

# Preliminary Analysis of MCTG FY2018 Data

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# Presentation Outline

- 1.** Maintenance Cost Methodology
- 2.** FY2018 Data Preliminary Analysis
- 3.** IATA Maintenance Cost Dashboard



# Presentation Outline

**1. Maintenance Cost Methodology**

**2. FY2018 Data Preliminary Analysis**

**3. IATA Maintenance Cost Dashboard**

# Maintenance Cost Methodology

- IATA's Maintenance Cost Technical Group (MCTG\*) collects maintenance cost data on an annual basis for benchmarking purpose.
- MCTG's database is unique:
  - US \$17 Bill.\*\* ⇒ ~25% of MRO spend worldwide
  - 53 airlines
  - 4,706 aircraft ⇒ ~20% of the world fleet
  - 46 aircraft versions
  - 79 aircraft/engine combinations

\* Formerly known as Maintenance Cost Task Force (MCTF)  
\*\* FY2017 Data

# Maintenance Cost Methodology

	Labor	Material	Outside Repair	Material Mgmt	Overhead
Direct Costs	Line Maintenance				
	Base Maintenance				
	Engine Maintenance				
	Component Maintenance				

*By Aircraft (Fleet) Type*

*Also works with data by tail number*

- Understand Airline Maintenance Costs and their drivers
- Collect, report and analyze costs consistently
- Collect and allocate overheads appropriately
- Develop benchmark capabilities

# Maintenance Cost Methodology

- Definitions: what is a maintenance cost and what's not
- IT: Multiple sources of information – difficult to combine into 1 destination
- Financial accounting rules (IFRS & GAAP) vs managerial accounting
- Data submission requirements: data quality and consistency
- Allocating the ops data and costs
  - By aircraft/engine type
  - By aircraft tail number, by component, by ATA chapter
  - By segment (Line, Base, Component, Engine)
  - By element (Labor, Material, LLPs, Subcontracted)
  - Direct vs Indirect costs

# Maintenance Cost Methodology

- MCTG Toolset and User Guide ⇒ definitions, calculations and FAQ
- MCTG Workshops for airlines
  - Maintenance costs and their drivers
  - Collect, allocate, report and analyze costs consistently
  - All maintenance activities: from operations to maintenance to overhead support to aircraft ownership
- MIS providers (e.g. AMOS, Trax, etc.)
  - Integrated solution in MIS to automate maintenance costs tracking
  - Accuracy and consistency of the data for MCTG data submission



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# MCTG FY2018 Data Cycle Overview

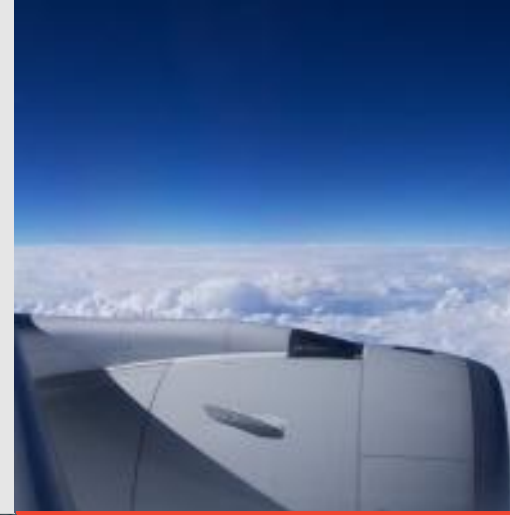
30

Airlines



9.3

Avg Age (Yrs)



98.9%

Dispatch  
Reliability

2,086

Aircraft



9.1

Utilization  
(Hrs/day)



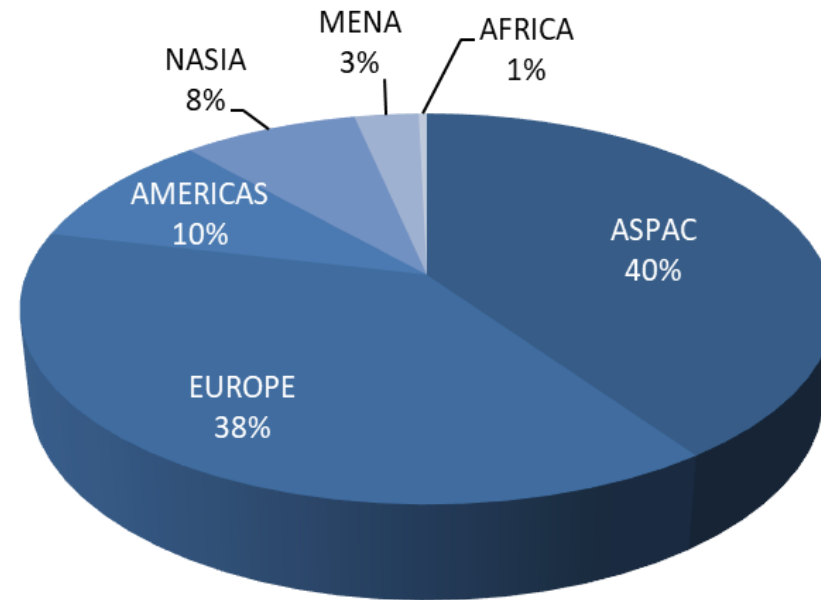
# MCTG Fleet (FY2018)

