

Bridging the Gap: OBAP as a Catalyst for Access and Inclusion in Aerospace

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The Organization of Black Aerospace Professionals (OBAP) plays a pivotal role in addressing the longstanding racial and gender disparities within the U.S. aviation/aerospace workforce. Despite industry growth and increased demand for talent, Black Americans remain significantly underrepresented across most aviation professions. This position paper explores OBAP's function as an equity intermediary—an entity that bridges gaps in access, exposure, and opportunity for minoritized individuals, particularly Black Americans. To accomplish this the paper takes three positions: (1) OBAP plays a key role in the recruitment/retention of minoritized individuals—particularly Black Americans—in the aviation/aerospace industry; (2). OBAP's programs, namely, EA, ACE, and SFA may increase the participation rates of minoritized individuals in aviation/aerospace because of the exposure, access, and education the programs provide; and (3) OBAP can aid in the aviation/aerospace industry diversification by providing a population that has existed “in plain sight” for years, but has been overlooked historically. By drawing upon scholarship in public administration, STEM education, social equity, and nonprofits, the manuscript outlines certain barriers to entry and offers critical insight for organizational leaders wanting to move the needle. Ultimately, this manuscript contributes to both academic and practitioner discourses by advocating for greater acknowledgment, support, and measurement of minority-serving nonprofits like OBAP, whose efforts remain essential to redressing inequities in STEM-related fields and ensuring a more inclusive future for aviation/aerospace professionals.

Keywords: Aviation/aerospace, Black, equity, nonprofit, OBAP

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Introduction

The employment numbers within the U.S. transportation workforce and more specifically, within the aviation/aerospace industry, have steadily increased over the past five years yet the racial and gender diversification of this industry has not improved. Research by Keenan (2024) found that 31% of the transportation industry workforce is racially diverse compared to 38% of the overall U.S. workforce. To make matters worse, this trend of racial disparity exists amongst higher levels of employment and is not just limited to entry- and mid-level positions as women and minoritized¹ individuals also lag in leadership positions (Keenan, 2023; Garsten, 2024). The racial and gender diversity narrative worsens when examining the U.S. aviation/aerospace industry. According to Johnson (2023), 94% of professional pilots identify as White compared to 3.4% who identify as Black or African-American. This diversity dilemma for Black Americans is prevalent across several other aviation/aerospace occupations such as Aircraft Engineers at 2.6%, Airport Management positions at 5.6% (Silk, 2020; Johnson, 2023), Airport Executives at 6.5% (Zippia 2020; Johnson, 2023), and Air Traffic Controllers at 9.5% (Silk, 2020; Zippia, 2022).

There is a plethora of jobs available within the aviation/aerospace industry that tend to be more lucrative compared to other U.S. industries. Yet the participation rates of minoritized individuals and in particular, Black Americans, within this industry have hardly increased at all in several decades. The inability for the aviation/aerospace industry to recruit and retain minoritized individuals is concerning, especially when one considers that the industry is experiencing an inability to meet the workforce demand (Johnson, 2023; Lutte et al. 2023) and is predicted to need to hire 675,000 new civilian pilots, 716,000 new maintenance technicians, and 980,000 new cabin crew members worldwide over the next 20 years to maintain the global commercial fleet (Boeing, 2025). Some of these positions are advertised on the websites of aviation/aerospace entities that are committed to helping the industry meet its workforce demand. The Organization of Black Aerospace Professionals (OBAP) is one of those entities and is uniquely situated to assist the industry to meet the demand while diversifying the workforce. This is due to its programming that facilitates workforce development with an objective to increase minority participation in aviation/aerospace, thereby highlighting the three positions made in this manuscript – particularly the first and third, which are elucidated below.

The lack of diversity in the industry remains concerning, particularly given the extensive outreach efforts by major airlines like Delta Air Lines and United Airlines. Despite these efforts, the desired diversification improvements within the aviation/aerospace industry have not been realized. Further, even with the increased growth in the industry, availability of jobs, and higher wages, Black Americans are reluctant to enter. This reluctance can be traced to a variety of reasons or factors, including, but not limited to: the fear they may be unsuccessful due to a lack of support – academic and social (Johnson, 2023; Johnson, 2024), financial barriers (Johnson, 2023; Johnson, 2024), inability to navigate the nuanced industry (Johnson, 2023), and a lack of representation in positions they are being recruited for and/or aspire (Johnson, 2024; Harl & Roberts, 2011). Any one of the aforementioned is an impediment, but oftentimes, minoritized individuals pursuing an aviation/aerospace career encounter several of these factors, which compound one another and ground their dreams before they ever liftoff. This is where minority-serving nonprofits (MSNs) such

¹The term minoritized is used here rather than “minority” because minority is a term that for many DEI practitioners, places the blame for the oppression on the individual being oppressed rather than the oppressors or historical situations that resulted in the marginalization and oppression. Consequently, the term minoritized was derived to indicate the blame for oppression should not be placed upon the oppressed (Morrison, 2023).

as OBAP showcase their impact, helping individuals overcome a multitude of barriers (financial, exposure, and access) so they can enter the industry. MSNs have historically played a role in providing access and support for minoritized individuals (Hall, 2006) and provide an opportune platform for those who encounter specific entry barriers innate to the aviation/aerospace industry to excel. While these organizations' roles play are recognized, African American-led and MSNs are a notably under-examined area within the literature (Gooden et al. 2018). Further, there has been little research examining the participation rates of minoritized individuals in aviation/aerospace, and studies centralizing Black Americans in general are sparse (Johnson, 2023; Johnson, 2024; McNair et al. 2019). The reason for this, as asserted by Gooden et al. (2018), is simple: communities of color and by association, Black, Indigenous, and Persons of Color (BIPOC) individuals, live in a society where their cultures and/or experiences are invisible and disregarded, respectively.

The invisibility that manifests practically stems from the scholastic invisibility, especially as it relates to Black and BIPOC individuals pursuing STEM-related endeavors and the intersection with nonprofits, particularly MSNs. This illuminates the need for literature that focuses on Black Americans and accentuates the role of MSNs to underscore the impact of equity intermediaries like OBAP with respect to bridging access, exposure, financial, and knowledge gaps. There are no specific research questions guiding this manuscript since it is a position paper and instead, holds three positions that are detailed below. The central aim of this manuscript is to explain the role OBAP plays diversifying the aviation/aerospace workforce pipeline by increasing minoritized participation rates. An additional aim is to outline how OBAP's programs, namely Aerospace Career Education (ACE), Explore Aerospace (EA), and Solo Flight Academy (SFA) provide individuals with exposure to, access to, and education about the aviation/aerospace industry. This will be accomplished by showcasing how an MSN like OBAP functions as an equity intermediary².

The Authors' Position

The authors would like to make it clear this is a position paper that takes three positions:

1. The first position is that OBAP plays a key role in the recruitment/retention of minoritized individuals—particularly Black Americans—in the aviation/aerospace industry.
2. The second position is that OBAP's programs, namely EA, ACE, and SFA may increase the participation rates of minoritized individuals, specifically Black Americans, in the aviation/aerospace industry because of the exposure, access, and education the programs provide participants. More specifically, involvement in OBAP's programs may potentially result in an increased interest in academic adjacent areas, enrollment in advanced OBAP programs, improved emotional well-being, obtainment of scholarships, and an increased inclination to pursue an aviation/aerospace career.
3. The third position is that OBAP can aid the aviation/aerospace industry in its workforce diversification efforts by providing a population that has existed "in plain sight" for years, but has been overlooked historically. This would be accomplished through OBAP's programs, which help funnel individuals who traditionally may not consider pursuing a career in the industry to be encouraged to do so as a result of their involvement in OBAP.

The following sections delve into the literature review to contextualize and provide salient background about the manuscript. Following the literature review is a detailed explanation of

² An equity intermediary is an organization or individual that acts as a bridge between marginalized communities and resources, institutions, or decision-makers. These intermediaries serve as facilitators to shift resources and power to individuals that have historically been excluded from decision-making and lacked power respectively, (Teitsworth, 2023).

OBAP's keystone programs and their potential impact on participants. The manuscript will culminate with a discussion, describing its contributions, outlining implications of innate challenges nonprofits experience (e.g., scalability, mission drift, resource dependency, and unintended consequences), and with well as critical, and detail area(s) for future research prior to the conclusion.

