

## The Diversification of the US Airline Pilot Career Field: Perceptions of Collegiate Flight Students.

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# **Diversification in the Flight Deck: Perceptions of Collegiate Flight Students**

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# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



*“The fact that you are bringing women and people of color into this school, career - this survey is the biggest hunk of bullshit I have ever seen. Hire who does the best and not discriminate against white males. You dumb fucks have your heads so far up your ass and are part of the reason this country is starting to circle the drain and believe me when hell breaks loose, I’m coming for whoever made this stupid fucking survey.”* – **Participating Collegiate Flight Student**

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Introduction:

- U.S. airlines have vowed to make **diversity, equality, and inclusion (DEI)** a top priority within their flight decks. According to the Bureau of Labor Statistics (2021), 94% percent of professional pilots are white and 93% are male. Moreover, ***only 7% of professional pilots are women, and 6% are people of color*** (Black, Hispanic/Latino, and Asian). Only about ***1% are women of color***.
- ***Women*** and ***people of color*** will be the “focus” of the airlines, keeping these demographics front and center when it comes to opening the doors of opportunity for professional pilot careers in the U.S.
- Given the “ongoing pilot shortage”, one of the ways that an US airline can maintain a strong pipeline of pilots is to ***operate their own flight school***, which would provide a direct path for aspiring pilots to enter the pipeline and secure employment with the airline.
- In March 2021, **United Airlines** announced a “recruitment drive” to hire more women and people of color as commercial pilots. The plan was to train 5,000 new pilots at its ***own*** flight school by 2030; and that at least ***50% of recruited flight students will be women and people of color***.

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Introduction:

- In January 2022, United Airlines became the only major U.S. carrier to operate their own a flight training school – **United Aviate Academy**. The first inaugural class (n=30), **80%** of whom were women or people of color, will complete a rigorous, year-long training program.
- United’s flight program includes *scholarship money* and *private student loans* for these two underrepresented groups – all designed to **break down the barriers** that have long prevented the U.S. airline industry from becoming more diversified in the flight deck.
- Admission to United Aviate Academy requires a high school diploma or GED equivalent. Since the flight program opened in January 2022, United has received approximately **12,000 applications**.
- **Collegiate flight programs** provide a pathway for initial pilot training and are a key source of airline pilots. Historically, these programs have delivered a high level of pilot training because they are designed to “*produce professional pilots*” for airlines.

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Purpose of the Study:

- The purpose of this study was to identify perceptions of collegiate flight students regarding *United Airlines' new training and hiring initiatives* focused on race and gender.

## Significance of the Study:

- The dissemination of findings will:
  - ❑ foster needed *"industry dialog"* regarding diversity, equity and inclusion policies and hiring incentives currently being utilized within the US airline industry.
  - ❑ implement additional change regarding the diversification of the US airline flight deck and the *"effects"* these new training and hiring initiatives may have on collegiate flight students.

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Research Questions:

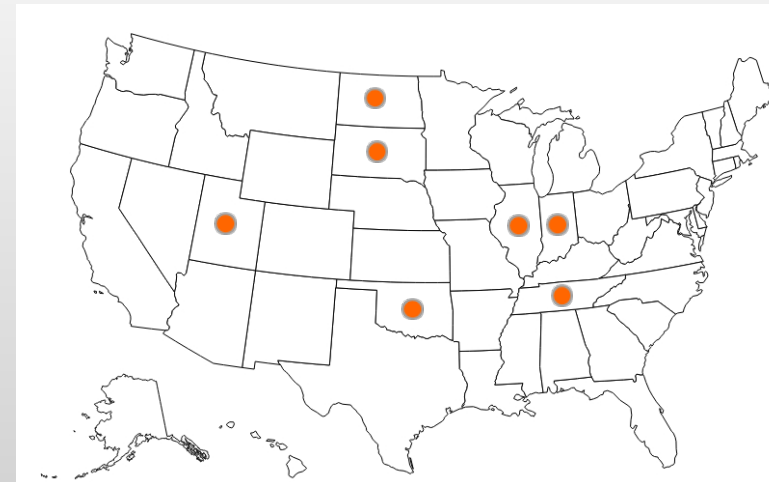
- RQ1 - Do collegiate flight students believe that identifiable barriers and/or biases exist within the US airline industry, resulting in the underrepresentation of women and people of color in the flight deck?
- RQ2 - Do collegiate flight students believe that US airlines should renew their commitment to diversity, equity, and inclusion by ensuring that at least 50% of all hiring and training flight crew classes are women and people of color?
- RQ3 - Do collegiate flight students believe that US airlines' pledge to increase diversity among its pilots violates Title VII of the 1964 Civil Rights Act that prohibits employment discrimination based on race, color, religion, sex and national origin?
- RQ4 - Do collegiate flight students believe that US airlines operating their own flight training facilities will decrease a collegiate flight student's opportunity to be hired as a US commercial airline pilot?

