

**13<sup>th</sup> MAINTENANCE COST CONFERENCE**  
**SEPTEMBER 13-15**  
**Panama City, Panama** **2017**

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# Preliminary Analysis of MCTF FY2016 Data

September 13<sup>th</sup>, 2017

Geraldine CROS

Manager, Operational Cost Management - IATA



# Preliminary Analysis of FY2016 Data

- About MCTF Data Collection & Analysis
- World Fleet & MRO Spend
- MCTF Fleet & Costs Analysis
- IATA Maintenance Cost Dashboard™



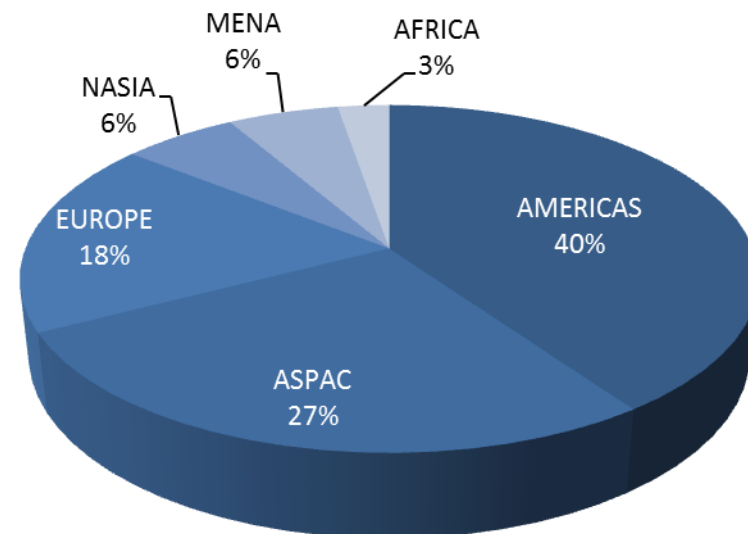
# World Fleet & MRO Spend

- 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%