Literature Review

The literature review will be divided into seven sections. The first section will describe the many advancements Black Americans have made in the U.S. socially despite significant legal restrictions that once stymied their progression. The second section will outline some of the diversity challenges in STEM, specifically the difficulty with diversifying the U.S. aviation/aerospace workforce and information on bridging the diversity gap within the industry. The third section will provide details on how professional associations serve as equity intermediaries, beginning with an overview of these associations and the history of MSNs. The fourth section will expound upon the rich history of OBAP, particularly the organization's efforts and actions to be a vehicle for change. The fifth section will provide an elaborate discussion on where MSNs intersect with aviation/aerospace through the lens of OBAP. The sixth section will detail the "empowerment effect" and explain how/why representation in underrepresented spaces such as aviation/aerospace is important to increase the participation rates of minoritized individuals in the industry. The seventh section will describe social equity and outline its four pillars emphasizing access, expounding upon why it is important and how OBAP provides access to program participants.

The Advancement of Black Americans

Minoritized individuals and women have been suppressed and stymied in their personal, academic, and professional advancement essentially since the beginning of time and within the U.S., it constitutes a deep-rooted issue that marked a darker time in the nation's history (Johnson, 2023; a). The most evident instances of such unfortunate and inequitable treatment are slavery and Jim Crow laws (Johnson, 2023) where members of the BIPOC community were treated inhumanely. In short, American institutions and their governing policies have rarely incorporated social or racial equity until challenged in a court of law by the afflicted groups as evidenced by the "Separate, but Equal" Doctrine. These same institutions and policies were not necessarily considered a priority unless mandated by federal legislation such as Affirmative Action in the 1960s (Johnson, 2023) or pressure from U.S. citizens (Jung et al. 2022) and/or the media (Ruiz, 2023) who were willing to advocate against the inequity much like what occurred following the unlawful killing of George Floyd and the BLM Movement. Despite such long-standing and deep-rooted inequity and treatment of Black Americans, they have still made significant progress in the U.S., especially within sectors of the workforce that have historically been underrepresented.

Although Black Americans have been able to enter these spaces, they still encounter significant racism, discrimination, and prejudice (Evans & Feagin, 2012; Johnson, 2023). Due to the historical underpinnings of marginalization and the routine nature of this racism and discrimination, Black Americans and BIPOC individuals, have grown accustomed to experiencing this treatment. In light of this, some White Americans still assert that since Black Americans and other members of the BIPOC community have experienced personal and professional success, the U.S. has made substantial progress towards social and racial equity (Johnson, 2023). This phenomenon can also be referred to as demonstrated "survivor bias" within the aviation/aerospace industry. It is believed this occurs because only the success stories of individuals are examined, observed, or considered since the failures never "survived" to be observed (Clinehens, 2024). Consequently, public and private support for equity-related initiatives can be adversely impacted because decision-makers do not include the entire sample in their logic, only those who were successful. This is problematic because the reasons why those who failed or did not survive may highlight equity gaps that stymie the

participation, progress, and success of certain individuals. At its core, such a belief is an illogical fallacy and is underpinned by willful ignorance of the current race relations within the U.S. These issues contribute to the already pervasive set of diversity challenges that impact the recruitment and retention of Black Americans to STEM-fields such as aviation/aerospace.

Diversity Challenges in STEM

Workforce Diversity Woes in Aviation/Aerospace

The racial and gender diversity within the aviation/aerospace industry is and has been dismal, especially when examining diversity within the commercial sector (Johnson, 2023; Johnson, 2024). Such a long-standing lack of diversification should be concerning for industry leadership because of the adverse impact on its continuity and longevity. Broad racial and gender representation is paramount for the industry to continue to advance, thrive, and be profitable (Lutte et al. 2023; Johnson, 2023). Achieving this, however, cannot be accomplished unless talent from minoritized groups is sourced, especially from Black Americans who account for single-digit percentages within several aviation/aerospace occupations. Sourcing this talent is easier said than done and has proved to be an inordinate task for industry leaders, highlighting the importance OBAP as well as the first and third positions of this manuscript stated earlier. One reason for this difficulty in the effective recruitment/retention of minoritized persons and Black Americans in particular can be traced to social and racial equity issues that have plagued both the higher education environment and the industry (Johnson, 2024). The severe shortage of STEM graduates—especially those from minoritized backgrounds—graduating from U.S. undergraduate programs further challenges the aviation/aerospace industry's ability to recruit and retain talent, a problem that is closely linked to issues within higher education (Murillo, 2020; Johnson, 2023).

At their core, these STEM programs are a pathway to funnel students³ into the industry so they can fulfill essential STEM-related positions (Murillo, 2020). With fewer students graduating, the funnel's stream is reduced to a slow dribble that manifests via industry shortages across various occupations. With this shortage now being recognized by industry leadership, it is plausible the U.S. may be unable to furnish a sufficient number of graduates to meet the increasing demand to remain competitive in STEM fields. As stated earlier, this lack of STEM graduates is exacerbated relative to minoritized individuals because of their low recruitment in STEM programs and poor retention once enrolled. Research by Murillo (2020) found that minoritized students are voluntarily exiting their STEM programs at notably higher rates than their non-minoritized counterparts. The consequence of such poor recruitment and retention efforts has also contributed to the low number of minoritized students matriculating from collegiate aviation flight programs (Johnson, 2023).

One proposed solution to this recruitment issue is raising the mandatory retirement age of commercial pilots from 65 to 67 (Reed, 2024). A similar solution was implemented once before in 2007 (Munhoz and Byington, 2024), but only provides short-term reprieve and does not address the root cause(s) of the issue within the industry. Instead, raising the retirement age exacerbates the situation because it funnels more resources to pilots who are senior, which lessens organizational resources and support that can be directed towards recruiting and training newer/junior pilots. Additionally, the solution is opposed by the labor market, some commercial airlines, and the Federal Aviation Administration (FAA) because increasing the age would not increase the pool of available pilots nor would it increase services to certain communities (Air Line Pilots Association [ALPA],

³For the purposes of this manuscript, the term “student” refers to an individual enrolled in an educational institution that provides primary, secondary, and/or post-secondary education.

2023). In short, the proposed solution is, “One in search of a problem”, as stated by ALPA President Jason Ambrosi (Reed, 2024). As such, more viable long-term solutions are needed, and ideally, these solutions should focus on improving pathways with collegiate aviation programs and leveraging nonprofit organizations that can utilize their social and other forms of capital to bridge the gaps with STEM programs and industry.

Given the fact that most STEM programs now encompass aviation/aerospace programs (Halleran, 2019), it is somewhat easier to funnel new graduates of these programs into the industry to fulfill management, maintenance, pilot, and other vital STEM roles the industry needs. Despite this funnel essentially bridging one gap in the workforce demand challenge facing the industry, the matriculation issue discussed earlier serves as a counterweight and compounds other barriers to entry such as inadequate exposure, lack of awareness, and insufficient representation (Johnson, 2023; Johnson, 2024). These barriers are long-standing equity-based issues impacting the effective recruitment/retention of minoritized individuals to the industry, especially for Black Americans. As a result, the current diversity gap that exists in aviation/aerospace and the transportation sector is exacerbated. There have been several monumental attempts to close this diversity gap throughout U.S. history, primarily via public policy, which is most evident in the 1960s.

Bridging the Aviation/Aerospace Diversity Gap

The first real attempt to increase employment and educational opportunities for minoritized individuals and in particular, Black Americans, by way of public policy, was Affirmative Action. In 1961, President Kennedy enacted an executive order that required federal contractors to take ‘affirmative action’ to ensure applicants were treated equally regardless of race, color, religion, sex, or national origin (Hartocollis, 2022). This legislation was predicated upon five premises that fostered legal and social coercion to force change to pursue racial equity (Johnson, 2024; Thomas, Jr., 1990). The legislation enabled BIPOC individuals to gain entry to certain fields/sectors environments that historically underrepresented (e.g., aviation/aerospace). Despite this salient policy, affirmative action alone has not been enough to bridge the diversity gaps extant within the U.S. workforce, but have served as a great starting point (Lutte et al. 2023).

The creation of robust partnerships between collegiate aviation programs and commercial operators has aided diversification efforts founded by the affirmative action legislation. Additional partnerships and pathways between these collegiate programs and the industry are needed to help bolster the workforce. Such a notion is supported by the National Research Council [NRC], (1997), and Ison et al. (2016), who recommended that commercial airlines create and foster relationships with collegiate aviation programs that possess large racial and gender minoritized student bodies to increase the diversity of the applicant pool. As such, Historically Black Colleges and Universities (HBCUs) and Predominantly White Institutions (PWIs) are prime institutions to foster such relationships, and research by Johnson (2023) demonstrates that there are qualified, skilled, and dedicated BIPOC students actively pursuing aviation/aerospace careers despite encountering specific barriers to entry (e.g., access, exposure, financial, etc.).

