

Mar 2nd, 11:15 AM - 12:30 PM

An Examination of Recent Female Graduates from a Collegiate Aviation Program and their Decisions to Become Professional Pilots

Debra Henneberry Ed.D.

Vaughn College of Aeronautics and Technology, deb.henneberry@vaughn.edu

Maxine Lubner Ph.D.

Vaughn College of Aeronautics and Technology, maxine.lubner@vaughn.edu

Pete Russo Ph.D.

Vaughn College of Aeronautics and Technology, pete.russo@vaughn.edu

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



Part of the [Vocational Education Commons](#)

Henneberry, Debra Ed.D.; Lubner, Maxine Ph.D.; and Russo, Pete Ph.D., "An Examination of Recent Female Graduates from a Collegiate Aviation Program and their Decisions to Become Professional Pilots" (2020). *National Training Aircraft Symposium (NTAS)*. 19.
<https://commons.erau.edu/ntas/2020/presentations/19>

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.



An Examination of Recent Female Graduates from a Collegiate Aviation Program and Their Decisions to Become Professional Pilots

Debra Henneberry, Ed.D.

Maxine Lubner, Ph.D.

Pete Russo, Ph.D.

March 2, 2020

Flying is the great equalizer. The jet doesn't care whether you're a man or a woman.

**-Christine Mau,
first woman to fly
the F-35**



Background

- According to Federal Aviation Administration data, as of 12/31/2018, females represent just over 7% of the total pilot population in the United States
- Females represent approximately 5% of pilots in the United States holding commercial or ATP ratings
- Demand for new pilots in growing industry
 - Boeing's Pilot & Technician Outlook 2019-2038 projects 804,000 new pilots will be needed worldwide

Purpose

- Identify common themes among professional female pilots
- Gain a better understanding of why females decide to become professional pilots
 - Can be used to increase the number of female pilots
 - Implications for self-actualization through a more comprehensive career selection process

Study

- Replication of Henneberry (2018)
 - Original study interviewed 12 professional female pilots from a wide variety of aviation backgrounds
 - Participants were aged 26 – 97 years
 - Participants were predominantly white
 - Geographically diverse within United States, one participant from Chile

Participants

- Five professional female pilots who graduated from a collegiate aviation program between 2015 - 2020
- Four traditional, one non-traditional college student
- Three participants from a large metropolitan area in the northeast United States, two participants lived in a foreign country until adulthood
- Ethnically diverse group of participants
- Less diverse aviation backgrounds
 - 4/5 worked as flight instructors, 3/5 were currently working in airlines, 2/5 had miscellaneous jobs under Part 91

Participants

	Current Study (N = 5)	Previous (N = 12)
Married	40%	58%
Children	40%	42%
Undergraduate Degree	100%	92%
Graduate Degree	20%	50%
Middle-Class Upbringing	100%	83%
Played Sports in High School or College	80%	75%
Average Age When First Interested in Flying	15.6 yrs	18.2 yrs

Previous Findings

Initial Prompt to Pursue Flight Training	Total Participants (N = 12)	% of Participants Who Experienced Prompt
Role Model	3	25
Lived Event	7	58
Personal Epiphany	2	17

New Findings

Initial Prompt to Pursue Flight Training	Total Participants (N = 5)	% of Participants Who Experienced Prompt
Role Model	1	20
Lived Event	2	40
Personal Epiphany	2	40

Role Models

	Current Study (N = 5)	Previous (N = 12)
Knew a Pilot Prior to Flight Training	20%	83%
Could Name a Famous Female Pilot	60%	92%
Could Name a Female Pilot Character on Television/Movies	0%	25%

Themes

- Motivation to fly
 - Need for a challenge
 - Freedom
 - Adventure/travel
 - Financial stability

Themes

- Repetitive Experiences
 - Rode in a plane as a passenger
 - Lived near an airport
- Personal Epiphany
 - Strong sense of self-awareness
 - Desire for self-actualization
 - What am I going to do when I grow up?

Themes

- Resilience
 - Friends were not supportive at first
 - Family did not nurture interest
 - Not “normal” for a female

Implications

- The mental model of who can be a pilot must be expanded
 - Socio-economic diversity
 - Wives and mothers
- The members of the aviation industry can promote change
 - Male pilots and flight instructors can influence prospective female pilots

Implications

- New and revised recruitment strategies are needed
 - Colleges/High Schools
 - ✓ Hold recruiting events at or near airports
 - Extra-curricular activities
- Educators and others can influence career selection through their dissemination of information
 - Young audience
 - Correct information
 - Outsource to experts as needed

Recommendations

- Suggestions for further research
 - Impact of family life by gender
 - More studies investigating the backgrounds of female pilots
 - Informative for prospective female pilots
 - Could mitigate the pilot shortage
 - ✓ Everyone who relies on aviation benefits!
 - More studies regarding the health effects by gender of extended time spent at high altitudes

In Closing



Thank you!