Meeting Workforce Needs
Opportunities & Risks
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Future Aviation/Aerospace Workforce News
FSANA August 2021
88,400 airline pilots in North America, a subset of ATP certificate holders.

About 7,300 took early retirement

Another 1,800 will reach 65 or be medically retired across 2020/21. Oliver Wyman believes at some airlines in the US, retirements were as high as 20%

Another 300 will leave the commercial flight deck for other opportunities

Total: 9,400 pilots exited the industry -- 12% of the workforce

2019 SURVEY: 62% of flight operations leaders listed a shortage of qualified pilots as a key risk
Airlines Not Coming Back?

6.2% Growth Post Crisis
By the Numbers

By 2039
Boeing Pandemic Outlook 2020-2039
Likely conservative

By 2030 CAE

Commercial Aviation
2,086,000 New Personnel

Business Aviation and Civil Helicopter
319,000 New Personnel

New Pilots needed over the next 10 years
* includes movement of 21k Business Pilots to airlines
Oliver Wyman: There is a global gap of 34,000 pilots by 2025. This could be as high as 50,000 in the most extreme scenarios.

“For individuals considering being a pilot, they are looking at a career projection unlike anything we’ve seen in decades,” said Oliver Wyman Partner Geoff Murray*

Analysis: Pilot Shortage 2.0 on Horizon Unless Airlines Act
But Wait, There’s More

Industry Facing Shortages in Manufacturing
- Engineering
- Airports
- ATC
- Below Wing
- Above Wing
- Advanced Air Mobility

739,000 Technicians
Opportunities

It is unknown if there is capacity to train the pilots and technicians. What is clear is we need to grow the Aviation Education Ecosystem.

Capacity expanding as airlines open new flight and aviation maintenance schools leveraging new rules to open satellites in local high schools.
New Pipelines

Where will we find this new talent? We have to go to them.

- Under-represented groups
- Inner cities – Boys & Girls clubs, Girl Scouts, Boy Scouts,
- Rural schools
- Aviation Minority Groups

BUT.......

Industry must dramatically change with robust diversity, equity and inclusion culture changes meaningful to millennials, minorities. You’ve got to Walk the Walk.
Aviation Minority Groups

- AWAM
- Fly for the Culture
- IAWA
- Latino Pilots Association
- NGPA
- OBAP
- TUSKEEgee AIRMEN, INC
- WCA
- Women in Aviation
- Whirly Girls
Education Trends

• Beginning in pre-school to attract kids to Aviation/Aerospace
• Career & Technical Education
• Credits for college while in high school
• Removing Education Silos to train students across disciplines – the 21st C employee
• New parent strategy for mitigating higher ed costs -- Certification at high school graduation...leveraging corporate education programs for higher ed.
Education Trends, cont’d

• Micro credentialling
• Co-sponsored Continuing Education – Life-long CE to ensure employees keep up with tech.
• Minority Flight Schools
• Apprenticeships, Internships
• Mid-Career Pivots -- Almost 70% of workers want a career change, said recent Business Insider story
• Emerging Technology Integration – CAE, Volocopter partnering on Advanced Air Mobility pilot training
• Aviation Maintenance Schools, unions, corporations partnering to develop curriculum for new MRO demand
• Super Technicians able to work across disciplines. Same requirement will be made of pilots.
Student Funding

- Scholarships
  - Are they enough? Very inefficient
  - Develop more seamless approach to cover multiple years

University Aviation Association Scholarships
FREE ONLINE
https://www.uaa.aero/uaa_scholarships.php

- Some already cover trade schools but need expansion to:
  - Technical schools
  - Flight schools

- National Center for the Advancement of Aviation (NCAA)
New Federal Grants

- **Federal, State & Private Loans**
  - L3 Harris reports private equity interested in funding pilot training
  - SkyBound private bank lending

- Aircraft Pilots Workforce Development Grants are designed to expand the pilot workforce and educate students to become pilots, aerospace engineers or unmanned aircraft systems operating systems

- Aviation Maintenance Technical Workers Workforce Development Grants will help prepare a more inclusive talent pool of aviation maintenance technicians

FAA Workforce Development Grants
https://www.faa.gov/about/office_org/headquarters_offices/ang/grants/awd/
Connecting the Dots

➤ The aviation education ecosystem is VAST but we don’t connect the dots

✓ Educators and corporate workforce development programs
✓ Aviation Minority Groups & Educators, Flight Schools
✓ Veteran Career Groups and Aviation
✓ Students and scholarships
✓ Parents and Aviation Careers
✓ Museums
✓ K-12
✓ STEM/Aerospace Programs
Marketing & Funding Resources

Resources for Education and Workforce Development Programs for Aviation/Aerospace

https://futureaviationaerospaceworkforce.com/resources-for-promotion-and-education-in-aviation-aerospace/
Thank You, Questions?

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