It is widely recognized and understood that employment opportunities in aviation/aerospace tend to be lucrative, particularly occupations such as professional pilots and air traffic controllers (Johnson, 2024). Despite the high earning potential that exists, the financial burden to enter aviation/aerospace careers have, historically, served as an insurmountable barrier for many (Johnson, 2023; Johnson, 2024). For instance, those aspiring to become professional pilots can expect to pay anywhere from \$50,000-\$80,000 for flight fees excluding traditional higher education costs (e.g., tuition) (Murillo, 2020). Due to these financial barriers, it was recommended that financial assistance programs be established for professional pilot majors to help individuals afford the costs of flight and transitional training (NRC, 1997). This recommendation was built upon by Johnson (2024) who recommended that educational institutional leadership consider restructuring financial aid packages

for professional flight students who are BIPOC, first-generation, and/or classify as low-income. Therefore, the concern is that if the cost remains high and financial support remains limited, then the industry's ability to meet the current workforce demand and diversify will be stymied (Johnson, 2024). Consequently, a unique talent pool that has been "in plain sight" (Lutte et al. 2023) and marginalized (Johnson, 2023) will be further isolated and barred from a phenomenal, lucrative, and rapidly evolving industry. The provision of financial support via scholarships, however, constitutes an area where MSNs, such as OBAP, have assumed a critical role by filling the financial gap that exists, bridging gaps within the industry. This involvement underlines the third position made earlier relative to OBAP's ability to reveal this hidden population and funnel them into the industry.

Professional Associations as Equity Intermediaries

Professional Associations Overview

Professional associations can be and have been of great benefit to U.S. citizens, especially minoritized individuals, in helping them meet their various social and/or economic needs (Hall, 2006; Gooden et al. 2018). This is because these entities, which were once known as voluntary associations when they were first created in the 18th century, but are now known as nonprofit organizations or professional associations, provide their members with exclusive benefits. Such benefits include significantly discounted goods or services as well as advanced information that the general public must wait longer to receive (in some cases) (Hall, 2006). Further, these nonprofits provide programs and services that help its members bridge knowledge gaps, render exposure, provide access, alleviate certain fiscal constraints, and/or provide support (e.g., mental or emotional) that some, especially minoritized individuals, would be hard-pressed to obtain elsewhere (Murillo, 2020; Gooden et al. 2018), thereby framing themselves as equity intermediaries. Within the context of aviation/aerospace, these entities serve a similar purpose, but for minoritized individuals that have historically leaned on nonprofits, specifically MSNs, to help meet their socioeconomic needs, are much more salient. Specifically, these aviation-centric MSNs such as OBAP, provide minoritized individuals access to scholarship or employment opportunities, enhanced networking ability through conferences or mentorship, and allow them to bridge gaps in their aviation knowledge through uniquely crafted programming that furnishes exposure and access (OBAP, n.d.; Murillo, 2020; Johnson, 2023). The aforementioned succinctly outlines how professional associations can and have served as equity intermediaries to help address general and aviation-specific disparities, thereby reinforcing the second position made in this manuscript relative to OBAPs' programming provides participants. However, to truly understand the salience of these MSNs and their role as equity intermediaries, their history must first be explicated.

Minority-serving Nonprofit History

The aforementioned literature on diversity in STEM and the history of Black Americans, particularly their advancement in society and aviation, provides pivotal context to understand OBAP's role as an equity intermediary. Although to fully understand the organization's role in this capacity, engagement with nonprofit theory and organizational change literature is necessary as well as Critical Race Theory (CRT) given the historical underpinnings of marginalization that served as a lynchpin to the creation of MSNs. Citizens within the BIPOC community, historically, were socially excluded and barred from joining nonprofits so they were forced to create their own. The purpose behind the creation of these MSNs was to foster a sense of belonging with others who looked like them or had been excluded for being a racial minority or immigrant, and were not considered a part of 'civil society' despite them being emancipated (Hall, 2006). Consequently, these excluded individuals cultivated a community for those who were economically and socially isolated, providing them with an entity they could rely on to fulfill their various needs (Trent, 2021). Thus, the origin of

MSNs was predicated upon satiating needs that were caused by state failure and compounded by racist rhetoric. The aforementioned constitutes a phenomenon that is well documented and discussed within contemporary CRT literature, and corresponds to two of the six tenets of CRT. These two tenets, as posited by Delgado and Stefancic (2017), state that: 1. Racism in the U.S. is a common, ordinary experience for most people of color and 2. Race is not biological, but socially constructed to benefit dominant groups. This insinuates that racism is an ordinary and everyday experience for most BIPOC or minoritized individuals and while CRT did not exist back in the 1800s when associations – the nomenclature precursor to nonprofits (Hall, 2006) – it is clear the intentional exclusion of BIPOC individuals regardless of their emancipation status was rooted in racism. As such, racism, segregation, exclusion, and other inequitable treatment was not an uncommon experience as posited in the first CRT tenet whereas the purposeful exclusion of these individuals (emancipated or not) underscores the second. This was done to keep BIPOC individuals isolated in lower socio-economic brackets and labor markets to ensure that White Americans remained in positions of power socially and economically, allowing the power imbalance to benefit them and their needs, thereby underscoring the second CRT tenet (Patton, 2022).

Although creating these entities was an important step, the intent underlying their development is the more salient aspect because of their aim to help BIPOC individuals sustain life, advance socially or academically, and thrive professionally (Scott, 1990; Lee, 2020). To help mitigate the many inequities that have been propagated within the U.S. educational system, the nonprofit sector and MSNs in particular, have played a prominent role in improving social and racial equity through bridging various gaps via program and service delivery (Gooden et al. 2018; Hall, 2006). Most voluntary organizations created during the 18th century were by Black women, but they never received credit for their contributions; they were purposefully overlooked due to their race and gender (Scott, 1990). The intentional creation of these MSNs underscores and connects to another core tenet of CRT, namely the experiences minoritized individuals qualify them to speak out against racism (Patton, 2022). While one can speculate Black and BIPOC women were vocal, to an extent, about the unfair treatment, their actions in creating MSNs for their communities with the purpose of supporting BIPOC individuals spoke louder than words and essentially was their way of speaking out against the racist treatment they experienced every day and fighting back. These foundational underpinnings and rationale for creation can be seen with contemporary nonprofits, especially MSNs, with the creation of OBAP being a prime example.

These women raised money for vocational and formal education despite backlash and repercussions from White Americans who opposed the education of Black Americans (Scott, 1990), to establish small scholarships to send young Black boys and girls to college. Such a narrative accentuates the role MSNs played within the Black community by providing social and financial support while helping recruit/retain students through social and economic assistance, underscoring several tenets of social equity through access. The provision of access and exposure to resources underscores an important function of MSNs for those relying on them given the inequitable landscape that has existed in certain programs and services in the U.S. Further, MSNs provide an invaluable source of support for the racial communities they serve (Gooden et al. 2018). Therefore, the importance of MSNs cannot be overstated and their role as equity intermediaries is difficult to overlook since they actively work to prevent minority citizens and communities of color from going without paramount social services (Gooden et al. 2018; Lee, 2020) further underscoring their necessity in society and ability to furnish access, exposure, and knowledge to those lacking it. Within the context of this manuscript, MSNs like OBAP, are viewed as sources of diversity and innovation (DiMaggio & Anheier, 1990). Therefore, these MSNs can provide a ‘vehicle for change’, academically, financially, professionally, and socially transporting BIPOC individuals traditionally overlooked by an inequitable system to careers within the aviation/aerospace industry. One such

entity that has been a profound vehicle for change for nearly 50 years is OBAP, which is largely due to its mission, programs, and members.

The History of OBAP – A Vehicle for Change

The impetus of OBAP can be traced back to 1976, when Ben Thomas, a young Black American pilot employed by Eastern Airlines, led an effort to form a permanent body to address racism and discrimination in the U.S. aviation/aerospace industry. Thomas invited 37 other Black American pilots and aviation industry pioneers to convene at the O-Hare Hilton Hotel in Chicago, IL, on September 17th and 18th, 1976 to discuss, address, and derive a plan of action to combat the lack of diversity and inclusion within the industry in addition to the rampant racism and discrimination (OBAP, n.d.). At this time, the 38 individuals represented roughly 50% of the worldwide minority-pilot population. Despite facing danger, further social persecution, and potential blackballing in the aviation/aerospace industry, these 38 individuals remained steadfast in the face of adversity and in their pursuit to create OBAP during those fateful days in mid-September. Initially, OBAP was called the Organization of Black Airline Pilots and was created to encourage and advance minoritized individuals in all aviation and aerospace careers while focusing on preparing the youth to realize successful careers in aviation (OBAP, n.d.). The organization retained its original name for nearly 40 years until the mid-2010s, altering the nomenclature to become the Organization of Black Aerospace Professionals to be more inclusive and representative of the many occupations and people now comprising the aviation/aerospace industry.

