



UID QUARTERLY: WINTER 2007

INTRODUCTION

Welcome to the UID Quarterly Winter 2007 Edition, brought to you by A2B Tracking Solutions as an educational service. In this issue we present a case study that illustrates how a manufacturer of firearms is complying with UID. You will benefit from lessons learned by property managers that have successfully transitioned from the DD1662 to paperless transmission to the IUID Registry. And finally, you will learn about RFID and the role it plays in uploading data to the WAWF.

What you'll find in this issue:

UID Success - *Barrett Firearms Manufacturing Inc.*, has successfully fulfilled the UID requirement for the M107 rifle contract issued last year. In this case study, you will learn the process undertaken by Director of Operations and UID Project Lead Eddie Macon as he brought education to problem-solving, in order to make informed decisions about UID solutions.

UID SUCCESS:

Barrett Firearms Manufacturing, Inc.

About the Company

Headquartered in Murfreesboro, Tennessee, Barrett Firearms Manufacturing, Inc. (BFMI) is the world's leader in large-caliber rifle design and manufacturing. Well-known for .50 caliber rifles, the company now produces rifles in .416 Barrett and 6.8 SPC calibers and is a growing innovator in the design and production of optics for long-range shooters. The United States Army named the Barrett M107 as one of the Top Ten Greatest Inventions of 2005. Indeed it was a 2006 Department of Defense (DoD) contract for the purchase of M107 rifles that first brought the Army's unique identification (UID) requirement to light at Barrett.

After BFMI management gathered initial information on UID requirements, and the impact of UID on the company's business was established, it was decided to assign the implementation task to a single individual, Director of Operations, Eddie Macon. His first step was to learn all



UID Solutions - *GFP Managers: It's Time to Make Your (Virtual) Mark*

A2B sales engineer Will Sniffen shows how the changeover from the DD1662 to the IUID Registry provides an excellent opportunity for fresh thinking about how specific item identification can result in positive business results. Lessons learned by other program managers will also prove enlightening.

Vendor's Corner - *epcSolutions Inc.* provides a tutorial regarding the interdependence of UID and RFID labeling as required by MIL-STD-130M and MIL-STD-129P respectively.

News From A2B Tracking - Read our latest press releases and where we hope to see you in the coming months, including our first UID Users Summit scheduled for April 10-11 in Newport, RI.



he could about UID. Finding the answers he needed was challenging. His search included the DCMA (Defense Contract Management Agency), the official UID website and various seminars. What he found, he says, was information, but no clear path for implementation.

Developing an Implementation Plan

"We found information and suppliers to facilitate the implementation of UID, but BFMI found it difficult to locate a single-source provider to assist with hardware, application software and an understanding of the submittal process to the IUID Registry," says Macon. "BFMI is a smaller volume business with multitasking personnel, and we did not have resources to focus only on the UID initiative. We were very fortunate to discover A2B Tracking as a single-source provider for solutions to our UID needs."

Working with the BFMI military contracts, quality and manufacturing departments in conjunction with

A2B Tracking's assistance, Macon established an implementation plan. The contracts department needed to become familiar with all UID requirements in order to ensure that contracts would be fulfilled. Quality needed to ensure that the ISO 9001 - 2000 STD would be met, and manufacturing became involved with applying the UID label. Among other things, A2B helped Macon settle on Construct 2 for the label design and also informed him of a dummy test site for use before actual uploading to the IUID Registry.



Labeling and Technology Decisions

One of the earliest decisions Macon faced, after choosing A2B as his single-source UID provider, concerned the type of label that should be used. Given the harsh environment to which the rifles would be exposed, Macon had to ensure that the label would be robust in extreme conditions. BFMI's lower volumes of product requiring UID marking, however, did not support the financial investment of direct part marking technology. In the end Macon choose polyester labels for their rugged dependability and the ability to print them in low volume as needed. Affixing a white label to a sniper's rifle was originally a concern, but then it was determined that the label could be affixed in a visually non-intrusive location. Each rifle gets one 2-D matrix, Construct 2 UID label located on the rifle's magazine side plate.