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## Research Methods:

- Seven collegiate flight programs were purposely selected by the researchers to participate in this study. *All seven flight programs responded and participated in the study (100%).*
- The researchers sent an email to Aviation faculty members located at the seven collegiate flight programs. The body of the email provided: (1) precursory information regarding airline diversity initiatives, (2) purpose of the research study, and (3) embedded link to the online survey. *Subsequently, the faculty members distributed the email to their flight students.*
- The research instrument was composed of three parts: (1) *demographic information*, (2) *Likert statements*, and (3) *personal comments*.
- **Collegiate flight students** (N=183) from all seven collegiate flight programs submitted completed surveys. The selection of flight students was determined upon their spring 2022 enrollment. All participating students were required to complete a *consent form* before accessing the survey questions.





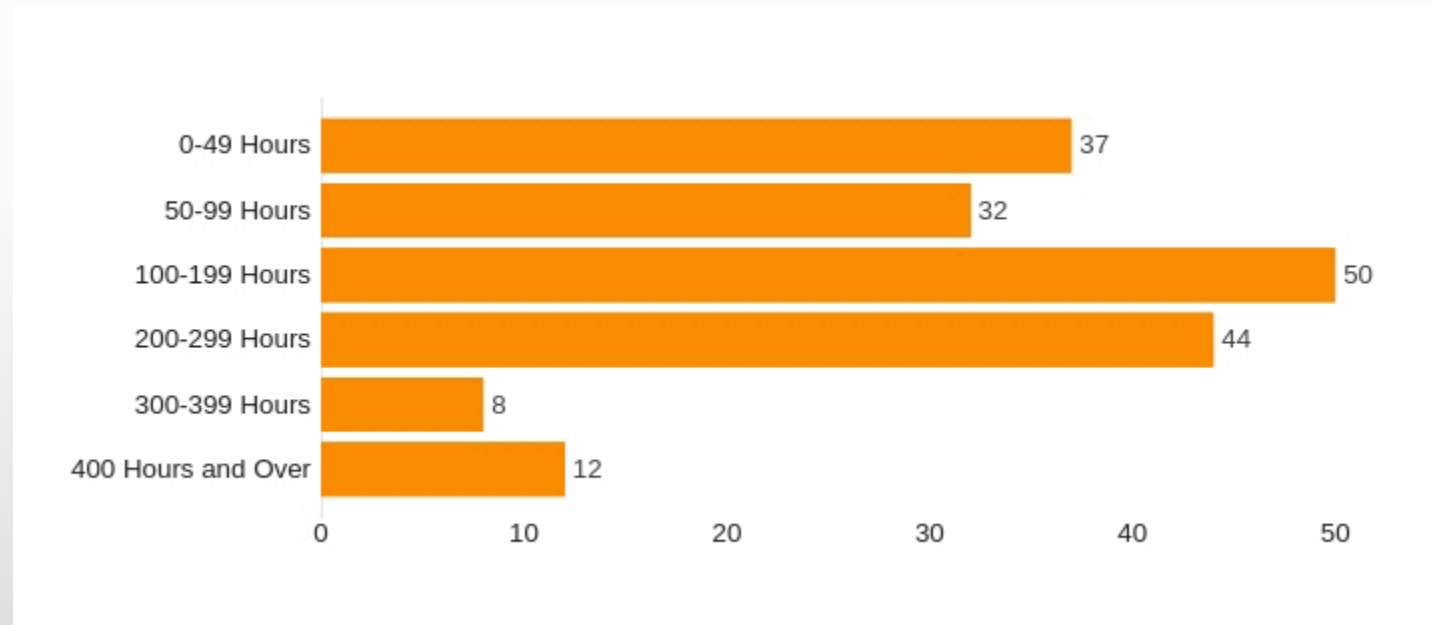
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## Demographics of Participants:

Approximately how many total flight hours have you logged during flight training?