➤ Preliminary analysis includes 30 airlines & 2,086 aircraft

➤ Expected in final report: 55 AL & 5,200+ AC – RECORD YEAR!!!

➤ MCTG airlines by Region

➤ By number of aircraft



**REGIONS AS DEFINED BY IATA:**

**Africa:** Sub-Saharan Africa

**ASPAC:** Asia Pacific

**MENA:** Middle East & North Africa

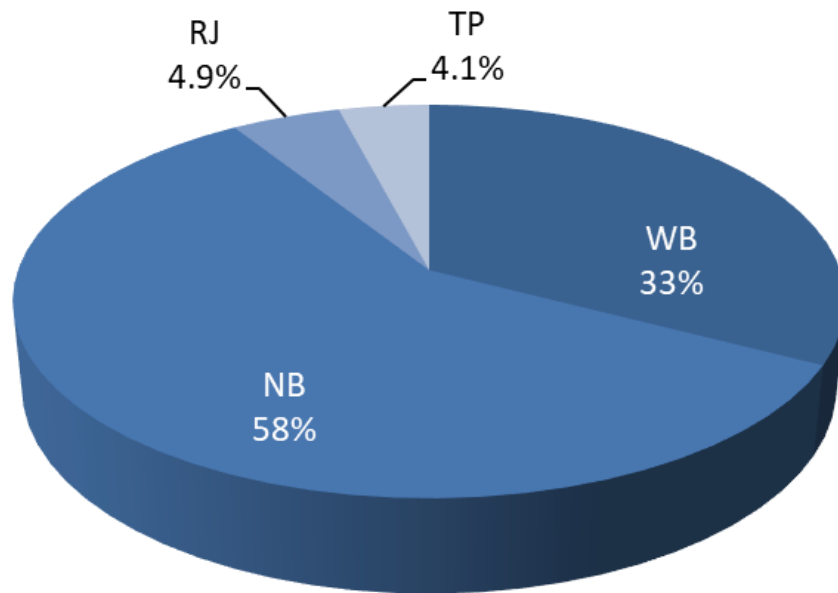
**Americas:** North & South America

**Europe:** includes CIS

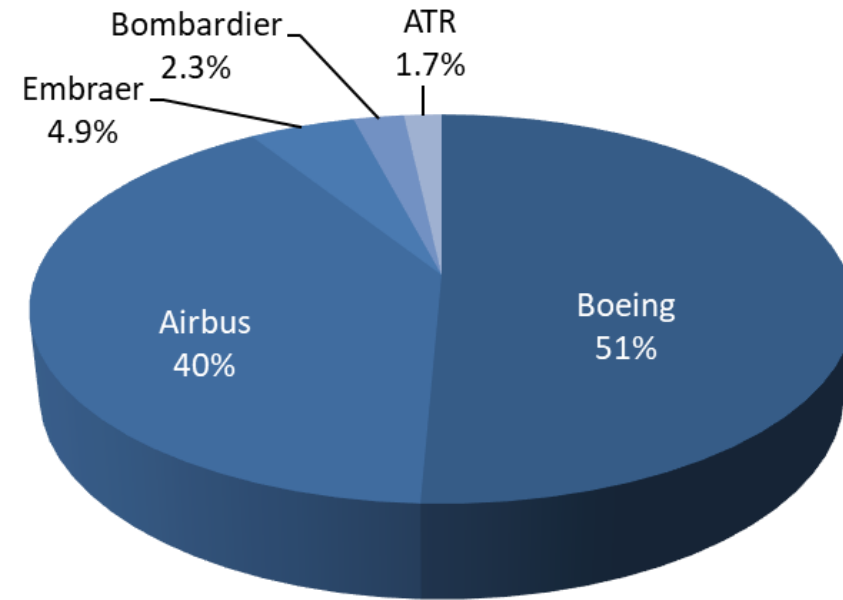
**N. Asia:** China, Hong Kong, Macao, Taiwan, Mongolia

