



Presented by

Klaus Malone

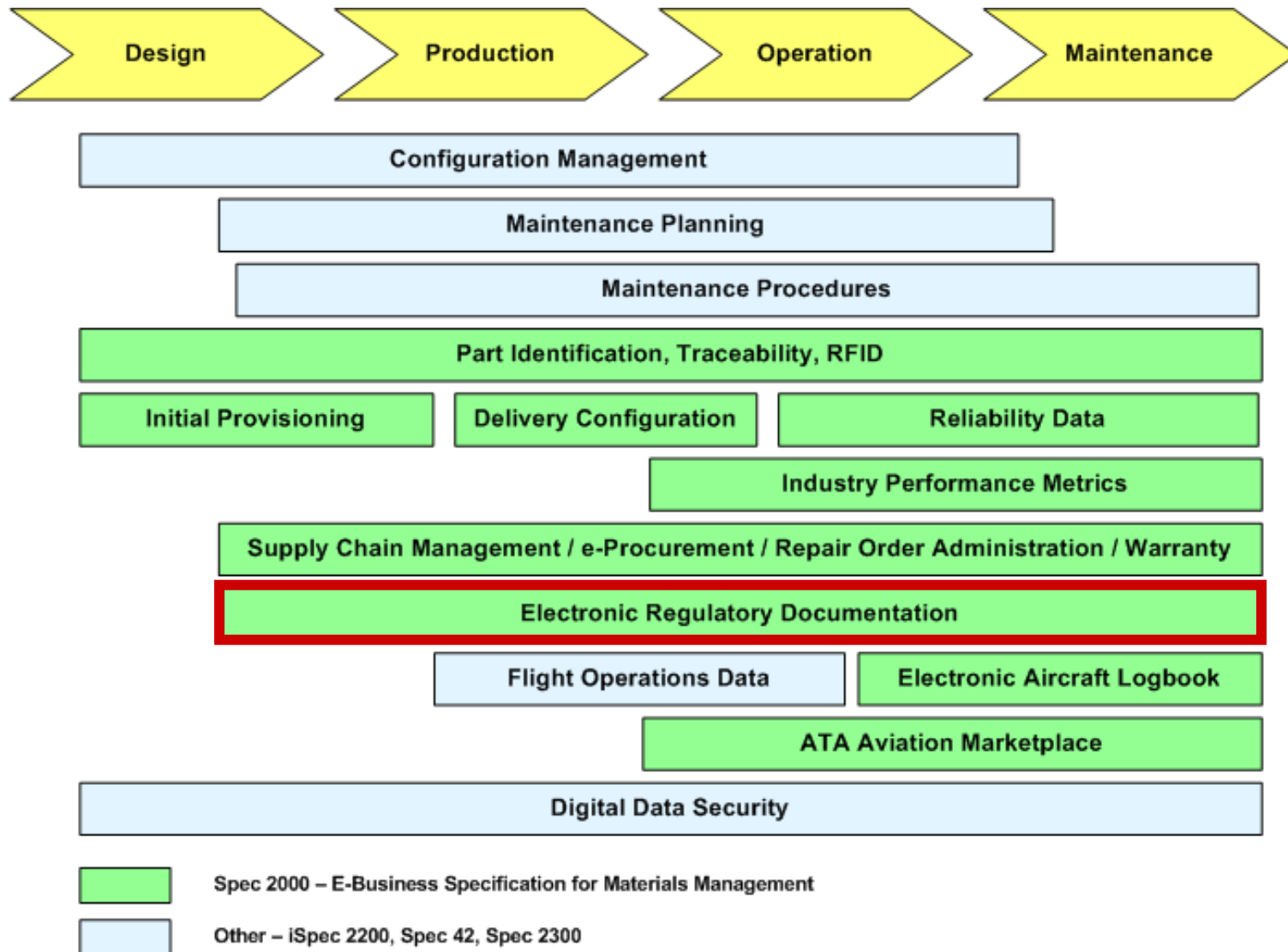
Head of e-Business Development
Business Development and Projects



Regulatory documentation



Functional Scope



Today's Reality

1. Approving National Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number 075631258	
4. Organization Name and Address: PRATT & WHITNEY 415 WASHINGTON AVENUE NORTH HAVEN, CT 06473, USA				TURBINE AIRFOILS PRODUCT CENTER FAA APPROVAL HOLDER PRODUCTION CERTIFICATE NUMBER 2		5. Work Order/Contract/ Invoice Number 90984346
6. Item	7. Description	8. Part Number	9. Eligibility	10. Quantity	11. Serial/Batch Number	12. Status/Work
1	BLADE	54L732	PW4000	140	N/A	NEW
13. Remarks: Page 1 of 1 ORIGINAL AIRWORTHINESS APPROVAL						
14. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation <input checked="" type="checkbox"/> Nonapproved design data specified in Block 13			19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other requisition specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
15. Authorized Signature: <i>Lorrey K Hatch</i>		16. Approval/Authorization No.: NEB00004AC		20. Authorized Signature:		21. Approval/Certificate No.:
17. Name (Typed or Printed): LORREY HATCH		18. Date (m/d/y): 1/24/2004		22. Name (Typed or Printed):		23. Date (m/d/y):
User/Installer Responsibilities						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft is flown.						

FAA Form 8130-3 (8-01)

*Installer must cross-check eligibility with applicable technical data.

NSN: 0092-00-012-6008



Regulatory documentation

An ATA industry project

- Launched July 2003
- Mission
To develop an industry specification to enable the electronic exchange of regulatory documentation for aircraft products and parts.

The project team

Airlines	Authorities	Industry Groups
ABX Air Air Canada Alitalia Airlines American Airlines ATA Airlines Atlas Air Continental Airlines Delta Air Lines FedEx Japan Airlines JetBlue Airways Lufthansa Technik Midwest Airlines Northwest Airlines Qantas Airways Southwest Airlines United Airlines UPS US Airways	FAA	ATA AIA ARSA ASA
	Manufacturers	Suppliers/Distributors
	Airbus Boeing Dassault Falconjet GE Aircraft Engines Goodrich Honeywell International Aero Engines Korry Electronics Co Parker Hannifin Pratt & Whitney Rolls-Royce	AirLiance Materials A.J. Levin M & M Aerospace Hardware Tracer Corp Valtec Aircraft Supply
		Solution Providers
		Avexus IBM ILS SITA Technology Solutions

Regulatory documentation

What is it?

- ▶ A new way to meet existing regulatory requirements
- ▶ A replacement of paper forms with computer files
- ▶ A common electronic data format
 - Content, structure and syntax
 - Parsable
- ▶ A “data-centric” approach
- ▶ A comprehensive baseline of data security capabilities
- ▶ A shared process for exchanging data
- ▶ A set of agreed implementation rules
- ▶ An international, open, broad-based industry standard
ATA Spec 2000 Chapter 16

Regulatory documentation

- What is it NOT
 - ▶ A software application
 - ▶ Electronic paper
 - ▶ Dependent on proprietary software/hardware/services
 - ▶ Mandatory

Regulatory documentation

- A common electronic data format for:
 - ▶ CASA Form 917
 - ▶ EASA Form 1
 - ▶ FAA Form 8130-3
 - ▶ TCCA Form 24-0078

 - ▶ Certificate of Conformance
 - ▶ Transfer Documents

Regulatory documentation

- A common electronic data format for:
 - ▶ **CASA Form 917 (future CASA Form One)**
 - ▶ EASA Form 1
 - ▶ FAA Form 8130-3
 - ▶ **TCCA Form 24-0078 (now TCCA Form One)**