# 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

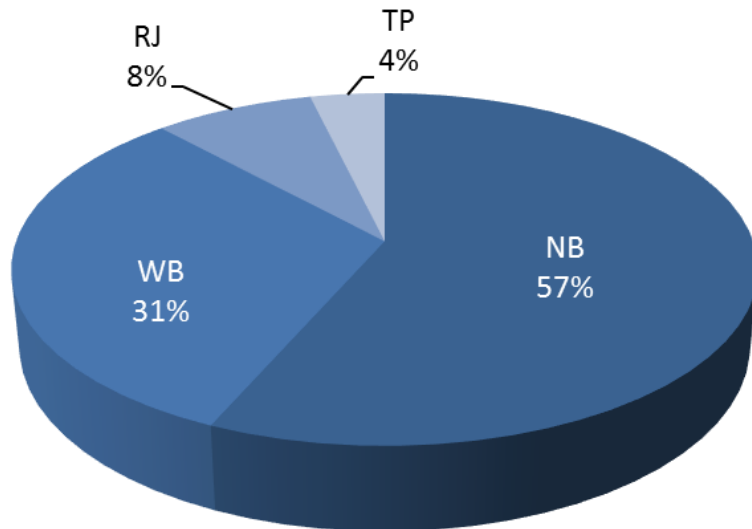
**Europe:** includes CIS

**N. Asia:** China, Hong Kong, Macao, Taiwan, Mongolia

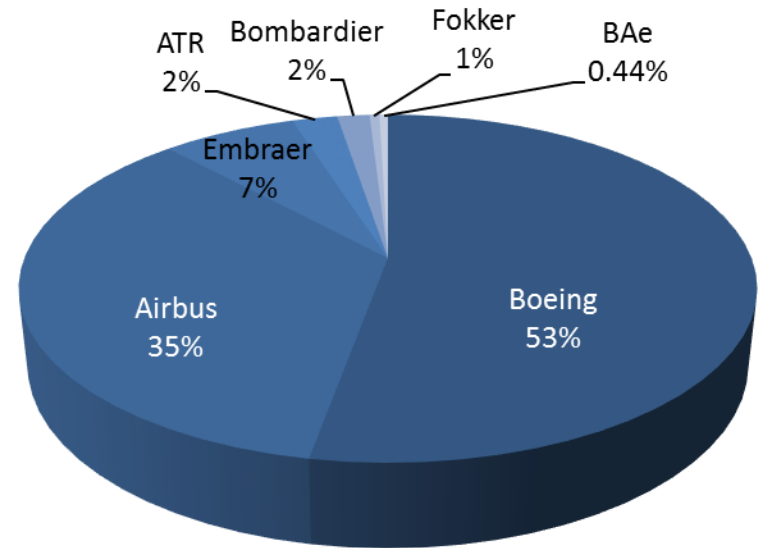


# MCTF Fleet: 3,648 Aircraft (FY2016)

- By Aircraft Category

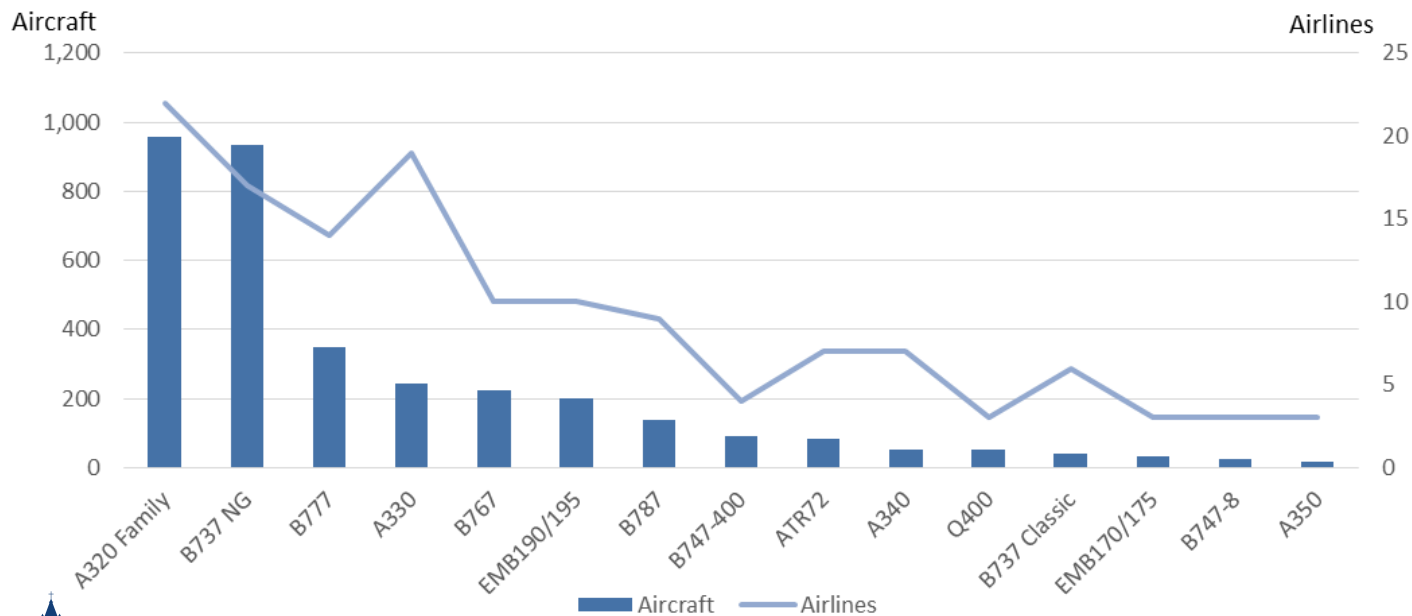


- By Manufacturer



# Top 15 AC Families\* = 94% of MCTF fleet

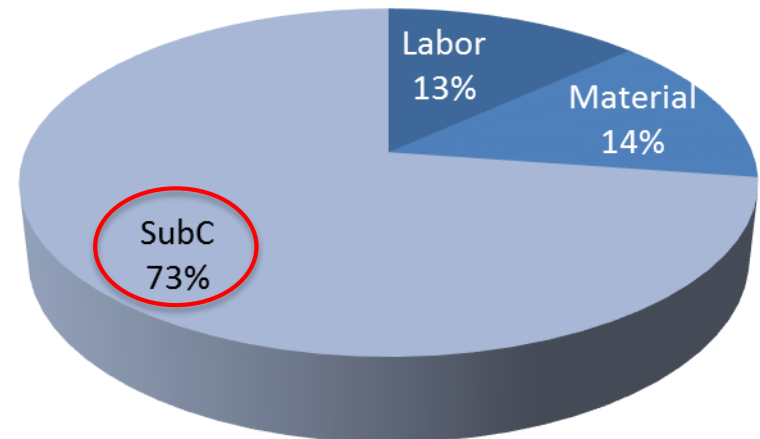
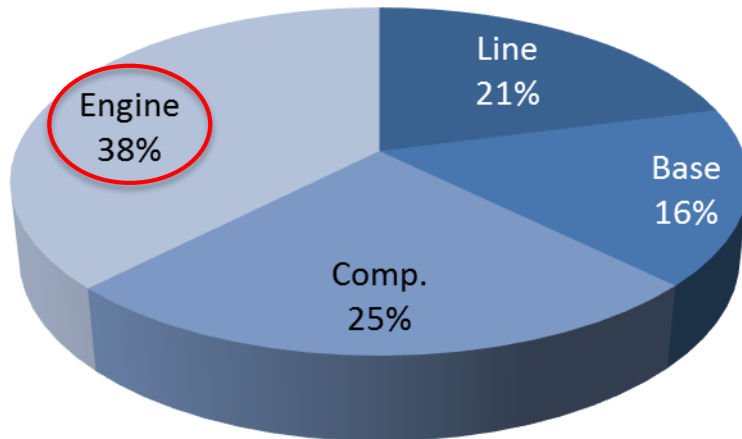
- All AC categories represented
- However, still a limited number of RJs and TPs



\* with 5+ A/C and 3+ operators

# MCTF Spend (FY2016)

- Direct Maintenance Costs (Line/Base/Component/Engine)