Since its creation, OBAP has used its platform and resources to position itself as an equity intermediary for members of the BIPOC community, specifically Black Americans, in the realms of public policy, the nonprofit sector through partnerships and collaborations, and to create opportunities in the aviation/aerospace industry for those who have historically lacked them. For instance, in 1992, OBAP President Captain Perry M. Jones encouraged the U.S. Congress to appoint a panel and funded a two-year study by the National Academy of Sciences to evaluate the country's supply, demand, and production capacity for airline pilots beyond the year 2000 (OBAP, n.d.). This was done in an effort to augment the dwindling supply of military pilots, which was one of the primary talent pools for the U.S. aviation/aerospace industry to draw from (Johnson, 2023). Consequently, the U.S. Armed Forces became obligated to increase the participation of minoritized individuals in the military, leading to the allocation of positions designed solely for minoritized pilots (OBAP, n.d.). The aforementioned efforts demonstrate the intersection of the nonprofit and public policy spheres and connect to the theory of racialized organizations posited by Ray (2019) while accentuating some of the CRT points made earlier while critically engaging scholarship that focuses on the role of race and power relative to nonprofits. This theory is beneficial in providing a lens to examine how OBAP must center Black identity and advocacy efforts while concomitantly negotiating (institutional) legitimacy within a traditionally underrepresented environment such as aviation/aerospace, which has historically been White-male dominated (Johnson, 2024; Lutte et al. 2023). The notion of navigating institutional legitimacy is elaborated upon within the *Unintended Consequences* section of the *Discussion* later in this manuscript and is eloquently framed through the use of DiMaggio and Powell's (1983) institutional theory. Specifically, this theoretical lens helps explain how OBAP must circumnavigate the nuances of the nonprofit sector while simultaneously aligning with field-level expectations to maintain its legitimacy as an actor in aviation/aerospace workforce development. Doing so is paramount in upholding the organization's reputation and credibility, especially amongst members and volunteers as well as external stakeholders (e.g., funders, educational partners, and industry gatekeepers). This legitimacy is key in OBAP maintaining its status as a vehicle for changes, especially during the early years of the organization, as it navigated constraints bestowed by society, funders, and other parties while working towards mission achievement.

The mission of OBAP is to inspire excellence by removing barriers through exposure, skill development, access, mentoring, and advocacy. This mission is facilitated through four objectives: 1) To motivate youth to become educationally prepared for life; 2) To increase minority participation in aerospace through exposure, training, mentoring, and scholarships; 3) To increase the number of underrepresented minority professionals, engineers, scientists, and management personnel in aerospace and related industries and 4) To better assist the organization, membership concerns, and constituencies (OBAP, n.d.). The objectives of OBAP are accomplished through its eight programs: Aerospace Professionals in Schools (APIS), Aerospace Career Education (ACE), Explore Aerospace (EA), Luke Weathers Flight Academy (LWFA), Solo Flight Academy (SFA), Ascension Project, Scholarships, and Aerospace Professional Development Program (APDP). Collectively, these programs provide participants with the access, exposure, education, financial assistance, and support needed to successfully pursue a career in aviation/aerospace. It is through these programs that OBAP bridges the many gaps that preclude the BIPOC community from pursuing a career in aviation/aerospace. Thus, the mission, objectives, and programs coalesce to reinforce all three positions made in the manuscripts as it relates to OBAP's role in workforce diversity efforts within the industry as an equity intermediary.

OBAP – Where MSNs Intersect with Aviation/Aerospace

The intersection between the aviation/aerospace industry and education provides a new frame to understand the salience of MSNs with respect to program and service delivery, which has not been extensively explored by the literature (Gooden et al. 2018; Murillo, 2020). It also furnishes a new opportunity to explore the role of MSNs as equity intermediaries as it pertains to the recruitment/retention of minoritized individuals within the industry while providing an example of how these entities can foster social and racial equity. Through this function, OBAP assists with the voices of marginalized groups being heard and ideally, considered, to help address systemic inequities, because they now have a seat at the proverbial table due to the equity intermediary's assistance.

OBAP is a prime example of how an organization can serve as an equity intermediary and facilitate real change for the beneficence of marginalized individuals. The Organization provides several programs that furnish aviation education and exposure to middle-, high-, and college-aged students, specifically those identifying as Black or African-American (OBAP, 2023). Two of these programs are Airline Professionals in Schools (APIS) and Aviation Career Education (ACE). The goal of these programs is to provide students with aviation education and exposure through career fairs, STEM events, classroom visits, and immersive hands-on experiences, which are facilitated by OBAP members – who are volunteers – and identify as Black aviation/aerospace professionals (OBAP, n.d.). The education and empowerment that is conveyed to these students through representation and edification is impactful, and underscores the notion of access, which is a key tenet of social equity (Gooden, 2015a). This is because OBAP essentially brings the industry to these students rather than relying on their school districts or parents to bring them to the industry. This constitutes an equity-minded approach (McNair et al. 2019), that incorporates racial and social equity by overcoming common obstacles to aviation/aerospace (e.g., transportation, fiscal resources, personnel, etc.).

In light of narratives and support citing the impact of aviation-centric MSNs such as OBAP, pertaining to the recruitment/retention of minoritized individuals in aviation/aerospace, the contributions of these nonprofits largely goes unnoticed by the general public and even some scholars (Murillo, 2020; Lutte et al. 2023). Therefore, the full impact of these MSNs as equity intermediaries is relatively unknown, which typically manifests through scholarships, internship opportunities, networking, and exposure initiatives. The aforementioned coalesce to amplify the impact, positive influence (Murillo, 2020), and support (Gooden et al. 2018; Johnson, 2023; Johnson,

2024) these nonprofits have for minoritized individuals as they pursue their higher education and/or aviation/aerospace endeavors.

In a similar vein, OBAP is as much as a social capital generator as it is an equity intermediary. According to Lin (2001) social capital is defined as investment in social relations with expected returns in the marketplace. For members, this social capital is built through participation in OBAP's unique programming initiatives such as ACE, EA, and SFA to cultivate relationships between themselves and other members as well as those external to OBAP. During these programs, members make connections, referred to as ties in the context of Social Network Theory (SNT) according to Brass (1984), with one another to create social relationships. These social relationships comprises a significant portion of one's social capital (Toms et al. 2024) and aids in their development and more importantly, grants them access information. Information benefits tend to exist in three forms, access, timing, and referrals as posited by Burt (1992), for minoritized individuals, access is typically the most important. This information is often new and pivotal such as scholarship awareness or industry seminars/webinars in addition to other important resources that may impact their academic and professional experiences as well as their career trajectory in the aviation/aerospace industry. Therefore, by being better connected and investing in social relationships, members can accumulate significant amounts of social capital that can be leveraged to navigate such a nuanced industry and utilize OBAP as a vehicle to do so as they increase access to and expedite the receipt of information that can influence their careers. (Toms et al. 2024). Thus, OBAP effectively aids its members in providing opportunities to build social capital that can be spent as they make connections with various sectors of the industry, bridging gaps across a multitude of interpersonal networks (Putnam, 2000) that exist to due to equity issues such as access, knowledge, exposure, fiscal, etc.

The possession of social relationships and consequently, social capital, has also been shown to help individuals, especially students, traverse educational environments and enable them to foster a sense of belonging in traditionally underrepresented places such as educational institutions, collegiate aviation programs, and the industry as a whole (Toms et al. 2024). As such, the importance and relevance of social capital cannot be understated, especially for minoritized individuals who must use it effectively to obtain access to scarce resources and information via their MSN to navigate sector or industries where they may not be well-represented. This is particularly applicable for collegiate and non-collegiate aviation students who rely on MSNs and the social capital amassed to obtain both a sense of feel as if they belong and empowerment. Through this empowerment effect, more minoritized students may be shepherded into the industry, allowing for a diverse and representative generation of aviation/aerospace professionals and leaders to be cultivated by means of passive, active, and symbolic representation (Ricucci and Van Ryzin, 2017; Gilmore, 2022).

Empowerment Effect – Representation Matters

It has been suggested that one of the reasons why Black Americans have, historically, had low participation rates within the aviation/aerospace industry is because they do not see themselves represented in positions in which they are being recruited for and/or aspire (Harls & Roberts, 2011; Johnson, 2024). This lack of representation can be disempowering and is especially impactful on Black and BIPOC youth because they have few individuals they can reference to “see it to be it”, unless they have someone or organization to lean on. This is where MSNs such as OBAP can be of benefit because they provide programs meant to educate, expose, and empower BIPOC individuals (OBAP, n.d.). This is accomplished through showcasing Black aviation/aerospace professionals who volunteer in specific programs, fostering a connection between the students and the professionals. Consequently, a community of support the youth can leverage when they need empowerment or support can be built as they pursue careers goals (OBAP, n.d.; Murillo, 2020; Johnson, 2023).

