# An In-Depth Look at China's Aviation Industry's Gender Ratio 

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#### Abstract

Globally, the aviation industry is experiencing an increasing involvement of women, however there are noticeable differences observed across various areas. The investigation of the experiences of Ms. Song Yin, a pilot involved in marine search and rescue operations, highlights the aptitude, perseverance, and determination that women may demonstrate, particularly in challenging and technically complex situations. Furthermore, the prominence of Air India, which proudly exhibits the highest level of female participation in the field of global aviation, serves to emphasize the crucial role that women can and indeed do fulfill within this industry. This study utilizes a qualitative approach to conduct a thorough analysis of the gender dynamics present in China's aviation industry, shedding light on the extent and characteristics of female involvement. The paper argues that the aviation sector in China, despite making improvements, lags behind global equivalents in terms of female participation. In order to address the gender disparity in aviation and fully use the untapped capabilities of women in this field, it is crucial to implement strategic policies and programs that promote a more inclusive and equal environment within the aviation industry.


Keywords: aviation gender ratio, gender equity, tokenism, Airlines gender ratio

## 1. Introduction

Within the dynamic and ever-changing realm of the aviation sector, a consistent irregularity persists, namely the notable lack of female pilots. The proliferation of technology and globalization has resulted in the expansion of flight routes and increased international connectivity. However, it is important to note that there remains a significant gender disparity within the ranks of pilots. Based on data provided by the International Society of Women Airline Pilots in 2021, it has been determined that the global representation of female pilots is at $5.8 \%$, as reported by the main countries in this field. Female pilots have several problems in the field of aviation, such as gender bias, workplace harassment, and limited professional growth prospects. These factors contribute to the overall sense of insecurity experienced by female pilots within the aviation industry. This study will employ tokenism as a methodological approach to analyze the negative remarks on Weibo pertaining to the gender ratio within the Chinese aviation business. The objective of this study is to investigate strategies for optimizing the gender ratio within the Chinese aviation sector. India Airline can be seen as a noteworthy case study due to its significant representation of women in the aviation business, making it one of the leading examples globally. The data included in this study

[^0]was sourced from official sites, such as the China Civil Aviation Flight University 2023 Recruitment Brochure and the China Civil Aviation Flight University Graduates Employment Quality Report. This study aims to examine the progressive policies implemented by India Airline, a prominent worldwide player in advancing female representation in the aviation sector. By conducting an investigation into these policies, the objective is to provide practical insights that might potentially contribute to the transformation of China's aviation business, fostering a more inclusive environment.

## 2. Literature Review

### 2.1. Women's Sense of Insecurity in Aviation and the Significance of Gender Role Models in Aviation

Harvey et al conducted a comprehensive investigation on the obstacles encountered by women in the field of aviation, with a specific emphasis on the emotional and professional uncertainties they confront [1]. The study utilizes empirical data, human narratives, and statistical patterns to elucidate the potential origins of these feelings of insecurity, which may be attributed to systemic factors such gender bias, workplace harassment, and restricted career development prospects. The paper holds significance due to its focus on the imperative nature of addressing these deeply ingrained issues, suggesting the possible adverse consequences for the business if they are not addressed in a timely manner. This encompasses the possible attrition of highly qualified workers and a resultant decrease in workplace diversity. In Leonard's comprehensive analysis, she emphasizes the significant impact that woman role models have on the aviation and space industries [2]. Based on an examination of social learning theories and a diverse range of case studies, this research highlights the influential role that prominent female leaders in the field of aviation can play. Specifically, these people serve as catalysts, inspiring and motivating aspiring professionals while also reinforcing their selfconfidence and belief in their own talents. Leonard explores historical narratives, highlighting prominent individuals whose innovative endeavors not only facilitated the progress of future cohorts but also contested the dominant societal assumptions. This paper additionally posits that the establishment of a more comprehensive industry narrative holds significant importance in the recruitment and retention of female professionals.

### 2.2. Personal Narratives of Early Female Aviators and Prospective Trends of Women in Aviation Education

In his work, Erisman provides a comprehensive historical exploration [3], delving into the experiences of early female aviators by drawing from their personal stories and diaries. The book not only highlights the exceptional resolve of these individuals in a field that is mainly controlled by men, but also sheds light on the various sociological, technological, and political obstacles they had to cross. Each narrative, replete with intricate historical particulars, serves as a monument to the resilience and determination of its subjects, thereby illuminating the wider socio-cultural context of the respective eras. Erisman's compilation serves as a significant testament to the fortitude and resolve exhibited by these trailblazers, offering contemporary practitioners a valuable reservoir of motivation. Ison's study takes on a prospective approach, examining the anticipated patterns of female involvement in higher education programs focused on aviation [4]. Based on a comprehensive study of statistics and survey findings, Ison observes that although there has been an increase in the enrollment of females, there is still a significant disparity in the numbers, indicating a lack of gender parity. The study also examines potential obstacles to participation, such as established gender norms, limited awareness regarding educational options, and insufficient institutional assistance. The report continues by emphasizing the significance of proactive strategies,
such as the implementation of scholarships，mentorship programs，and focused recruitment initiatives，in order to address and mitigate the existing gender disparity．

