Location</u>	<u>City</u>
82H	DJIBOUTI	LEMONIER, DJIBOUTI	LEMONIER, DJIBOUTI
82K	OMAN	MASIRAH, OMAN	MASIRAH, OMAN
82L	OMAN	SEEB (DYNCORP), OMAN	SEEB, OMAN
82M	OMAN	THUMRAIT (DYNCORP), OMAN	THUMRAIT (DYNCORP), OMAN
82N	QATAR	AL UDEID, QATAR	AL UDEID, QATAR
82P	QATAR	AS SAYLIYAH, QATAR	AS SAYLIYAH, QATAR
82T	UAE	SEVEN SEAS WAREHOUSE, UAE	DUBAI, UAE
83A	KUWAIT	ARIFJAN, KUWAIT	ARIFJAN, KUWAIT
83F	KUWAIT	ARIFJAN (RETROGRADE YARD), KUWAIT	ARIFJAN, KUWAIT
83H	KUWAIT	CAMP BUEHRING, KUWAIT	CAMP BUEHRING, KUWAIT
83J	KUWAIT	CAMP VIRGINIA, KUWAIT	CAMP VIRGINIA, KUWAIT
83K	KUWAIT	MINA ABDULLAH, KUWAIT	MINA ABDULLAH, KUWAIT
83L	KUWAIT	NAVISTAR, KUWAIT	NAVISTAR, KUWAIT
83M	KUWAIT	PWC KU	MINA ABDULLAH, KUWAIT
83N	KUWAIT	AL JALIAL, KUWAIT	AL JALIAL, KUWAIT
83P	KUWAIT	ALI ALSALEM, KUWAIT	ALI ALSALEM, KUWAIT
84A	IRAQ	AL TAQADDUM, IRAQ	AL TAQADDUM, IRAQ
84F	IRAQ	AL QAIMR, IRAQ	AL QAIMR, IRAQ
84H	IRAQ	ALASAD, IRAQ	ALASAD, IRAQ
84K	IRAQ	AR RAMADI, IRAQ	AR RAMADI, IRAQ
84S	IRAQ	BAGHDAD, IRAQ	BAGHDAD, IRAQ
84V	IRAQ	FALLUJAH, IRAQ	FALLUJAH, IRAQ
85C	IRAQ	MOSUL (DIAMONDBACK), IRAQ	MOSUL, IRAQ
85G	IRAQ	QWEST, IRAQ	AL QUYYARAH, IRAQ
85J	IRAQ	KIRKUK, IRAQ	KIRKUK, IRAQ
85N	IRAQ	TAL AFAR, IRAQ	TAL AFAR, IRAQ
85S	IRAQ	KOREAN VILLAGE, IRAQ	RAS AL 'AIN, IRAQ
86A	IRAQ	BALAD, IRAQ	BALAD, IRAQ
86F	IRAQ	BAGDAD, IRAQ	BAGDAD, IRAQ
86J	IRAQ	TAJI, IRAQ	TAJI, IRAQ
86P	IRAQ	TIKRIT, IRAQ	TIKRIT, IRAQ
87A	IRAQ	TALLIL, IRAQ	TALLIL, IRAQ
87D	IRAQ	SCANIA (FUEL POINT), IRAQ	AD DIWANIYAH, IRAQ
87E	IRAQ	NEW CEDAR (FUEL POINT), IRAQ	AN NASIRIYAH, IRAQ
87H	IRAQ	BLUE DIAMOND, IRAQ	AR RAMADI, IRAQ
87J	IRAQ	NAJAF (DUKE), IRAQ	NAJAF, IRAQ
87L	IRAQ	TREBIL (WARHORSE), IRAQ	TREBIL, IRAQ

How This Affects You

If you are in CENTCOM and building RF records for unit deployment or sustainment movements that will not leave the theater, use these codes in the POE (origin) and POD (destination) fields. This will allow you to track your ground shipments point-to-point and not provide erroneous data to GTN.