 - ▶ Certificate of Conformance
 - ▶ Transfer Documents

Regulatory documentation

- Guiding Principles

- ▶ Standard pertains to exchange of data, not internal company processes
- ▶ Meet intent and objectives of governing regulations
- ▶ Data-centric approach
- ▶ Leverage regulatory guidance regarding electronic signature
- ▶ Meet legal and liability requirements
- ▶ Leverage existing technologies, standards, and best practices where applicable

Regulatory documentation

- What are the Benefits?
 - ▶ Facilitates improved reliability, consistency and timeliness of the data
 - ▶ Difficult to forge undetected; originals verifiable directly to source
 - ▶ Reduced lost, or misdirected originals
 - ▶ No more damaged/mutilated originals
 - ▶ Reduced errors
 - ▶ Reduced costs for record retention
 - ▶ Easier access to historical data
 - ▶ Easier to integrate with other systems and data

ATA Specification

- **Business Guidelines**

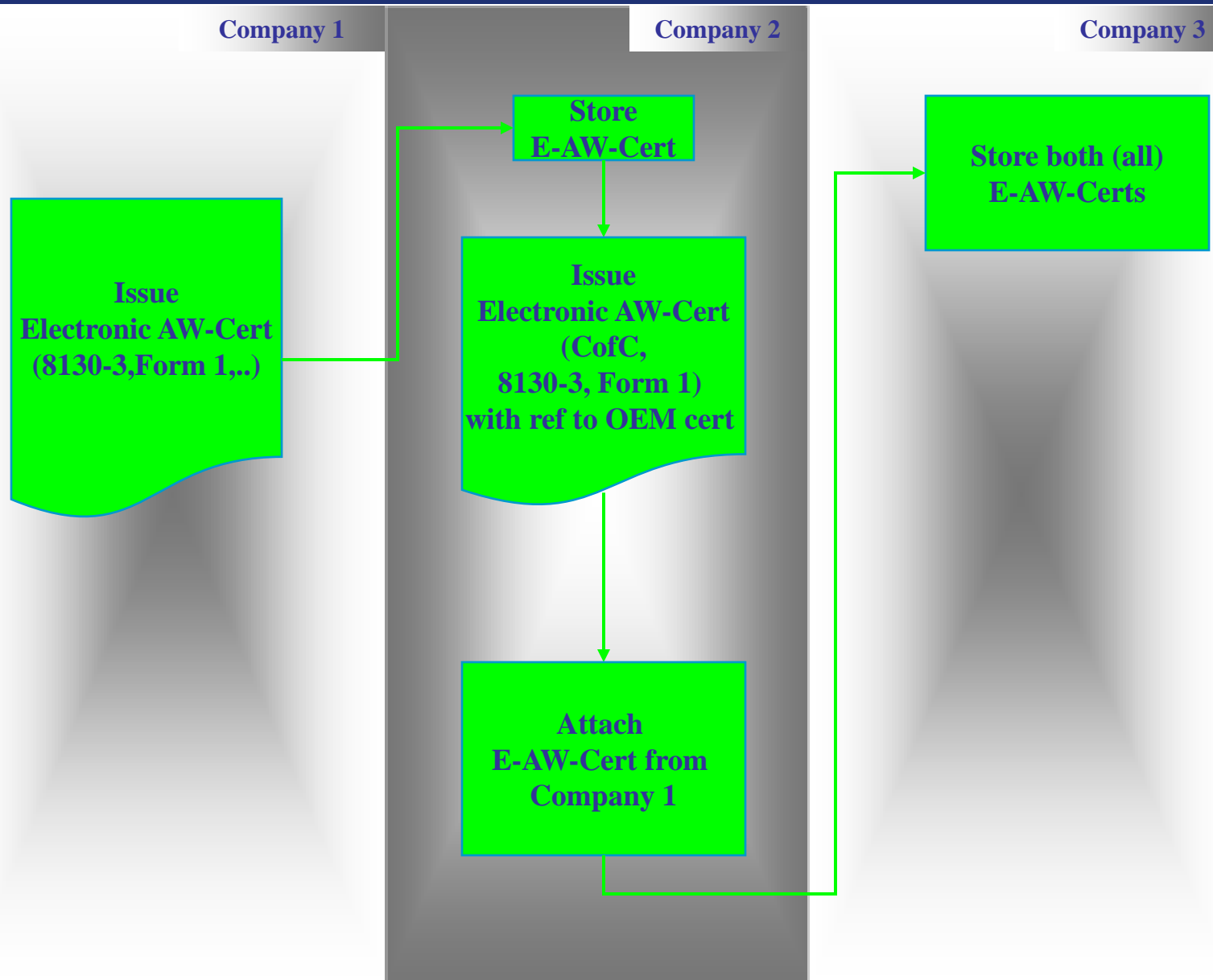
- ▶ A new e-Form will be issued for each transfer/RTS
- ▶ A separate e-Form will be issued for each part number for non-serialized parts
- ▶ A separate e-Form will be issued for each serial number for serialized parts
- ▶ Each e-Form should reference and attach any applicable, immediately prior e-Form
- ▶ All transmissions of an unaltered, digitally signed e-Form are considered originals
- ▶ Any paper forms printed from the e-Form are considered copies.

- e-Form Schema
 - ▶ The data elements that are provided
 - ▶ Which are mandatory/optional, repeatable
 - ▶ The sequence in which they're provided
 - ▶ The application of digital signatures to the data
 - ▶ References to previous e-Forms

