Agenda

• Pilot Supply Trends
• Operational Impact
• Humanitarian Impact
• Humanitarian Experience Requirements
• Recommendations
• Safety Impact
Pilot Demand

- **AMERICAS**: +85K New pilots
- **EUROPE**: +50K New pilots
- **MIDDLE EAST & AFRICA**: +30K New pilots
- **ASIA-PACIFIC**: +90K New pilots

**New pilots required for growth and replacement**

- **50%**: Of pilots flying by 2027 have not started to train yet
- **70**: New pilots/day
- **180k**: New captains
Fleet Growth

- **Passenger trips***
  - 2017: 3.2B
  - 2027: 4.8B

- **City-pairs with direct flights**
  - 2017: 18K
  - 2027: 25K

- **Active commercial aircraft***
  - 2017: 25K
  - 2027: 37K

* Based on IATA Air Passenger Forecasts, October 2016
** Based on IATA city-pairs data, 2016
*** Based on a combination of aircraft manufacturer and industry forecasts

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Pilot Supply Trends

Historical Major Hiring
(Source: FAPA)
Pilot Supply Trends

FORECAST HIRING AT MAJOR AIRLINES

University of North Dakota (Source)
Pilot Supply Trends

Historical and Forecast Cost of Initial Flight Training
Year-Over-Year (2016 Dollars)

Historical Costs vs. Forecast Costs

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University of North Dakota (Source)
Operational Impact

Forecast Yearly and Cumulative Shortages of Pilots to Staff the US Airline Fleet

Yearly Shortage
Cumulative Shortage

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000
0 2,000 4,000 6,000 8,000 10,000 12,000 14,000 16,000

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University of North Dakota (Source)
Humanitarian Impact

• Part 135 and regionals are impacted
• Struggling to attract pilots
• Fewer applications
• Lower quality
• Mid career departures
• Lack of experience
• Desire to fly larger aircraft, depleting humanitarian fleet
Humanitarian Experience Requirements

- War
- Coup
- Rebel Group
- Terror Cell
- Political Unrest
- Instability
- Disease
- Global Pandemic
- Riot
- Help
- Rescue
- Relief
- Response
- Support
- Security
- Life
Humanitarian Experience Requirements

• Personal security
Humanitarian Experience Requirements

• Personal security
• Inaccurate weather reports, field condition reports
Humanitarian Experience Requirements

- Personal security
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- Political unrest and military coups
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- Evacuation Plans
Humanitarian Experience Requirements

• Personal security
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• Political unrest and military coups
• Evacuation Plans
• Fuel availability and quality: fuel replaced with water
Recommendations

• Increase the number of pilots
  • Cost issues
  • CFI shortages
• Increase the number of pilots to aspire to a professional flying career
• 2010 study 29% of student pilots were aspiring to fly professionally
• Realize the challenge of obtaining pilot staffing is going to continue and possibly worsen
• Financial support of training/education debt
• Loan repayments & scholarships
• Provide ATP CTP
Recommendations

• Realize quality of life is a priority
• Schedules that minimize time away
• Defined Career Paths
• Mentoring important
• Recruitment visits
• Well prepared representatives
Thank you.