

Aug 14th, 12:00 PM - 1:00 PM

Lunch Keynote Speaker — The Mechanic Pipeline

Crystal Maguire J.D.

Executive Director, Aviation Technician Education Council (ATEC), crystal.maguire@ATEC-AMT.ORG

Follow this and additional works at: <https://commons.erau.edu/ntas>

Maguire, Crystal J.D., "Lunch Keynote Speaker — The Mechanic Pipeline" (2018). *National Training Aircraft Symposium (NTAS)*. 9.
<https://commons.erau.edu/ntas/2018/tuesday-august-14/9>

This Presentation is brought to you for free and open access by the Conferences at Scholarly Commons. It has been accepted for inclusion in National Training Aircraft Symposium (NTAS) by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.



National Training Aircraft Symposium

Daytona Beach, Florida

August 14, 2018



About ATEC

- Promotes and supports aviation maintenance technician education
- Represents 72% of the 171 FAA-certificated aviation maintenance technician schools
 - Eighty percent public institutions (representing 63% of enrollments)
 - Vast majority offer associate's degree (70%), also four-year institutions (17%), technical schools (6%) and high schools (2%).
- Industry employer members include—





atec-amt.org/schools

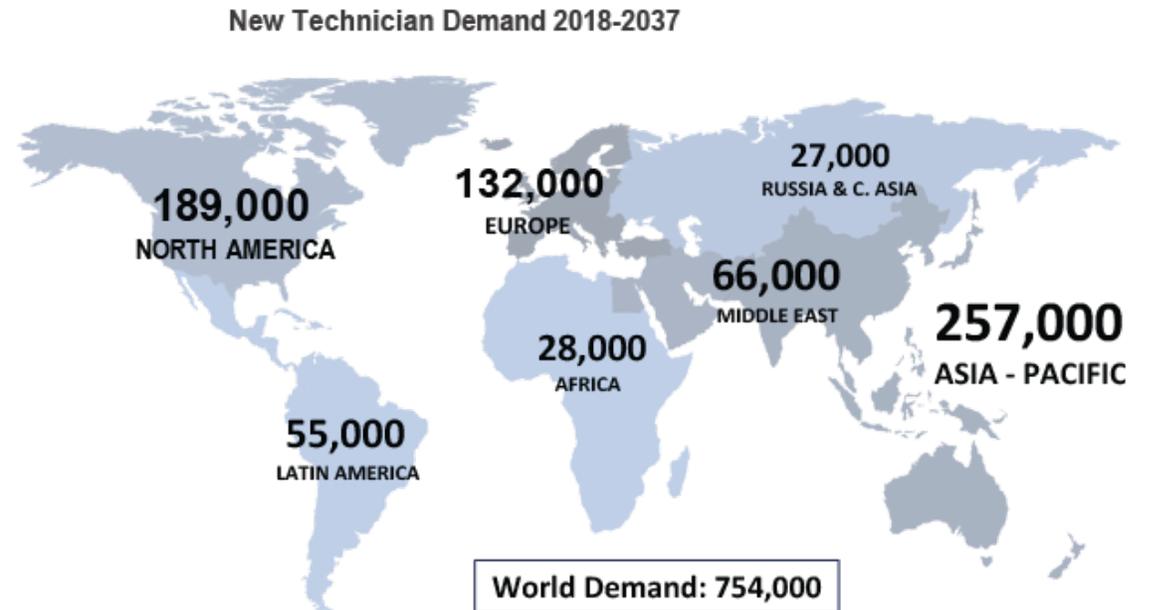
Workforce Data: The Government

The Bureau of Labor Statistics anticipated [4% growth](#) for airline and commercial pilots, and [5% growth](#) for aircraft mechanic and technical careers in the next decade. The Bureau projects 4,400 new pilot and 12,400 new technical job openings in the next ten years.



