13th MAINTENANCE COST CONFERENCE
SEPTEMBER 13-15
Panama City, Panama 2017
Preliminary Analysis of MCTF FY2016 Data

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Preliminary Analysis of FY2016 Data

• About MCTF Data Collection & Analysis

• World Fleet & MRO Spend

• MCTF Fleet & Costs Analysis

• IATA Maintenance Cost Dashboard™
World Fleet & MRO Spend

• The FY2016 world fleet consisted of 28,000+ aircraft

• The MRO market represented $67.6 Bill. worldwide.

• It is expected to reach $100 Bill. in 2026.

• With a per annum growth of 4.1%

Source: ICF
MCTF FY2016 Data Cycle

- Preliminary analysis includes 41 airlines & 3,648 aircraft
  - 10 more expected for the final report

- MCTF airlines by Region
  - By number of aircraft

REGIONS AS DEFINED BY IATA:
- Africa: Sub-Saharan Africa
- ASPAC: Asia Pacific
- MENA: Middle East & North Africa
- Americas: North & South America
- Europe: includes CIS
- N. Asia: China, Hong Kong, Macao, Taiwan, Mongolia

13th MAINTENANCE COST CONFERENCE SEPTEMBER 13-15 Panama City, Panama 2017
MCTF Fleet: 3,648 Aircraft (FY2016)

- By Aircraft Category
  - NB: 57%
  - WP: 31%
  - RJ: 8%
  - TP: 4%

- By Manufacturer
  - Boeing: 53%
  - Airbus: 35%
  - Embraer: 7%
  - Fokker: 1%
  - Bombardier: 2%
  - ATR: 2%
  - BAe: 0.44%
Top 15 AC Families* = 94% of MCTF fleet

- All AC categories represented
- However, still a limited number of RJs and TPs

*A with 5+ A/C and 3+ operators
MCTF Spend (FY2016)

- Direct Maintenance Costs (Line/Base/Component/Engine)
  - $11.14Billion. (17% of World MRO Spend)

By Segment

By Element
Our Main KPIs

- **Operational Data**
  - % of world fleet
  - 41 airlines
  - 3,648 aircraft
  - 11.4 Mill. FH
  - 5 Mill. FC

- **Average Unit Costs (DMC*)**
  - % of world MRO spend
  - Average Cost per Flight Hour
  - Average Cost per Departure
  - Average Cost per Aircraft
  - Average Cost per Airline

MCTF airlines get a detailed report with analyses by AC categories, families and/or AC

- Avg FH/AC
- Avg FC/AC
- Stage length (FH/FC)
- Avg Utilization (hrs/day)
- Avg Age

* Direct cost only, excluding Overhead
Unit Costs by Aircraft Family

• Top 15 A/C Families*
Spares & Inventory

- Averages: $3.6\text{Mill.}/\text{AC} ; $295\text{Mill.}/\text{AL}

Rotables 32%
Engines 51%
Others 17%

Inventory $\text{Mill.}/\text{AC}$
- Asia Pacific: $M6.5$
- N. Asia: $M3.4$
- Americas: $M3.0$
- Africa: $M2.7$
- Europe: $M2.0$
- MENA: $M1.5$

31 airlines, 2,557 aircraft
Aircraft Leasing & Supplemental Rent*

- 41% of total MCTF fleet is under operating lease
  - World average is 40%
- 54% of MCTF airlines pay supplemental rent

- Total MRs: $510 Mill.
  - Engines = 76% of MRs (incl. LLPs)
Technical Division Costs

• Direct Mtc $ (85%) + Overhead $ (15%)
Personnel & Overhead

• Direct vs Indirect Labor:
  – 24,509 mechanics
  – 16,674 staff

• Direct Labor vs %DMC Subcontracted (SubC)
  – 10 mech./AC vs. 75% SubC
Personnel & Overhead

- Average Number of Staff per Aircraft
  - 980 mechanics/AL
  - 631 OH Staff/AL
  - 9 mechanics/AC
  - 6 OH Staff/AC
In summary (1/2)

• The 41 airlines in this preliminary analysis have reported:
  – Direct Maintenance Costs $11.14 Bill.
  – Overhead $2.00 Bill.
  – Spares & Inventory $9.16 Bill.
  – Supplemental rent $0.5 Bill.

• However, not all airlines provided Spares & Inventories $, OH$ and Supplemental Rent $. 
In summary (2/2)

• Engine maintenance: 38% of DMC

• Airlines subcontract 73% of their maintenance costs

• 76% of Maintenance Reserves are for engines (incl. LLPs)

• Overhead: 11% of total Technical Division costs

• 9 mechanics/AC and 6 overhead staff/AC

Want to know more? Join MCTF!
Maintenance Cost Dashboard

• Exclusive access to airlines that provide data
• Perform your own benchmark analyses
• Export data to create presentations and graphs
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Any Questions?