Having access to such an empowerment network while seeing representation is critically important, especially in fields where underrepresentation is the “norm” (Murillo, 2020; Johnson, 2024).

A profound example of such diverse representation and the impact of empowerment was described by Harls and Roberts (2011), who conducted interviews on Black professional pilots working in corporate aviation. One of the main themes that underpinned the interviews was mentorship, in which the Black junior pilots sought out senior pilots of color, particularly Black pilots, for guidance on how to deal with racism within the cockpit and the industry at-large (Harls & Roberts, 2011). These senior pilots provided resources and emotional support for their juniors, offering them unique insight on how to deal with certain situations based on their own experiences with racism. Many of the junior pilots reported feeling empowered through the words of affirmation delivered by their seniors and were able to persist because of this empowerment network they had access to (Harls and Roberts, 2011). Consequently, more Black pilots were retained within the industry despite the racism and inequitable treatment they faced at work and in society each day. This underscores research by Johnson et al. (2024) that highlighted how racism is an “everyday” experience for many Black aerospace professionals, yet despite this, the magnitude of the empowerment and mentorship received encouraged them to remain in the industry. Such a realistic example showcases how important the diversification of the industry is. If more BIPOC aviation/aerospace professionals can be empowered and supported to overcome adversity and eventually be retained, then the representation within the industry can be increased. This would send a strong signal to BIPOC youth that they too can become involved in aviation/aerospace and enjoy it. Thus, the impact of active representation (Ricucci & Van Ryzin, 2017), empowerment (Murillo, 2020), and communities of support (Gooden et al. 2018; Johnson, 2024; Johnson et al. 2024), cannot be overstated as it pertains to the effective recruitment/retention of minoritized individuals.

Social Equity – Access

What is known is that these MSNs bridge gaps through access provision, accentuating the importance of centralizing social equity at the core of an organization's mission and incorporating equity into its programs. The origins of the term “social equity” within Western society and U.S. public administration can be linked to H. G. Fredrickson, who has been deemed as the “Father of Social Equity” by many (Johnson, 2023). Frederickson’s initial definition of social equity was, “Activities designed to enhance the political power and economic well-being of minorities” (Fredrickson, 1971, p. 310). Since the 1960s/1970s, social equity has made some positive strides in terms of definitional development. The current, widely-agreed upon and commonly accepted definition of social equity is, “The fair, just, and equitable management of all institutions providing services to the public directly or by contract; the fair and equitable distribution of public services to the citizens and public policy implementation; and a commitment to the promotion of fair, just, and equitable public policy formulation” (Gooden, 2015, p. 30). For the purposes of this manuscript a narrow definition will be used and is as follows: nonprofit and academic support and engagement toward increased diversity and inclusion across race/ethnicity and gender.

There are four key tenets of social equity: Procedural fairness, access, quality, and outcomes (Gooden, 2015a; Johnson, 2023). These four tenets compromise some of public administrators most relevant themes, but for this manuscript, the access tenet will be centered. Research by Gooden (2015) stated access, or distribution, involves reviewing programs/services to determine the level of access individuals possess to the programs/services and conducting an analysis to determine why unequal access may exist. Essentially, this means access is concerned with determining who can or cannot enter a space and why or why not (Johnson, 2023). Historically, minoritized individuals and Black Americans in particular, have experienced significant difficulty gaining access to aviation/aerospace opportunities due to several barriers to entry such as racism and discrimination as evidenced by the great late Captain David E. Harris (OBAP, 2024), financial (Johnson, 2023);

Johnson, 2024), exposure (Lutte et al. 2023; Johnson, 2024). Generally, the Black community and communities of color are adversely impacted by a phenomenon referred to as “Zip code as destiny”. This phenomenon, posited by Little Jr. (2020), asserts that the aforementioned communities and specifically, Black youth, live in geographic areas that are disconnected from quality schools, jobs that nurture their potential and provide growth opportunities, and extracurricular activities. Some paramount extracurricular activities these students are disconnected from include aviation/aerospace because they lack ample access to industry elements such as local airports, aviation/aerospace professionals, and unique aviation/aerospace programs within their schools, districts, and communities (Johnson, 2023).

The lack of access (and exposure) to aviation/aerospace-related opportunities within the Black community is where OBAP comes in. OBAP provides a compelling example of what equity in action looks like for an organization that embeds the construct at the core of its mission and its programs. According to research by Johnson (2023), an analysis was conducted on some primary and secondary institutions to ascertain why the students enrolled possessed little to no exposure to aviation education. The analysis revealed the institutions examined possessed inadequate resources such as funding, personnel, and connections to aviation/aerospace professionals that could provide aviation/aerospace education to the youth. Programs like OBAP’s APIS and ACE were created to bridge access gaps that were shown in the aforementioned analysis. These programs not only constitute an equity-minded approach to education (McNair et al. 2019), but also incorporate both social and racial equity. Of the four equity elements discussed earlier, access was emphasized because it is the most paramount, especially for Black Americans interested in pursuing aviation/aerospace. This is because Black Americans and the BIPOC community in general, tend to lack access to aviation/aerospace information (Morrison, 2023), tools and programs (Morrison, 2023), funding (Johnson, 2024), awareness of aviation/aerospace events, and opportunities to socialize with those in the industry (Johnson, 2023; Murillo, 2020). These elements are important because they may benefit, enable, and empower those in minoritized communities to pursue an aviation/aerospace career.

OBAP Programs

As stated earlier, this manuscript holds three positions, all of which aim to explain OBAP’s role in diversifying the aviation/aerospace industry. Simultaneously, the manuscript strives provide a clear nexus between aviation/aerospace and MSNs through the lens of OBAP, utilizing three of its cornerstone programs – EA, ACE, and SFA – to showcase the impact of OBAP as an equity intermediary, emphasizing and reinforcing the second position held. There is a need to address the lack of participation of minoritized individuals and in particular, Black Americans, in aviation/aerospace and OBAP’s aforementioned programs provide the access, exposure, and knowledge for that to occur. These programs focus on developing KSAs and experiences that are supportive of post-secondary school or university studies. Prior to discussing these three programs in detail, it is necessary to provide a brief background on OBAP Programs as a whole. The organization’s program centers on a framework called “Project Aerospace”. The framework was established to “offer annual opportunities to inform and prepare aspiring aerospace professionals for their future careers” according to OBAP (2024, p.2) This dream-to-career commitment includes initial exposure to the industry through in-school career day events, immersive summer programs, flight training academies and professional development opportunities held nationwide.”

OBAP’s “dream-to-career” model refers to a suite of programs and initiatives that dovetail to form a pathway for youth and young professionals to gain access to experiential and development opportunities focused on aerospace career preparation. An example of a profound program and facilitated by OBAP that can be adopted by collegiate aviation programs is the Aerospace Professionals in Schools (APIS). The APIS program provides minoritized youth, young adults, and

even collegiate-level aviators with exposure to careers in aviation via in-school activities that are led by industry professionals (OBAP, 2020). Such a program is paramount in accentuating the importance of active and symbolic representation for Black Americans students. It also provides academic and non-academic support via mentorship by industry professionals. Other programs within Project Aerospace include: Girls LAUNCH, Scholarships, and the Luke Weathers Flight Academy (LWFA). While these programs are important to OBAP and its mission, only Explore Aerospace, and Aerospace Career Education, and Solo Flight Academy are expounded upon for the context of this study since they are the foundational programmatic activities.

Explore Aerospace (EA)

EA was created in 2021 as an all-important link in the educational efforts of OBAP. EA bridges the gap between in-person Aviation Professionals in Schools (APIS) visits and ACE academies each summer with virtual instruction that is accessible for students in the 6th - 12th grade all across the globe. The virtual platform, referred to as “Class”, allows instructors to instruct large groups of students about aviation and aerospace topics for 75-minute sessions for 12 Saturdays in the Fall and Spring. The courses rotate each semester between 1. Introduction to Aviation, 2. Introduction to Aviation Careers, 3. Introduction to Aerospace, 4. Introduction to Small Unmanned Aerial Systems (sUAS), and 5. Introduction to Aviation Maintenance. Students receive instruction from industry professionals and are required to complete discussion boards, quizzes, and essays after class. The program served 183 Students in 2021, 183 in 2022, 191 in 2023, and 184 in 2024 (OBAP, n.d.). In 2025, the program intends to reach more students with an asynchronous offering that allows students who cannot be present on Saturdays to attend at their own pace. The aforementioned statistics and weekend course offerings underscore the second position made in this manuscript and highlight the potential profound impact EA has on program participants via the provision of exposure to, access to, and education on aviation/aerospace. Participants receive the opportunity to learn about topics not taught in school in an in-depth way and gain the mentorship of seasoned OBAP members. Students also stay engaged in aviation/aerospace from the earliest times they become interested in aviation/aerospace until they are college-aged. The modality of EA also makes it possible to reach students where OBAP does not yet have a presence, having students participate from small midwestern or western states of the U.S. to South Africa.

