



Training

2016 Pilot & Technician Outlook

Support and Services

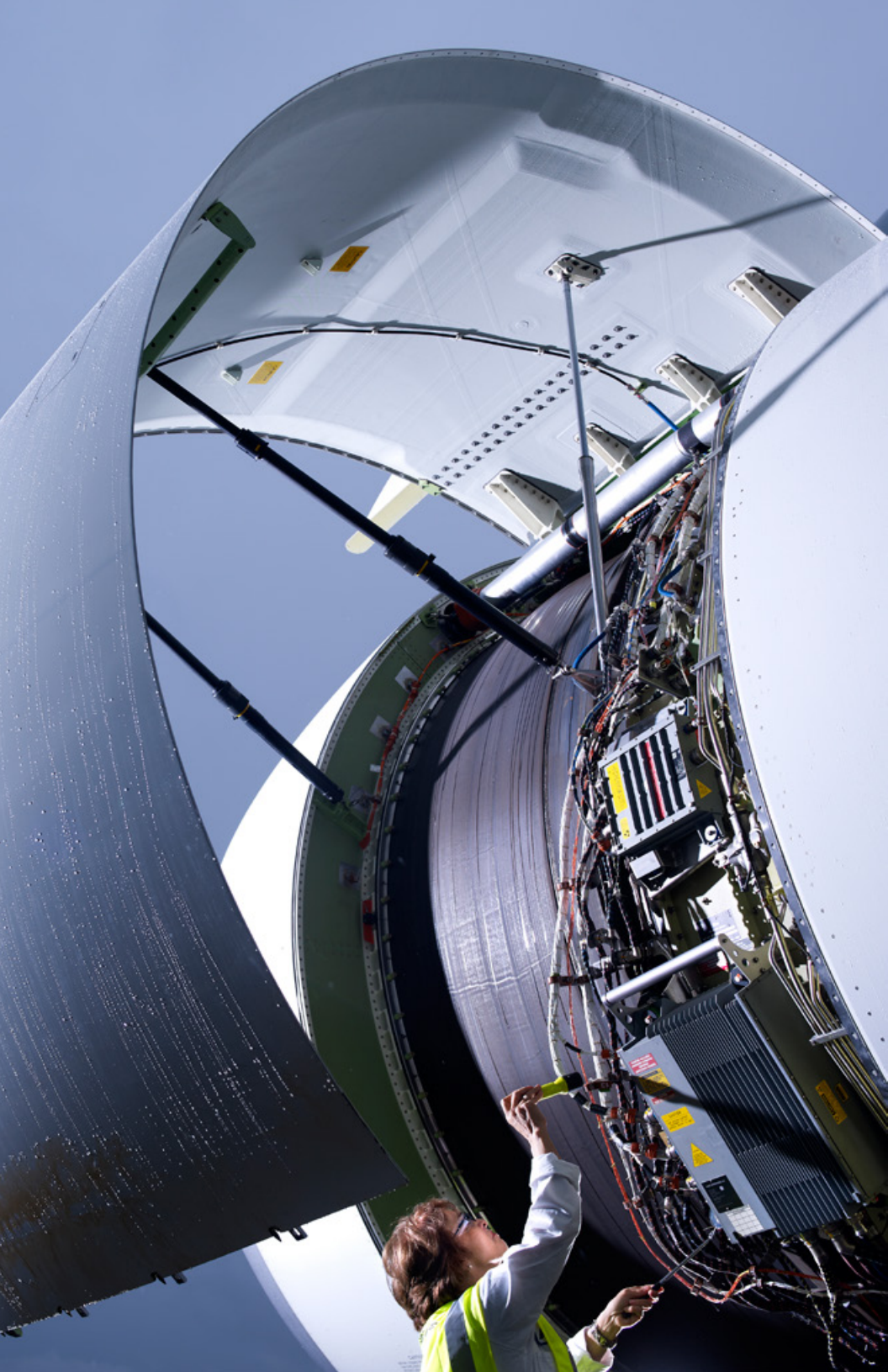
FLIGHT OPERATIONS SOLUTIONS





“This is fundamentally different than anything you have seen in history. This is a strong long-term growth market.”

- Dennis Muilenburg, CEO



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Pilot & Technician Outlook

As global economies expand and airlines take delivery of tens of thousands of new commercial jetliners over the next 20 years, there is extraordinary demand for people to fly and maintain these airplanes.

Between now and 2035, the aviation industry will need to supply more than two million new commercial airline pilots, maintenance technicians, and cabin crew.

The 2016 Boeing Pilot & Technician Outlook, a respected industry forecast of personnel demand, projects that 617,000 new commercial airline pilots, 679,000 new maintenance technicians, and 814,000 new cabin crew will be needed to fly and maintain the world fleet over the next 20 years.

Meeting this demand will require innovative solutions – focused on educational outreach and career pipeline programs – to inspire the next generation of pilots, technicians, and cabin crew. New technologies, devices, and training methods will be needed to meet a wide range of learning styles. The growing diversity of aviation personnel will also require instructors to have cross-cultural and cross-generational skills to engage tomorrow's workforce.

Although Asia Pacific remains the region with the highest overall demand, there has been a significant increase in the expected number of skilled resources required in other parts of the world. New market opportunities, such as the opening of Cuba for the North American market and increased intra-Europe travel for the European market, have strengthened demand.