  - \$11.14Bill. (17% of World MRO Spend)
- By Segment
- By Element





# Our Main KPIs



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



- Operational Data
    - % of world fleet
    - 41 airlines
    - 3,648 aircraft
    - 11.4 Mill. FH
    - 5 Mill. FC
- Avg FH/AC
  - Avg FC/AC
  - Stage length (FH/FC)
  - Avg Utilization (hrs/day)
  - Avg Age



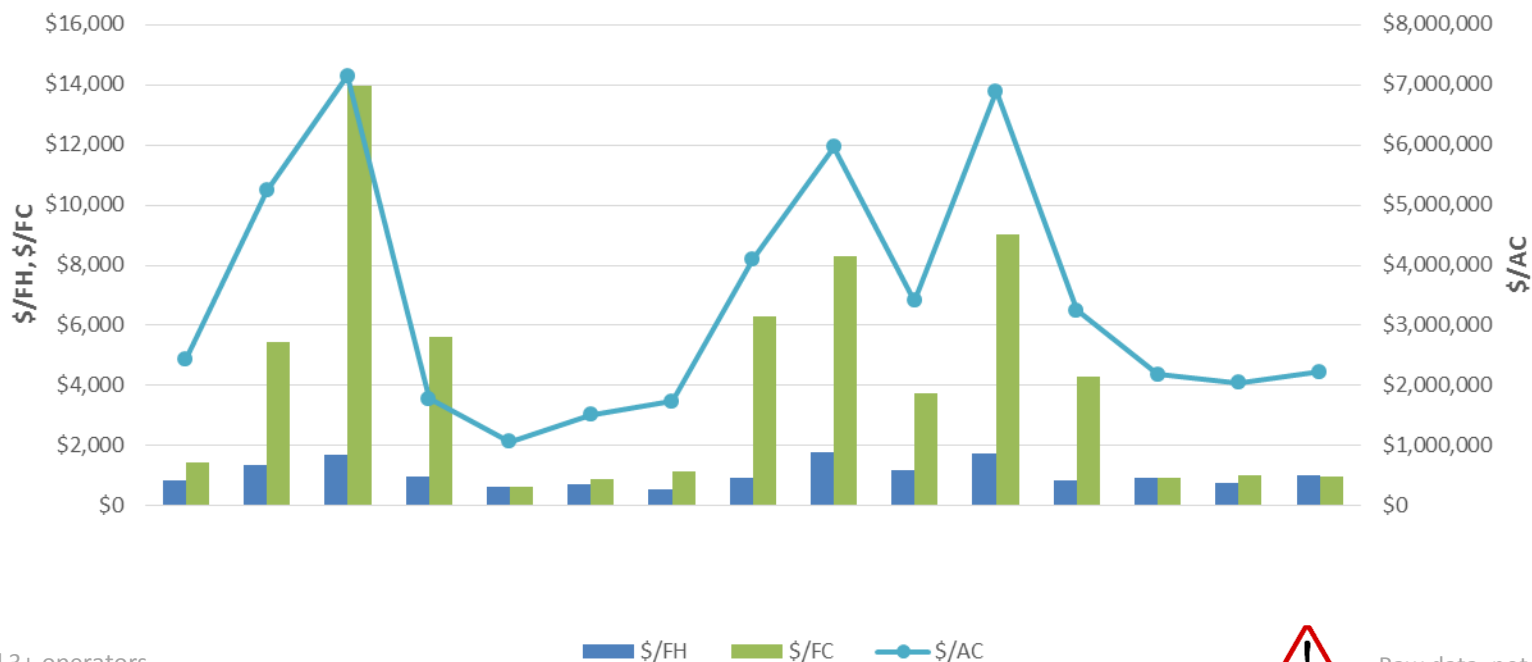
- Average Unit Costs (DMC\*)
  - % of world MRO spend
  - Average Cost per Flight Hour
  - Average Cost per Departure
  - Average Cost per Aircraft
  - Average Cost per Airline

