



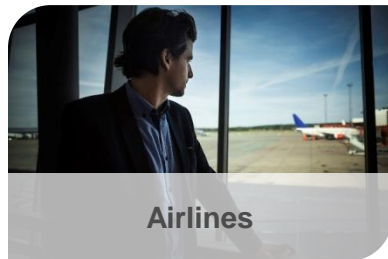
**Capacity Building: Strategies to overcome the shortage in licensed personnel**  
*AACO & IATA Technical Forum*

**Sascha Feuerherd**  
*Managing Director*

October 2019 | Kuwait



# Alton Aviation Consultancy is a boutique aviation consulting firm with deep domain expertise across the aviation value chain



***Agile. Global. Independent.***

# Alton supports a global client base from offices in Asia, USA and Europe, with associates worldwide

## Singapore

50 Raffles Place 19-01  
Singapore Land Tower  
Singapore 048623

+65 3138 2033  
Singapore@AltonAviation.com

## Tokyo

Taiyo Seimei  
Shinagawa Building  
28th Floor, 2-16-  
2Konan  
Minato-Ku  
Tokyo, Japan

+81 90 8057 1956  
Tokyo@AltonAviation.com

## Beijing

8 Guanghua Dongli  
China Overseas Plaza  
South Tower, Floor 11,  
Suite A053  
Chaoyang, Beijing  
100020 China

+86 10 8598 4981  
Beijing@AltonAviation.com

## Hong Kong

136 Des Voeux Road  
Central, Suite 1010  
Central  
Hong Kong

+852 8191 3028  
Hong.Kong@AltonAviation.com

## New York

10 West 40th Street  
Suite 505  
New York, NY 10018  
USA

+1 212 256 8488  
New.York@AltonAviation.com

## Dublin

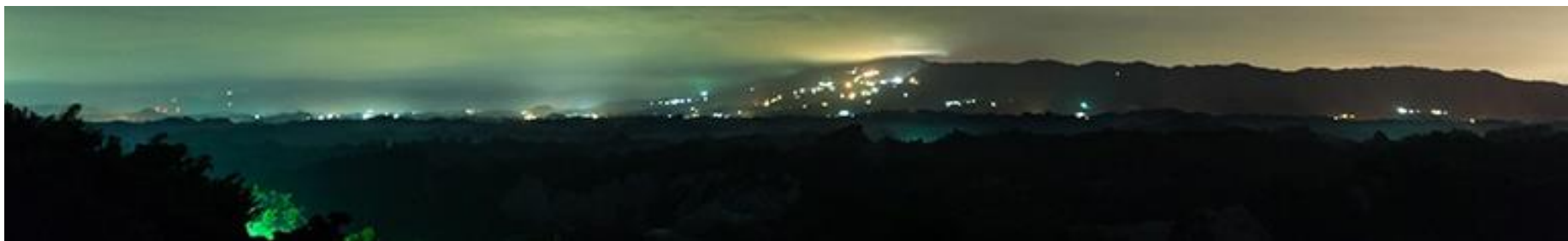
No. 1 Grants Row  
Lower Mount Street  
Dublin 2  
D02 HX96  
Ireland

