



UNIQUE IDENTIFICATION (UID)

**Joint Aeronautical Commanders
Group UID Working Group
July 13-14, 2004**



Agenda

Agenda Topics – Tuesday, July 13

	Time
Welcome (LeAntha, Mike)	8:30 to 8:45
Review Agenda (James)	8:45 to 8:50
Introductions (Group)	8:50 to 9:10
Review June 9-10 Meeting (James)	9:10 to 9:25
Define Outcomes (LeAntha, Mike)	9:25 to 10:00
Break	10:00 to 10:15
Review Action Items (James)	10:15 to 11:15
Open Discussion/ Define Breakout Groups (LeAntha, Mike)	11:15 to 12:00
- Single Process Initiatives	
- Strategies for Non-Recurring Engineering Changes (drawings, pubs)	
- Legacy Systems Implementation/Policy	
Lunch	12:00 to 1:00
Review Break-out Groups/ Establish Ground Rules (James)	13:00 to 13:30
Convene Break-out Groups	13:30 to 16:30
Outbriefs and Wrap-up (LeAntha, Mike)	16:30 to 17:00

Agenda Topics for Wednesday, July 14

Regroup (LeAntha, Mike)	8:30 to 9:00
Convene Break-out Groups	9:00 to 11:00
Outbriefs (Group Leads)	11:00 to 11:45
Wrap Up and Next Steps (LeAntha, Mike)	11:45 to 12:00



Objectives

- Review concept from engine manufacturers for developing single standard for marking
- Discuss and develop strategies for changing engineering drawings to factor in UID
- Discuss policy for legacy data integration



Closed Action Items (June 9-10)

CLOSED ACTION ITEMS

1. Distributed Business Case from UCC to the group (James C.)
2. Meet with Dave Guinasso (Debra H., LeAntha S.)
3. Distributed Rolls Royce Vendor Guide for comments (James C.)
4. Provide comments on Vendor Guide (Group)
5. Distributed Vendor Guide to Lt. Col. Linny Clark for review (James C.)
6. Contact Lt. Col. Linny Clark re legacy part environment (LeAntha S., Rob L.)
7. Distribute common parts traceability approach, approach to serialization (Nat R.)
8. Distribute system engineering documents to group (Merrill Y.)
9. Provide comment on system engineering documents (Group)
10. Provide Honeywell contact information to other engine manufacturers (James C.)
11. Provide lighting document to James C. (Andy J.)
12. Get update from DoD AIT office on implementation guidance (James C.)
they are focused on RFID
13. Distribute lighting document to group (Andy J., James C.)
14. Distribute Software Algorithm document (Max W.)



Closed Action Items (June 9-10)

CLOSED ACTION ITEMS

15. Distribute lighting document to group (Andy J., James C.)
16. Distribute Software Algorithm document (Max W.)
17. Distribute embedded decision tree (Lynn B.)
18. Collect existing strategies/documents for engineering changes (Max) – **only one applicable document discovered**
19. Schedule UID 101 Session prior to next meeting (James C.)
20. Provide guidance on quality of the marking process (Lynn B., Nat R., Andy J.) **9132 draft is key document; 130 references 9132 in section**
21. Adapt Production Readiness Survey to Gov't (Pam M.)
22. Develop white paper on legacy data elements in support of legacy policy and distribute (Bruce P., LeAntha S.) **new legacy data elements in new legacy policy forecast.**
23. Review marking decision tree developed last meeting (Group)
24. Review marking decision tree developed last meeting from engine manufacturer perspective (Andy J., Nat R.)
25. Ensure MIL-STD-130L is tied to quality standard, socialize and harmonize (Working Group) – On-going



Breakout Groups

Single Process Initiatives

Strategies for Non-Recurring Engineering Changes (drawings, pubs)