\* Direct cost only, excluding Overhead



# Unit Costs by Aircraft Family

- Top 15 A/C Families\*



Raw data, not normalized

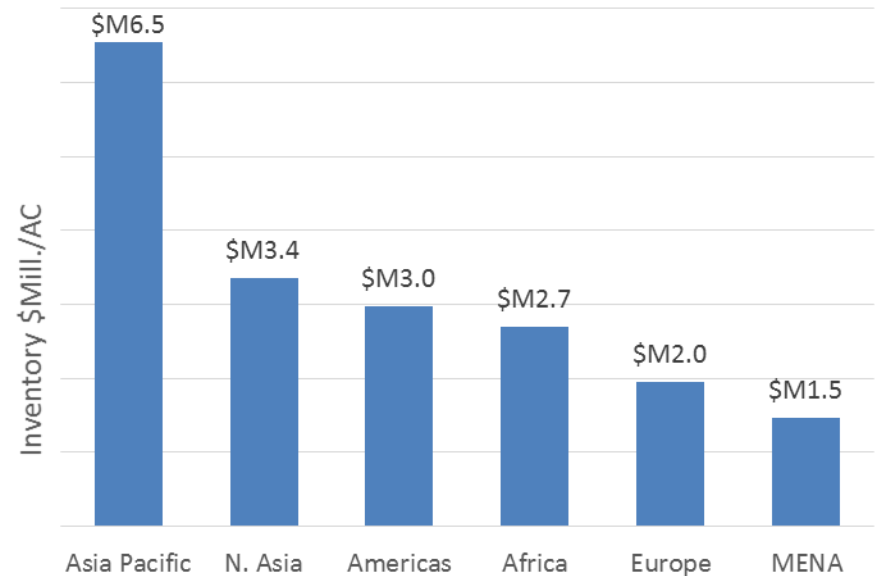
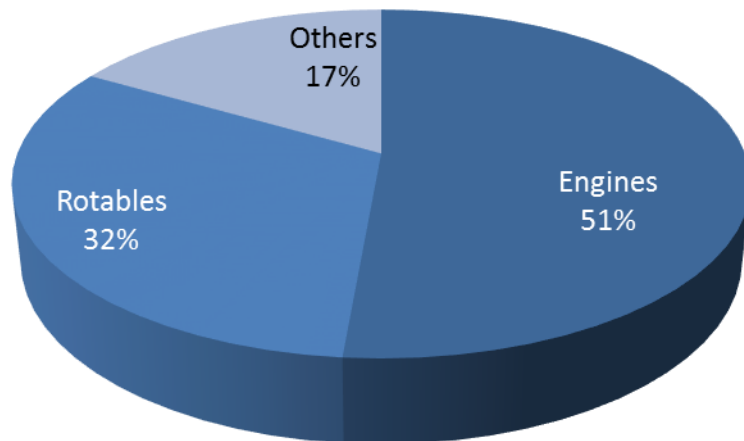
with 5+ A/C and 3+ operators



