

## **Feminine leadership in commercial aviation: success stories of women pilots and captains**

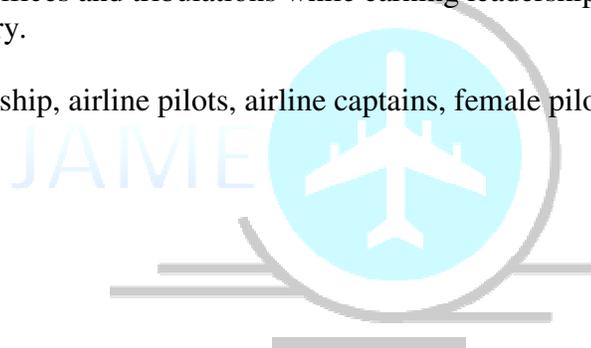
Geraldine E. Hynes  
Sam Houston State University

Marisa Puckett  
Sam Houston State University

### **ABSTRACT**

This research project concerns gender-related issues in the aviation industry, as there is a significantly smaller number of female pilots than male. Research indicates that there are no significant differences in skill level between male and female pilots, yet the extreme disparity continues to exist. In an attempt to investigate reasons for the low number of female commercial pilots and captains, interviews were conducted with five women who are members of the International Society for Women Airline Pilots (ISWAP). They disclosed their accomplishments, experiences, hardships, sacrifices and tribulations while earning leadership positions in the commercial aviation industry.

Keywords: Feminine leadership, airline pilots, airline captains, female pilots, career success



## INTRODUCTION

As of 2009, only 4,000 of the 92,000 U.S. aircraft pilots and flight engineers are women (Department of Labor, Bureau of Labor Statistics, 2009).

This research project focused on women in leadership positions in the aviation industry. Women are in the minority in aviation, except as flight attendants and ground-based support personnel (ChecklistComplete, 2008). The significantly smaller number of female pilots and captains in commercial aviation led the researchers to investigate the personal stories of women who broke the barrier to become leaders in their industry. Learning about the hardships, sacrifices, and tribulations these women encountered when pursuing advancement and how these barriers were overcome was the purpose of this study.

## LITERATURE REVIEW

There have been very few empirical studies about gender issues in aviation, especially in the United States. Most of the studies concerning this topic were published in the 1990's and early 2000's and were anecdotal in nature. Articles about this topic point to definite gender-related issues in the aviation industry. However, it is still an under-developed category of research.

A seminal study focused on 40 male and 30 female pilot trainees' performance in the U.S. Air Force (Kantor, Noble, Leisey, & McFarlane, 1979, p. 5). Military aviation had become open to women only a few years earlier, in 1975, and predictions about how women compared to men were pessimistic. The researchers found that "few significant differences were found between men and women entering pilot training. Comparable performance on most pre-training measures, combined with equivalent graduation rates, factors associated with flight training performance, and student impressions of the flight training experience, all lend strong support to the conclusion that men and women perform similarly in flight training."

Not only did the investigators find no significant differences between the genders entering pilot training, they also found equivalent graduation rates, flight training performance factors, and trainee impressions of their flight training experience. On the other hand, the Air Force instructors rated male trainees as significantly better than female trainees.

A second key study was conducted in Europe some twenty years later. It was designed to examine the difficulties faced by female pilots (Davey & Davidson, 2000). Interviews were conducted with 23 female and 17 male pilots to compare the experiences of the first female pilots who joined a commercial airline company with the experiences of women who joined later. Interviews with the first women to join determined that they were not automatically accepted by the male flight crew. The interviews also revealed that these women were made aware of being visibly different from male pilots. They also experienced sexual harassment in their workplaces. The researchers discovered that male pilots found it difficult to adapt to female pilots and showed aggressive behavior towards female pilots.

The women who joined the commercial airline several years later also reported many difficulties but seemed to have an easier time entering the industry than the women who entered in earlier years. These women also claimed they felt forced to laugh at sexist jokes, pranks, and teasing. They felt socializing and drinking with men was very important in order to be "well liked" by the flight crew. Even though they felt more accepted than female pilots in the past, women pilots still represented a very small percentage and were still considered "different."

Women who entered the aviation industry later perceived that they were considered inferior and therefore were reluctant to admit to having problems. One female interviewee speculated that, “women generally managed to rise above the problems because of their high level of competence.”

A study conducted in Australia surveyed 1,114 pilots (24 percent female) (Mitchell, Kristovics, & Vermeulen, 2006). The purpose was to determine why the number of female pilots in that country was so small – between 3 and 4 percent. The results showed that both male and female pilots had significantly more negative perceptions of female pilots’ proficiency and safety orientation, despite the fact that female pilots had earned significantly higher scores than their male counterparts on actual performance measures. That is, “many aviation industry pilots had negative perceptions towards female pilots, including some female pilots themselves” (Mitchell, Kristovics, & Vermeulen, 2006, p. 48). The survey also revealed that the opportunity to fly with female pilots improved male perceptions of their safety orientation. The researchers concluded that negative perceptions may lead to gender bias, prejudice, harassment and discrimination.