Legacy Systems Implementation/Policy



Issues

- High-level issue
 - Explanation of issue
 - Example of impact of issue
 - Priority/urgency
 - (Recommended) Owner(s)/Action Plan
- Lack of consistency between 129 and 130; indication of three different symbology standards
- Question of infrastructure (various types readers, etc.) – unintended consequences related the practical application of UID (scanning and pulling stock and how the individual will “comply” with the desired behavior versus a behavior of “convenience”
- Lack of clear process for mandatory versus discretionary UID; consistency of definitions (e.g., serially managed, legacy)
- Existing legacy marks that meet UID requirements being sufficient (meeting the “intent” of the policy or “letter” of the policy)

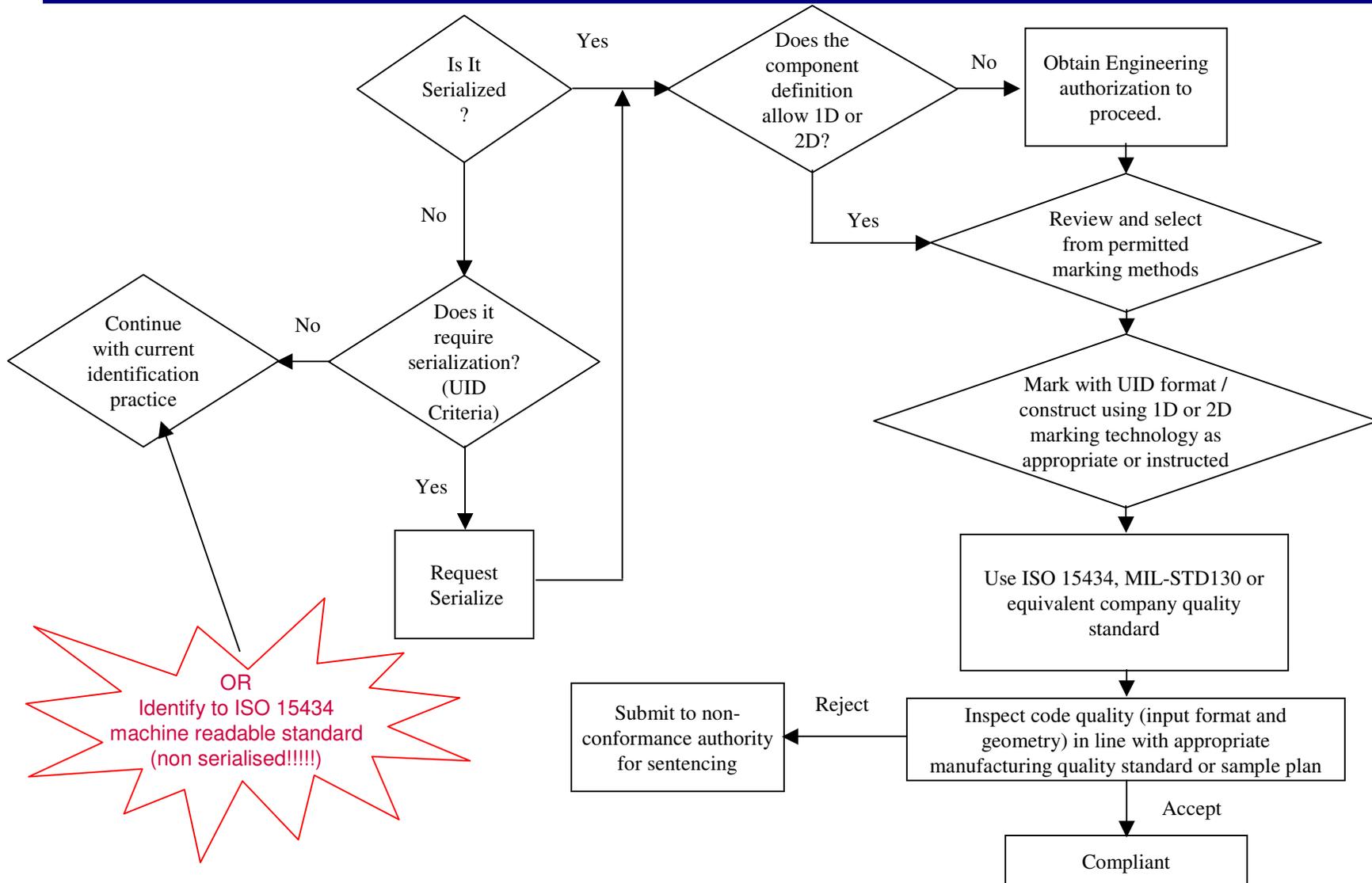


Issues

- Contracting issues:
 - Foreign governments do not always want UID.
 - Technical data packages are not available. Contractors unwilling to accept risk to price and deliver an undefined “thing”.



Decision Tree



OR
Identify to ISO 15434
machine readable standard
(non serialised!!!!)



Roadmap

								<u>Time Horizon</u>	
Operational								2007-2008	
Accountability				Value				2006-2007	
Organization		Program		Location		Status		2005-2006	
AT&L	P&R	PA&E	AT&L	Geo.	Phys.	Virt.	Categories		
Item				People				2004-2005	
Real Property		Personal Property		CAC		CIDM			
AT&L				P&R					

Legal
Controlling
Custody
Steward



Legacy Policy

Phase I - Initial UID Capability (target completion September, 2004)

- Remaining Activity
 - Develop child data element
 - Develop access rules for registry, roles and responsibilities

Phase II – Enhanced Item Intelligence (Sept. 2004 – Sept. 2005)

- Item Description Aliasing (allow infinite aliases: catalog, NSN, description, etc.)
- Status, with Effective Date (Fall, 2004)
- Type of Mark (ability to add information into the database, even if 2D Data Matrix is not marked on the item)
- Current Part Number
- Child UID



Legacy Policy

Phase II (cont'd)

Reengineer:

