Preliminary Analysis of MCTF FY2017 Data

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14th MAINTENANCE COST CONFERENCE
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Preliminary Analysis of FY2017 Data

- About MCTF Data Collection & Analysis

- World Fleet & MRO Spend

- MCTF Fleet & Costs Analysis

- IATA Maintenance Cost Dashboard™

World Fleet & MRO Spend

- The FY2017 world fleet consisted of 26,000 aircraft

- The MRO market represented $76 Bill. worldwide.

- It is expected to reach $118 Bill. in 2027.

- With a per annum growth of 4.6%

MCTF FY2017 Data Cycle

- Preliminary analysis includes 36 airlines & 3,714 aircraft
  - 16 more expected for the final report

- MCTF airlines by Region
  - By number of aircraft

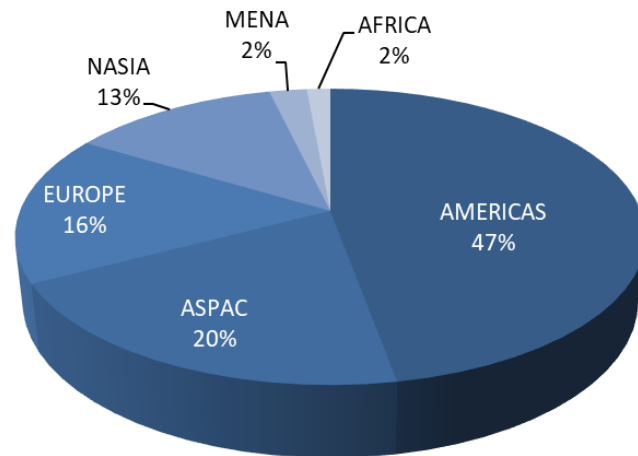**REGIONS AS DEFINED BY IATA:**
Africa: Sub-Saharan Africa
ASPAC: Asia Pacific
MENA: Middle East & North Africa
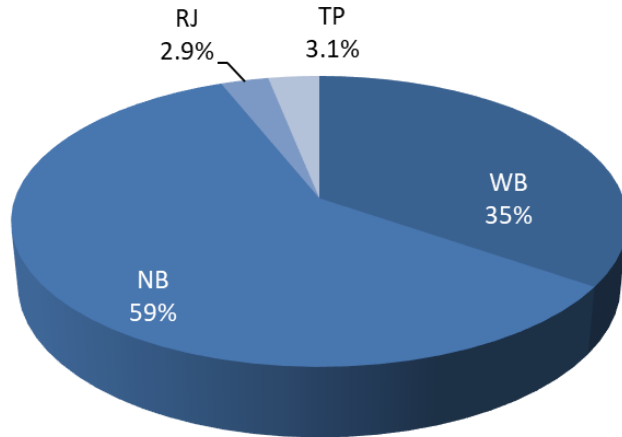
Americas: North & South America
Europe: includes CIS
N. Asia: China, Hong Kong, Macao, Taiwan, Mongolia

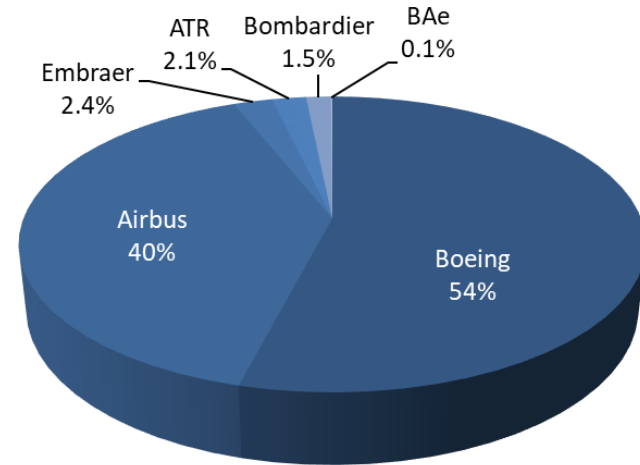Pie chart: MENA 2%, AFRICA 2%, NASIA 13%, EUROPE 16%, AMERICAS 47%, ASPAC 20%