- ❑ *51% of participants have completed 100 to 299 total flight hours*



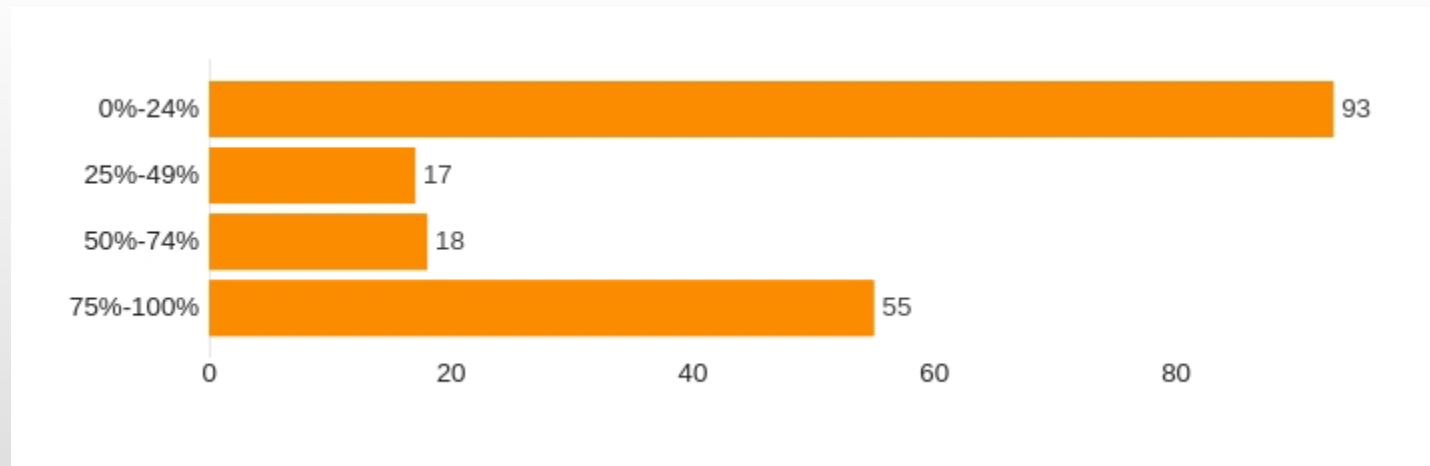
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## Demographics of Participants:

What percentage of your flight costs are supported by financial aid, student loans, and/or scholarships?

- 51% of participants have 0%-24% of flight costs supported by aid, loans, or scholarships
- 30% of participants have 75%-100% of flight costs supported by aid, loans, or scholarships



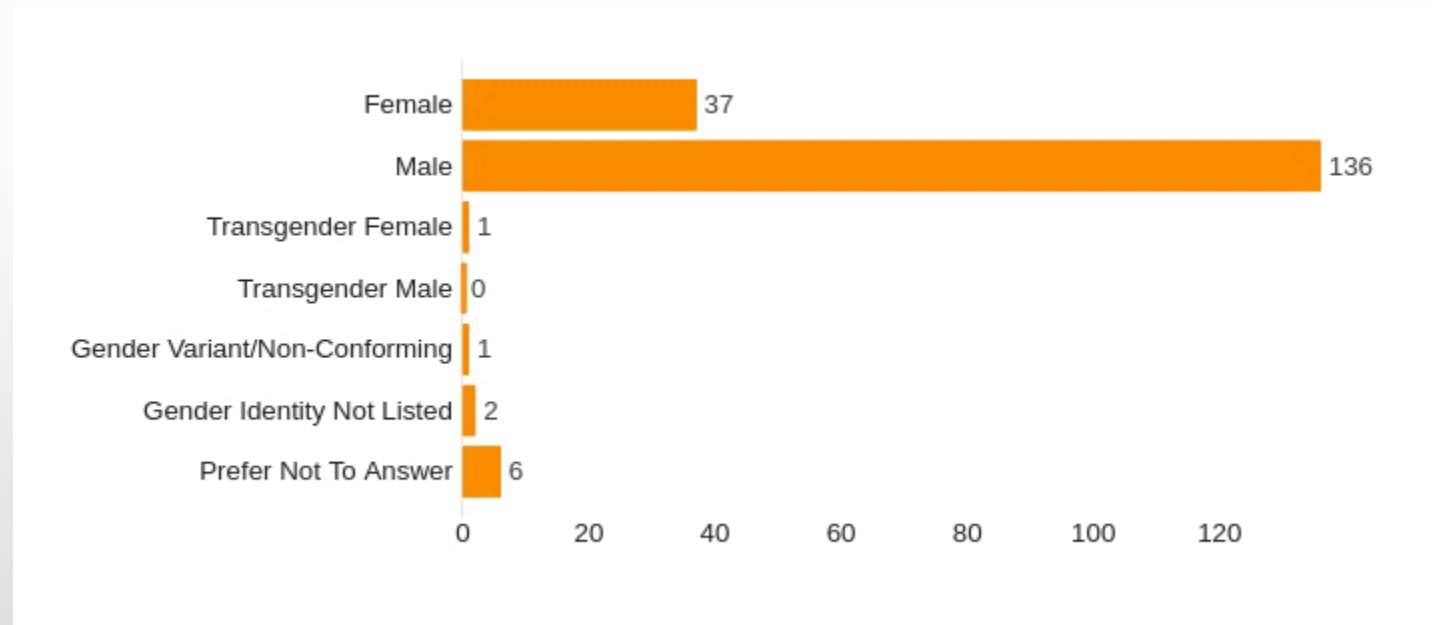
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## Demographics of Participants:

