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

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

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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

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



# Previous Findings

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

# New Findings

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

# Role Models

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