Another key study was conducted in South Africa. The researchers used the Aviation Gender Attitude Questionnaire, a reliable and valid instrument that measures aviators’ perceptions about gender-related pilot behavior (Vermeulen and Mitchell, 2007, p. 197). The South Africa study compared perceptions of 93 flight instructors (9.7 percent female) with 93 pilots (5.4 percent female) regarding female pilots (Vermeulen, 2009). The study focused on four factors that related to perceptions about gender-related pilot behavior: flying proficiency, safety orientation, flight confidence/emotional stability, and flight standards. The results indicated that there were statistically significant differences between the male and female flight instructors’ perceptions of female pilots’ flying proficiency. However, there were no significant differences between the male and female instructors’ perceptions of female pilots’ safety orientation. The study also showed that both male and female flight instructors had a more positive perception than commercial pilots did of female pilots’ performance (Vermeulen, 2009, p. 6).

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## RESEARCH METHODS

Online interviews were conducted with five women who are members of the International Society for Women Airline Pilots (ISWAP), formerly called the ISA+21. ISWAP is a non-profit organization of “career women airline pilots whose purpose is to: celebrate camaraderie; support informational exchange and social interaction among its members in a healthy environment; provide aviation scholarship opportunities for career-seeking women; and inspire future generations of women aviators via educational outreach” (ISWAP, 2010). The participants volunteered for the research project during an ISWAP conference in 2010.

Each participant of the study has reached a career milestone in aviation, such as being the first woman to pilot a B-747. All participants have served at least 26 years in the aviation industry. All participants are in a leadership position (pilot, co-pilot, or captain), and fly for commercial airline companies such as FedEx and Continental Airlines. Surprisingly, of the five participants, none were formerly engineers, and only one entered commercial aviation with a military background, having served in the Air Force for seven years. The others’ backgrounds were purely civilian – one was formerly an English teacher, one an instructor for the Motorcycle Safety Foundation, one was a pharmacist, one was a flight attendant.

Interview questions were administered online because of the impracticality of face-to-face interviews with a geographically dispersed sample. In addition, several of the women who volunteered to participate in the study fly overseas routes every week. The interview protocol consisted of forced choice as well as open-ended formats.

## **RESULTS**

A full 80 percent of the study sample felt that it was difficult to break the barrier and become a female leader in commercial aviation. None of the participants felt this process had been “easy.” The following sections summarize major findings of the interviews, organized according to five categories:

- Workplace climate
- Mentors
- Male resistance
- Leadership traits
- Fulfillment

### **Workplace Climate**

The participants were asked about the extent to which their workplace promoted a particular attitude toward female leaders. Overall, 80 percent of the respondents said they felt that the aviation industry encourages female leaders and has a positive effect on their leadership skills. One participant said, “As a captain, these skills are taught, reinforced, and expected. If they aren’t, you fail or lose respect of your peers.” Another said, “It is in the aviation industry’s best interest to train female captains to develop the skills of women in leadership positions.” However, 20 percent felt that their workplace does not influence their leadership skills and does not strive to develop female leaders. Several participants added that their employers sometimes incur problems when women with poor leadership skills are promoted.

### **Mentors**

In light of the apparent disparity between a perceived encouraging environment and great difficulty in reaching advancement, the participants were asked about the chief resources they had tapped to achieve success. All of the participants reported several people that had personally mentored them. Influential people in the respondents’ lives included authors, coworkers, teachers, public figures, parents, and military leaders. The participants’ activities as leaders in non-aviation areas seemed to have transferred to the workplace. Among the respondents, 80 percent have held leadership positions in other organizations such as on a church board, conflict resolutions committee, and as a member of the U.S. armed forces. The participants said they believe these positions influenced their career path and aided their acquisition of leadership abilities.

### **Male Resistance**

The respondents agreed that breaking into leadership positions in the aviation industry was met with male resistance. One respondent stated that the hardships were faced early on in her career when it was “unheard of” to have women in aviation. Participants explained that they

were forced to deal with men who did not want them in “their” profession and were sometimes required to perform tasks that men were not required to do. Other hardships they faced included ridicule, harassment, alienation, malicious comments from co-workers and passengers, having to “prove that they were capable of doing the job,” having to change airlines up to seven times in order to reach career goals, balancing personal and career decisions, and “breaking the glass ceiling.”

### **Leadership Traits**

The authors of this study were interested in learning what it takes to be a successful female leader in the commercial aviation industry. When asked what the important traits are for a successful leader, the participants reported the following key traits: excellent communication skills, integrity, compassion, competence, and patience. Among these responses, “compassion” was the least expected, and the participants were asked to elaborate. They said that some of the most rewarding parts of their careers include being able to give back to their employers by mentoring and training other pilots and helping people who were afraid to fly.

### **Career Satisfaction and Fulfillment**

The participants in this study felt that they had achieved their career goals. Eighty percent felt that they had reached their full potential and could happily retire. One participant said, “I went further than I ever dreamed possible.”

### **CONCLUSIONS AND IMPLICATIONS**

The results of this study indicate that female pilots and captains in the aviation industry faced real gender-related roadblocks to their career paths, as had their predecessors over the past forty years. Despite these barriers, they had reached leadership levels and said that they feel satisfied and fulfilled. Further, their perceptions of their industry and generally positive.

The women seem to have achieved success and become leaders for reasons other than their workplace environments, whether welcoming or threatening. Instead, they said they owed their success to experiences, people, and events outside of the aviation industry. These external influences, mentors, and community experiences helped them to acquire the skills and confidence that they needed for leadership positions in aviation.

The findings yield two major implications for educators. First, we should encourage our students and entry-level business professionals to seek developmental opportunities in their communities; these external experiences are likely to help them prepare for leadership in their careers. Second, we should encourage our students to seek out mentors who will guide their careers.

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