# MCTG Fleet (FY2018)

## By Aircraft Category

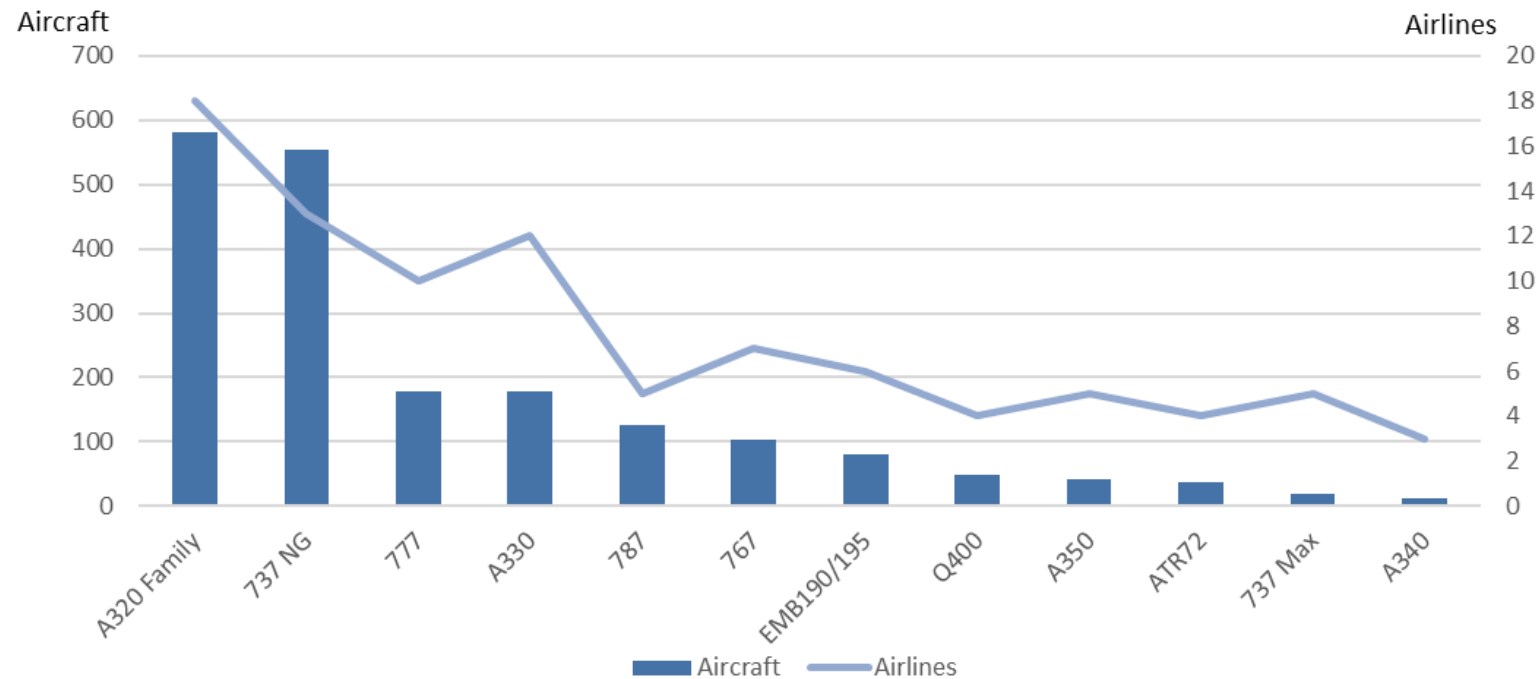


## By Manufacturer



# Top 12 AC Families\* = 94% of MCTG fleet

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

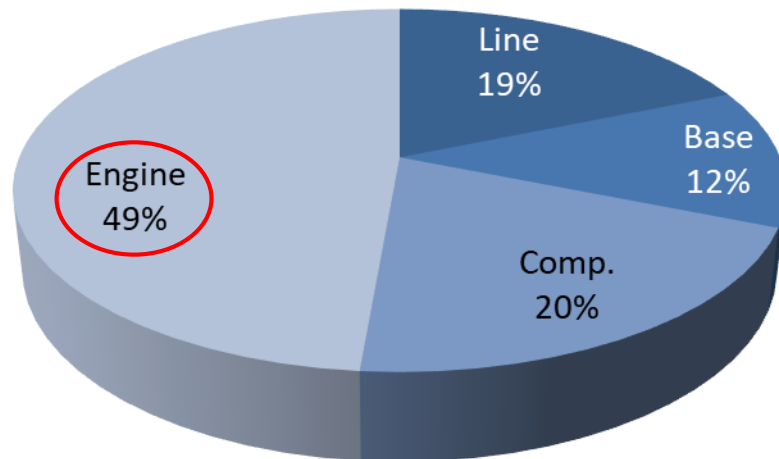


\* With 5+ AC and 3+ operators

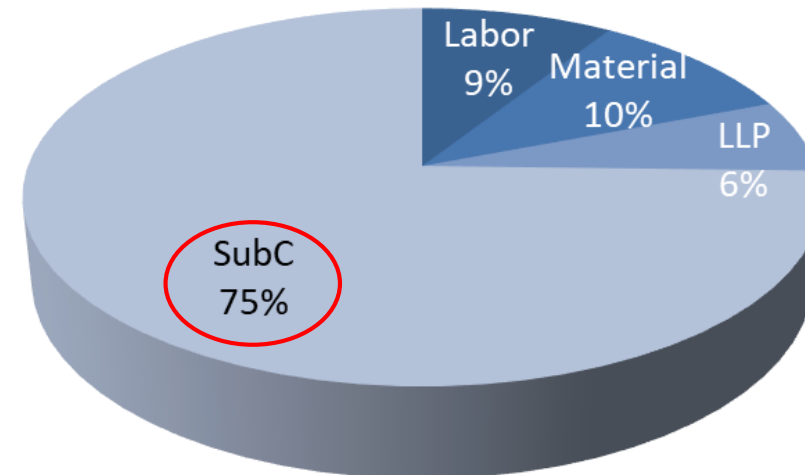
# MCTG Spend (FY2018)

➤ Direct Maintenance Costs (Line/Base/Component/Engine): \$8.02 Bill.