Over Interrogation Data Analysis for CENTCOM AOR



For this month's newsletter, we took a look at read sites in the CENTCOM AOR to see how they were doing in the area of over interrogation. During the week of 17 July, we selected 12 random sites from the **Weekly Write/Read Report for SWA**. There were over 1400 tags read at these sites during the analysis period, and we viewed nearly 360 tags--or 25%. While there is no standard for what constitutes "over-interrogation," anything over 300 hits in a one-day period is a reasonable benchmark that we used for this study. Of the tags we looked at, 70% were being over interrogated. Of tags being over interrogated, 31% had a TK6 indicating that it had reached its final designation. This indicates that the tags sat near the interrogator and continued to be read.

Due to the high volume of tags that move through the system, we are only able to view a selected/limited sampling. The discrepancies provided below may or may not be representative of the performance at your location, but we ask that you review these sites to determine if there may be a problem.

<u>Interrogator ID, Name, Description</u>	<u># of Tags During Analysis Period</u>	<u># of Tags Viewed</u>	<u># of Tags Being Over Interrogated</u>	<u># of Over Int Tags With a TK6</u>	<u>Average Hits Per Day</u>
24348, FUJAIHR1, FUJAIRAH SDDC SPOD MOBILE READ	74	19	19 (100%)	2 (11%)	2401
40563, MAREZR1-S, MOSUL IZ MAREZ (WDT) SARSS	206	52	22 (42%)	8 (36%)	2934
40709, PWCR2, PWC KU EAST GATE INBOUND/OUTBOUND	100	25	25 (100%)	1 (4%)	102124
40773, ALASADR3, ALASAD IZ FLIGHT LINE	130	33	17 (52%)	4 (24%)	903
41111, ALTAQADDUMR2, AL TAQADDUM IZ IIP	51	13	13 (100%)	1 (8%)	2547
41812, SATHERR1, BAGHDAD IZ MCT IN/OUTBOUND	262	65	22 (34%)	2 (9%)	305
42326, TIKRITR6, TIKRIT IZ AIRFIELD IN/OUTBOUND	102	26	26 (100%)	3 (12%)	1598
44478, ALTAQADDUMR7, AL TAQADDUM IZ ARMY CRSP	87	22	18 (82%)	7 (39%)	1310
42307, ARIFJANR3, ARIFJAN KU ASG CONTAINER YD ARR/DEP	88	22	22 (100%)	7 (32%)	2052
40696, BALADR1-S, BALAD IZ CL IX (WP7) SARSS	182	45	34 (76%)	34 (100%)	373
42658, DJIBOUTIR2, LEMONIER DJ ADACG	58	15	14 (93%)	1 (7%)	1310
41108, ALASADR4, ALASAD IZ CDC YARD	83	21	18 (86%)	7 (39%)	1598

Impact of Over Interrogation

The number of times a tag is read by an interrogator can impact the longevity of a battery. Consequently, over-interrogation of a tag will seriously degrade the tag battery and can affect ITV of your shipments. RF tags with low battery power will not operate properly, and interrogators will not read RF tags with dead batteries. To extend the life of your batteries and maintain visibility of your shipment, move tagged items further from the interrogator or turn the battery around if your shipment has reached its final destination or if the item is not scheduled for movement. Be sure to verify that the batteries are activated and in the "ON" position when your shipment is ready for movement.

If you need assistance with what appears to be over-interrogation at your site, contact the RFID Customer Support Desk at 1-800-877-7925 from 6 AM – 4 PM EST or email them at help@rfitv.army.mil to get the phone number of your supporting Field Service Engineer (FSE). The chart below shows current assignments of FSE's in SWA. We will update FSE assignments for other theaters in future newsletters.



Attention All Users!!!



Have You Seen This?



