



# UID&eBusiness Forum

Implementation Strategies for Programs & Suppliers

## IUID—Pathway to Improved Asset Management

Presented by the  
AIM North America  
UID Supplier Alliance (USA)





## Agenda

- Overview of USA Committee
- Creation of a UII (unique item identifier) and Managing Data
- Marking Technologies
- Verification vs. Validation
- IUID Reader Technology
- Registration
- RFID Label Printing
- Data Use



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## UID Supplier Alliance



- Established in Fall 2007
- Currently comprised of 16 member companies
- Dedicated to raising the awareness and adoption of the UID Policy through their aggressive work with Congress, policy offices, DoD oversight activities and DoD contractors.



## Creation of a UII

- There are a variety of ways to create a UII (unique item identifier)
- Choices are dependant upon your existing business processes, i.e. maintenance, logistics, etc
- UID vendor community has a wealth of information based on a history of successful implementations
  - They can help you based on your needs
- Should understand and consider Virtual UII's, Construct 1 and/or Construct 2



## Data management starts before the barcode

- Create consistent UII data
  - Know the business rules of the IUID Registry
- Design the verification process for data
  - Checks and balances not simply bar code quality
- Manage unique serialization
- Establish an audit trail
- Assign UIIs to acquisition data
- Track embedded and custody relationships
- Handle virtual UIIs vs. physically marked UIIs
- Attach alternative mark data



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## Data issues to watch out for

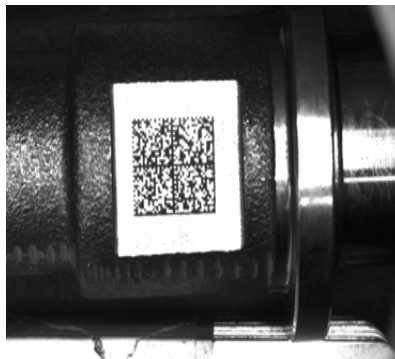
- Creating and submitting duplicate UIDs
- Submitting part and serial numbers that meet the format standards
- Submitting accurate parent-child relationships
- Accepting proper UIDs and item pedigree from subs
- Matching UIDs to acquisition data



## Marking Techniques

It is important to remember that a marking technology exists for virtually any item that needs to be marked!

Laser



Dot Peen



Ink Jet



Thermal Print





# Verification vs. Validation

**Both are important**

**VALIDATION is like**

**“spelling”**

Is the Content correct, data correct and in an acceptable structure?

**“Syntax rules based”**

Continuing to evolve with new formats and equivalents approved. May change again influenced by NATO, NASA, USCG

**VERIFICATION is like**

**“penmanship”**

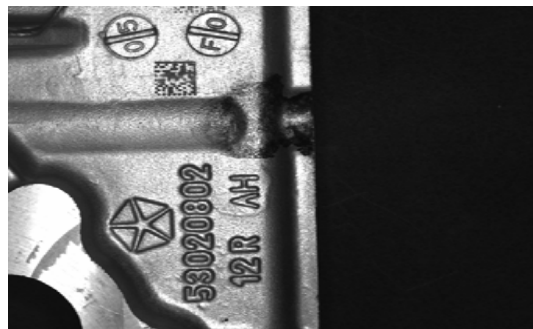
Are the individual cells and the symbol formed correctly? Size, shape, contrast, distortion, consistency

**“Standards Rules Based”**

Continuing to evolve as AIM refines understanding of DPM. Ongoing tension between Marking and Reading, especially damaged symbols



## IUID Verifier Technology



**IUID Compliance Verifier, DPM**  
*(for direct part marks)*



**IUID Compliance Verifier, LDP**  
*(for labels and data plates)*



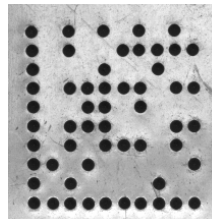
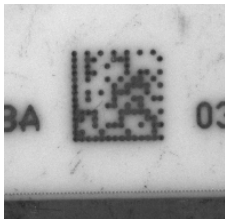
## IUID Reader Technology

Variety of reader choices based on your requirements!

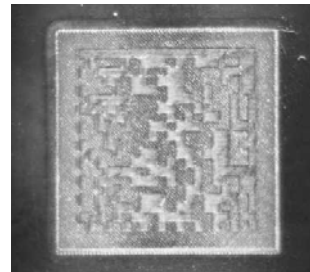
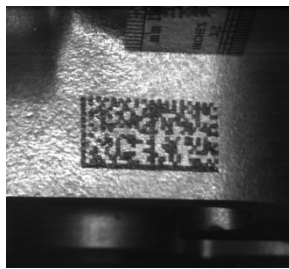
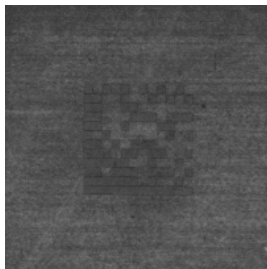
### High Contrast Marks - Labels



### Low Contrast Marks - DPM



### Specialty Readers - DPM





## Registration

- IUID Registry stores and maintains information on item and history
- Test IUID Registry
- Production IUID Registry
- Accepts Data from WAWF, through the GEX and manually via IUID website
- Be prepared for length of time to get registration accomplished
- Resources – DLIS Registry Demo in hall



## RFID Label Printing

- EPC Gen 2 RFID encoding
- Printer encodes RFID chip and can print information on surface of label
- RFID printer can print non-RFID labels
- RFID not part of the UID mandate, distinction – but can happen at the same time





## Beyond Compliance

### Use the Data to Improve Your Business Process

- Asset management
- Cradle to grave history – who, what, where, & when
- Acquisition data, movement history, disposition
- Security requirements compliance
- Accountability and valuation of property
- Historical data management
- Prognostic item maintenance
- Equipment status & location for warfighter



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## Early Adopters of Unit Level Traceability... Driven by Return on Investment – not a mandate

- Electronics
- Semiconductor
- Automotive
- Aerospace
- Consumer goods
- Document handling
- Postal
- Pharmaceutical
- Medical devices
- Lab automation





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## Thank You

Use the provided questions to ensure your experience here at the Forum is as productive as possible. Please be sure to visit our members in the exhibit hall!

- A2B Tracking Solutions
- Evanhoe & Associates, Inc.
- Horizons Incorporated
- ID Integration, Inc
- INFOSIGHT Corporation
- Lockheed Martin, I-GUIDES®
- Lowry Computer Products
- MetalCraft Inc.
- Monode Pryor Traceability, LLC
- Seagull Scientific, Inc.
- SIEMENS Energy & Automation, Inc.
- The Danby Group, LLP
- The Clarion Group
- UID Journal
- Potomac Redan Associates LLC
- WEBSCAN, Inc.