To which gender identity do you most identify?

- ☐ *74% of participants identify as “male”*



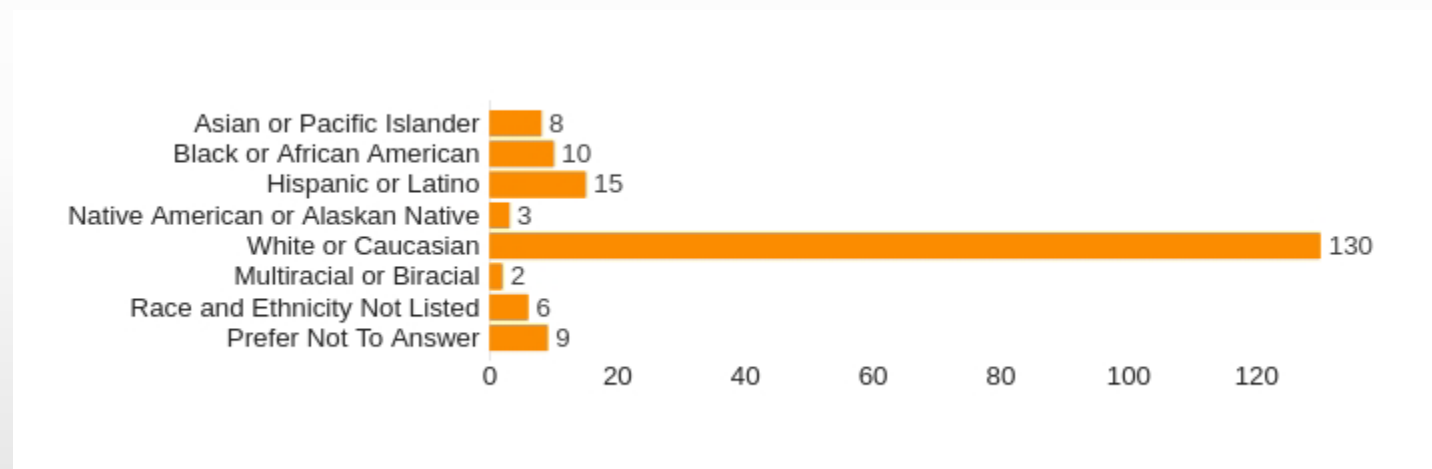
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## Demographics of Participants:

How do you describe yourself?

- 71% of participants identify as “White or Caucasian”*



# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Selected Results:

Likert Statement	Strongly Agree or Agree	Neutral	Disagree or Strongly Disagree
Women and people of color are <u>underrepresented</u> in the US airline pilot career field.	<b>101</b> <b>(55%)</b>	43 (24%)	39 (21%)
While diversity is improving in many other career fields, US airline flight decks (pilots) are lagging behind; largely due to the <b>high costs of flight training</b> which puts <u>women and people of color</u> at a disadvantage.	64 (35%)	32 (17%)	<b>87</b> <b>(48%)</b>
US airlines should <b>diversify their pilot ranks</b> and create <u>new opportunities for women and people of color</u> who want to pursue a career in the airline industry.	<b>85</b> <b>(46%)</b>	53 (29%)	45 (25%)
At least <b>50% of flight students</b> recruited by an US airline-owned flight school should be <u>women and people of color</u> .	32 (17%)	50 (28%)	<b>101</b> <b>(55%)</b>