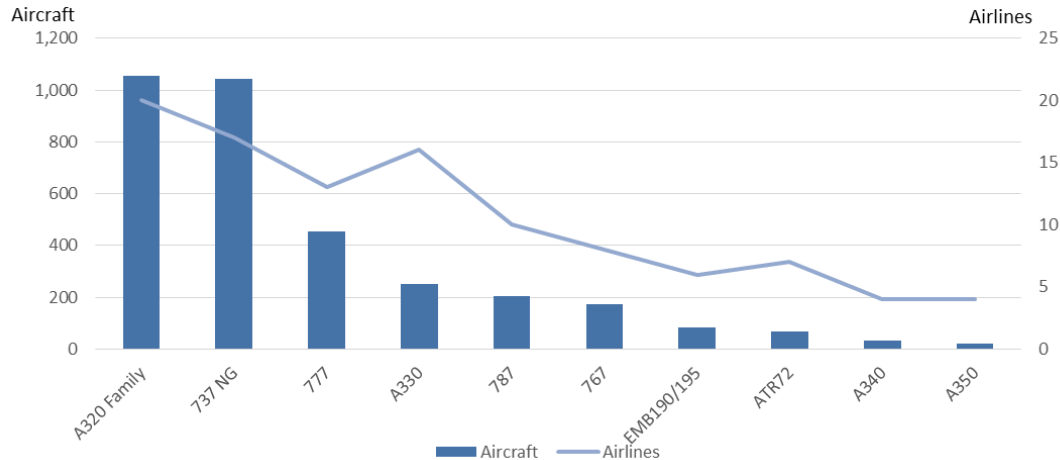# MCTF Fleet: 3,714 Aircraft (FY2017)

- By Aircraft Category

- By Manufacturer

Top 10 AC Families* = 90% of MCTF fleet

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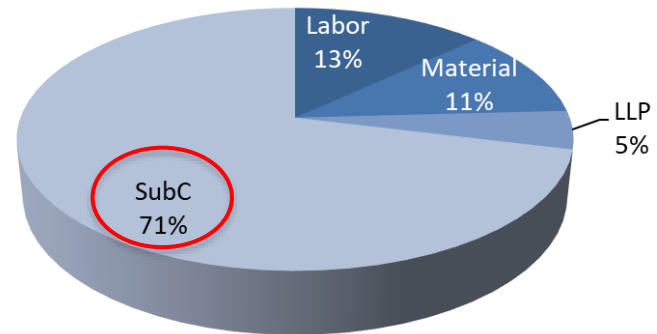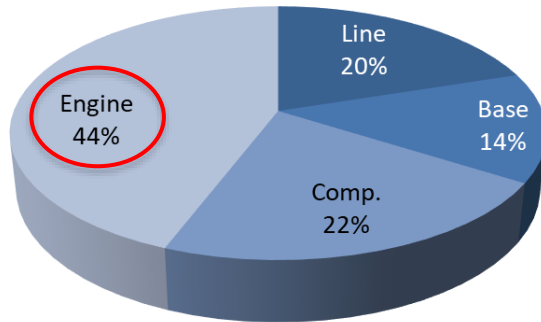- However, still a limited number of RJs and TPs

* With 5+ AC and 3+ operators

MCTF Spend (FY2017)

- Direct Maintenance Costs (Line/Base/Component/Engine)
- $13.06Bill. (17% of World MRO Spend)
- By Segment
- By Element

Our Main KPIs

- Operational Data
  - 36 airlines
  - 3,714 aircraft
  - 12.2 Mill. FH
  - 4.9 Mill. FC
  - Avg Age
  - Avg FH/AC
  - Avg FC/AC
  - Stage length (FH/FC)
  - Avg Utilization (hrs/day)
  - Dispatch Reliability