Aerospace Career Education (ACE)

The ACE Program was founded in November 1992 (OBAP, n.d.) to offer comprehensive training in the disciplines of aviation and for those youths between the ages of 15 and 18, actual flight training. In its current evolution, the program’s now stated goal is to “provide middle and high school youth with exposure to opportunities in aerospace through week-long summer academies.” (OBAP, 2024). ACE is and has been endorsed by the FAA because of the leading role the organization has played in establishing ACE Academies nationwide to introduce, educate, and guide diverse students towards careers in aviation/aerospace. OBAP currently operates 42 ACE Academies nationwide and is on an exciting path of expansion. These academies are designed to help underrepresented communities explore career opportunities in the industry and have made a significant impact in recent years, mentoring 1,200 middle and high school students in 2023 and 841 students in 2024. Notably, in 2024, 242 female students and 767 minority students participated in the program (OBAP, n.d.). Again, the aforementioned statistics demonstrate the reach OBAP has in accessing minoritized individuals to ultimately provide them with the exposure, access, and education on aviation/aerospace careers, thereby underscoring the second position made. Further, to adapt to the evolving landscape of the industry, the ACE academy program has introduced three maintenance-focused academies and has plans to establish two space-focused ACE academies, promising a bright future for underrepresented students and the program as a whole.

Solo Flight Academy (SFA)

The OBAP Luke Weathers Jr. SFA is a transformative two-week program that introduces young adults (aged 16 to 18) to aviation/aerospace through structured ground school instruction and hands-on flight training, which is led by FAA-certified instructors. Participants complete roughly 40 hours of accelerated ground instruction, covering a comprehensive range of aviation knowledge including federal aviation regulations, weather theory, aircraft performance, navigation, and the fundamentals of flight. Instructors also guide students through hands-on flight training that includes preflight procedures, basic maneuvers, takeoffs, landings, and emergency operations—giving them a real-world glimpse into the responsibilities of a pilot. The hallmark of this program is that it prepares each student to solo an aircraft—becoming the “sole manipulator of the controls”—before they leave the program, an extraordinary milestone in any pilot’s journey.

At its core, SFA is significant because of its long-term outcomes. Each year, 24 students, many of whom arrive without fully believing they could ever become pilots, leave transformed. Numerous graduates have later earned their Private Pilot License, Instrument Rating, and Commercial Pilot Certificate, directly attributing their success to the confidence and exposure gained during this academy. The fact many SFA graduates completed the program and continued their training post-SFA to earn additional FAA certificates and ratings emphasizes OBAP’s role as an equity intermediary and specifically underscores the second and third positions made in this manuscript that center the organization’s involvement in encouraging individuals to pursue careers within the industry. Therefore, it can be postulated that the SFA program itself serves as a critical launchpad, especially for underrepresented youth, by removing barriers and showing that an aviation/aerospace career is possible and within reach. With enrollment limited to 24 participants each year, the academy provides a valuable opportunity for those pursuing careers in aviation, offering certification upon completion and pathways to further training and scholarships (OBAP, n.d.).

Potential Impact of OBAP Programs

The descriptive provision of OBAP’s three keystone programs within the previous section was meant to orient readers to the paramount work via its unique programming the organization conducts within various communities across the country to positively impact minoritized youth as it relates to the aviation/aerospace industry. Although there is a definite need to showcase OBAP’s impact, it is important to not conflate empirical and conceptual contributions since this a position paper. As such, this section details the potential impact OBAP’s program and specifically, EA, ACE, and SFA may have on its participants as a result of participating. It is important to note that this section offers an opportunity to delve further into the impact an MSN, namely OBAP, has on its beneficiaries through the provision of core concepts echoed through this manuscript (e.g., access, exposure, education/knowledge, mentorship, and support), which amplify and reinforce the three positions stated at the beginning. Therefore, the overarching goal of this section and the manuscript holistically is to explicate how OBAP connects minoritized individuals and in particular, Black Americans, to the aviation/aerospace career while providing pivotal support structures they need to be successful in the industry.

Increased Interest in Academic Adjacent Areas

The first potential impact participants may receive by participating in one of OBAP’s programs is an increased interest in academic adjacent areas. This is because OBAP Programs present information in a way that engages students and draws their attention to many facets of aviation/aerospace careers. Through this engagement, students experience positive modeling of learning. While the OBAP programs are not focused on improving specific academic performance in

any one subject, they can contribute to community-school partnerships which when properly designed, can have a positive impact on academic scores as well as “self-reported work habits”. Such an impact was reported by Mahoney et al. (2009) who specifically noted that, “Promoting interest [in career education programming adjacent to school academics] can enhance learning if applied properly to the degree that teachers integrate these factors into their instruction, their students are likely to experience increased interest and learning”. This underscores the overall net positive impact OBAP programs such as EA, ACE, or SFA, can have on students as it relates to their personal and academic standing. Additionally, the increased interest in these academic adjacent areas may cause participants to be more inclined to enroll in advanced OBAP programs so they can continue exploring the aviation/aerospace industry. Doing so further exposes participants to careers within the industry and concomitantly increases their potential to pursue such a career, one that they may not have considered without being involved in an OBAP program, thereby connecting to and underscoring the second and third points made in this manuscript.

Enrollment in Advanced OBAP Programs

The second potential impact participants may receive by participating in one of OBAP’s programs is the inclination to enroll in advanced OBAP programs. This particular potential impact complements the aforementioned one and amplifies the benefits of participation in OBAP programming. Examples of advanced OBAP programs include the Ascension Program – formerly referred to as the Collegiate Program – and the Aerospace Professionals Development Program (APDP). The rationale underlying this natural desire to continue participation with/in OBAP by opting to enroll in more advanced programs stems from the presumed positive experience(s) one has in an entry program (e.g., EA or ACE) because of the exposure, access, and education received. These advanced programs are intended to build upon the foundational knowledge, skills, and abilities participants obtained in an aforementioned entry program and further prepare participants to pursue either aviation higher education or a career in the industry. Consequently, participants are more likely to receive personal, academic, and professional growth. Subsequently, their rudimentary skills are strengthened while their interest in aviation/aerospace is cultivated, increasing the likelihood of their participation in the industry and reinforcing the positions two and three made in this manuscript.

Improved Emotional Well-Being

The third potential impact participants may receive by participating in one of OBAP’s programs is the improvement of one’s emotional well-being. When properly designed, youth programs such as those offered by OBAP, can positively contribute to the emotional wellbeing of individuals. According to Courtwright et al. (2020) emotional wellbeing in youth can operationally be defined as, “An overall positive state of emotions, self-esteem, and resilience that leads to self-actualization, self-efficacy, and health-promoting behaviors”. OBAP programs are inherently designed to be positive experiences that reinforce constructive social behaviors and ultimately support emotional wellbeing for students, including: 1. The benefits of working in group settings and how those interactions lead to positive personal and professional relationships, 2. Collaborative problem solving - learning how they can contribute to diversity of thought to improve solutions and experience positive emotions related to successfully solving problems, 3. Engaged learning – improved sense of self-worth through positive feedback received by asking and answering questions and contributing to conversations with peers and instructors to make learning more effective, and 4. The benefits of investing time into learning a skill - increased sense of self-worth when seeing their own personal improvement as a result of time and effort invested. These constitute critical intra- and interpersonal skills one would need to be successful in an aviation/aerospace career due to the team dynamics at play. While this particular potential impact is a more personal element that can be enhanced through participation in an OBAP program, it is necessary and important to the

recruitment/retention of minoritized individuals within the industry given the inequity, hardship, and obstacles this demographic has experienced historically as suggested by the literature (Lutte et al. 2023; Johnson, 2024; Gooden, 2015; Gooden et al. 2018), thereby connecting to and underscoring the first and second positions made within this manuscript.