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Selected Results:

Likert Statement	Strongly Agree or Agree	Neutral	Disagree or Strongly Disagree
US airlines should be able to <b>operate their own flight schools</b> , so they can <u>diversify a career path</u> traditionally dominated by white males.	<b>76</b> <b>(41%)</b>	54 (30%)	53 (29%)
<b>White pilots</b> are perceived as a <u>racial barrier</u> in the US airline industry and <b>males</b> are considered a <u>gender barrier</u> for potential pilot candidates.	50 (28%)	40 (22%)	<b>93</b> <b>(50%)</b>
It is <b>discriminatory against white males</b> for any US airline to announce that they will reserve <u>50% of new pilot slots for women and people of color</u> .	<b>123</b> <b>(67%)</b>	31 (17%)	29 (16%)
If a US airline decides to reserve <b>50% of new pilot slots for women and people of color</b> , a <u>white male pilot will have very little chance of being hired</u> , while a woman or person of color pilot will be a nearly-certain hire.	<b>113</b> <b>(62%)</b>	41 (22%)	29 (16%)

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## Selected Results:

Likert Statement	Strongly Agree or Agree	Neutral	Disagree or Strongly Disagree
The new pilot training programs being considered by some US airlines will <b>prioritize gender and race quotas</b> rather than <u>hiring the best pilots</u> based upon aptitude and competency.	<b>108</b> <b>(59%)</b>	28 (15%)	47 (26%)
<b>Passengers</b> want US airlines to <u>hire pilots based upon aptitude and competency</u> and not gender and ethnicity.	<b>144</b> <b>(79%)</b>	26 (14%)	13 (7%)
US airlines that <b>discriminate against applicants based on their race and/or gender</b> will be <u>violating the Civil Rights Act</u> and other federal legislation.	<b>152</b> <b>(83%)</b>	24 (13%)	7 (4%)
US airlines <b>operating their own flight schools</b> will <u>negatively impact a collegiate flight student's employment opportunity</u> in the US airline industry.	<b>88</b> <b>(48%)</b>	51 (28%)	44 (24%)

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## Data Analysis:

Currently, the researchers are completing the analysis of the data. The *data analysis* consists of using the survey data from the *183 participating flight students*. **SPSS Statistics** (statistical software suite) was used to analyze participant data.

- ✓ **Pearson Correlation Coefficient** is being used to measure the strength of a linear association between two variables. The correlation coefficient formulas calculate a “*r* value” between *-1 and 1*, where:
  - 1* indicates a strong positive association,
  - 1* indicates a strong negative association, and
  - 0* indicates no association at all.
  
- ✓ **Test of Significance (Two-tailed)** is being used to determine if the linear association (sample data) is strong enough to use to model the association in the population.
  - If the test concludes that the correlation coefficient is significantly *different from zero*, then the correlation coefficient is "significant."



# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Findings:

**RQ1 - Do collegiate flight students believe that identifiable barriers and/or biases currently exist within the US airline industry, resulting in the underrepresentation of women and people of color in the flight deck?**

- **55%** of flight students *strongly agreed/agreed* that *women and people of color are underrepresented in the US airline pilot career field.*
- **50%** of flight students *strongly agreed/agreed* that *white pilots are perceived as a racial barrier in the US airline industry and males are considered a gender barrier for potential pilot candidates.*
- ❑ *“I am a white male who could not afford training, and because of that I joined the military to receive my GI Bill. Most people in my school have in excess of \$100,000 in debt. I’m very tired of pretending that everyone in this country does not have the same opportunities. I’ve worked very hard and sacrificed a lot for what I have and to have someone say I’m privileged is a slap in the face.”*
- ❑ *“Cost is one of the aspects most widely discussed as a barrier to the airline industry. “*

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Findings:

**RQ2 - Do collegiate flight students believe that US airlines should renew their commitment to diversity, equity, and inclusion by ensuring that at least 50% of all hiring and training flight crew classes are women and people of color?**