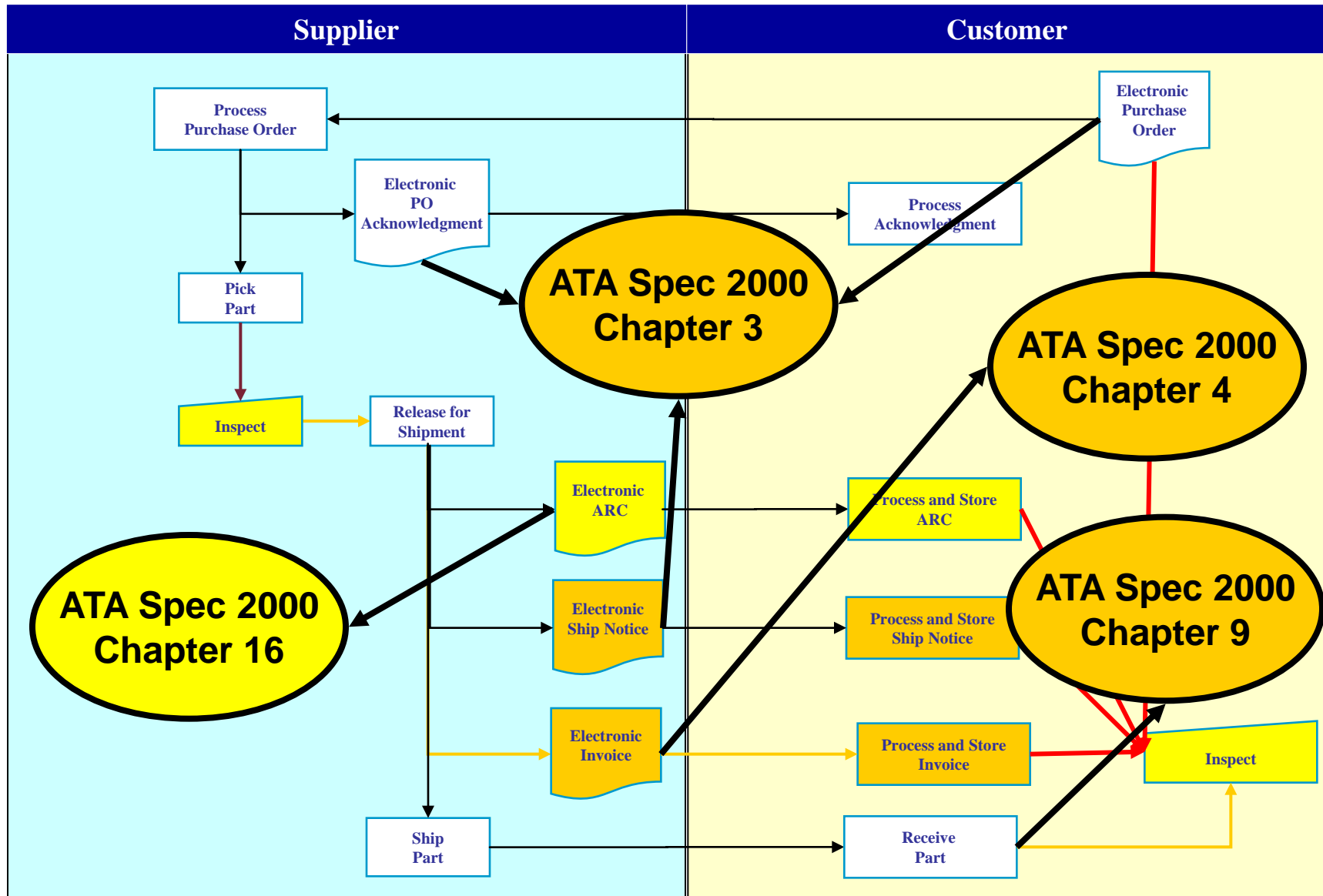
Digital Security

- Objectives
 - ▶ Signer authentication
 - ▶ Data integrity
 - ▶ Non-repudiation
- Solution
 - ▶ W3C XML Signature
 - X.509 Digital Certificates
 - Digital Signatures
 - Public Key Infrastructure (PKI)

Regulatory documentation



Regulatory documentation – New parts



1. Approving Competent Authority/Country	AUTHORISED RELEASE CERTIFICATE EASA FORM 1	3. Form Tracking Number
--	--	-------------------------

4. Approved Organisation Name and Address:	5. Work Order/Contract/Invoice
--	--------------------------------

6. Item	7. Description	8. Part No	9. Eligibility (*)	10. Quantity	11. Serial/Batch No	12. Status/Work

13. Remarks

Part M Section A Subpart F organisation approval number: AAA RRR XXXX

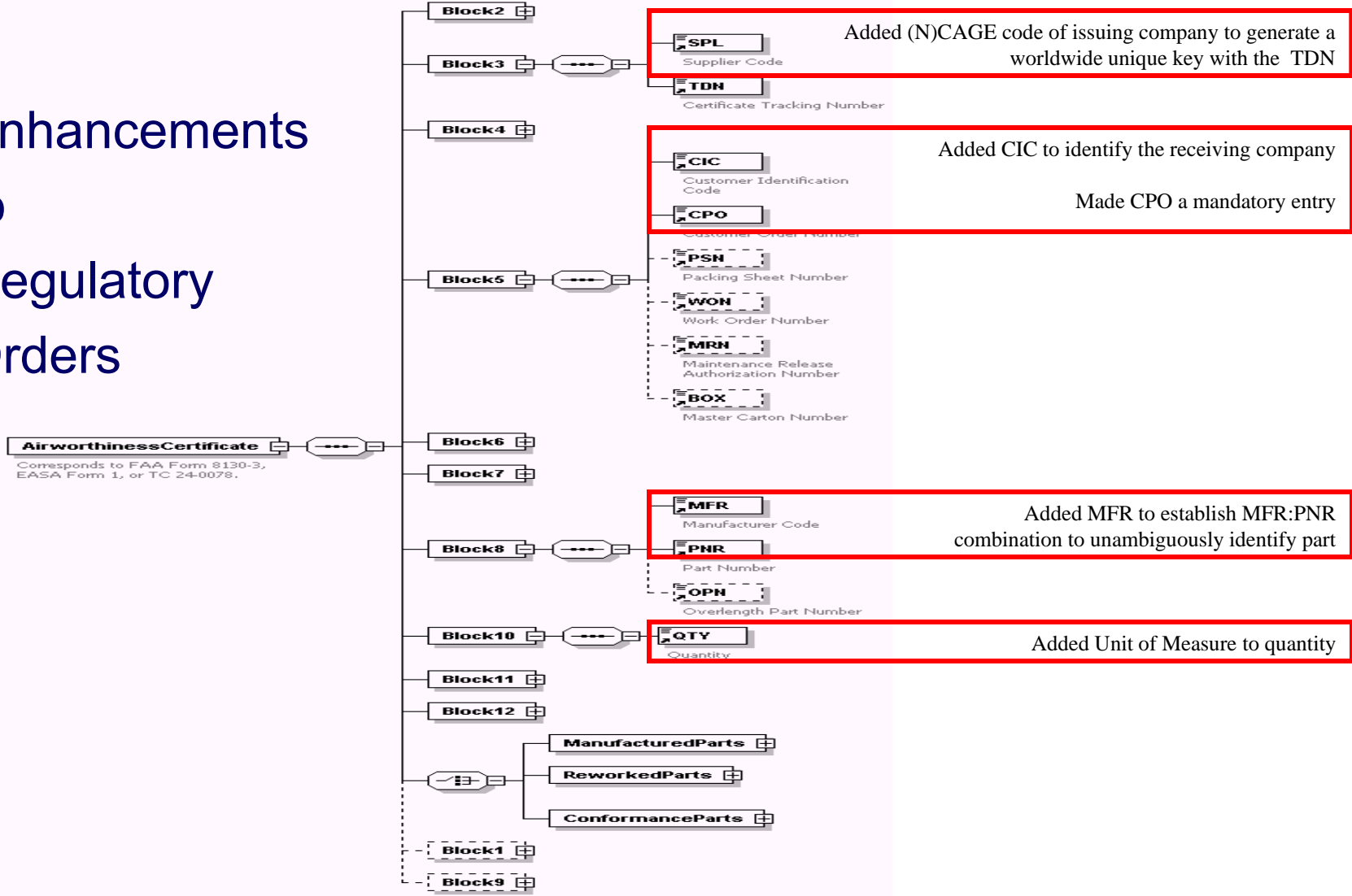
14. Certifies that the items identified above were manufactured in conformity to: <input type="checkbox"/> approved design data and are in condition for safe operation <input type="checkbox"/> non-approved design data specified in block 13	19. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 13 Certifies that unless otherwise specified in block 13, the work identified in block 12 and described in block 13, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.
---	--

15. Authorised Signature	16. Approval/ Authorisation Number	20. Authorised Signature	21. Certificate/Approval Ref. No
--------------------------	------------------------------------	--------------------------	----------------------------------