Workforce Data: Industry

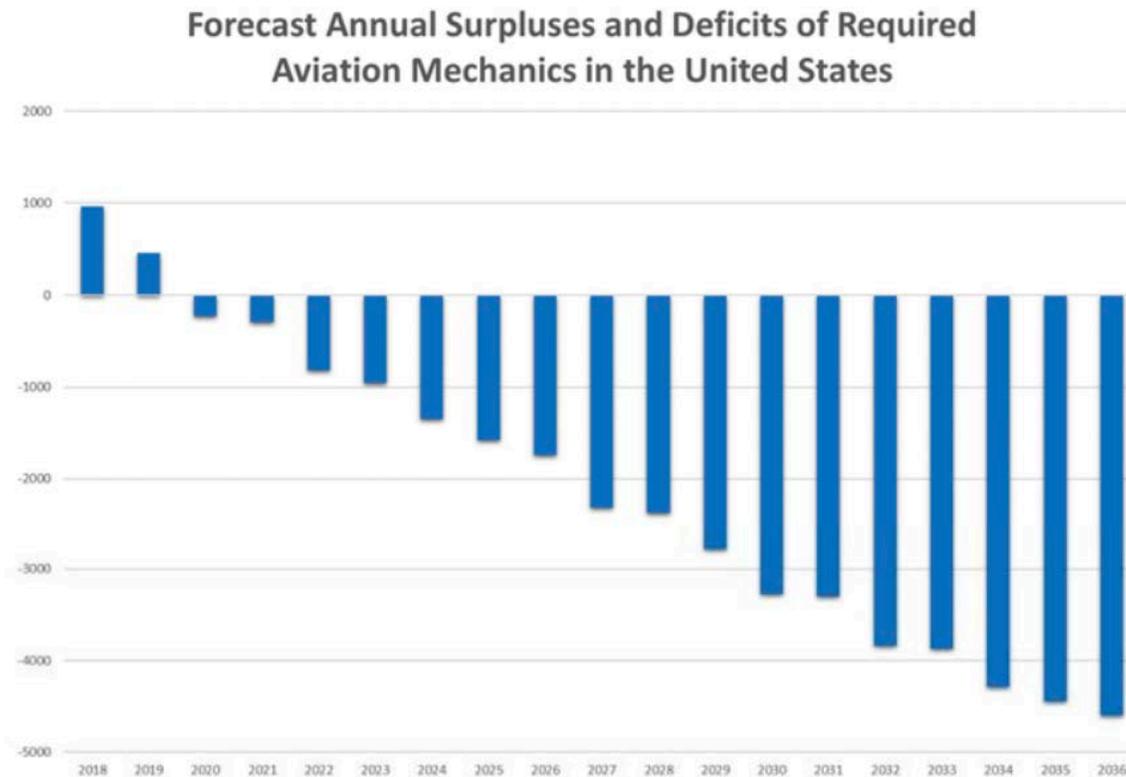
- Industry studies paint a starker picture.
- Airbus projects a need for 630,000 new technicians (and 540,000 new pilots) worldwide in the next 20 years—up from the company’s 2017-2036 estimate of 550,000 new technicians.
- Boeing’s needs estimate is even higher; the manufacturer says that the commercial, helicopter and business aviation industries combined will require 754,000 new technicians (and 790,000 new pilots) by 2037, with a quarter of the demand coming from North America.