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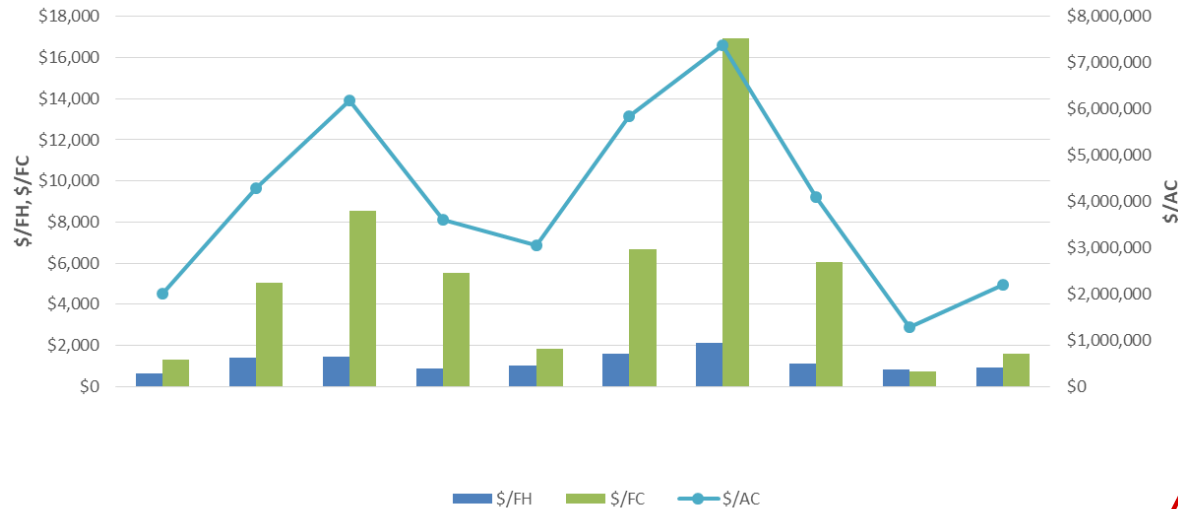 - Average Cost per Aircraft
  - Average Cost per Airline

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

* Direct cost only, excluding Overhead

Unit Costs by Aircraft Family

- Top 10 A/C Families*

Raw data, not normalized

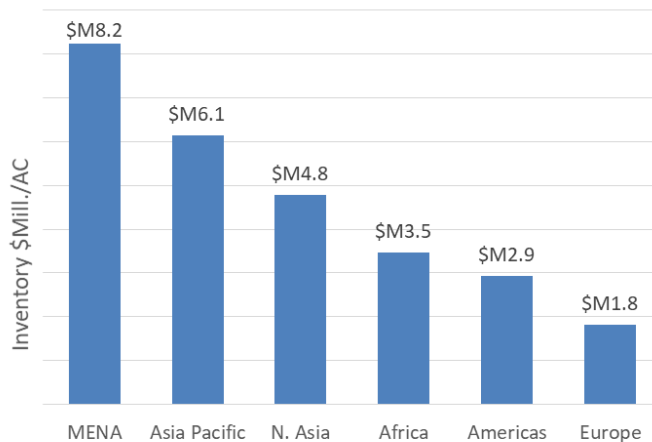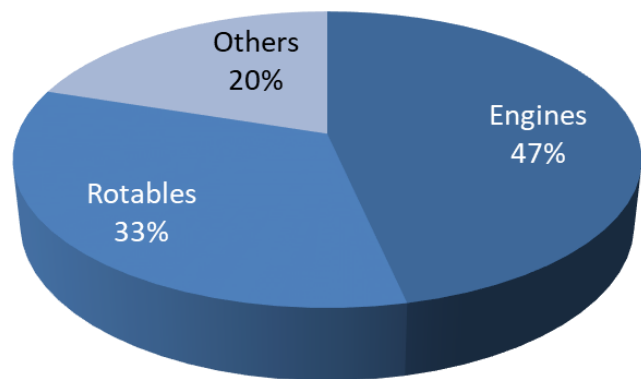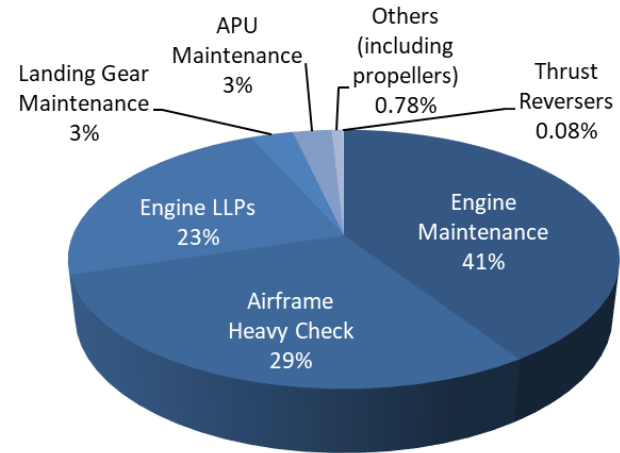# Spares & Inventory