➤ By Aircraft Category

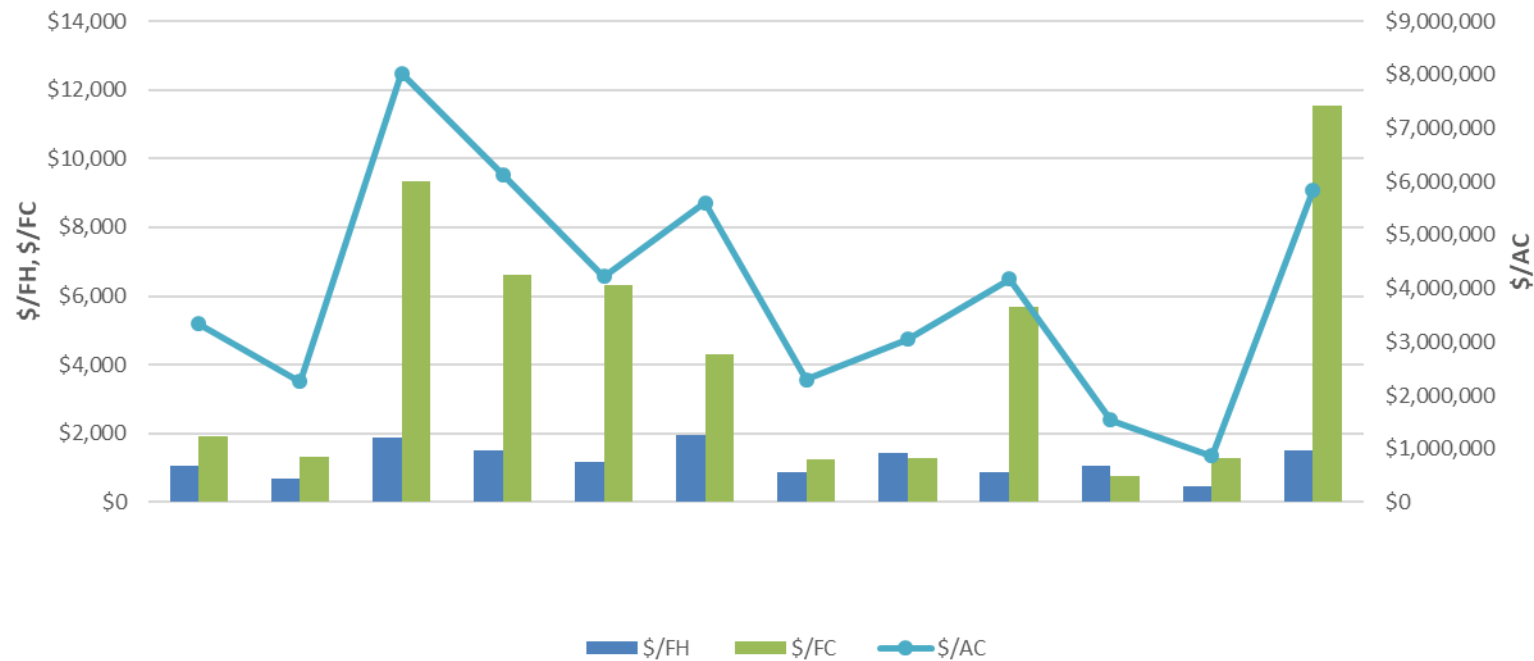



➤ By Manufacturer



# Unit Costs by Aircraft Family

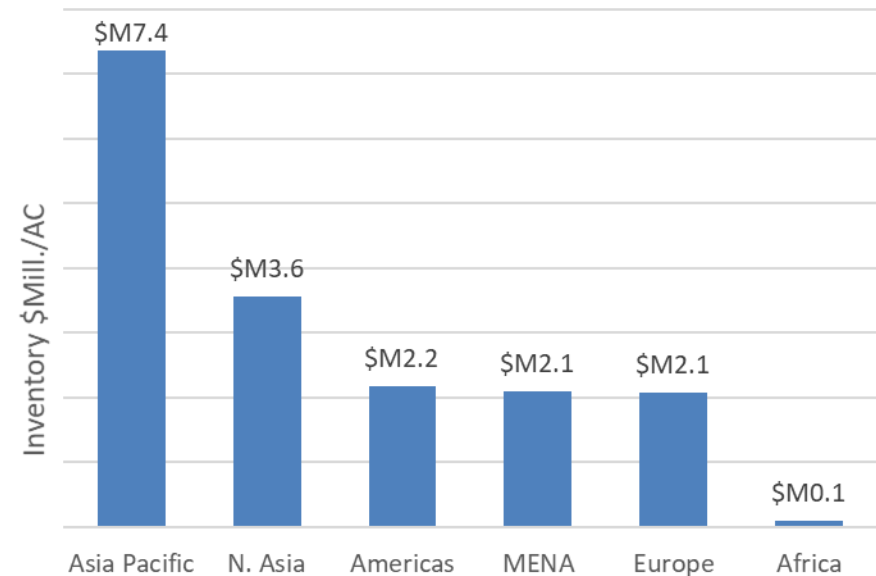
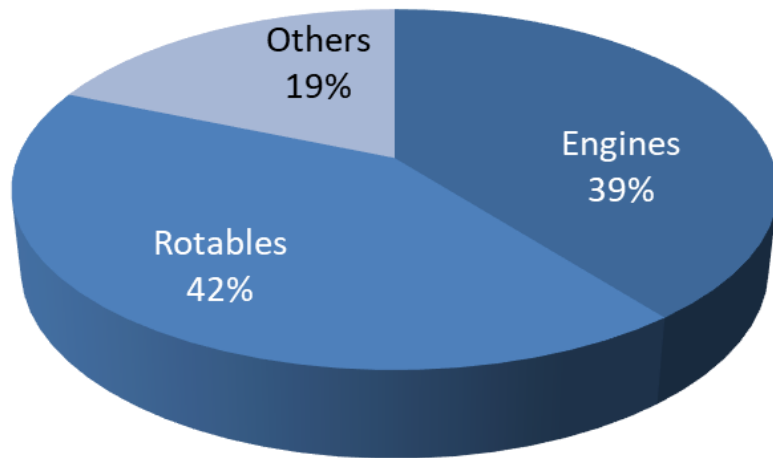
## ➤ Top 12 A/C Families\*



 Raw data, not normalized  