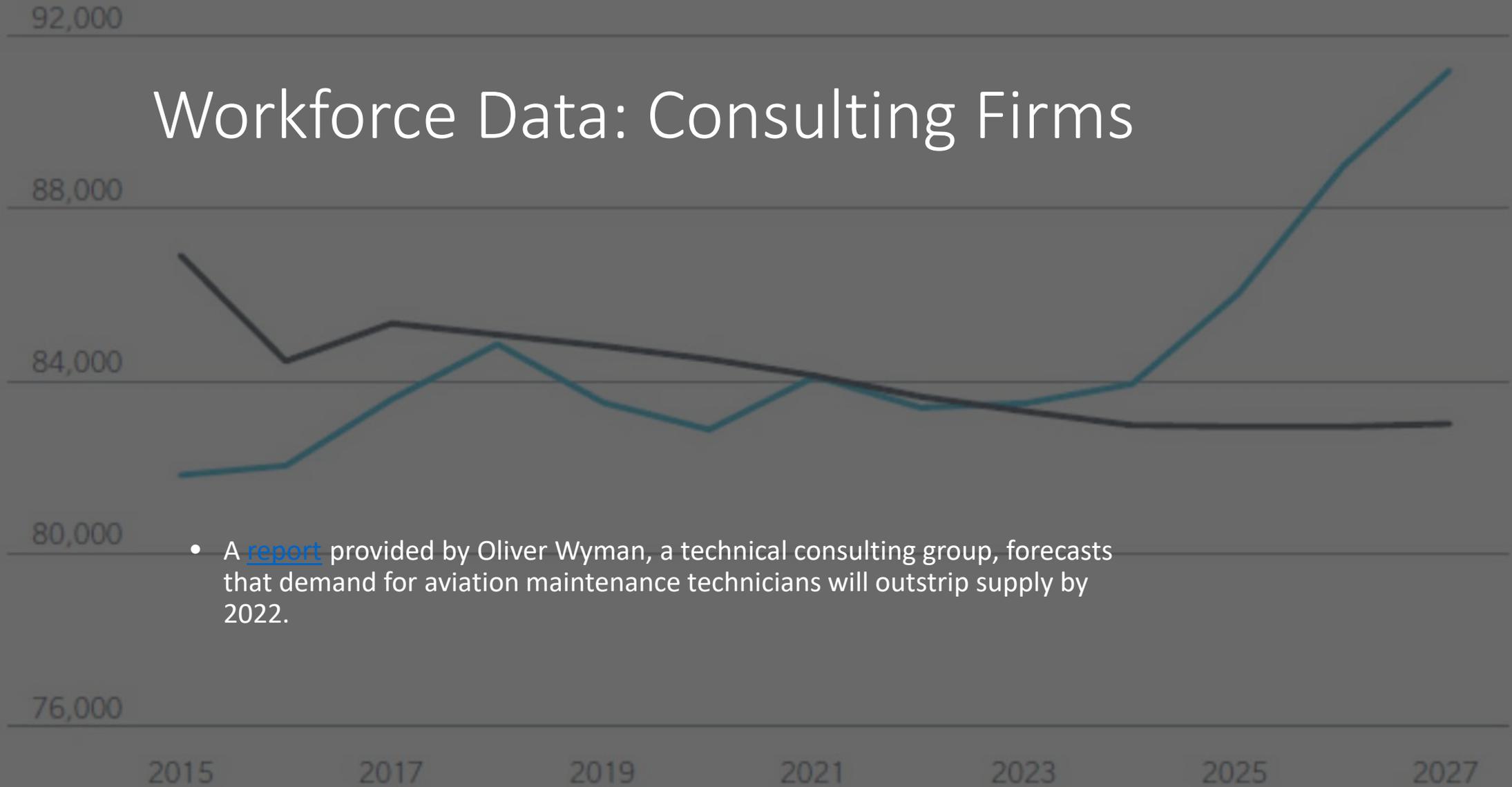
Source: Boeing Technician Outlook: 2018 - 2037

Workforce Data: Industry Groups

- An [Aeronautical Repair Station Association \(ARSA\) report](#) estimates that there are more than 2,500 unfilled technical positions in the U.S., costing the repair station industry upwards of \$642.5 million in annual revenue.
- A [Helicopter Association International study](#) projects a shortage of 7,649 pilots and 40,613 certificated aviation mechanics in the U.S. by 2036.