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# Spares & Inventory

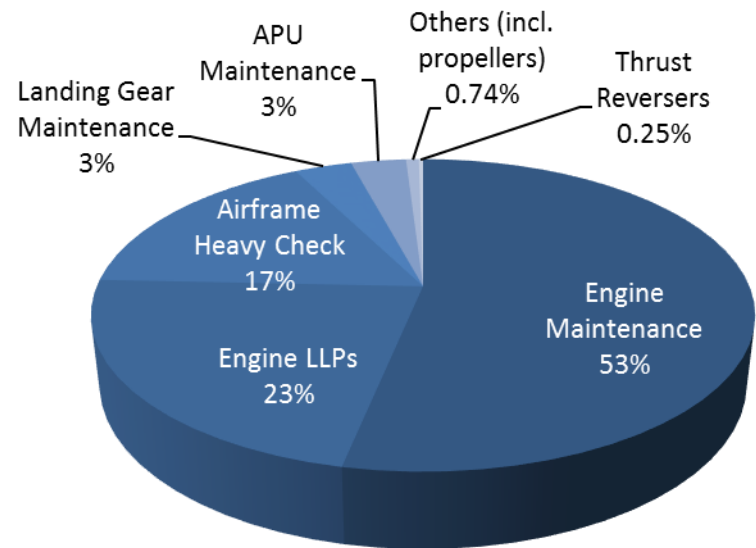
- Averages: \$3.6Mill./AC ; \$295Mill./AL



# 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)

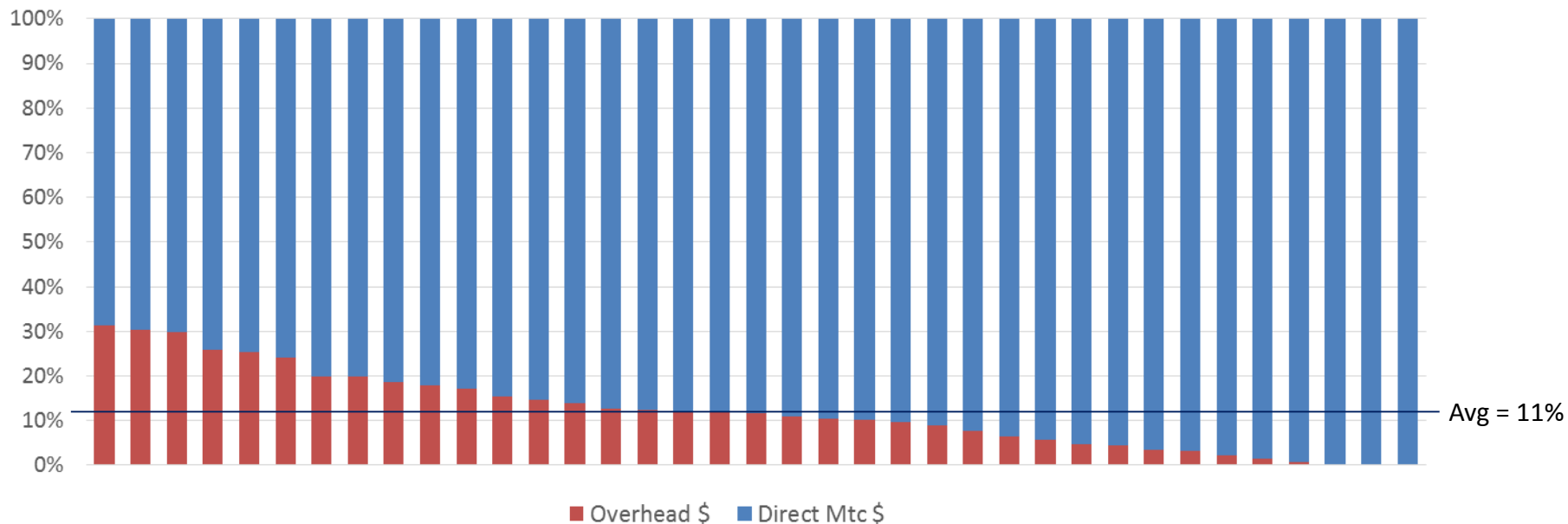


• Maintenance Reserves  
 • 39 MCTF airlines - 1,498 aircraft under operating lease