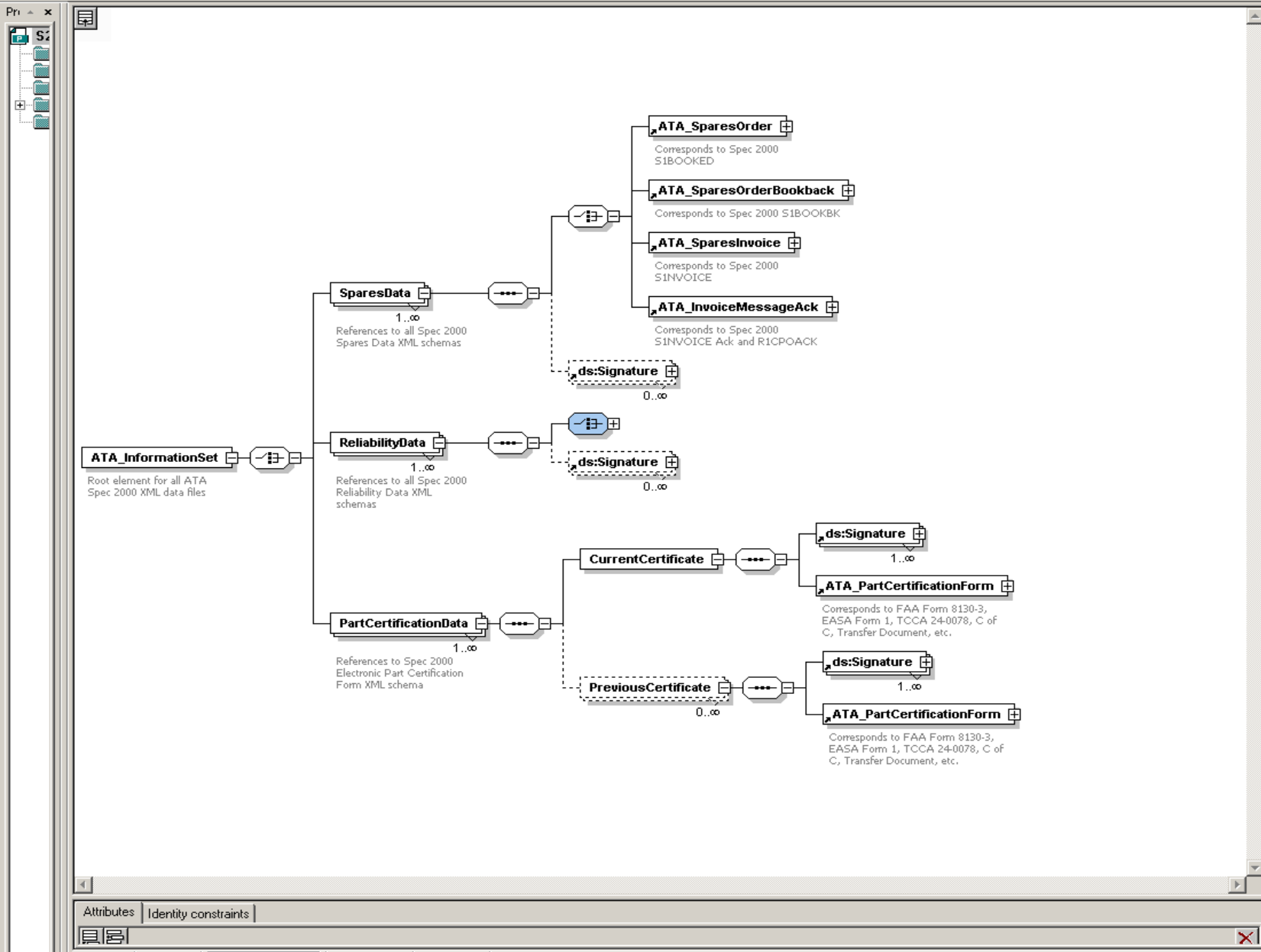
17. Name	18. Date (d/m/y)	22. Name	23. Date (d/m/y)
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Regulatory documentation