Obtainment of Scholarships

The fourth potential impact participants may receive by participating in one of OBAP's programs is better positioning to obtain scholarships. The promotion of scholarships and other avenues to defray the high cost of pursuing aviation/aerospace careers, especially those aspiring to be professional pilots, is a key part of OBAP programming. To facilitate this, OBAP includes information and skill development related to successfully applying for scholarships, which often manifests in the form of "Scholarship Summits" and "Scholarship Workshops", hosted by members of the Scholarship Committee and/or student leadership of collegiate chapters (housed under OBAP's Ascension Project) (OBAP, n.d.), respectively. According to Murr (2010), workshops similar to the ones hosted by OBAP are very successful in educating high risk students (i.e., minoritized and low-income) about the steps necessary to develop a competitive scholarship application that can increase their chances of accessing a higher education. Abridged versions of these summits and workshops are typically incorporated within the EA, ACE, and/or SFA program curriculum. Given the high cost of entry to an aviation/aerospace career, which discourages individuals and particularly minoritized persons, from pursuit (Lutte et al. 2023; Murillo, 2020), the coverage of scholarship information and assistance with applications demonstrates OBAP's role in the recruitment/retention of minoritized individuals to/within aviation/aerospace and underscores all three positions made – particularly the first and third.

Increased Inclination to Pursue Aviation/Aerospace Careers

The fifth and final potential impact participants may receive by participating in one of OBAP's programs is an increased inclination to pursue a career in aviation/aerospace. OBAP programs have a foundational requirement to place students and aviation/aerospace professionals in immediate proximity to promote meaningful engagement. Interactions with these professionals are largely unscripted and are meant to allow the student or individual to experience an "honest accounting" of what it is to work in the various aviation/aerospace careers. This allows for participants to learn about the positive and negative aspects of industry careers, and learn discernment when making value judgements about important life decisions. As a result, this honesty facilitates credibility, which inherently helps increase meaningful engagement. OBAP's programmatic model aligns with conclusions drawn from research by Lindstrom et al. (2020, pp. 11-12) who found that strategies centered on building relationships with trusted adults, and career related learning activities were most impactful. In an analogous case study, Price et al. (2016) found their program had a significant impact on career aspirations of participants. In other words, program participants showed an inclination to participate in the highlighted career fields. The potential to increase participation rates in the industry is a strategic outcome made possible through the measured approach that is embedded within OBAP's mission and at the core of its programs. This allows for increased diversification in aviation/aerospace careers through active and symbolic representation (Ricucci and Van Ryzin, 2017; Gilmore, 2022), exposure (Johnson, 2024), access, and education about the industry, thereby underscoring all three positions made.

Discussion

At the beginning of this manuscript, the author's posed three positions that collectively framed OBAP as an equity intermediary within aviation/aerospace to underscore its role as a force in the diversification of workforce pipelines. These three positions were: 1. OBAP plays a key role in

the recruitment/retention of minoritized individuals—particularly Black Americans—in the aviation/aerospace industry, 2. OBAP’s programs, namely EA, ACE, and SFA may increase the participation rates of minoritized individuals, specifically Black Americans, in the aviation/aerospace industry because of the exposure, access, and education the programs provide participants. More specifically, involvement in OBAP’s programs may potentially result in an increased interest in academic adjacent areas, enrollment in advanced OBAP programs, improved emotional well-being, obtainment of scholarships, and an increased inclination to pursue an aviation/aerospace career, and 3. OBAP can aid the aviation/aerospace industry in its workforce diversification efforts by providing a population that has existed “in plain sight” for years, but has been overlooked historically. This would be accomplished through OBAP’s programs, which help funnel individuals who traditionally may not consider pursuing a career in the industry to be encouraged to do so as a result of their involvement in OBAP. The aforementioned positions were reinforced throughout the entirety of the manuscript and were emphasized through the use of empirical data, leveraging its demonstration strategically to underscore the impact – through exposure, access, and education – OBAP has provided program participants. As such, it is important to note that these empirical demonstrations assist in showcasing OBAP’s role and impact, thereby highlighting its industry diversification efforts. While the positions made and work conducted by OBAP are notable, it would be academically remiss to not consider or discuss some of the broader constraints that nonprofits face such as scalability, mission drift, and resource dependency. Additionally, brief discussion about some of the unintended consequences that could result from OBAP’s increasing role in workforce pipelines.

Scalability

The issue of scalability is one all nonprofits experience at some point, which is significantly impacted by the relationships built, capital generated, and partnerships forged (Simon, 2024) amongst other critical elements that impact the success of scaling. The same is true for MSNs and even more so as they tend to face unique challenges surrounding scalability because of resource constraints, funding gaps and systemic inequities. This is supported by the Philanthropy News Digest (2023) who reported that roughly 76.8% of MSN operate on a budget of less than \$500,000/year and are primarily comprised of volunteers with no paid full-time employees. Additionally, Black-led MSNs like OBAP operate with revenues 24% lower than White-led nonprofits, resulting in a nearly \$20 million funding gap (Braithwaite, 2024), which directly impacts mission, services and programs, and scalability. While OBAP had a reported revenue of \$3.7 million in 2023 (OBAP, 2025a), which is higher than the \$500,000 average, it is still a far cry from the budgets of other nonprofits.

Despite this budgetary constraint, OBAP has shown consistent progress in its ability to scale its programs without diluting its mission or sacrificing other elements that make the MSN unique. This is best evidenced through ACE, which first started as a joint venture between OBAP and Tuskegee Aviation International in the 1990s (OBAP, n.d.). In 1992, OBAP was sponsored two ACE academies, by 1994, this number grew to 17, and currently the organization sponsors 43 academies that impact 1100 students in 30 cities across the U.S. annually. These academies are also endorsed by the FAA through a Memorandum of Understanding (MOU) between the two entities, solidifying a working partnership that enhances opportunities for youth from underrepresented communities to be exposed to and explore careers in aviation/aerospace (OBAP, 2025b). OBAP also has nine full-time staff positions to run the organization with the most recent addition occurring in 2025, demonstrating the ability to recognize and address staffing concerns proactively to prevent mission continuity from being impact.

This profound partnership between the FAA and OBAP as well as the staffing strategy helps combat one of the prime challenges to scalability, namely institutional capacity, and particularly staffing and partnerships. It should also be noted that while OBAP focuses on minoritized individuals

with an emphasis on Black individuals, its programs, services, and resources are open to any person regardless of their race/ethnicity, gender, sexual orientation, or other identifier (OBAP, n.d.). This is reflected in the programming materials used, which are tailored for various audiences to ensure inclusivity and enhances the adaptability of the programs to serve other underrepresented groups to broaden the aviation/aerospace pipelines. Consequently, concerns centering structural and mission-based scalability are also quelled. Such steady growth of just one of OBAP's flagship programs demonstrates that while MSNs may not inherently be scalable due to the unique challenges and inequities they face, they can be scaled with adequate leadership, support via staffing, sponsorship, and partnerships.

Mission Drift

The notion of scalability poses its own challenges on nonprofit entities, but there are continual additional risks that stem from mission drift and/or resource dependency, which may adversely impact MSNs in a significant manner and OBAP is no exception. While two separate and distinct phenomena, in this context, one can influence the other and will be discussed as such. Mission drift or mission creep is a term used when a nonprofit performs actions or exhibits behavior that does not correlate with the stated mission or purpose. This shift in organizational behavior or performance from the originally stated mission causes a 'drift' (Suykens et al. 2025). Mission drift can be both positive and negative, and occurs for various reasons. The most common reasons for adding or removing programs include the enhancement of funding, changes in leadership that cause misperceptions of the mission, and failure to evaluate the mission statement every three to five years (Rosenthal, 2020; Wang, 2024). The easiest way to avoid mission drift is to routinely evaluate the mission statement, ideally each year, and ensure it remains aligned with the goals set and strategic plan derived for the organization by its leadership.

With respect to OBAP specifically, the most concerning onset or cause for mission drift stems from the addition or removal of programs for the sake of funding, which is more commonly known as programmatic drift. The addition or removal of key programs dictates staffing needs; more programs usually means more personnel and more overhead costs, thereby decreasing funds for mission fulfillment and vice versa. These changes can result in mission misalignment and organizational desynchronization amongst employees and/or volunteers. Consequently, mission buy-in (from volunteers and employees) may occur and mission fulfillment may suffer as the organization's original services and programs (that were in alignment) are reduced. Therefore, the underlying impacts of negative mission drift, which also constitute the associated risks, are the potential to underfund mission-driven programs, increase the risk of organization desynchronization, and waste valuable resources that could be allocated towards mission achievement. The aforementioned can significantly derail a nonprofit's performance, marketability, and ability to recruit and retain employees, volunteers, and donors. Donors, a valuable resource and pivotal contributor financially for nonprofits, may also fluctuate depending upon what is added/removed, highlighting a resource dependency risk. Thus, it is imperative that nonprofits, especially MSNs who operate with lower budgets, keep their mission front and center to avoid instances of mission drift and tipping the delicate balance struck amongst their dependent resource(s).