BFMI uses high-tech machine shop technology for its manufacturing operation with a supporting IT network, so they only had to purchase the required printer (Zebra 105SL) to generate UID labels. BFMI has employees

with experience in electronic product manufacturing and computer technology, so the technology part of implementing UID had minimal impact once hardware and application software were purchased.

"Initially there was some confusion relative to the requirements and need for hardware, software and submittal to the Registry," says Macon. "But once requirements were established that fit the BFMI business model, using A2B Tracking as the primary resource, the confusion was eliminated and the required plan and procedures were implemented."

Barrett's UID Solution Path

BFMI's complete UID solution consists of UID Comply! software from A2B which drives the Zebra printer, a Siemens verifier and Siemens scanners. Barrett is able to create their UIIs, verify the quality of the mark created with their verifier, and then they are able to validate the syntax using their scanners.

"Eddie was an extremely educated buyer," says A2B sales specialist Brad Smith. "He had been involved in new software/hardware rollouts previously, and as a result he took the unusual step of visiting a current UID Comply! customer. He said he needed to see how the system worked so he would know exactly what to expect when A2B's installation team arrived." Eddie met with a fellow manufacturing engineer that had already traveled down the UID road. Because of his due diligence, Eddie had no surprises. He asked a myriad of questions, and learned all he needed to know about UID. He did his homework, and it paid off.

When asked what advice he would pass along to others who must comply with UID requirements, Eddie says, "Don't depend solely on information that is provided by government sources for UID requirements and solutions. Get in partnership with a knowledgeable, single-source provider like A2B Tracking, a company that provided excellent customer service for BFMI's needs."

UID SOLUTIONS:

GFP Managers: It's Time to Make Your (Virtual) Mark



If these were medieval times for managers of Government Property the heralds would be harking – "The DD1662 is dead! Long live the Registry!" In case you missed the King's memo, 2006 was the last year the existing DD1662 process will be in effect. In 2007 (September 30th Fiscal year end to be exact) all qualifying GFP property items (also known as PIPC) must be identified and recorded in the IUID Registry by the prime steward of those

assets. And the transition doesn't end with the initial registration. Asset-Life Events that affect the qualifying items must also be recorded in the IUID Registry going forward. These events include property receipts, disposals, transfers or changes of ownership, deliveries, product part number changes, and physical item marking actions.

While a change in business processes to meet a new government reporting requirement might be cause for consternation, a wise property manager or business owner might take a step back and see this event as a perfect opportunity to perform a business process review (BPR), which is not simply modernizing. Modernizing is doing

the same thing with new equipment. BPR is looking at changing the way you do business. Listed below are a few lessons and tactics learned from both the business and technical perspective that have led to successful DD1662 transitions as well as fresh thinking about how specific item identification can result in positive business results:

(1) Establish a Champion within your organization. Many larger asset management firms have established 'tiger' teams as champions. These teams are usually multi-disciplined - one part accountant, one part ops, and one part IT geek. When they have a clear creativity mandate from upper management (or the business owner) they can cut through wasteful effort and superfluous practices with new approaches and ideas. Make this team read the government policy guidelines, tutorials, and roadmaps. The champion should also make sure the contracts people understand the changes necessary to the contracts, for transition, and coordinate the change with the DCMA representative early on.

(2) Analyze your existing item marking practices. If you have physically identified your GFP with an 'innate' serial marking system you will have an advantage right out of the gate. 'Innate' serial marking usually includes text or one dimensional existing barcode marks on the items (and in databases) that have the elements of 'uniqueness' that qualify it as part of a new UII construct.

(3) Virtual UII or Real UII label? Decide if you are going to apply new 2D datamatrix UII's to your GFP. If (big if) you have very strong control of the GFP items, you probably want to take advantage of the 'virtual' UII process for some, most, or all of your items. The 'virtual' process allows you to register your GFP without physically marking it until a 'trigger' event occurs. Trigger events are opportunistic labeling points in an item's life-cycle where labeling with the new mark becomes practical. In real life situations you would set up 'gateways' around these trigger points. Once you physically mark a virtual item and update the IUID Registry, the item is flagged as "marked."