Enhancements to Regulatory Orders



Generated with XMLSpy Schema Editor www.xmlspy.com



Components

- ABT
- ACC
- ACK
- ACH
- ACS
- ACT
- ADC
- ADD
- ADE
- ADL
- ADQ
- ADS
- ADT
- ADV
- AEC
- AFM

Elm Grp Com Sim

Details

model	choice
minOcc	1
maxOcc	1
id	

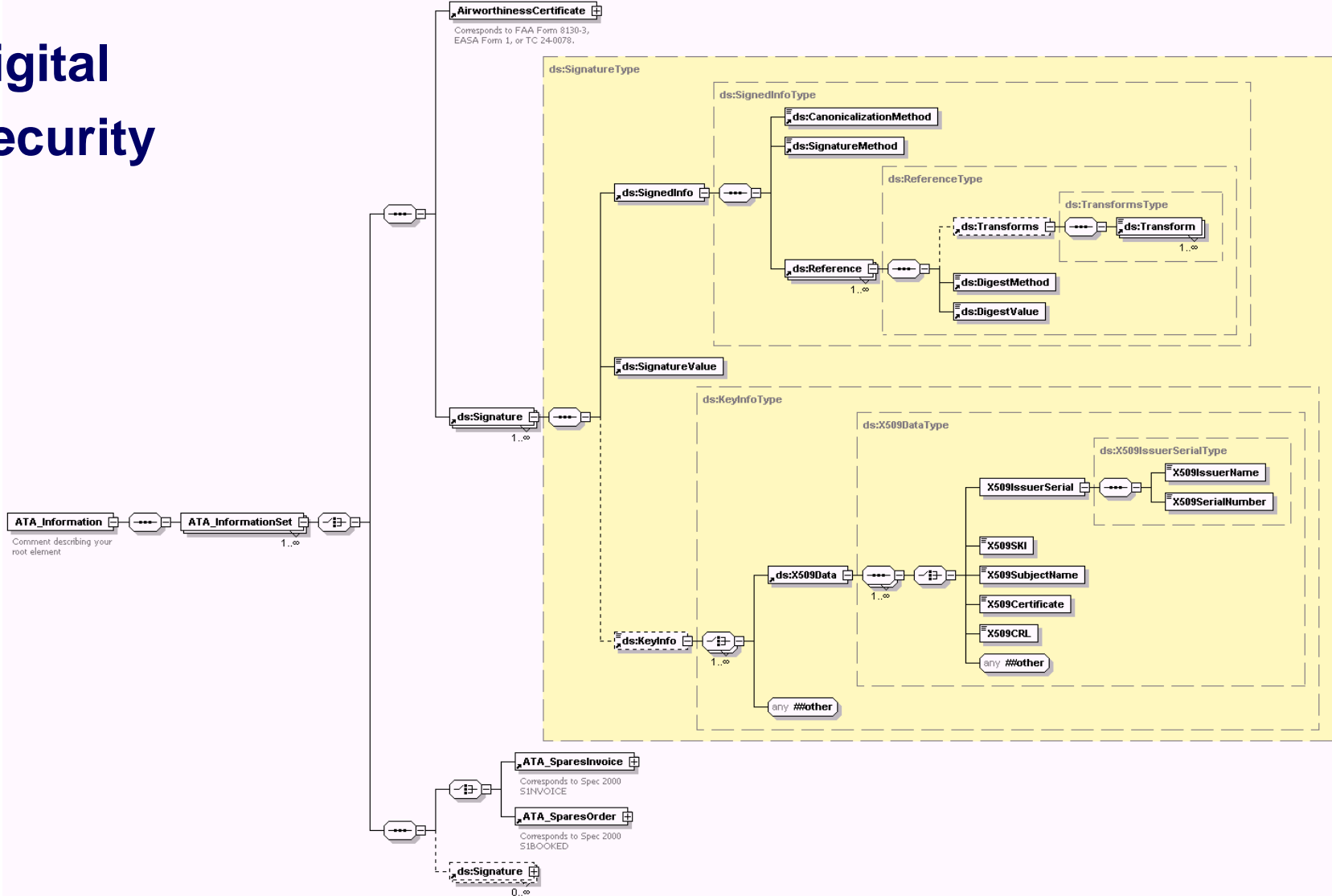
Details

Facets

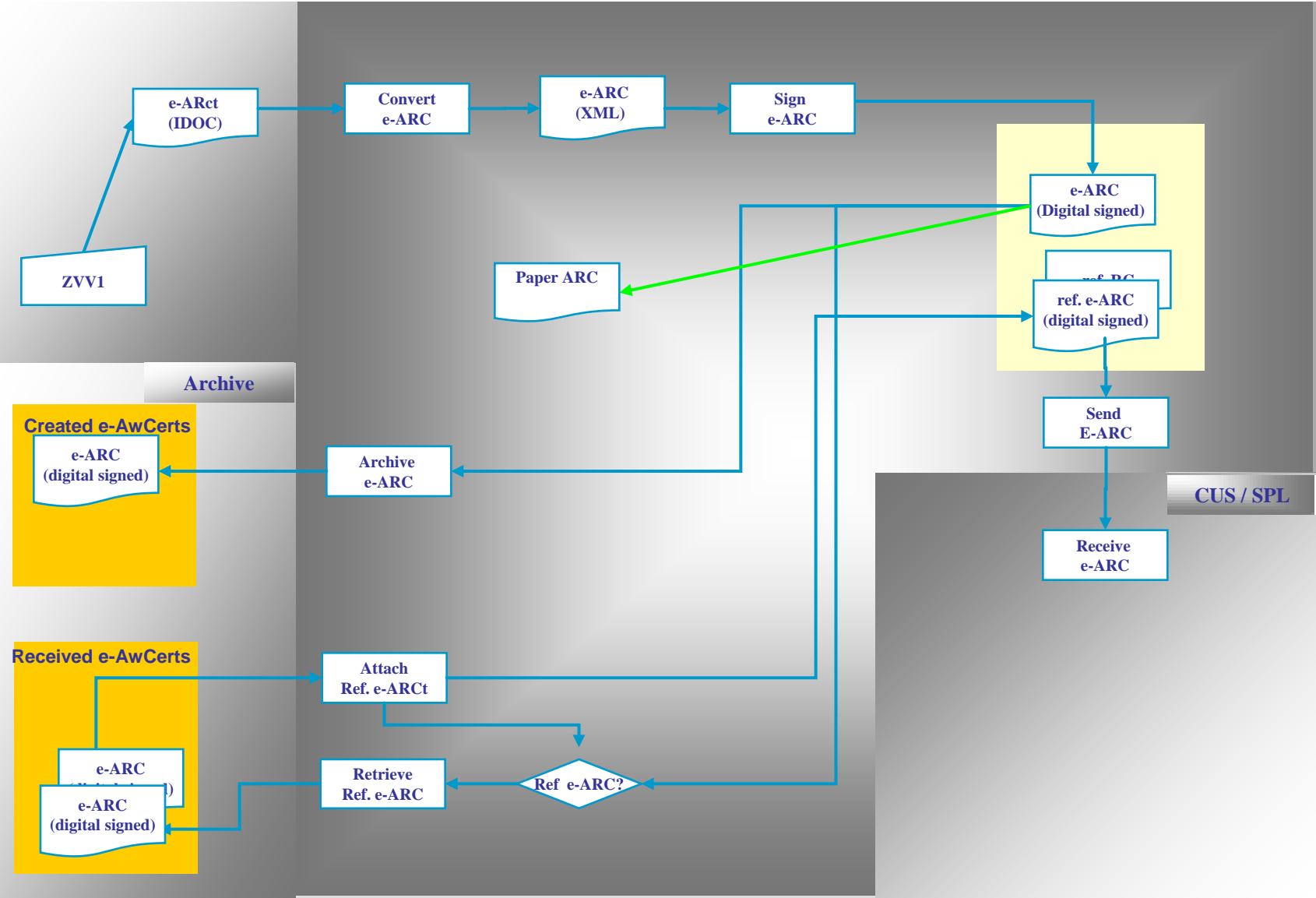
Facets

Regulatory documentation

Digital Security



Future process flow



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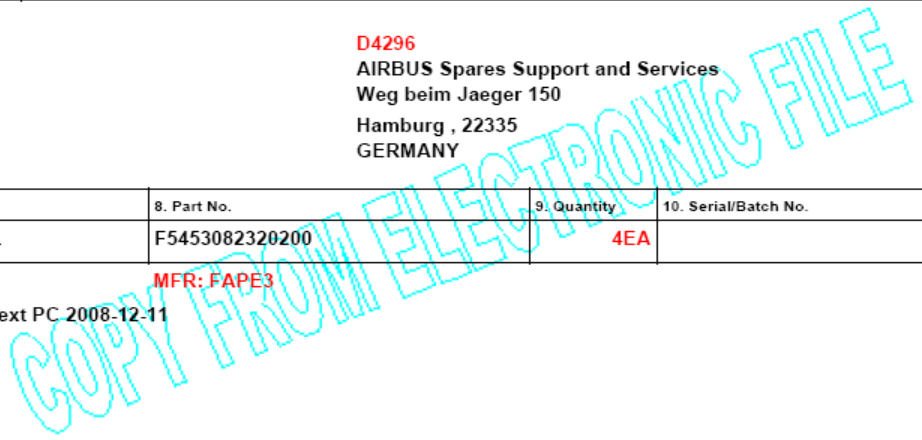
XML document

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- <Block4> <IssuerDetail> <SPL>FAPE3</SPL> <WHO>Airbus Head Quater</WHO> <ADL>1 Rond Point</ADL> <ADL>Maurice Bellonte</ADL>
- <CIY>Blagnac Cedex</CIY> <ZIP>31707</ZIP> <CNT>FR</CNT> </IssuerDetail> <RemotelssuerDetail> <SPL>D4296</SPL>
- <WHO>Airbus Spares Support and Services</WHO> <ADL>Weg beim Jaeger 150</ADL> <CIY>Hamburg </CIY> <ZIP>22335</ZIP>
- <CNT>DE</CNT> </RemotelssuerDetail> </Block4>
- <Block5> <CIC>SIA</CIC> <CPO>QQQQQ12345</CPO> <BOX>8098288700</BOX> </Block5>
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- </Block8> <Block10> <QTY UNT="EA">4</QTY> </Block10> <Block11> <LOT>L056060300</LOT> </Block11> <Block12> <PSC>Inspected</PSC>
- <ManufacturedParts> <Block14M> <DDA>A</DDA> </Block14M> <Block15M> <SOF>>true</SOF> </Block15M> <Block16M>
- <ARN>DE.21G.0009</ARN> </Block16M> <Block17M> <NME>GHODSS-A.</NME> </Block17M> <Block18M> <DAT>2005-03-13</DAT>
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- </PreviousCertificate> <REM>Inspected as per P 10-01-00 Next PC 2008-12-11</REM> </Block13M> </ManufacturedParts> <Block1>
- <NAA>Luffahrt-Bundesamt</NAA> <CNT>DE</CNT> </Block1> <Block9> <MOL>A330</MOL> </Block9> </ATA_PartCertificationForm>