 \* With 5+ AC and 3+ operators

# Spares & Inventory

➤ Averages: \$3.9Mill. per AC ; \$263Mill. per AL



24 airlines, 1,636 aircraft

# Aircraft Leasing & Supplemental Rent\*

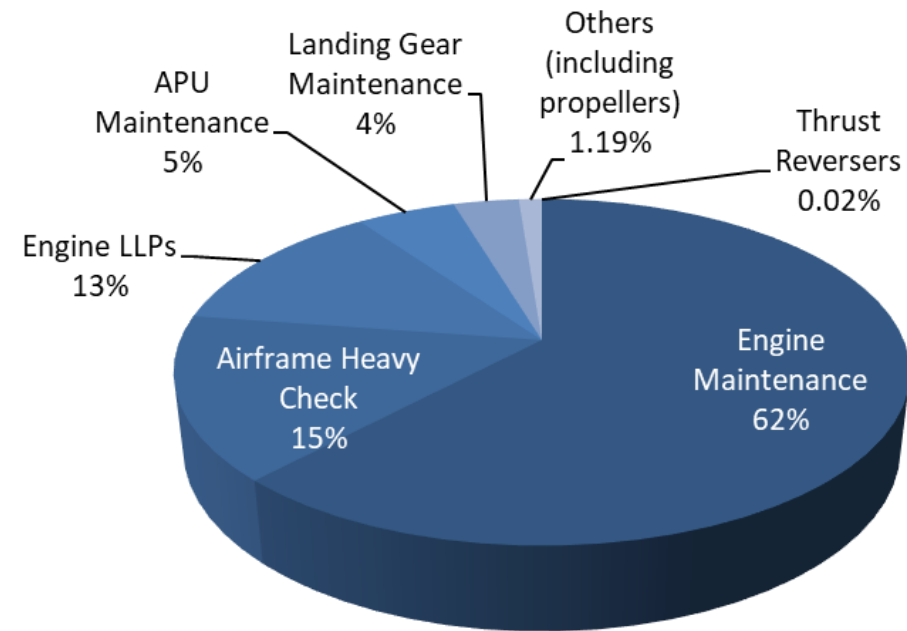
➤ 41% of total MCTG fleet is under operating lease