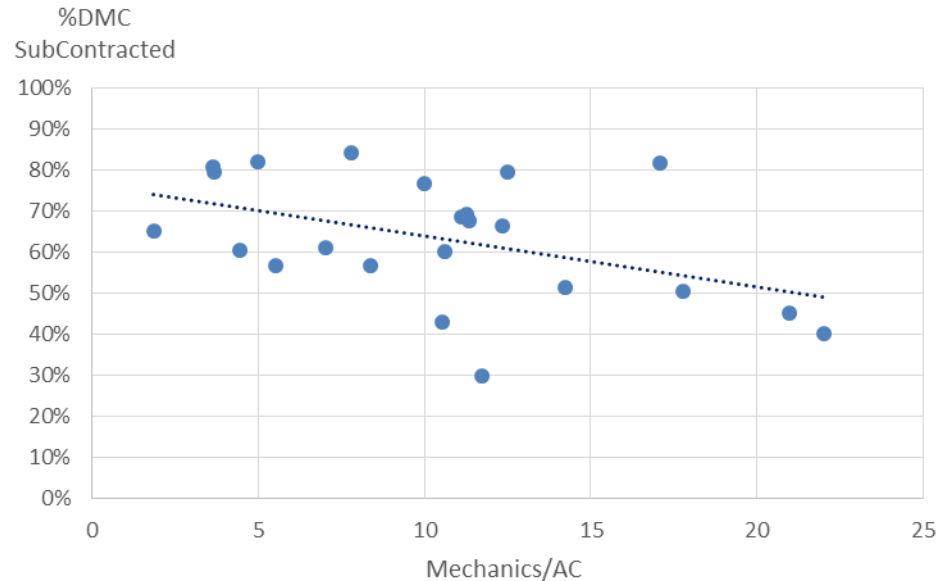
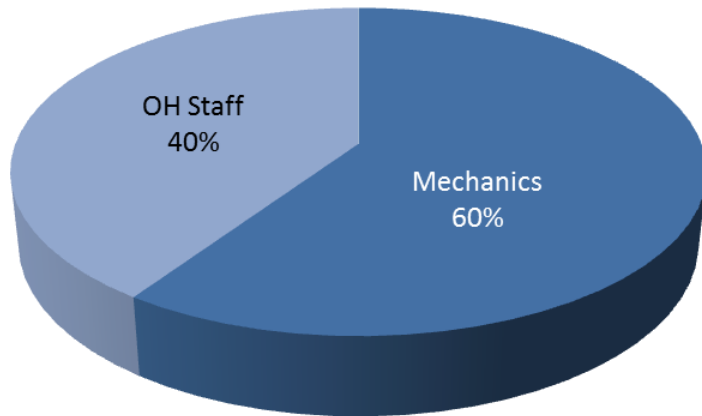
# Technical Division Costs

- Direct Mtc \$ (85%) + Overhead \$ (15%)



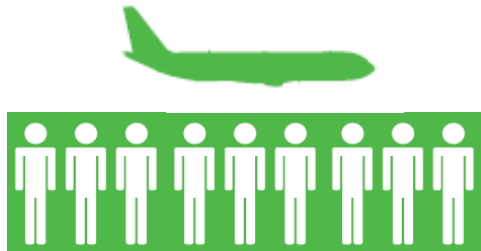
# Personnel & Overhead

- Direct vs Indirect Labor:
  - 24,509 mechanics
  - 16,674 staff
- Direct Labor vs %DMC Subcontracted (SubC)
  - 10 mech./AC vs. 75% SubC

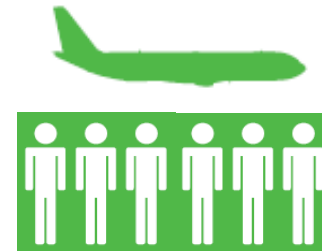


# Personnel & Overhead

- 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!**



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# 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

