

Increasing Career Choice: Women in Aviation Maintenance

Brandon Waggoner

Liberty University

Growth, opportunity, and personal improvement are all aspects to an American culture that traces its origins back to the founding of the United States. However, decades later, these opportunities are not the same across ethnicities and gender. Specifically, women have faced an uphill battle in access to opportunities found in many career fields. Women remain underrepresented in the fields of science, technology, engineering, and math (STEM) which has begun to garner more attention within the last decade. While there has been an increase in the amount of undergraduate degrees issued to women in STEM fields, there continues to be major misrepresentation of women compared to men in entering and sustaining employment in these fields (Chen & Moons, 2015; Sassler, Glass, Levitte, & Michelmore, 2017). Aviation maintenance falls within the STEM fields that is growing and can provide many opportunities for women that have not been accessed due to many strongly held stereotypes (Turney, 2018).

### **The Problem**

Aviation maintenance within the broader aerospace industry is anticipating massive growth and opportunities in the future. Boeing (2019) predicts a shortage of over 700,000 aviation technicians in the next 15 years. The demand is already being felt with employers seeking to fill jobs with very small pools of qualified individuals (Clark, Newcomer, & Jones, 2018). Despite these needs, women working within the aviation maintenance field has been hovering around 2% for the last decade (FAA, 2019). The forecasted need coupled with the rising median salary of \$65,230 highlight a growing opportunity for all individuals regardless of gender (Bureau of Labor Statistics, 2018).

Additionally, there continues to be a wage gap between men and women. However, that wage gap is smaller in STEM fields than it is in the overall labor force. While women in STEM

fields earn roughly 84 cents for every dollar men do, it is greater than the 77 cents per dollar found in the overall labor force (Michelmores & Sassler, 2016). Women also represent nearly half of the workforce in the United States (48%) but are found in only a quarter of those employed in STEM fields (Clark, Newcomer, & Jones, 2018). Thus, based on the needs and opportunity of the industry along with a desire for equal benefits and opportunity for individuals regardless of gender, it is reasonable to posit that there is great benefit for increasing women in fields such as aviation maintenance. However, due to many factors such as empowerment, stereotypes, and societal gender roles, women have not chosen fields such as aviation maintenance.

### **Implications for Counselors**

The field of aviation maintenance is uniquely fitted to highlight one way to facilitate change. Aviation maintenance has, for many been seen as a career for males. This was challenged some during World War II in which there was a need to see women enter the manufacturing workforce as many of the men entered the armed forces. The ad campaign of “Rosie the riveter” was successful in breaking down the gender barriers for male dominated careers in manufacturing aircraft and other war supplies (Opengart & Ison, 2016). The campaign which portrayed a role model for working women was successful in increasing the women in the workforce from 12 million to 20 million during the war. This campaign was able to challenge the notion that a woman could not or should not do a “man’s job.” However successful this campaign was to helping win the war, the gender role walls were not down for long. Women soon returned to clerical and domestic jobs once the war was over. This trend continued into the 1980s and 90s (McEuen, 2016).

Counselors and practitioners are uniquely positioned to help give women clients the empowerment, acceptance, and confidence they need to begin to visualize their access to high paying, high demand fields. This confidence will be critical to develop in order to break through such a strong male dominated field. Role models can be huge positive influences in building confidence. The example of the impact Rosie the riveter had illustrates this fact well. There should be a push to emphasize the simple thought of, "I can do that!" What would be the impact of allowing a young girl to think the thought "why would you want to serve the coffee if you can be served it?" (Opengart & Ison, 2016). This problem cannot be solved simply, but through small steps of thought change and visualizing possibilities there can be progress. Perhaps it begins with counselors realizing their own stereotypes and bias toward certain careers. The thought of a woman mechanic can be possible when visualized by the advocate and then adopted by the client.

### References

- Boeing. (2019). *Boeing current market outlook*. Retrieved from Boeing:  
<http://www.boeing.com/commercial/market/pilot-technician-outlook/>
- Bureau of Labor Statistics. (2018). *Labor force statistics from the current population survey*. Retrieved from <http://www.bls.gov/cps/cpsaat11.htm>
- Chen, J. M., & Moons, W. G. (2015). They won't listen to me: Anticipated power and women's disinterest in male-dominated domains. *Group Processes & Intergroup Relations*, 18(1), 116-128. doi: [10.1177/1368430214550340](https://doi.org/10.1177/1368430214550340)
- Clark, P. J., Newcomer, J. M., & Jones, A. M. (2018). Overcoming Gender Barriers in Aircraft Maintenance: Women's Perceptions in the United States. *The Collegiate Aviation Review International*, 33(2). doi: [10.22488/okstate.18.100505](https://doi.org/10.22488/okstate.18.100505)
- FAA. (2019). *U.S. civil airmen statistics*. Retrieved from  
[https://www.faa.gov/data\\_research/aviation\\_data\\_statistics/civil\\_airmen\\_statistics/media/2018-civil-airmen-stats.xlsx](https://www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics/media/2018-civil-airmen-stats.xlsx)
- McEuen, M. A. (2016). Women, gender, and World War II. In *Oxford Research Encyclopedia of American History*. Doi: 10.1093/acrefore/9780199329175.013.55
- Michelmores, K., & Sassler, S. (2016). Explaining the gender wage gap in STEM: Does field sex composition matter?. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 2(4), 194-215. DOI: 10.7758/RSF.2016.2.4.07
- Opengart, R., & Ison, D. (2016). A strategy for alleviating aviation shortages through the recruitment of women. *International Journal of Aviation Management*, 3(2/3), 200-219.  
Retrieved from

[https://www.researchgate.net/profile/Rose\\_Opengart/publication/308948455\\_A\\_Strategy\\_for\\_Alleviating\\_Aviation\\_Shortages\\_Through\\_the\\_Recruitment\\_of\\_Women/links/57f95b2c08ae280dd0bdcc49/A-Strategy-for-Alleviating-Aviation-Shortages-Through-the-Recruitment-of-Women](https://www.researchgate.net/profile/Rose_Opengart/publication/308948455_A_Strategy_for_Alleviating_Aviation_Shortages_Through_the_Recruitment_of_Women/links/57f95b2c08ae280dd0bdcc49/A-Strategy-for-Alleviating-Aviation-Shortages-Through-the-Recruitment-of-Women)

- Sassler, S., Glass, J., Levitte, Y., & Michelmore, K. M. (2017). The missing women in STEM? Assessing gender differentials in the factors associated with transition to first jobs. *Social science research*, 63, 192-208. Doi: 10.1016/j.ssresearch.2016.09.014
- Turney, M. A. (2018). Attracting women to aviation careers: What recent studies reveal. *The Collegiate Aviation Review International*, 18(1). [doi: 10.22488/okstate.18.100292](https://doi.org/10.22488/okstate.18.100292)