+353 86 820 6812  
Dublin@AltonAviation.com

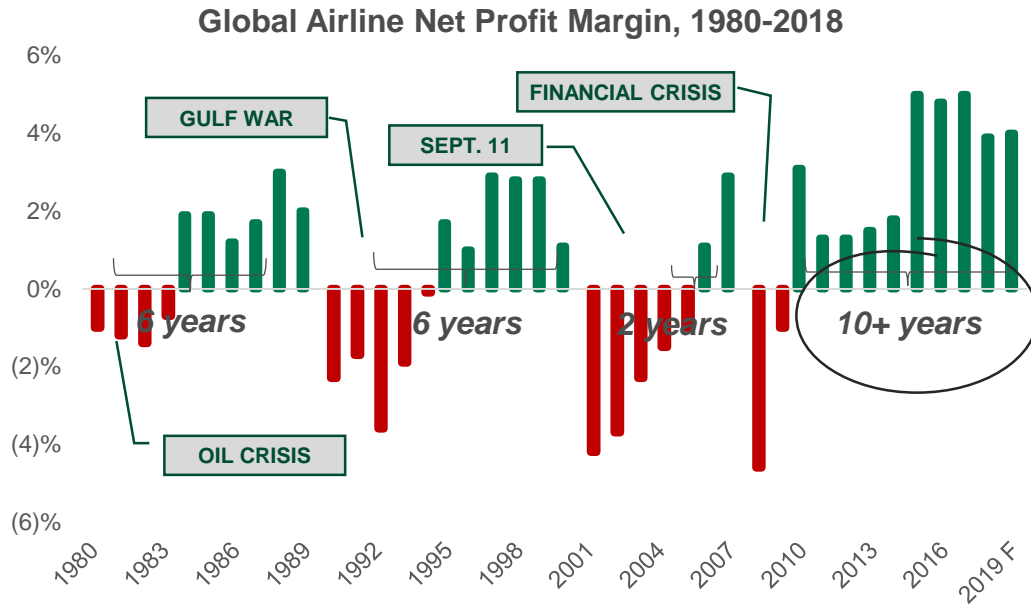
## Frankfurt

Opening Q3 2019

+49 6221 6484950  
Frankfurt@AltonAviation.com



# The airline industry is experiencing its longest cycle of profitability in a post-deregulation industry with an estimated profit of \$28.1 billion in 2019



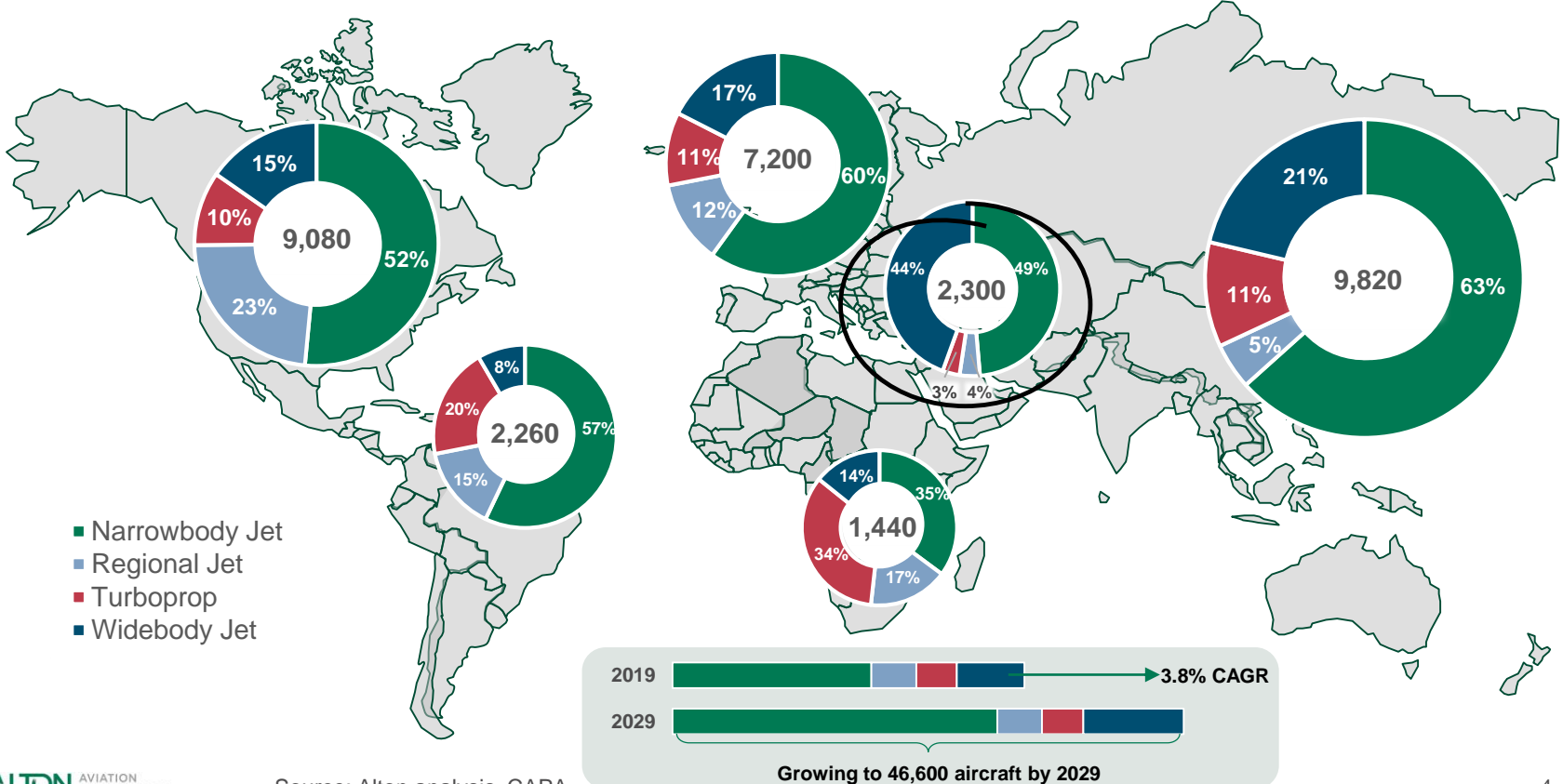
## Alton Insight

### Factors sustaining current momentum:

- Continued strong growth in air traffic demand
- Airline consolidation in mature markets driving capacity & pricing discipline
- Stable and moderate fuel prices and interest rates