Qlik  | QlikView

Please sign in using your username and extranet password in the prompt below and NOT your email address.  
[Can't access your account?](#)



Sign In

User Name:

Password:



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# Maintenance Cost Dashboard

Welcome CROS Geraldine | Favorites & Profile | Sign Out

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Last updated Tuesday, September 12, 2017 11:30:49 PM

AccessPoint

Showing 1-1 of 1 1 12 items per page

Category:

All

Attribute:

No Attributes Available

View as:



Search Here

Go



★ [MtcCosts\\_Dashboard.qvw](#)

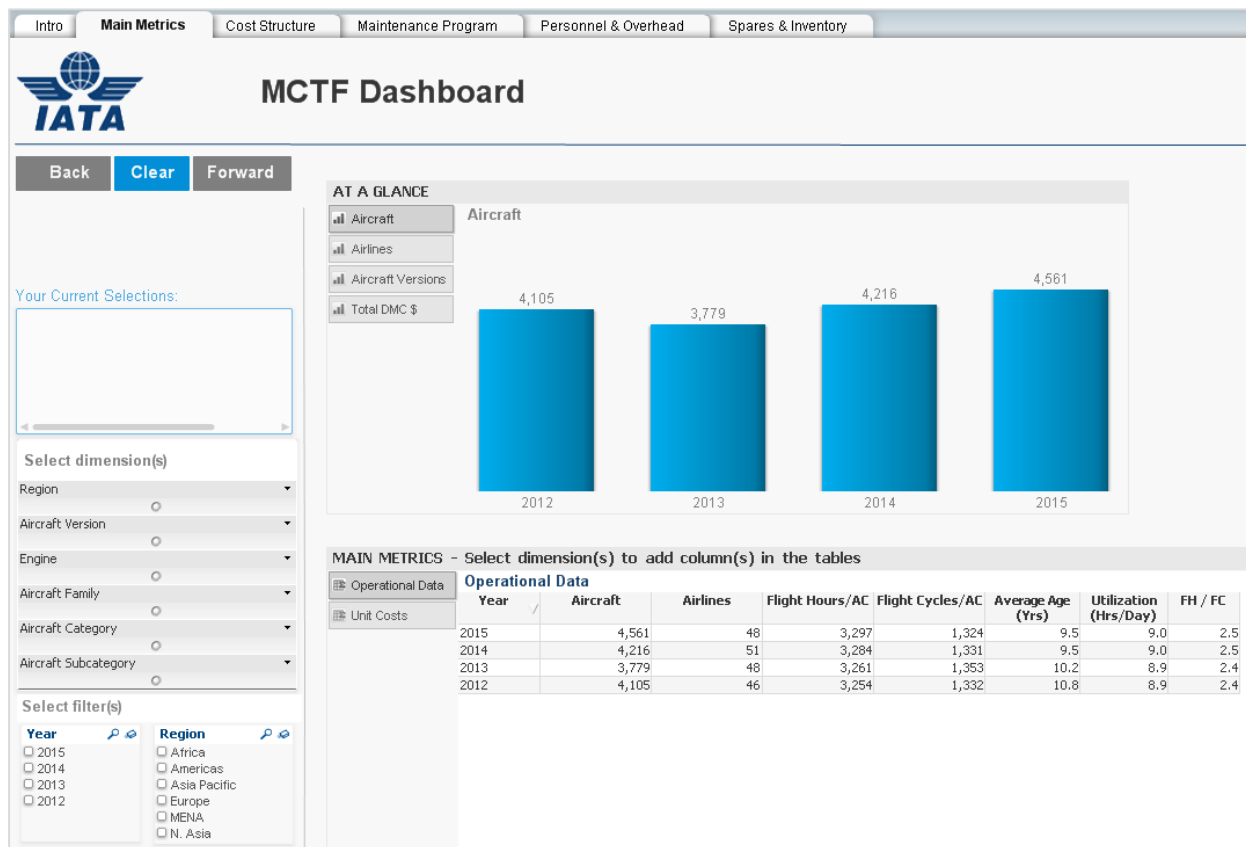
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# Maintenance Cost Dashboard



# Any Questions?



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