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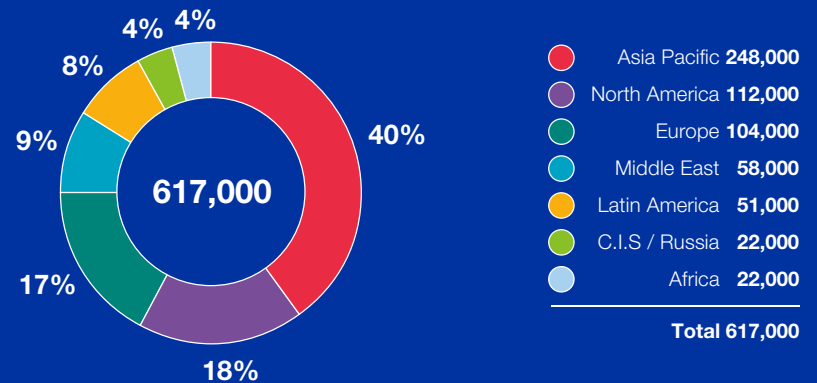
2016 Pilot Outlook

Airlines across the globe are expanding their fleets and flight schedules to satisfy demand generated by global economic expansion. The aviation industry continues to address these challenges by creating balanced, sustainable solutions to fill future pilot pipelines.

Regional markets that have relied heavily on recruiting pilots from outside their home locations are increasingly seeking to recruit, train, and develop locally sourced pilots.

Over the next 20 years, the Asia Pacific region will lead the worldwide growth in demand for pilots, with a requirement for 248,000 new pilots. North America will require 112,000, Europe 104,000, the Middle East 58,000, Latin America 51,000, the Commonwealth of Independent States (CIS) / Russia 22,000, and Africa 22,000.

New Pilots by Region 2016-2035



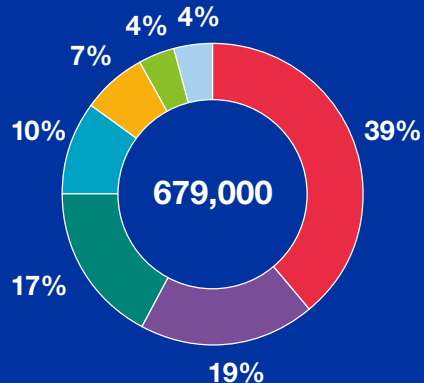
Training 2016 Technician Outlook

As newer generation airplanes become more prevalent in worldwide fleets over the next 20 years, airplane reliability will improve, and maintenance check intervals will lengthen. Although this trend will moderate demand for maintenance personnel somewhat, the global need for technicians will remain strong.

Overall global fleet growth, along with the increasing trend for operators to outsource maintenance, repair, and overhaul activities to third-party providers, will drive an increased need for qualified technicians.

The need for maintenance personnel is largest in the Asia Pacific region, which will require 268,000 new technical personnel. Airlines in North America will require 127,000, Europe 118,000, the Middle East 66,000, Latin America 50,000, CIS / Russia 26,000, and Africa 24,000.

New Technicians by Region 2016-2035



Asia Pacific	268,000
North America	127,000
Europe	118,000
Middle East	66,000
Latin America	50,000
C.I.S / Russia	26,000
Africa	24,000

Total 679,000



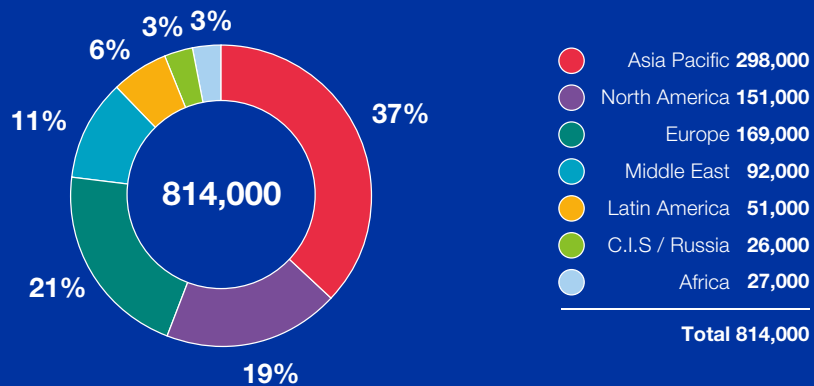
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2016 Cabin Crew Outlook

As airlines continue to expand flight routes, grow their fleet, and transition to airplanes with higher seat capacity, an increasing number of cabin crew personnel will be needed to ensure the safety and comfort of passengers. With a focus on operational improvements, many regional markets have also updated regulations to require a greater number of cabin crew per aircraft.

Over the next 20 years, the largest projected growth in cabin crew demand is in the Asia Pacific region, with a requirement for 298,000 new cabin crew. Europe will require 169,000, North America 151,000, Middle East 92,000, Latin America 51,000, Africa 27,000, and CIS / Russia 26,000.

New Cabin Crew by Region 2016-2035





Support and Services

FLIGHT OPERATIONS SOLUTIONS

Training and Resourcing

- Flight Training
- Ground Training
- Cabin Safety Training
- Maintenance Training
- Pilot Provisioning
- Training Materials
- Line Assist
- Pilot Development

Simulator Services

- Simulator Package
- Simulated Hardware
- Simulator Management
- Training Center Services

Fuel Optimization

- Fuel Monitoring & Analytics

Flight Optimization

- Charting
- Electronic Flight Bag Applications
- Flight Planning
- Inflight Optimization Services

Airspace Optimization

Business Consulting

- Crew Planning
- Airline Operations
- IT and Cyber Security

Boeing Commercial Airplanes

Flight Services Marketing
P.O. Box 34787, MC 20-74
Seattle, WA 98124-1787

www.boeing.com/commercial/services/
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