Update on IATA Activities Related to Paperless Aircraft Technical Operations

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Aircraft (re)delivery documents

- Harmonization of paperwork (AIR*, ARL**)

- What is the birth record of the aircraft?

- Need to provide acceptable “standards” that facilitate smooth record transfers

- LLP documentation; regulations, commercial

- Technical documentation requirements

* Aircraft Inspection Report; an Airbus doc
** Aircraft Readiness Log; a Boeing doc
What IATA has done (1)...

Guidance Material and Best Practices for Aircraft Leasing; www.iata.org/alag

- Redelivery process best practices
- Aircraft redelivery documentation checklists for aircraft transfers
- ICAO’s Cross Border Transfer (XBT) to harmonize aircraft transfers
What IATA has done (2)...

Incident Clearance Statement (ICS) to replace the Non-Incident Statement (NIS)

- Available for Aircraft and Engines
- Working to establish similar document for aircraft parts (based on ATA 106)
- Commercial documents
Aircraft Transfers - ALAG

Share of Worldwide Fleet under an Operating Lease (Ascend, 2017)
What IATA has done (3)...

Life Limited Part (LLP) Traceability Template

- Airlines use significant resources to comply with LLP tracking
- Creating a global standard template that facilitates LLP movements over part’s life
  - For Engine and Landing Gear LLPs
- Defining supporting docs to show LLP trace
- Evaluating the potential for a global database/registry/clearinghouse for LLPs
Life Limited Part Survey

143 participants

Aircraft operator 89 62%
Aircraft/engine lessor 23 16%
MRO 10 7%
OEM 9 4%
Parts trader 1 1%
Other 14 10%

109 companies

Aircraft operator 65 60%
Aircraft/engine lessor 19 17%
MRO 7 6%
OEM 6 6%
Parts trader 1 1%
Other 11 10%
Do you think a LLP global database would be of value for your company?

- Yes: 118 (83%)
- No: 25 (17%)

- Operator: 89% (11%)
- Lessor: 65% (35%)
- MRO: 100% (100%)
- OEM: 67% (33%)
- Parts trader: 100% (100%)
- Other: 64% (36%)
Would your company be willing to participate in the IATA LLP Global Database?

Yes: 107 (75%)
No: 36 (25%)

Bar charts for different roles:
- Operator: 79% Yes, 21% No
- MRO: 90% Yes, 10% No
- Parts trader: 100% Yes, 0% No
- Lessor: 57% Yes, 43% No
- OEM: 67% Yes, 33% No
- Other: 71% Yes, 29% No
Next Steps

- IATA and FlightGlobal evaluating commercial viability

- Creation of an Airline Group to act as an Advisory to the activity

- Work with a small number of airlines in a pilot phase to automate data input
IATA activity related to RFID

IATA as Point of Contact between OEMs & Airlines for RFID

- Welcomed by airlines and OEMs; efficient process
  - Airlines have a single coordinated voice
  - OEMs deal with a single request
- 1st action: standardize RFID tagging of cabin items
  - Economy seats, O₂ generators etc.
- Established industry facility to ensure RFID standard met
  - Auburn Univ. RFID Lab to ensure conformity of RFID tags software; funded by Airbus and Boeing, supported by IATA and A4A/ATA
- Working towards an integrated name plate
  - Human readable, 2D barcode, RFID on the same plate
ICAO’s Airworthiness Panel (AIRP)

- The AIRP/5 meeting was held on Nov 6-10, 2017 in Montreal
- IATA is one of the International Org. Member of the AIRP

- Progress of work with IATA focus/interest/involvement:
  - Approval and global recognition of approved maintenance organizations (AMOs)
  - Electronic aircraft maintenance records (EAMR)
  - Cross border transferability of aircraft (XBT) - separate TF that links with AIRP (ageing aircraft, Export Certificate of Airworthiness etc.)
  - State responsibility in case of third-party modifications and repairs
  - Aircraft Health Monitoring integration in aircraft maintenance programs
  - EMI risks from active devices carried in cargo, mail and baggage
  - Acceptance of COTS parts
Approval and Global Recognition of AMOs (1)