➤ World average is 40%

➤ 54% of MCTG airlines pay supplemental rent

➤ Total MRs: \$482 Mill.

➤ Engines = 62% of MRs (incl. LLPs)



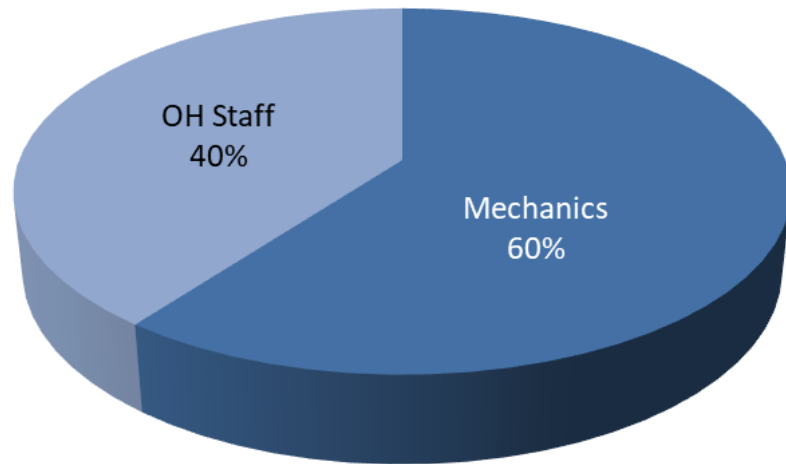
15 airlines - 340 aircraft under operating lease



# Personnel & Overhead

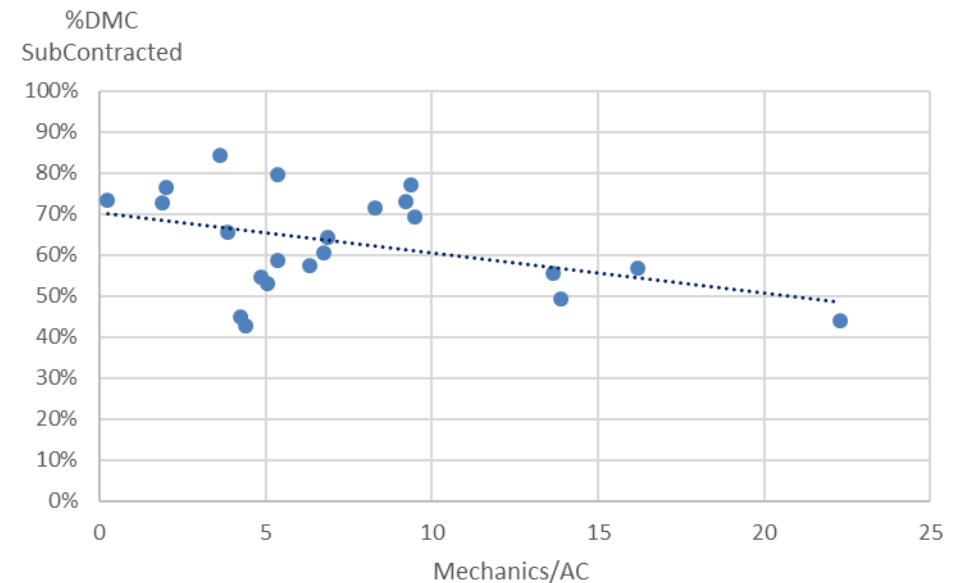
## Direct vs Indirect Labor:

- 10,595 mechanics
- 6,982 staff



## Direct Labor vs %DMC Subcontracted (SubC)

- 8 mech./AC vs. 63% SubC



22 Airlines; 1,390 Airlines

# Personnel & Overhead

## ■ Average Number of Staff per Aircraft

- 482 mechanics/AL



- 8 mechanics/AC

- 317 OH Staff/AL



- 5 OH Staff/AC

22 Airlines; 1,390 Airlines

# In Summary (1/2)

- 30 Airlines
- \$8.02 Bill DMC
- \$1.37 Bill. Overhead Costs
- \$6.3 Bill. Spares & Inventory
- \$530 Mill. Maintenance Reserves