XML document

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•                       <ADL>1 Rond Point</ADL> <ADL>Maurice Bellonte</ADL>
•                       <CIY>Blagnac Cedex</CIY> <ZIP>31707</ZIP> <CNT>FR</CNT>           </IssuerDetail>
•                       <RemotelIssuerDetail> <SPL>D4296</SPL>
•                       <WHO>Airbus Spares Support and Services</WHO>
•                       <ADL>Weg beim Jaeger 150</ADL> <CIY>Hamburg </CIY>
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•       <Block16M>     <ARN>DE.21G.0009</ARN>           </Block16M>
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•       <Block18M>     <DAT>2005-03-13</DAT>           </Block18M>
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•                       <TDN>AS80335364/01001</TDN><CET>EASA Form 1</CET>           </PreviousCertificate>
•                       <REM>Inspected as per P 10-01-00 Next PC 2008-12-11</REM>           </Block13M>
•   </ManufacturedParts>
•   <Block1>          <NAA>Luftfahrt-Bundesamt</NAA>           <CNT>DE</CNT>           </Block1>
•   <Block9>          <MOL>A330</MOL>           </Block9>
• </ATA_PartCertificationForm>
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1. Approving Competent Authority/Country Luftfahrt-Bundesamt/GERMANY		AUTHORISED RELEASE CERTIFICATE EASA FORM 1			3. Form Tracking Number D4296 - AS80349934-01001	
4. Organisation Name and Address FAPE3 Malone head qqrter 1 Rond Point Maurice Bellonte Blagnac Cedex, 31707 FRANCE				5. Work Order / Contract / Invoice D4296 AIRBUS Spares Support and Services Weg beim Jaeger 150 Hamburg , 22335 GERMANY		7. Remarks DMF: 2005-01-01 EXP: 2013-01-01
8. Part No. F5453082320200		9. Quantity 4EA		10. Serial/Batch No.		11. Status/Work Inspected
12. Remarks MFR: FAPE3 Inspected as per P 10-01-00 Next PC 2008-12-11						
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> approved design data and are in a condition for safe operation. <input type="checkbox"/> non-approved design data specified in block 12.				14a. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 12. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.		
13b. Authorised Signature Digital Signature on File		13c. Approval /Authorisation Number DE.21G.0009		14b. Authorised Signature		14c. Certificate/Approval Ref. No.
13d. Name Klaus Malone		13e. Date (dd/mmm/yyyy) 11/OCT/2006		14d. Name		14e. Date (dd/mmm/yyyy)
User/Installer Responsibilities						
This certificate does not automatically constitute authority to install. Where working in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, the user/installer shall ensure that their Airworthiness Authority accepts items from the Airworthiness Authority of the country specified in block 1. Statements in block(s) 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						



Today and tomorrow

	EASA		FAA	TCCA	CASA
	FORM 1		Form 8130-3	FORM ONE	Form One
	New	Maintenance	New & Maintenance	New & Maintenance	New & Maintenance
Version	Issue 2	Issue 2	21G		Form 1 2/2010
Harmonized	Yes	Yes	No	Yes	No
Electronic	Yes	Yes	Yes	Yes	No
Issued	Nov 30, 2009	Feb 5, 2010	Oct 26, 2009	Dec 30, 2008	Mar 2010
Applicable	Yes	Yes	Yes	Yes	No
Effective	Sep 28, 2010	Sep 28, 2010	Apr 14, 2010	Dec 30, 2008	?
Remarks	AMC & GM published Mar 23, 2010				Draft

Today and tomorrow

- New version of SPEC 2000 Chapter 16 to be published after meeting end of Jun 2010
- New harmonized FAA Order ??? (8130.21H)

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How do you make a Receiving Inspector smile?

Electronic 8130 Initiative at Continental Airlines

Adam Martin, Manager – Technical Information Systems

Caveats

- This process was designed for integration into CO's process/system flow and is only intended as a demonstration of how CO intends to use the Chapter 16 XML schemas.
- The involved third parties are at CO's behest and will be demonstrating/discussing a CO specific solution. Where appropriate, industry standards and solutions will be utilized.

Part's journey from dock to bin in numbers

4
days

... from dock door to bin depending on type of material

10
docs

or more involved in the journey from dock to bin

8130, Certificate of Conformance, Teardown report, Shipping advice, Invoice, Asset tracking tag, Box tag, Routing document,

27
minutes

... are required to inspect a rotatable part. Of these 27 minutes, 20 minutes are dedicated to data entry and retrieval.

Estimates based on process analysis conducted by SITA and Continental Airlines, results are smoothed to represent a airline situation.



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Show me the paper!



11584292

Continental Airlines

FORM 43 3007
DATE 5/05
M&E P. 00-0712-3-0054

SEQUENCE # 1399748

PARTS RECORD & CONTROL TAG

**ATTACH THIS COPY TO THE VENDOR PAPERWORK
(WHEN APPLICABLE) AND ROUTE TO:
CONTINENTAL AIRCRAFT RECORDS DEPT.
HQJAR 12TH FLOOR
600 JEFFERSON, HOUSTON, TX 77002**

Mfg. P/N: 2118866-4	Mark All Boxes Y/N
Mfg. S/N: 58-A8385	Cure: <input type="checkbox"/> N S/W: <input type="checkbox"/> N
M&E P/N: 25-2614-9-0001 M&E S/N: 0305	ESD: <input type="checkbox"/> N S/L: <input type="checkbox"/> N
Part Name: DETECTOR, SMOKE, REMOTE (HAZ: <input type="checkbox"/> N SWARE: <input checked="" type="checkbox"/> N

1. Approving National Aviation Authority/Country: FAA/United States	2. Authorized Release Certificate: FAA Form 8130-3 Airworthiness Approval Tag	3. Form Tracking Number: 11584292	4. Organization Name and Address: Continental Airlines Inc. 121 Status Operator 1600 Smith Houston, TX 77002
---	---	--	--

5. Work Order/Contract/Invoice Number: 3889887	P.O. <input type="checkbox"/> R.O. <input checked="" type="checkbox"/>	6. Item: 1	7. Description: DETECTOR, SMOKE, REM
---	---	-------------------	---

8. Part Number: 2118866-4	9. Eligibility: N/A	10. Quantity: 1	11. Serial/Batch Number: 58-A8385
----------------------------------	----------------------------	------------------------	--

12. Status/Work: New Repaired Inspected Overhauled

13. Remarks: **MFG DATE: 03FEB18 COMMENTS BY 07074 REPAIRED BY HONEYWELL INTERNATIONAL. I/A/N C/N 26-18-02 REV 5 AND ECRA 2618-01279 AND A.T.2118866-2 REV E PER R.O. 3889887 IAH 06085**

	13A. Hours	13B. Cycles	13C. Calendar
TSO (Time Since OH)	052208.44	005596.00	000000.00
TSN (Time Since New)	052208.44	005596.00	000000.00

United life parts must be accompanied by maintenance history including total time, total cycles, time since new.

14. Certifies the items identified above were manufactured in:

Approved design data, are in a condition for safe operation.
 Non-approved design data specified in Block 13.

15. Authorized Signature: N/A	16. Approval/Authorization No.: N/A	17. Name (Typed or Printed): N/A	18. Date (m/d/yy): N/A
--------------------------------------	--	---	-------------------------------

19. 14 CFR Return to Service Other regulation specified in Block 13
 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

20. Authorized Signature: <i>E. Howard</i>	21. Approval/Certificate No.: CALA014A	22. Name (Typed or Printed): HOWARD, EUGENE	23. Date: 03FEB18
--	---	--	--------------------------

FAA Form 8130-3 (8-01)

COPY

1. Approving National Aviation
Authority/Country:

FAA/United States

2.

AUTHORIZED RELEASE CERTIFICATE

FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

3. Form Tracking Number:

305764725

4. Organization Name and Address:

Honeywell International Inc.
11100 North Oracle
Tucson, AZ 85737

HZ3R571L

5. Work Order/Contract/Invoice Number:

3809887-70

Page:

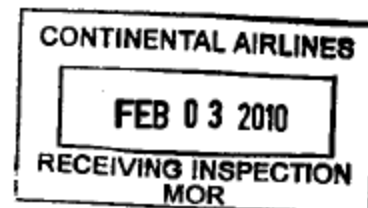
1 of 1

6. Item:	7. Description:	8. Part Number:	9. Eligibility*:	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
001	SMOKE DETECTOR	2118860-4	N/A	1	58-A0305	REPAIRED

13. Remarks: SEE ATTACHED RECORD OF WORK PERFORMED

Returned to service I.A.W., ECRA 2610-01279, rev orig 5/2/03; CMM 26-10-02, rev. 5, 2/13/06 and A.T.2118860-2, Rev. E, dated:30/MAR/2009.

QC885



Certifies that the work specified in Blocks 12/13 was carried out in accordance with EASA part 145, and with respect to that work, the aircraft component is considered ready for release to service under EASA Part 145 Approval Number EASA 145.4132

14. Certifies the items identified above were manufactured in conformity to:

- Approved design data and are in a condition for safe operation.
- Non-approved design data specified in Block 13.