- Receipt and Acceptance (internal and external)
- Next Level of Data (Organization, Program, Location, Status)
- Cataloging
- Government Furnished Property On-Line System
- Finalizing Real Property Definitions and CONOPS
- Consider Feasibility Demonstration for Maintenance Data Integration with Registry

Phase III (2005 – 2006)

- Operationalizing Organization, Program, Location, Status
- Reengineer Accountability and Value

Phase IV (2006 – 2007)

- Operationalize Accountability and Value



Legacy Policy

Ugly Data Elements – No Common Language

- Location
- Organization
- Program
- Status
- Accountability
- Item Description (first efforts)



Legacy Policy

Definition of “Completeness”

A complete legacy program would have marking instructions (process, location, method), orders or business process mod for organic operations and contractual language to support every (attrition-based) opportunity to mark sub-assemblies, components and parts not yet marked. Where applicable, utilize existing (legacy) serial number tracking programs to provide virtual UID within parent assembly. AIS would have UID capability, and rudimentary sorts/relational linkage.

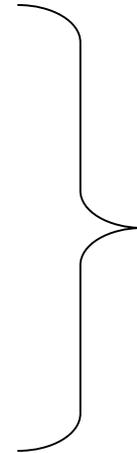
- Program plans need to be complete by 2005
 - Must identify scope of embedded assets
 - Must address the trigger events
 - Must forecast target level of completion by year
 - Must identify expected technology for marking and reading
- All sub-assemblies and end items with existing data plates updated - interim target date
- Update plan to address business processes and data integration – interim target date
- Services and components must develop plans (by _____) to implement strategy to address data capture and use (by _____)
- Programs will have different levels of completion by 2010
- Identify mission-essential items first.



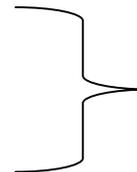
Roadmaps

DoD

- Distribution Centers & Depots
- Inventory Control Points
- DCMA
 - GFP
 - QA
 - Receipt & Acceptance
 - Address mid-909
- Program Managers
- Item Managers



Organizations



Roles and Resp.