## 2．3．Rethinking Tokenism：Looking Beyond Numbers

The idea of tokenism，as elucidated by Yoder［5］，pertains to the practice of making symbolic gestures towards inclusivity of minority groups，without actually providing them with substantial empowerment．An examination of empirical data indicates that，in contrast to Kanter＇s assertions，it is solely the token women in industries where their gender is deemed inappropriate who encounter the performance expectations，social exclusion，and limited role opportunities that arise from an imbalanced gender composition in the workplace．Furthermore，Kanter＇s focus on achieving numerical balance as a strategic approach for social reform failed to consider potential opposition from those in positions of power．Blalock＇s theory of intrusiveness posits that the presence of a greater number of individuals with lower social status poses a threat to those in positions of dominance．This threat manifests in various forms，including heightened instances of sexual harassment，disparities in compensation，and diminished opportunities for career advancement． Researchers and change agents in organizations have found Kanter＇s explanation of the personal consequences of tokenism to be persuasive．However，the persistent emphasis on statistics as the underlying cause and solution to gender discrimination in the workplace fails to acknowledge the complexities associated with achieving gender integration．

## 3．Analysis

Song Yin is a female recruit of rescue pilots who graduated from the Adelaide Flying Academy in Australia．She has acquired commercial helicopter pilot licenses in both Australia and Hong Kong， as well as a commercial pilot license provided by the Civil Aviation of China．Song Yin illustrates the perspective that a female colleague from the United States had shared with us，whereby she expressed that female pilots may have an amplification impact on their performance．Song Yin concurs with this viewpoint，highlighting the tendency of individuals to ascribe gender－based labels to the profession of piloting．While it is possible to implement certain preventative measures，their effectiveness is often limited due to the timing of their implementation．Frequently，individuals encounter violent incidents that result in the presence of bloodshed，and it is not uncommon for injured individuals to be segregated subsequent to their arrival within the cabin．Despite being the sole female coworkers in the aviation department，Wan Qiuwen and Song Yin refrain from engaging in any form of＂specialization＂．They engage in physical activity and participate in training sessions alongside their male counterparts．The criteria imposed on female pilots are equivalent to，if not more stringent than，those imposed on their male counterparts．
Translate：\＃Female Calendar\＃\＃Chinese First－
11：44 Chinese women＇s Daily ．．1 80 generation female search and rescue captain
birthday wishes for Song said her profession is gender－neutral\＃has
〈返回 Yin 5，中国妇女报 …can control a helicopter and hover over the
\＃女性日历\＃【\＃我国第一代女搜救机长说专业不分性bow of a ship that is only 3 meters long and
别\＃】长期坚守东海海疆，她能操控直升机，在长宽 years．She participated in the rescue of more
只有 3 米的船头上空悬停，参加工作十余年，共参 than 200 people in distress．She is Song Yin，
与救助 200 多名遇险人员，她就是全国三八红旗手 first－generation female search and rescue
标兵，我国第一代女搜救机长宋寅。谈起飞行员工 captain in my country．Talking about the job
作，她说：＂冷静不分性别，专业也不分性别，飞行 of a pilot，she said：＂Calmness does not
员是一定不分男女的！＂宋寅期望越来越多的女性加 professionalism does not distinguish between
入飞行员行业。今天是宋寅的生日，祝福＠舒克－宋 $\begin{aligned} & \text { genders．Pilots must be gender－neutral！＂Song } \\ & \text { Yin hopes that more and more women will }\end{aligned}$
寅生日快乐！■中国妇女报的微博视频 join the pilot industry．Today is Song Yin＇s
birthday，happy birthday to＠Song Yin！

Figure 1：Chinese women＇s daily birthday wishes for Song Yin（Screenshot of Weibo application）．


## 瑾瑾不歌颂 Professional admission但是专业录取分性别 has gender requirements



Figure 2：Weibo negative expects comments about Chinese aviation industry（Screenshot of Weibo comments）．

China Women＇s Daily wrote a Weibo about Song Yin＇s deeds on July 5， 2023 （figure 1 and 2）， this day is Song Yin＇s birthday．There are two comments that are very thought－provoking．＂Gender of flight major admission scores＂，＂How many female search and rescue captains are there now？Is there anyone else besides her？Is this using her as a shield？＂China continues to maintain higher obstacles for female pilots compared to their male counterparts．The commercial aviation industry continues to be predominantly influenced by masculine ideas and practices．Upon the initial inclusion of women in the airline sector，they encountered instances of sexism，harassment， heightened visibility，and isolation［6］．The reporting of Song Yin as a＂shield＂can be elucidated via the lens of tokenism，a theoretical framework．Tokenism refers to the practice of creating a superficial appearance of inclusivity towards minority groups，without actually benefiting them． This is typically achieved through recruiting individuals from underrepresented backgrounds in order to project an image of racial or gender equality inside professional or educational environments［5］．Tokenism is the symbolic inclusion of minority groups without addressing fundamental inequality．Some female pilots are documented，but their number is low．This shows that media consumers see an equitable gender ratio，indicating that women and men have equal work prospects．It explores the relationship between tokenism and Weibo comments．