(4) Identify the existing (legacy) databases and create a data conversion scorecard for them. Isolate only those ~30 data elements needed to create static item 'birth' records for registration. Establish and record the index tree for these databases so both the new database of record and old databases have links.

(5) Reconciliation. Devise a simple method of specific linking between those items reported on latest DD1662 and those items you are going to register (both from an existing physical mark and location standpoint, and a database index standpoint). Having a link (innate serial #) between both the physical item and the database will allow a great deal of flexibility when recording events with barcode scanners or mobile data collection devices. Note: Not

all items on the most recent previous DD1662 will require registration so you will have a bucket of items and valuation that will exist outside the registry reporting process.

(6) Establish a separate database of record for the registry process. This can and should be an indexed composite of existing databases and/or a tool that has the following characteristics:

- * It can import existing contract, part #, property, and location data and index back to legacy systems.
- * It can perform an automated registration in the correct format and with the correct data elements for GFP.
- * It creates unique UIIs under either construct.
- * It can validate the 2D UID mark for proper syntax.
- * It allows for mass changes for ownership transfers, disposals and sales.
- * It links with open architecture databases.
- * It can link with mobile devices for use in inventory taking or other inventory system integration using existing scanners and mobile devices.

Look for BPR ah-ha moments

The above are some of the more salient tactical aspects of a DD1662 transition to the Registry. The process can be complex, but it is the process of transition itself that leads to the 'ah-ha!' moments that create positive business change. Look beyond the DD1662 transition and continually ask yourself what a simple scan can accomplish with the right interface on the desk-top or on a mobile device. A simple scan can and does simplify or replace existing processes in businesses every day. Think of returning a rental car: Would you want to go to the desk and wait in line to get a receipt for returning a car? Of course not. This is the kind of thinking that goes beyond the DD1662 transition deadline and allows BPR to move to re-engineering – and while the process may still be a pain it is also an opportunity to capture dozens of those 'ah-ha!' moments to propel your business beyond your competition.

One final note: Please come and visit us at the UID Forum in San Diego this Feb 21-22. We'd love to hear and share your experiences as property managers and how you plan to (or have already) accomplished the transition to the IUID Registry.

References and Resources on the web:

<http://www.acq.osd.mil/dpap/UID/attachments/guides/DD1662-Transition-Instructions-Final-20060428.pdf>

<http://www.acq.osd.mil/dpap/UID/attachments/guides/dd-1662-rr-attachment3-20060316.xls>

VENDOR'S CORNER:

UID & RFID:

A Tutorial for DoD Suppliers



In January 2004 the DoD began to require that all parts and subassemblies supplied under contracts to the DoD be marked with a unique identifier (UID). The UID mark is to be included on a nameplate attached to the part or in certain cases etched directly onto the part. The UID standard provides for a parent/child relationship between UIDs on parts and the assemblies that comprise the parts. MIL-STD-130M provides the detailed requirements on what parts require UID and how to properly create, apply or etch the UID for each part.

Following the UID requirement the DoD announced their RFID labeling requirement as a part of MIL-STD-129P. This standard provides detailed requirements on when and where to apply RFID labels. These labels are required on containers, shipping containers and pallets as part of the requirement. The RFID requirement allows suppliers to use either EPCglobal tag encoding standards, if the supplier is a member of EPCglobal, or the DoD's royalty free GRAI encoding standard.

Both standards require that the data that is embedded in each label be included in a Wide Area Workflow (WAWF) document submissions. These submissions can be done manually by entering the required data directly into the DoD WAWF web site, or they can be automated via electronic submission of the proper DoD electronic file format. The data is also required to be included in a paper copy of the DD250 that accompanies the materials, if required as part of the contract.