Industry

- Small/Medium/Large Companies

AIS Roadmaps



SPI Breakout

- Investigate opportunities associated with defining a SPI for UID
 - To fill gaps of specificity not provided in MIL STD 130 and DFARS
 - To achieve consistency of marking across suppliers of common items
 - Minimize cost to implement/comply
 - Create a commercial practice/harmonize approach across commercial and defense; compatible with international partners
 - Eliminate confusion of interpretation
 - Apply a defined approach for SPI definition with support from the JACG



SPI Actions

- Define scope of SPI
- Define stakeholders
 - Can JACG be approving authority?
- Apply framework of requirements to pilot organization through a phased implementation
- Define approach to defining SPI
 - Non-standard: what to mark and how to mark, disassociated from who pays
- Would JACG be receptive to receiving proposals from companies across industry sectors for review and approval
- Demonstrate the process and requirements



SPI Outcomes

- Template matrix of items and criteria for marking
 - Validated minimum requirements
- Model for deriving matrix
 - Parts
 - Each criteria
 - Comments
- Demonstrated progress throughout implementation
 - What works, why
 - What doesn't work, why
- Roadmap for other companies/sectors, concurrent with implementation activities of framework



SPI Timeline

- Define approach, stakeholders, scope, etc.
 - Draft to review at JACG meeting July 27 (Mike/LeAntha/Matt)
 - Finalize by Oct 31
- JACG meeting – July 27
- Complete list of items in matrix – mid-August
- Vet matrix with government (logistics, engineering) – begin Sept 1 – Oct 31
- Capture feedback and lessons learned throughout implementation



Engineering Impacts of UID

- Discussion: Industry and government best practices to minimize non-recurring engineering changes with respect to UID
 - Drawings
 - Procedures
 - Specs/standards
 - Pubs
 - Education & training
 - Materials assessment
 - Approvals
 - ECPs/TDs
 - DCMA
 - FAA



Drawings

Problems

- Change every drawing (quantity -> costs up)
- Limited resources to change drawings (effort to review and determine extent of change)
- Drawing change does not always instruct immediate change (compliance period)
- Drawing instructs the method (the “Bible”)
- Data plate changes require cosmetic change (e.g., change to the photograph)
- Impact on/affect to other customers (e.g., subs, other users)

Solution set and problem is dependent on where the item is in the life cycle: in design, in production, out of production



Drawings

Opportunities

- Evaluate and determine what drawings really do need to be changed (timing of compliance, resources, etc.)
- Contract requirements to drive compliance
- Change company quality standards
- Standardization to changes (w/in companies, systems) – text changes versus physical drawing indication
- Provide authorization by “fly sheet” – authorization sheet that supercedes existing instructions (1)
- Communicate UID as enabler for process improvement (institutionalize) (6)

Solution set and problem is dependent on where the item is in the life cycle: in design, in production, out of production



Quality

Problems

- Potential impact on component performance
- Cannot be read
- Can read, but low quality (ISO16022, AS9132)
- Equipment not capable of marking at required quality level
- Reading equipment not capable
- Rubbish in/rubbish out
- Verification equipment calibration and repeatability (not reliable)
- Technology consistency issues across supply chain (e.g., I can read it, you cannot – one size does not fit all)

Applicable standards:

- ISO15423 – Barcode scanner & decoder performance testing
- ISO15426 – Barcode verifier conformance
- ISO15415 – Barcode print quality test spec – 2D



Quality

Opportunities

- International standards for marking and reading (2,3,8)
- No new marking processes invented (1)
- Develop guidelines and communication for “how to...” (2,3,5,6,7)
 - Targeted at compliance
 - Lessons learned
 - Community of practice
 - Education
- Defined acceptance criteria, processes (e.g., testing)
- Quality plan, sample plan, first article inspection report (FAIR), continuous improvement (3,4,6)
- Clear definition of terms, unambiguous (6)

Audiences for communication & education

- Quality managers
- Operators
- Inspectors
- Standards people
- Technology vendors