A Chinese woman enrolling in a flight－related higher education program to become a pilot is rare． According to the 2023 Annual Recruitment Brochure of the Civil Aviation Flight Academy of China［7］，applicants must be Chinese citizens．Candidates should also have taken the 2023 National Unified Examination for General College Enrollment in Arts and Sciences．Note that only male high school grads are accepted．As usual，the Civil Aviation Flight Academy of China admits only men．This shows that a woman＇s chances of passing college entrance examinations to enter a flight academy are slim．The Employment Quality Report of Civil Aviation Flight College Graduates of China［8］shows that the Civil Aviation Flight Academy has 83\％men and 17\％ women．This statistic reveals a low female student representation in the academy，indicating a poor gender ratio for aviation．Women confront more challenges in aviation than men．In addition to China，the International Society of Women Airline Pilots（ISA） 2021 survey［9］found less than $6 \%$ of women airline pilots worldwide．

## 4. Discussion



Figure 3: Countries with the highest number of female pilots (Source: International Society of Women Airline Pilots).

According to research findings, it has been observed that female pilots tend to exhibit superior performance in flight operations. This assertion is supported by statistical evidence indicating that male pilots have a comparatively greater accident rate when compared to their female counterparts [9]. India Airline might be regarded as a noteworthy example that pays attention to the highest female ratio in the globe. Based on data obtained from a survey conducted by the International Association of Female Airline Pilots (as seen in figure 3), it has been determined that India, which boasts the highest count of female commercial pilots, exhibits a female pilot representation of $12.3 \%$ (seen in table 1). Historical circumstances have played a significant role in motivating women in India to dismantle societal obstacles. Indian women have consistently defied conventional gender norms and society anticipations over an extended period of time. Indira Gandhi, a female politician, was chosen as the prime minister in the year 1966. India made history by becoming the inaugural nation to elect a female head of government, so setting a precedent for other countries. Concurrently, Indian society actively promotes the empowerment of women through the encouragement of educational pursuits and professional aspirations. Indian women have consistently defied conventional gender norms and societal expectations over an extended period of time. Simultaneously, individuals are motivated to actively engage in educational pursuits and professional endeavors. This facilitates the opportunity for a greater number of women to participate in the labor market, encompassing the field of aviation.

Table 1: Detailed statistics provide by International Society of Women Airline Pilots (ISA) for female pilots in India, Australia, Canada, the USA, and the world average based on different types of airlines.

| Country | Major Airlines | Low-cost Carriers | Regional airlines | Cargo airlines | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) India | 12.3 | 10.9 | 13.9 | 8.5 | 12.3 |
| 2)Australia | 6.0 | 5.8 | 12.6 | 9.8 | 7.5 |
| 3)Canada | 6.2 | 5.3 | 8.5 | 6.7 | 7.0 |
| 4)USA | 5.5 | 4.3 | 5.6 | 5.0 | 5.5 |
| 5)World | 5.0 | 6.1 | 6.4 | 6.4 | 5.8 |

Indian government policies promote gender equality and empower women in the workforce, particularly in aviation. In 2018, the "Women in Aviation" program was launched. This
organization provides training, scholarships, and mentoring for women in aviation. It also promotes workplace gender diversity and aviation sector understanding among women. The suggested plan includes several government programs to support women. One project is the Women Changing India campaign, which celebrates women's achievements in various fields, including aviation. Airlines with more female pilots are receiving lower landing and parking fees and more airport slots from the Indian government. In addition, the state has launched several female pilot training programs. The above programs are designed to give women the skills and information they need to succeed in aviation. A working group has been formed to examine female pilots' many challenges and propose solutions. This entity includes government, aviation, and women's organizations representatives. India's initiatives have advanced gender diversity and empowered women in aviation. Female commercial pilots in India have increased in recent years, making the aviation profession more diversified.

## 5. Conclusion

The progression from the pioneering female aviators of the past to present-day figures like as Song Yin exemplifies the unwavering determination and fervor that women contribute to the realm of aviation. Nonetheless, the presence of gender inequality and the complexities of tokenism inside China's aviation sector indicate a structural problem that goes beyond superficial representation. This study examines the success story of India, highlighting the concrete outcomes that may be attained by purposeful and collaborative endeavors undertaken by both governmental entities and industries to cultivate a climate that promotes gender inclusiveness. Although tokenism may create the illusion of progress, true transformation requires deeper and more comprehensive structural reforms. When equipped with appropriate strategies and policies, China's aviation sector possesses the capacity to not only empower its female aviators but also serve as a model for other industries and countries. One shortcoming of this study is its reliance on a single tokenism theory to interpret netizens' unfavorable attitudes. India's government and history also contribute to the aviation industry's high number of women. The Chinese context does not inform this study's recommendations.

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