- **55%** of flight students *disagreed/strongly disagreed* that at least 50% of flight students recruited by an US airline-owned flight school should be women and people of color.
- **67%** of flight students *strongly agreed/agreed* it is *discriminatory against white males for a US airline to announce that they will reserve 50% of new pilot slots for women and people of color.*
- ❑ *“Reserving 50% of hiring slots for women/POC puts an immediate unfair disadvantage for white males. If the applicants who show the most understanding and skill in aviation are white males, they should be the ones hired.”*
- ❑ *“As a female, I want to be hired because I was qualified and worked hard for my flight hours and certifications, not on the basis that I am a woman. Personally, I feel insulted that I would possibly be hired by an airline based on the fact that I would meet their diversity quota.”*
- ❑ *“As one of the only Black students in my flight program, limiting slots for other applicants still sounds like discrimination. Not only would it make the hiring process for white males more difficult, but to meet a diversity quota - an airline would be hiring someone with less aptitude.”*

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## Findings:

**RQ3 - Do collegiate flight students believe that US airlines' pledge to increase diversity among its pilots violates Title VII of the 1964 Civil Rights Act that prohibits employment discrimination based on race, color, religion, sex and national origin?**

➤ **83%** of flight students *strongly agreed/agreed* that US airlines that discriminate against applicants based on their race and/or gender will be violating the Civil Rights Act and other federal legislation.

- "Isn't hiring based on race called racism?"*
- "Wokeness is slowly destroying industries across America. Thank you for conducting a study such as this one."*
- "Do not undermine the hard work, talent, and qualifications, of a women or person of color just because they fit an airline's diversity agenda."*
- "Stop looking at people by what they look like and pick the best pilot for the job."*
- "People should be hired based on merit, character, compatibility, and ability to cooperate, not race or gender. Those "qualities" are inconsequential in the cockpit. "*

# Diversification in the Flight Deck: Perceptions of Collegiate Flight Students



## Findings:

**RQ4 - Do collegiate flight students believe that US airlines owning their own flight training facilities will decrease a collegiate flight student's opportunity to be hired as an US commercial airline pilot?**

- **48%** of flight students *strongly agreed/agreed* that *US airlines operating their own flight schools will negatively impact a collegiate flight student's employment opportunity in the US airline industry.*
- **41%** of flight students *strongly agreed/agreed* that *US airlines should be able to operate their own flight schools, so they can diversify a career path traditionally dominated by white males.*
- ❑ *"US airlines creating their own flight schools will negatively impact pilots in collegiate programs and Part 61 programs from gaining employment at the airline level. US airlines should help fund the flight training of women and people of color through scholarships towards a flight school of that group's choosing, and only in that way."*

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## Conclusion:

1. Socially (*and politically?*), it has become very important to U.S. airlines that the diversity of their pilots reflect the diversity of their passengers and the communities they serve. However, collegiate flight students – a significant contributor to the U.S. pilot pipeline – do not necessarily agree with the recruitment, and training initiatives currently being implemented by a major U.S. airline.
2. The diversity challenges that were presented to the collegiate flight students by the researchers are “current and real”, and these same challenges will continue to positively or negatively affect the recruitment, training, and hiring practices of U.S. airlines – perhaps, all dependent on the overall success of United’s flight training school.
3. Additional research studies on the growing interest to diversify flight decks is not only imperative to the U.S. airline industry, but to all other U.S. aviation/aerospace industries as a collective whole. *The U.S. aircraft maintenance technician workforce has a very similar job shortage as the U.S airline industry, as well as very similar race and gender percentages.*

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## Participant Comments:

- “The only thing that matters is proficiency and the required interpersonal skills which have been the standard in the industry for recent history. “
- “Knowledge and flying ability = safety. Hiring based on race = racism.” “Competency easily overrides diversification. Quotas for hiring based off of demographics is racist, sexist, and ignorant.”
- “Diversity is very important in any place of work but hiring someone solely because of their diversity could jeopardize safety.”
- “As a white, male pilot, the airlines should also aim to hire more LGBTQ pilots like myself.”
- “Diversity begins when systemic barriers are broken. Creating impossible quotas for one company will not create diversity. Implementing scholarship programs, mentorship, and pathways to success in aviation for any pilot will create diversity.”
- “Just because I am a woman, I do not want people to hand me things such as a position I did not earn. Not every white human being comes from a privileged background. Many of us, male and female, come from little and are working hard to secure these careers.”