- Engines: 49% of DMC
- Outside Repairs: 75%
- 62% of Maintenance Reserves are for Engines (incl. LLPs)
- Overhead: 15% of total Technical Division costs
- 8 mechanics/AC and 5 overhead staff/AC

## In Summary (2/2)





# Presentation Outline

**1.** Maintenance Cost Methodology

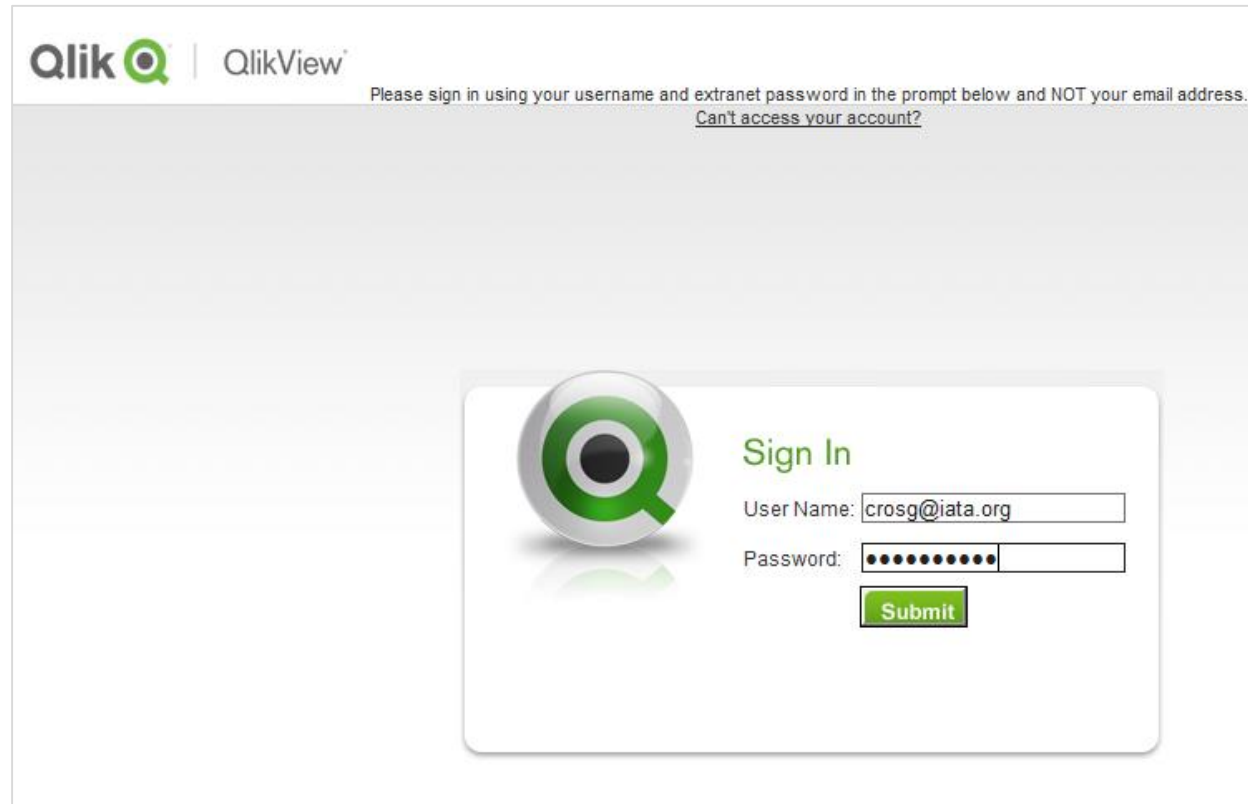
**2.** FY2018 Data Preliminary Analysis

**3.** **IATA Maintenance Cost Dashboard™**

# IATA's Maintenance Cost Dashboard

- Exclusive access for airlines that provide data
- Perform your own benchmark analyses
- Export data to create graphs and presentations

# IATA's Maintenance Cost Dashboard



The screenshot shows a QlikView sign-in interface. At the top left, the Qlik logo and 'QlikView' text are visible. Below this, a message reads: 'Please sign in using your username and extranet password in the prompt below and NOT your email address. [Can't access your account?](#)'. The main sign-in area is a white box with a green Qlik logo icon on the left. To the right of the icon, the text 'Sign In' is displayed. Below 'Sign In', there are two input fields: 'User Name:' with the value 'crosg@iata.org' and 'Password:' with a masked password of ten dots. A green 'Submit' button is located below the password field.