19. 14 CFR 43.9 Return to Service Other regulation specified in Block 13

Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

15. Authorized Signature:

16. Approval/Authorization No.:

20. Authorized Signature:

21. Approval/Certificate No.:

HZ3R571L

17. Name (Typed or Printed):

18. Date (m d y):

22. Name (Typed or Printed):

23. Date (m d y):

John Wells

JAN 29 2010

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

Honeywell

Configuration and Findings Evaluation Report (CAFE)

Date: 01/29/2010

Repair Station: HZ3R571L

Notification: 000305764725

Sales Order: 0002422836

Service Order: 5003119058

Cust: CONTINENTAL AIRLINES INC
PO Box 4607
HOUSTON TX 77210-4607
USA

Cust Code: 304041

Com/Military: C
Rating:

Responsible C.A.: ROBERT CUNNINGHAM

Item Receipt Date: 11-JAN-2010

Ship Date: --

Cust PO / Clin: 3809887-70 /

Honeywell Contract / Line: 0440018918 / 000060

Customer Reject Number:

Warranty Requested(Y/N): N

Warranty Approved (Y, N, Pending): D

-----AS-RECEIVED CONFIGURATION AND HISTORY-----

Material Number: 2118860-4

Serial Number: 58-A0305

Series: 2

Change:

NSN :

Model#:

Material Description: SMOKE DETECTOR

Quantity: 1.000 Reusable Container: No

Installed Date:

Removed Date:

TSN: 52208.

TSO:

TSR:

CSN: 5596

CSO:

CSR:

Last F.T.:

-----AS-SHIPPED CONFIGURATION-----

Material Number: 2118860-4

Serial Number: 58-A0305

Series: 2

Change:

NSN:

Model#:

Material Description: SMOKE DETECTOR

Cust Matl:

Authorizing Documents:

CMM 26-10-02 rev 5 2/13/06, ECRA 2610-01279 rev orig 5/2/03

-----CUSTOMER REASON FOR REMOVAL-----

Det chan e/e smoke status message. C/W ECRA 2610-01279orig.

-----GENERAL CONDITION AS RECEIVED-----

Last FT 11/11/09. Dirty, scratched, chipped paint.

-----WORK ACCOMPLISHED-----

Findings: Unit passes findings per A.T.211860-2 Rev.E dated:30/MAR/2009. Tested on PCN 539100153. Final: Cleaned tubes 1 and 2 on chassis. Unit passed final acceptance test per A.T.211860-2 Rev.E dated:30/MAR/2009. Tested on panel PCN 539100153 by John Burrell on 20/JAN/2010. Complied with CMM 26-10-02 rev 5 2/13/06, ECRA 2610-01279 rev orig 5/2/03.



Configuration and Findings Evaluation Report (CAFE)

Repair Station:HZ3R571L

Notification:000305764725

Sales Order: 0002422836 Service Order: 5003119058

Receipt Date:11-JAN-2010 Ship Date:--

-----REPLACED/REWORKED DETAIL PARTS SECTION-----

MATERIAL NUMBER IN	DESCRIPTION	USAGE DEC	QTY	
MATERIAL NUMBER OUT	SERIAL NO OUT	SERIAL NO IN	PART VALUATION	ROUTING

Operator No. : 94549
Part No. : 2118860-4
Program Name : 777 RSD

Date : 01-20-2010
Time : 09:38:51
Page : 1

Serial No. : 58-A0305
VDD : SW4210833-0103 Rev. : -
ATP : AT2118860-2 Rev. : E



Paragraph	Minimum	Measured	Maximum	Units	Results
Group 1: 4.6.1 Power Consumption Test					
4.6.1.3 C	10.00	10.48	11.00	VOLTS	PASS
4.6.1.3 C	0.0000	0.01743	0.07000	AMPS	PASS
4.6.1.3 C	-11.00	-10.35	-10.00	VOLTS	PASS
4.6.1.3 C	0.0000	.1153	.3400	AMPS	PASS
4.6.1.3 G	10.00	10.48	11.00	VOLTS	PASS
4.6.1.3 G	0.0000	0.01698	0.07000	AMPS	PASS
4.6.1.3 G	-11.00	-10.35	-10.00	VOLTS	PASS
4.6.1.3 G	0.0000	.1159	.3400	AMPS	PASS
Group 2: 4.6.2 BITE Tests					
4.6.2.3 C	-2.200	-1.199	-2.000	VOLTS	PASS
4.6.2.3 C	-2.200	-1.483	-2.000	VOLTS	PASS
4.6.2.3 C	4.700	5.692	6.700	VOLTS	PASS
4.6.2.3 E	4.700	5.739	6.700	VOLTS	PASS
4.6.2.3 E	4.700	5.737	6.700	VOLTS	PASS
4.6.2.3 E	-1.000	0.08760	1.000	VOLTS	PASS
4.6.2.3 G	-2.200	-.9575	-2.000	VOLTS	PASS
4.6.2.3 G	-2.200	-1.046	-2.000	VOLTS	PASS
4.6.2.3 G	4.700	5.687	6.700	VOLTS	PASS
4.6.2.3 I	4.700	5.744	6.700	VOLTS	PASS
4.6.2.3 I	4.700	5.742	6.700	VOLTS	PASS
4.6.2.3 I	-1.000	0.08720	1.000	VOLTS	PASS

Group 3: 4.6.3 Smoke Detection

RSD Channel 1 outputs @ 1.5% Obscuration - Inlet Port 1

4.6.3.3 b	-2.200	-1.219	-2.000	VOLTS	PASS
4.6.3.3 b	-2.200	-1.504	-2.000	VOLTS	PASS
4.6.3.3 b	4.700	5.692	6.700	VOLTS	PASS

RSD Channel 1 outputs @ 3.25% Obscuration

4.6.3.3 d	4.700	5.685	6.700	VOLTS	PASS
4.6.3.3 d	-2.200	-1.516	-2.000	VOLTS	PASS
4.6.3.3 d	4.700	5.693	6.700	VOLTS	PASS

Final

REPAIR AGENCY FINDINGS



Form: 45.0006
Date: 11-07
M&E: 00-0703-3-1791

R.O. Number: 3809887 70
R.O. Date: 05JAN10-07:17:10
Date Required: 07FEB10

Method Of Shipment: FED EX
Account Number: 126281684
Special Instructions:

Send Correspondence To:	Send Invoice in Duplicate and Single Copy of Tear-down Report	These 3 Numbers Must Appear on all Invoices:	Contact Information:
Continental Airlines Inc. Repair and Modification Department: HQJPK P.O. Box 1494 Houston, TX 77251-1494	Continental Airlines Inc. V.P. Technical Operations and Purchasing Repair and Modification Department: HQJPK P.O. Box 1494 Houston, TX 77251-1494	M&E#: 25-2614-9-0001 M&E S/N#: 00305 Tracking Tag #: 1390812	

End Assembly Removal Data

Mfg. P/N: 2118860-4 Mfg. S/N: 58-A0305 Quantity: 1 Unit of Issue: EA
Description: DETECTOR, SMOKE, REMOTE (RSD), 777-200

Instructions: This form must be returned attached to the repair agency findings when the part(s) on this Repair Order are returned to Continental Airlines. If Repair Order is for more than one part, one copy of this form must be returned for each individual unit. Please select one finding listed below that best describes the results of the evaluation or repair of the part(s) received on this order.

Note: This information is for reliability purposes only.