NUMBER OF PEOPLE

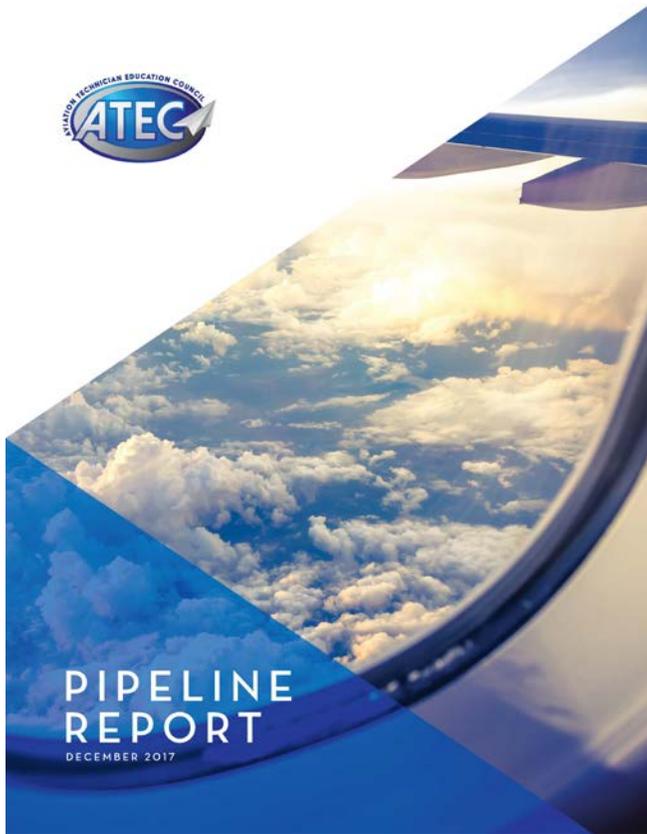


Supply

Demand

- A [report](#) provided by Oliver Wyman, a technical consulting group, forecasts that demand for aviation maintenance technicians will outstrip supply by 2022.

Source: Oliver Wyman Commercial MRO Maintenance Technician Labor Model



- Survey of 171 active AMTS with nearly 18,000 total enrollment (61% participation)
- Additional data was gathered from the National Center for Education Statistics College Navigator and FAA sources including the AMTS database, US Civil Airmen Statistics, Regional Active Airman Tables, FAA data downloads and the airman certification database.



atec-amt.org/workforce



Pipeline Report Findings

- Mechanics are retiring faster than they are being replaced. New entrants make up 2% of the population annually, while 30% of the workforce is at or near retirement age.
- Sixty percent of new mechanics obtain certification by virtue of an AMTS certificate of completion.
- A&P schools have the capacity to double production.
- While AMTS capacity increased by 2% in the last year, enrollment decreased by 2%.
- Twenty percent of candidates pursue careers outside of the industry and only 60% elect to take the FAA mechanic test.
- Average graduation rate for A&P student is 78%.
- Of those eligible for placement, 71% of A&P graduates had a job upon graduation.



Regulatory Advocacy

- Title 14 Code of Federal Regulations part 147 curriculum requirements largely unchanged since the 1970s
- Industry is asking for a “performance based” rule that would better align with Dept. of Ed and accreditation requirements
- NPRM issued November 2015, a supplemental proposed rule is expected this month, a final rule 24 months thereafter
- Pushing for curriculum requirements be tied to imminent [Aviation Maintenance Technician \(AMT\) Airman Certification Standards \(ACS\)](#)



Legislative Advocacy

- US Senators Orrin Hatch (R-UT), Maria Cantwell (D-WA), James Inhofe (R-OK), and Richard Blumenthal (D-CT) [introduced a bill](#) (S.2792) that would require promulgation within six months
- [S.2506](#) & [H.R.5701](#) that would incentivize local education-industry collaborations by providing grants of up to \$500,000 to support aviation maintenance workforce development activities



Efforts to Broaden the Pipeline

- Student accessibility to Designated Mechanic Examiners
 - Focus on educating industry on the application process
 - Tools to support needs analysis—Currently 279 mechanic examiner designees vs. nearly 18,000 current students (70% attend a two-year program)
 - Talks with the agency on potential ODA for DMEs
- High School Partnerships
 - Encourage dual enrollment high school programs
 - Utilization of additional fixed locations on AMTS op specs
- Distance Learning Program Approvals



Opportunities & Events

- Summer webinar series ([Register here](#))
- ATEC Fly-in in Washington Sept. 12-13, 2018 ([Register here](#))
- Annual Conference in Wichita March 18-20, 2019
- Employer Link on Monday March 18, 2019 ([Register here](#))
- [ATEC Journal](#): opportunity for industry to talk about emerging technologies or teaching methods
- Support through membership at atec-amt.org/join





P.O. Box 234
Jenks, OK 74037

703.548.2030

ATEC-AMT.ORG