# IATA's Maintenance Cost Dashboard

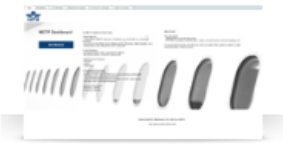
Welcome CROS Geraldine | Favorites & Profile | Sign Out

Qlik QlikView

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

AccessPoint Showing 1-1 of 1 12 items per page

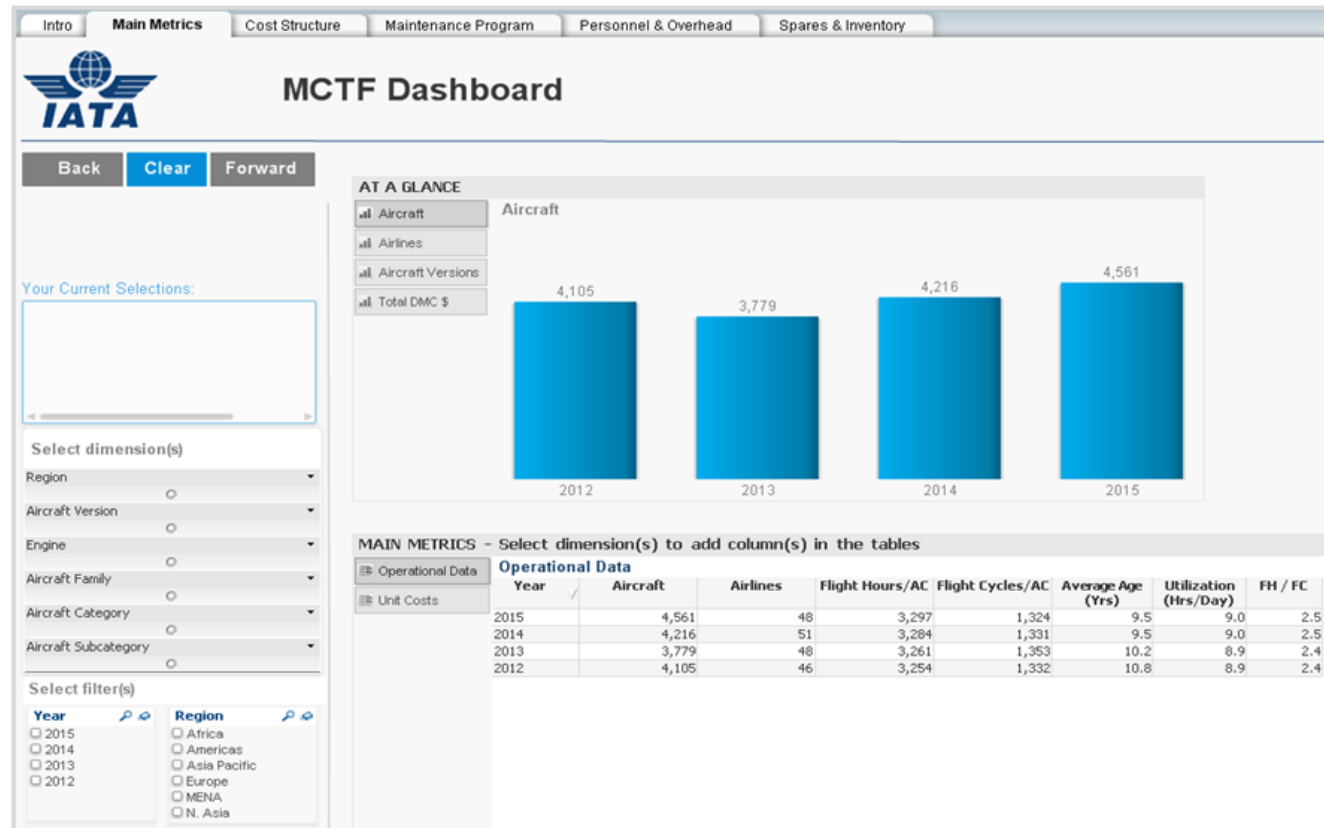
Category: All Attribute: No Attributes Available View as:  Go



★ [MtcCosts\\_Dashboard.qvw](#)  
Last Update: 2016-12-07 14:49  
[view details](#)



# IATA's Maintenance Cost Dashboard



# Next Steps / Action Items

- Continue to grow airline participation
- Match world fleet structure
- Improve geographical representation
- Automate data collection

# 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 “MCTG module”

## Not participating yet?

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

# Thank you

For more information, please visit

[www.iata.org/mctg](http://www.iata.org/mctg)

## Contact

- Geraldine Cros, [crosg@iata.org](mailto:crosg@iata.org)

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Athens, Greece

18 – 19 September 2019