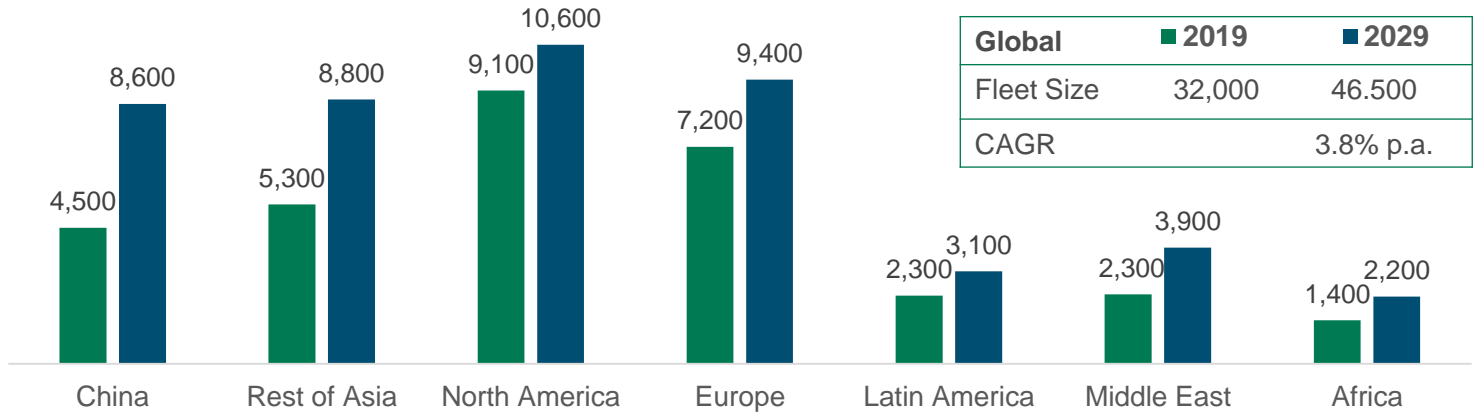
**Recent forecasts, however, have lowered the outlook**

# Today's commercial air transport fleet consists of approximately 32,000 aircraft which will grow to over 46,000 in the next 10 years



# Over the coming decade, the Middle East is estimated to add more than 1,600 aircraft to the fleet; a 5.3% annual growth rate

2019 - 2029 Fleet Forecast by Region



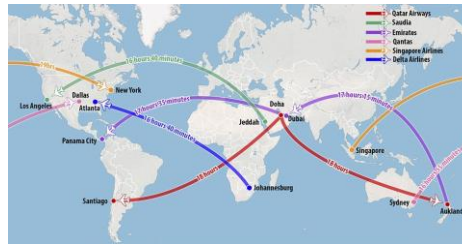
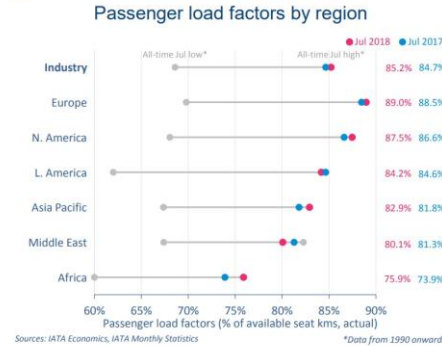
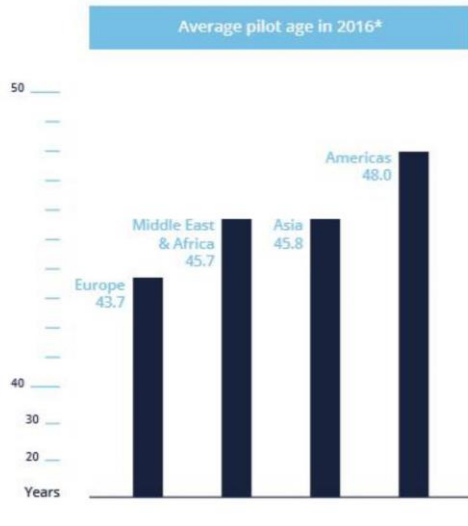
Global	2019	2029
Fleet Size	32,000	46,500
CAGR	3.8% p.a.	