- Averages: $3.9Mill./AC ; $351Mill./AL

25 airlines, 2,253 aircraft

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Aircraft Leasing & Supplemental Rent*

- 49% of total MCTF fleet is under operating lease
  - World average is 40%
- 53% of MCTF airlines pay supplemental rent

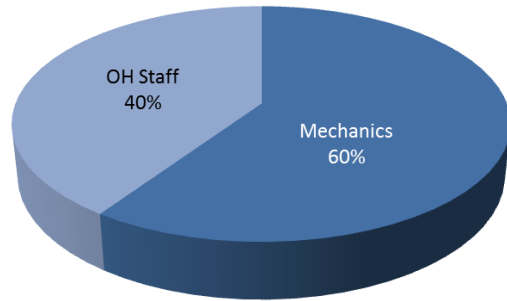- Total MRs: $662.5 Mill.
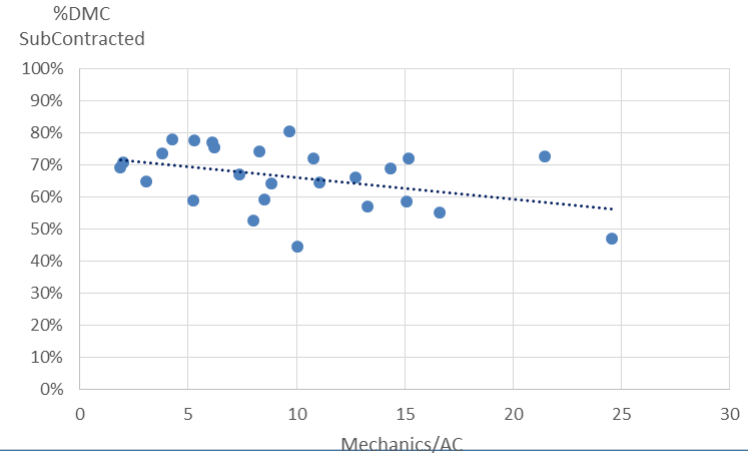 - Engines = 64% of MRs (incl. LLPs)

* Maintenance Reserves

34 MCTF airlines - 1,146 aircraft under operating lease

Personnel & Overhead

- **Direct vs Indirect Labor:**
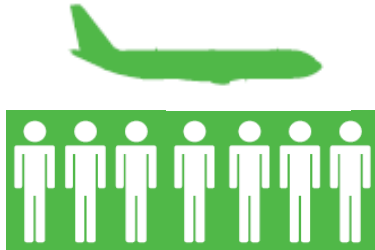 - 27,555 mechanics
  - 18,198 staff

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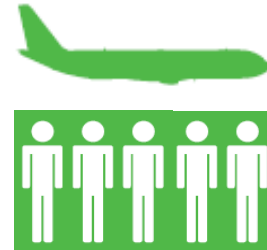
Personnel & Overhead

- Average Number of Staff per Aircraft
    - 765 mechanics/AL
    - 506 OH Staff/AL

    - 7 mechanics/AC
    - 5 OH Staff/AC

In summary (1/2)

- The 36 airlines in this preliminary analysis have reported:
  - Direct Maintenance Costs $13.06 Bill.
  - Overhead $2.28 Bill.
  - Spares & Inventory $8.78 Bill.
  - Supplemental rent $0.66 Bill.