When both UID and RFID requirements are listed on a contract, the relationship between the two is actually quite simple. Both UID and RFID standards are followed, which means that parts requiring UIDs be labeled or marked with the appropriate UID, and containers and shipping containers that are packed with UID labeled parts are tagged with RFID tags. This creates a parent/child relationship between RFID tags and UID labels/marks. The parent/child relationship is "documented" in the WAWF submission. This documented relationship allows the

receiving DoD depot to read the RFID tag on a container and know what parts are packed in the container. This provides a perfect audit trail of both UID and RFID labeled parts and shipping containers.

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DoD suppliers need to address all three requirements when seeking labeling solutions:

- (1) UID labeling or marking
- (2) RFID labeling
- (3) WAWF submission

If all three requirements are not met, or if they are not met in an integrated fashion, the supplier will be forced to manually enter data for WAWF submission. This is an extremely laborious and error-prone undertaking.

epcSolutions' RFIDTagManager for DoD now includes direct integration with A2B Tracking's UID Comply! application. This integrated solution allows suppliers to create and manage their UID data in UID Comply! and create and manage their RFID data in RFIDTagManager. RFIDTagManager's WAWF Wizard then combines the two data streams (UID and RFID), creates the parent/child relationship between UIDs and the RFID tags and submits the data to WAWF via WAWF's UDF format. This integrated solution supports all the popular UID labeling and direct part marking devices, all major RFID printers, RFID readers and RFID handheld readers.

NEWS FROM A2B TRACKING:



HYATT REGENCY NEWPORT HOTEL & SPA
NEWPORT, RHODE ISLAND
APRIL 10-11, 2007

Our UID Comply!™ users will have a unique opportunity to learn from A2B's stable of UID experts and from each other. With a theme of UID and Beyond, this Summit will allow users to sit down with military and policy personnel in roundtable discussions that will impact the future of our software as well as the rollout of UID.

Latest Press Releases

2/07/2007 - DoD RFID, UID and WAWF Integrated Solution Now Available

epcSolutions, Inc. the worlds most installed Wal*Mart RFID solution provider and A2B Tracking Solutions, the leading provider of UID data management solutions, announce the immediate availability of RFIDTagManager for DoD, which consists of epcSolutions RFIDTagManager and A2B's Flagship product UID Comply!@...

12/12/2006 - A2B Tracking Solutions, Inc. Names UID Business Development Sales Engineer

William A. Sniffen has been named UID Business Development Sales Engineer. Sniffen brings extensive experience in managing large-scale, technology driven, improvement programs that impact enterprise economies and stockholder value...

11/2/2006 - A2B Tracking Solutions Inc. Wins US Army Anniston Depot Contract

A2B Tracking Solutions, Inc the leading provider of unique identification (UID) compliance products and services, is announcing the award of a prime contract to supply Anniston Army Depot, with UID compliance hardware and software...

10/30/2006 - A2B Tracking Solutions Inc. Wins US Army Red River Depot Contract

A2B Tracking Solutions, Inc the leading provider of unique identification (UID) compliance products and services, is announcing the award of a prime contract to supply the US Army, Red River Depot, with UID compliance hardware and software...

UID Educational Opportunities Available From A2B - Web Seminars

Would you like to attend a web seminar on UID? Bar code guru David Collins, president of Data Capture Institute and a member of the UID integrated product team, is presenting a series of educational hour-long web seminars. The goal is to dispense a great deal of information in simple language you can use immediately. These immensely popular sessions fill quickly. To check dates, and reserve a seat email pchasse@a2btracking.com.

Are you in a quandary about implementing UID?

A visit to the UID Solution Builder, http://www.uidsolutions.com/m/_general/solutionbuilder.asp will answer many of your questions.

We hope to meet you at one of the upcoming events:



A2B Tracking Solutions Inc. will be exhibiting in booth # 38 at the February 21-22.



NPMA NOVA Property Management Seminar: March 12 – 13, Fairfax, VA



AIT Role in Air Force Logistics Forum: March 13 – 15, St. Louis, MO