<b>2019-2029 Net Fleet Growth</b>	<b>+4,100</b>	<b>+3,500</b>	<b>+1,500</b>	<b>+2,200</b>	<b>+800</b>	<b>+1,600</b>	<b>+800</b>
<b>Annual Growth Rate</b>	<b>6.7%</b>	<b>5.2%</b>	<b>1.6%</b>	<b>2.7%</b>	<b>3.1%</b>	<b>5.3%</b>	<b>4.5%</b>

Fleet numbers rounded to nearest hundred  
Source: Alton analysis



# Personnel replacement, average fleet utilization numbers, seat load factors at a maximum and new gen aircraft are additional factors in the equation...

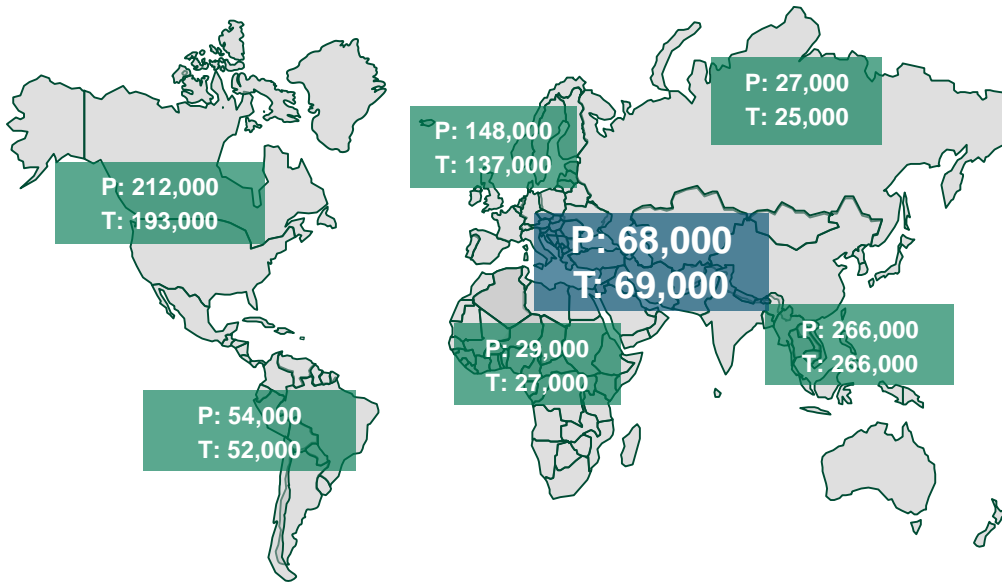


## Alton Insight

- **Maturing population (retirement and attrition) in licensed personnel mandate for replacement**
- **Airlines aim for efficiency (increasing Seat Load Factor and higher average fleet utilization) leading to higher pilot / aircraft ratios**
- **New generation aircraft enable airlines to fly longer sectors, leading to the regulatory mandated placement of relief crews**

# People: Future Outlook for Civil Pilots and Technicians over the coming 20 years show huge growth

## Civil Pilots / Technician Outlook by Region



### Recruitment

- Social & educational “influencers”
- Build, acquire or rent?

### Training

- Supply / Demand Assessment
  - *Skillsets needed for the future?*
  - *Where are the gaps?*
- Training Outcomes
  - *Competency, knowledge retention*
- Enablers
  - *Methods (AR/VR, gamification)*
  - *Virtual / e-learning*

### Performance & Retention

- HRTech: performance, feedback & analytics
- Culture: inter-generational, cross-cultural, multi-lingual
- Organizational leadership
- Compensation



## Questions

### Questions

- Are the AACO carriers prepared for the challenge to have adequate numbers of licensed personnel (today and in the future)?
- What are the main strategies on building up numbers for
  - Civil Pilots
  - Technicians
- Will a possible recession in the airline industry have any effect (short-term / long-term)?
- To poach or not to poach and how to deal with it?
- Will new gen aircraft with new technologies drive further outsourcing of MRO work?
- Will the Max return have an impact on licensed personnel shortage?
- Is the climate debate (flight shaming) going to have an impact?

# TODAY'S PANELISTS



Anthony Lowery

*Chief Technical Officer*



Victor Robeck

*Head Flight Operations  
Regulatory Affairs*





**ALTON** AVIATION  
CONSULTANCY

**Sascha Feuerherd**

+49 (0) 151 40139990

[sascha.feuerherd@altonaviation.com](mailto:sascha.feuerherd@altonaviation.com)

[ALTONAVIATION.COM](http://ALTONAVIATION.COM)

NEW YORK | DUBLIN | FRANKFURT | HONG KONG | BEIJING | TOKYO | SINGAPORE