Engineering Assessment & Approvals

Problems

- Flight safety issues related to marking items not intended to be marked or have marks
- Test process, procedures and authority (who is going to do it?)
- Government bandwidth/resources to provide approvals (high volume)
- Quantity point approvals
- FAA requirements and potentially conflicting compliance



Engineering Assessment & Approvals

Opportunities

- Education and communication
- No new marking process development required (technologies exist)
- Process equivalence is demonstrated
- Review blanket approvals
 - Joint/cross-service
 - International
 - FAA
- FAA, NASA, Coast Guard, DoE history (source of data)
- Common guidelines, processes, procedures between FAA, NASA, Coast Guard, DoE and DoD



Action Items (June 9-10)

OPEN ACTION ITEMS

1. Link to existing websites (associations), vendor guides, standards (UID team) – Ongoing
2. Provide guidance on quality of the marking process (Lynn B., Nat R., Andy J.) – 9132 draft is key document; 130 references 9132 in section 4.4 NEW ACTION: short info paper on standards available & what is covered in each
3. Develop strawman plan for corporate strategy to communicate with ACOs (Debra H.)
4. Distribute Production Readiness Survey to DLA, GSA, DCMA (Pam M.) – Unable to proceed based on #3. Conflicts with Gov't Paperwork Reduction Act; working on plan to distribute through industry mtgs
5. Present concept of vendor guide at AIT meeting for ICPs (LeAntha S., Mike B.)
6. Provide comment on Vendor Guide from Maintenance perspective (Linny C.)



Action Items (June 9-10)

OPEN ACTION ITEMS

7. Distribute white paper on legacy data elements in support of legacy policy and distribute (Bruce P., LeAntha S.) *new legacy data elements in new legacy policy forecast.*
8. Develop draft guidance for reading/verifying standard (Eddie C., Mark R.) *in progress, ~one week*
9. Develop white paper on use of Data Matrix - patent issue (Nat B.) *distribute related AIA letter on patent issues, original documentation from AIM*
10. Develop set of recommendations for signature authority for SPIs (Debra H.) *in progress; document discussion*
11. Identify what engine manufacturers would address in an SPI (Nat R., Andy J.) *in progress, template created*
12. Coordinate development of engineering guidance – establish conf. Call (Merrill Y., Rob L.) *Rob to talk with Merrill to develop list*
13. Reach out to WRA (Lakehurst) for serialization method (Dana P.)
14. Coordinate meeting of avionics folks at next GEIA meeting (Rob L.) *mtg week of 25 October*



New Action Items (7/13-14)

OPEN ACTION ITEMS

1. Develop strawman/template/boilerplate for legacy item plans. (Max)
2. Review draft MIL-STD-130M and provide feedback to Rob L. (Rob L. to distribute).
3. Determine status of 129, and review 129 and 130 for consistency. (Lynn)
4. Identify applicable quality standards and marking verification – update first article inspection plan to include UID marking validation. (Debra)
5. Review decision flow developed by engine manufacturer group and provide comment to James. (Group)
6. Update UID Guide with the decision flow. (Max)
7. Develop list of UID actions for depot operations. (Tom M. and Eddie C., Navy POC).
8. Review Max's list of UID roadmaps and provide comments to Max. (Group)
9. Develop list of status code categories that are used for things throughout DoD (not the codes themselves). Ex. Demil status codes, GFP status codes, etc. Send to James. (Group)
10. Revise Industry roadmap (Chris Iaquinto)
11. Develop DCMA roadmaps
 1. R&A – Bruce & Dave
 2. GFP – James w/ GFP team
 3. QA – Debra



New Action Items (7/13-14)

OPEN ACTION ITEMS

12. Review/revise Program Manager roadmap – Dean N.
13. Develop AIS roadmap – LeAntha, Maggie
14. Develop Item Manager roadmap – James/Item Management Working Group
15. Update UID CONOPS – UID Program Office
16. PBL roadmap – Mike
17. SPI Strategic Approach – Mike
18. Engineering Drawing Changes Best Practice Guidance Draft – Max
19. Research service-level engineering guidance for consistency – services & components