- However, not all airlines provided Spares & Inventories $, OH$ and Supplemental Rent $.

In summary (2/2)

- Engine maintenance: 44% of DMC

- Airlines subcontract 71% of their maintenance costs

- 64% of Maintenance Reserves are for engines (incl. LLPs)

- Overhead: 15% of total Technical Division costs

- 7 mechanics/AC and 5 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

Maintenance Cost Dashboard

Maintenance Cost Dashboard
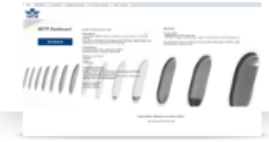
Maintenance Cost Dashboard
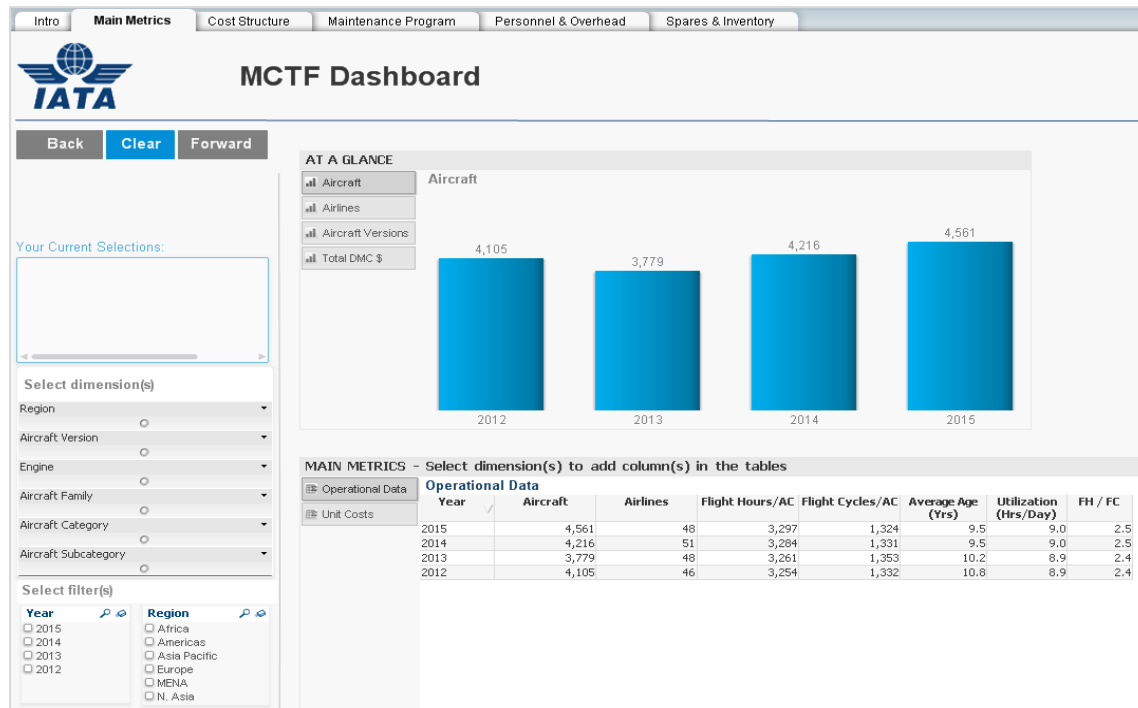
Next Steps / Action Items

Already participating?

- Keep up the good work!
- Help us automatize the data collection:
  - Talk to your MIS provider
  - Ask them to develop an "MCTF module"

Not participating yet?

- Talk to fellow airlines to get their feedback
- Join MCTF and provide your data
- And get our exclusive benefits!

Thank you! Any questions?