Do you have excess or unneeded tags just lying around??? If so, please return them so they can be reused. There is a critical shortage of RFID tags at shipping points in the USA. RFID tags are to be used on retrograde and may be used on intra-theater shipments. Commanders and RFID users are requested to ensure recovery and return of unneeded RFID tags to the Defense Logistics Agency. Unneeded RFID tags will be returned for reuse by shipping tags using MILSTRIP FTE/FTR transactions to:

Defense Distribution Center, Susquehanna (DDSP)
 ATTN: DDSP-OMP
 Warehousing Branch Bldg 203, Door 12,
 Mechanicsburg, PA 17055-0789

or

Defense Distribution Center San Joaquin (DDJC)
 ATTN: Transportation Office DDJC-TA, Warehouse 30
 25600 S. Crisman Road
 Tracy, CA 95376-5000

Day in the Life of the Joint Distribution Center in Balad, Iraq

For this month's analysis of a shipping/onward movement activity (RFID write site), we keyed in on the Joint Distribution Center at Balad, Iraq. Specifically, we looked at the tag writing workload for Tag Docking Station, T901090029 (BaladW7) for the period of 3 through 6 July 2006. During this 3-day period, we identified that 57 tags were written by T901090029 and destined mainly for intra-Iraq locations. The following are findings from this data analysis:

- 31 of these 57 tags (54%) reached their final destination creating TK6s on the ITV server. TK6s are created when the CONSIGNEE DODAAC written to the tag, matches the "Supported DODAAC" entered on the read interrogator's registration page.
- 8 of these 57 tags (14%) were re-written and used again within 2 weeks after they arrived at their final destination.
- 54 of these 57 tags identified during this analysis had archive records, indicating that 95% of the tags had prior use. Nice work!
- In 16 instances (28%), POD codes were improperly used or were made up. Camp/Fort/Base/Post locations codes are under development to support intra-theater shipments and should help alleviate this type of problem.

RFID in Support of the Japanese Ground Self Defense Force (JGSDF) Hawk Missile Deployment

Article provided by Whit Norris, UNISYS FSE in Japan

In a show of support to the JGSDF during their Hawk Air Defense Missile Deployments, the 836th Transportation Battalion, Yokohama, Japan recently demonstrated how RFID could be used to track JGSDF missile shipments. The deployment, scheduled for early 2007, supports the JGSDF 2d and 5th Air Artillery Groups in a bilateral training exercise between the US Army and the JGSDF that takes place at Ft. Bliss, TX.

For this demonstration, an operational code "JGSDF 2006" was created on the RF-ITV server. Mr. Carlos Tibbetts, Chief of Terminal Operations, Yokohama North Dock, provided both personnel and RF tags to ensure 100% ITV on all JGSDF equipment leaving the port. Mr. Koji Wada wrote the RF tags to be affixed to the shipments using Worldwide Port Systems (WPS) data imported into "TIPS Write" software. Once Mr. Wada had the tags created and affixed to the corresponding items, an Early Entry Deployment Support Kit (EEDSK) was set up at Yokohama North Dock, Warehouse G, to show the movement of cargo leaving the warehouse. A second EEDSK was then setup to capture the equipment being loaded onto a barge that would take the equipment to Honmoku Pier at the Commercial Port of Yokohama before offload and handover to American Presidential Lines (APL). To ensure total visibility from Yokohama North Dock to Honmoku Pier, a Symbol 8146 Handheld Interrogator was used during the barge offload. All of the 64 tags shipped were identified using the handheld with two having noticeably low batteries.

Upon Customs clearance at San Pedro, Unisys FSE, Mr. Pietro Schinaia, captured the arriving shipment using a Symbol 8146 Handheld Interrogator and replaced a tag that was damaged in shipment and could no longer be read.

The equipment was shipped out of San Pedro, CA to Fort Bliss, TX during the first two weeks of July 2006. Upon arrival at the assembly area Unisys FSE, Ms. Andrea Hamblin ensured the containers were processed, tag batteries were inverted, and the tags were collected for re-use during the redeployment phase to Japan in February 2007.



Thanks to the hard work of the 836th Transportation Battalion and its knowledge of RF-ITV, the JGSDF was provided excellent ITV support of its missile detachment shipments from Yokohama, Japan to the training facility at Fort Bliss, TX.