- CF = Confirmed Failure** - The work performed on this item, or a portion thereof, to return it to an airworthy condition was directly attributable or consistent with the removal reason(s) listed on this Repair Order. Also, the majority of the work performed was not the result of mishandling, or improper operation of the item.
- UF = Unrelated Failure** - Work was performed on this item to return it to an airworthy condition. However, no part of the work performed was directly attributable or consistent with the removal reason(s) listed on this Repair Order.
- NTF = No Trouble Found** - This item was tested/inspected and determined to be in compliance with the manufacturers inspection requirements for this item. No level of repair was performed on this part, including but not limited to, parts replaced for precautionary reasons or minor adjustments.
- EX = Exchange Unit** - This item was provided to Continental Airlines as an exchange item, P/N _____ S/N _____
- PRE = Precautionary** - This item was tested/inspected and determined to be in compliance with the manufacturers inspection requirements for this item. The work performed on this item was accomplished for precautionary reasons or to replace consumable materials required for reassembly.
- CD = Continental Damage** - The majority of the work performed on this item to return it to an airworthy condition was directly attributable or consistent with mishandling, or improper operation by Continental Airlines.
- CR = Customer Request** - This item was tested/inspected and determined to be in compliance with the manufacturers inspection requirements for this item. Work was accomplished on this item as directed by the Repair Order.
- OTH = Other** - This shop visit was for reason other than above options.

Other reason:

Shipper No. **83746559**

EARLY SHIP DATE: 12. Jan. 2010



1/29/10

Tucson - North Oracle Rd
11100 North Oracle Road
TUCSON AZ 85737

WB

JAN 29 2010 PM 1

SOLD TO: 304041	CONTINENTAL AIRLINES INC PO Box 4607 HOUSTON TX 77210-4607	SHIP TO: 302253	CONTINENTAL AIRLINES BLDG B STORES RECEIVING 4849 WRIGHT RD ATTN: STORE RECEIVING HOUSTON TX 77032
BILL TO: 304041	CONTINENTAL AIRLINES INC PO Box 4607 HOUSTON TX 77210-4607	MARK FOR:	

Freight Forwarder: _____

ORDER INFORMATION		SHIPPING INFORMATION	
Purchase Order No.	3809887-70	Bill of Lading:	
Sales Order No.	2422836	Ship Method:	
Contract No.		Ship Condition:	
Vendor Code:		Container Type:	BOX
Currency:	USD	No. of Containers:	1
Incoterms:	EXW SELLER'S FACILITY	Dimensions:	12 X 10 X 8
Payment Terms:	Net 30 Days	Gross Weight:	5
Sales Office:	1018 - ESS Anniston	Shipped From:	1018 - Tucson - North Oracle Road

Item No.	Requested Material No. Honeywell Material No./ Description	Qty	UoM	Serial No. / Lot No.	Unit Price	Extended Price
000010	2118860-4 SMOKE DETECTOR UPS 860392	1	EA	58-A0305		

This hardware, technical data, or software may be controlled by the U.S. Department of State International Traffic in Arms Regulations (ITAR) or the U.S. Department of Commerce Export Administration Regulations (EAR), and may not be exported out of the United States or be provided to foreign persons (as defined by the ITAR) located within the United States, without the appropriate prior authorizations from the U.S. Government. Diversion contrary to U.S. Department of State ITAR or U.S. Department of Commerce EAR is prohibited.

Shipping Instructions:

Contract Representative: (If Required)	Date	Government Source Inspection (If Required)	Date
Quality Assurance Representative:	Date	Customer Source Inspection (If Required)	Date

We certify that all articles delivered under the shipper have been inspected and found to be conforming in all respects, except for authorized deviations, to all applicable blueprints, specifications, and standards; and that evidence of this determination, including chemical and physical test results as required, is on file and subject to examination.

HONEYWELL INSPECTOR: *[Signature]* 29 JAN 2010

PQA of listed items has been made by me or under my supervision and they conform to contract except as noted herein or on supporting documents.

SIGNATURE: _____ DATE: _____

Where does the paper go?

Material Specialist

- Material Specialist opens box and verifies that the paperwork is present

Inspector

- Inspector reviews the paper work for accuracy and completeness
- Enters the 8130/Teardown information into SCEPTRE
- Tags part
- Bundles paperwork and ships to A/C Records

Records

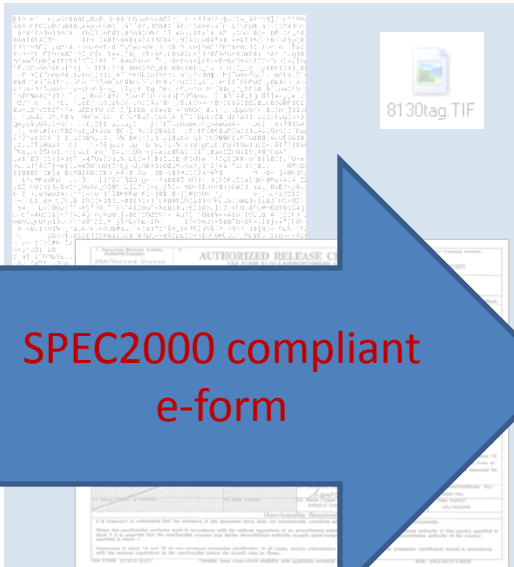
- Sorts paperwork
- Scans paperwork
- Indexes scanned images

Electronic form processing and SPEC2000

Paper document

- ✗ Electronic form transfer & storage
- ✗ Digital signature possible
- ✗ Import of data to recipient's system
- ✗ SPEC2000 compliant e-form

Scanned image



SPEC2000 compliant e-form

- ✓ Electronic form transfer & storage
- ✓ Digital signature possible
- ✗ Import of data to recipient's system
- ✗ SPEC2000 compliant e-form

Digitally signed XML file

```

<xml version="1.0" encoding="UTF-8" ?>
- <ATA_InformationSet xmlns:sia="http://www.w3.org/2001/XMLSchema-ir"
  version="1" id="TEST2">
- <CertificationData>
- <CurrentCertificate>
- <ATA_PartCertificationForm version="1" id="ID589601188712703">
- <Block2>
- <CETA FVI#6-01#FAA Form 8130-3#CET#>
- <Block2>
- <Block3>
- <ID#-1188-712703#TD#>
- <Block3>
- <Block4>
- <IssuerDetail#>
- <SR#58960#SRL#>
- <WHO#Honeywell International Inc.#WHO#>
- <ADL#1300 W. Warner Road#ADL#>
- <CT#Temp#CT#>
- <TID#8096#TID#>
  
```

XML Document

Sample 8130 xml file from ATA

- ✓ Electronic form transfer & storage
- ✓ Digital signature possible
- ✓ Import of data to recipient's system
- ✓ SPEC2000 compliant e-form

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XML document linked to a part via unique ID encoded on RFID tag

eDocuments Timeline

- 2Q – 3Q 2010: Receiving re-engineering
 - Use of Adobe Lifecycle to consolidate legacy applications and minimize “hands on keyboard”.
 - Purchase Orders
 - Expendable Repair Orders
 - Rotable Repair Orders
 - Provide a foundation for the incorporation of eDocuments

eDocuments Pilot Timeline

- 4Q 2010 – 1Q 2011: Pilot Implementation
 - Pilot Scope:
 - From receipt/review to data archive
 - Single supplier participation
 - Rotable PO's only
 - Benchmark against existing paper process
- 2Q 2011: Review/Expansion
 - Qualify and quantify results against assumptions
 - Modify process as necessary

eDocuments Timeline

- 2Q 2011: Review/Expansion (continued)
 - Add additional suppliers and CO receiving sites
- 3Q 2011: Document Expansion
 - Rotable Repair Orders 8130's
 - Teardown Reports

Challenges

- Internal
 - Process change impact
 - Parallel receiving processes to accommodate exception
- Harmonization of Form1 and 8130
- Supplier participation