- **Phase I** – Develop SARPs for the harmonization and global recognition of AMO approvals – completed Q4-2015 with applicability intended Q4-2020
  - The proposed amendment regarding the approval and global recognition of AMOs; transfer of the associated AMO provisions from Annex 6 to Annex 8 and are aimed to ensure a clear allocation of responsibilities to the State of Registry
  - ICAO issued State Letter SP 60/4-16/69 on 26 Aug 2016

- **Phase II** – Develop provisions for the harmonization and global recognition of AMO approvals – completed Q4-2016 with applicability intended Q4-2020
  - ICAO issued State Letter SP 60/4-17/80 on 10 July 2017 for comments
  - ICAO Airworthiness Manual Doc 9760 revision to support Phase I above to be developed – to be published in the next rev of Doc 9760
Approval and Global Recognition of AMOs (2)

Phase III – Consider SARPs addition to facilitate harmonization and mutual recognition of AMOs and acceptance of their maintenance work – completion by Q3-2018; applicability intended Q4-2022

- This step would consider the benefit of possibly elevating some Doc 9760 elements to the Annex 6 and Annex 8 level (SARPs)
- Based on High Level Safety Conference (HLSC) 2015 initiatives

Phase IV – Develop provisions for reducing duplication of the certification and surveillance activities of AMOs – completion by Q3-2020; applicability intended Q4-2024

- This step envisages both SARPs for Annex 6 and Annex 8 and supporting guidance via ICAO Airworthiness Manual Doc 9760 (based on HLSC 2015)
Electronic Aircraft Maintenance Records

- Develop standards and/or guidance for electronic aircraft maintenance records (EAMR)
- Propose amendments to Annex 6, Annex 8 - completed
  - ICAO in State Letter SP 60/4-17/80 proposed form and format of records (paper, film or electronic) in Annexes 6 and 8 with reference to EAMR guidance in ICAO Airworthiness Manual Doc 9760
  - The term “Records” has been clarified
    - “Continuing airworthiness records” for operators I.A.W. Annex 6 Part I, 8.4
    - “Maintenance records” for AMOs I.A.W. Annex 8, Part II, 6.7
- Proposed amendment to ICAO Airworthiness Manual Doc 9760 – completed
- ICAO publishing of EAMR – see website alternative envisaged for Nov’17
Cross border transferability of aircraft (XBT)

Several informal meetings between ICAO, selected States, IATA and AWG revealed the need to better understand the complexity of the XBT process and the different treatment by regulators worldwide.

- Certain States restrict aircraft importation due to aircraft (calendar) age.

ICAO established the XBT-TF to:

a) ensure that future XBT activities, including the substantial increase of cross border aircraft transfers, do not compromise the current level of safety and

b) improve the efficiency of the XBT process and address the issue of aircraft importation restrictions

c) evaluate a harmonized global regulatory framework for XBT through a possible ICAO delegation mechanism.
The work of the XBT TF will focus on:

a) the review of the XBT process, associated issues, responsibilities and impediments

b) the development and enhancement of ICAO provisions related to XBT including addressing restrictions on importation of ageing aircraft (guidance material on the importation of aircraft)

c) recommendations on electronic tools and mechanisms to facilitate efficient XBT (includes International Air Operations Platform, an ICAO concept combining Aircraft and AOC registries etc.)

d) delegation of functions and duties related to XBT (development of guidance material for the delegation of XBT functions and duties)

The work of the XBT TF will be completed by Q4 2018
Third Party Modifications and Repairs

- Clarify responsibilities of State overseeing an organization for design or manufacture of modifications and repairs to type certificated products
- Propose amendments to Annex 8 - completion by Q4-2018; effectivity intended Q2-2020
  - State of Design as the organization responsible for the type design maybe different from State of Design for modifications
  - Clarity the States of Design responsibilities for States approving and overseeing STCs, repair designs, or other modifications. Would facilitate reducing of barriers to cross-border transfers of aircraft
http://www.iata.org/events/Pages/paperless-aircraft-operations.aspx