Resource Dependency

While mission drift should be avoided in most instances there are times when it can be leveraged to benefit the nonprofit, which is something MSNs should take advantage of when/where able. By using Resource Dependency Theory (RDT) as a lens, the potential risk can be viewed as a benefit. The core idea of RDT asserts that nonprofits are not fully self-sufficient and are reliant on resources from other entities (e.g., government or private donors) to satisfy financial and mission obligations. Due to this dependence on other entities, the nonprofit must engage with other entities in

a strategic manner to acquire the needed resources while balancing their autonomy and creating a power dynamic (Malatesta & Smith, 2014). Simply, nonprofits require resources from their environment, which when successfully obtained produce power, influence, and long-term stability. Research by Tremblay-Boire (2013) contends that to survive, organizations will alter their goals and participate in activities unrelated to their mission whenever necessary. As such, mission drift is both normal and expected. Albeit an innate risk for any nonprofit, especially MSNs who possess lower operating budgets and generate less revenues, this type of mission drift may allow for revenue diversification via RDT.

The current socio-political climate provides a great example of how OBAP proactively mitigated resource dependency risk and diversified its revenue stream in the process. For instance, due to the slew of executive orders from President Trump relative to ending DEI, many commercial aviation operators and airlines removed DEI language from their reports, websites, and other public platforms (Maharishi, 2025) presumably to avoid scrutiny and backlash from the Administration. With rollbacks of this magnitude, it was anticipated that the level of financial support to diversification causes or efforts such as sponsorship and donations to MSNs like OBAP, would also experience a reduction. To circumvent lapses in funding in anticipation of the executive actions, in 2024, OBAP sought to diversify its revenue stream by engaging with, applying for, and receiving one of the National Basketball Association (NBA) Foundation's grants that aimed to support workforce development across a broad range of industries (e.g., criminal justice reform, creative arts, healthcare, STEM, and more) (Scalzo, 2025).

The NBA Foundation is not a typical donor for OBAP and the two have different missions, but the drift was necessary to secure the \$300,000 grant to offset reductions from commercial airlines – typical donors – thereby lessening the dependency on them while mitigating external circumstances within the political climate. OBAP is now listed as a partner of the Foundation (NBA Foundation, 2025), showcasing the newfound partnership and revenue stream. Although just one example, it exemplifies the inherent risk of resource dependency while showcasing a mitigation strategy embedded within RDT that positively frames instances of mission drift that can lead to revenue diversification and decreased dependency on standard resources. Unfortunately, resource dependency risks within the nonprofit sector are inevitable and can be difficult to mitigate so nonprofit leadership must be diligent and intentional as they formulate partnerships, acquire donors, receive grants, and solicit funds to avoid drawing from the same fiscal wells to avoid running them dry, especially when the giving climate is contingent upon the political one.

Unintended Consequences

As a positive force in diversifying and building aviation/aerospace pipelines, OBAP has continued to uphold its mission and make an impact on minoritized individuals despite varying socio-political climates. While the role OBAP has taken with respect to aviation/aerospace pipelines has increased over time, yielding significant benefits such as improved access and diversity), the unintended consequences of their role must also be considered. These unintended consequences primarily fall into three categories, including organizational capacity, perception and legitimacy, and equity/inclusion dynamics. The first of these, organizational capacity has already been discussed in the aforementioned paragraphs, specifically with instances of mission drift or creep and resource strain. This can be addressed and mitigated through routine evaluation of the mission by organizational leadership and operation in accordance and adherence to the strategic plan.

The second unintended consequence relates to perception and legitimacy of the organization. By engaging in the critical work of being an equity intermediary and increasing participation rates of minoritized individuals through its programs and workforce development initiatives, OBAP may unintentionally cause tension amongst other stakeholders. Due to the growth in influence, visibility, and effort put forth to achieve its stated mission, external organizations and stakeholders who operate

in the same space that are committed to similar workforce initiatives such as labor unions or other nonprofits (e.g., Women in Aviation, International), may believe that OBAP is stepping out of its lane. Consequently, friction can arise between OBAP and other entities it would usually partner with, potentially resulting in diminished support (financial and social) over time, increased competition for scarce resources from donors and partners (e.g., commercial airlines), and lessened opportunities for collaboration. In a similar vein, there is also the unintended consequence of perceived tokenization by entities within the aviation/aerospace industry. This consequence is more difficult to address and mitigate because it requires a delicate balance to be struck and finesse by the organization. That said, OBAP would need to be intentional when helping and clearly communicate with other stakeholders about their intentions to ensure everyone is on the same page, so an external entity does not perceive the organization as overstepping in/during a genuine effort.

The third unintended consequence pertains to the equity/inclusion dynamics associated with OBAP. Specifically, there is the potential to exert pressure on OBAP members, especially students, to enter specific aviation/aerospace careers instead of exploring broader career paths. This is most likely to occur with professional pilot positions given their front facing nature, aesthetic appeal, perceived social status, and abundance of pathway/cadet programs. However, this can be mitigated and combatted through increased representation (in marketing materials and on social media) of industry professionals that work in non-pilot roles, intentional programming that highlights an array of aviation/aerospace roles, and career seminars/webinars that feature less frequently discussed positions such as aircraft dispatchers or crew schedulers.

Contributions

The contributions of this manuscript are notable for the advancement of aviation/aerospace scholarship and practice. With respect to scholarship, the first contribution is the centering of minoritized perspectives in aviation/aerospace literature. The explicit focus on minoritized persons and particularly Black Americans is scarce in aviation/aerospace literature as suggested by Lutte (2021), Lutte et al. (2023), Johnson (2024), Johnson et al. (2024), and Morrison (2023) as well as public administration literature (Gooden, 2015a; Gooden et al. 2018). The centralization in this manuscript directly responds to the glaring gap in the literature relative to minoritized participation in STEM-disciplines, specifically aviation/aerospace. More importantly, it yields insight into how organizations like OBAP are actively working to increase participation rates of these individuals. The second scholastic contribution complements the first in that it critically engages with nonprofit theory and social equity literature to underscore the distinct positions made and unique juxtaposition of OBAP. Specifically, the manuscript connects core nonprofit concepts/construct and public administration theories such as CRT and Institutional Theory to showcase how MSNs like OBAP work to counter systems inequities and enhanced opportunities - educational and professional - in places where barriers persist such as education, aviation/aerospace, and society in general. The third scholastic contribution is also complementary of the first two in that it extends the extant equity intermediary literature to encompass that of aviation/aerospace. By positioning OBAP as an equity intermediary, the manuscript extends the application of the term, which has social science origins in public administration and nonprofit, to aviation/aerospace. This extension forges a salient nexus between aviation/aerospace and public administration and nonprofit literature, which is something few scholars have done such as evidenced by Lutte et. al. (2023) and Johnson (2023). As such, the nexus offers a new and unique lens to further explore the impact and effectiveness of aviation-centric MSNs like OBAP, providing an opportune launch pad for those wanting to conduct additional studies.

The contributions for practice derived from this manuscript are notable. The first practical contribution stems from the insights garnered on how public and private sector entities may best leverage the nonprofits and specifically MSNs, sector to supplement or complement their allocated

resources to effectively impact, recruit/retain, and funnel minoritized individuals into the aviation/aerospace industry to help meet the increasing workforce demand. In short, the manuscript encourages industry stakeholders such as the FAA and commercial operators, to leverage partnerships with MSNs to satiate workforce demands while improving industry diversification efforts. The second practical contribution is that the manuscript provides a blueprint MSNs, specifically those that are aviation-centric, can utilize as a baseline for stakeholder engagement opportunities centering diversity, equity, access, and inclusion (DEAI). Given the risks innate to the nonprofit sector relative to issues of scalability, legitimacy, mission drift, etc., the manuscript provides nonprofit leaders with candid insight derived from critical engagement with the associated literature to inform them of how to navigate these issues to circumvent growth and coalition-building challenges. Additionally, nuanced insight on how to navigate and deal with potential tension(s) or pinch points with nonprofits with parallel mission(s) as a means to avoid increased competition over collaboration (i.e., toe-stepping) as well as issues such as DEAI, that may arise due to changes in the socio-political landscape, both of which can alter revenue sources. The third practical contribution complements the second in that the manuscript serves as a generalized scalability and resource strategy for MSNs. This generalized guide stems from the critical discourse around the implications surrounding nonprofits – mission drift and resource dependency – to enlighten nonprofit leaders who yearn to sustain programming efforts and diversify their funding streams to continue mission fulfillment while remaining aligned with their mission.

Future Research

Given the framing of OBAP in this manuscript and provision of elaborate detail on how the aviation-centric MSN plays a key role in workforce diversification within aviation/aerospace, its scholastic and practical contributions were elucidated thoroughly above. However, the theoretical and/or conceptual contributions were not. This was done intentionally so the manuscript could remain a true position paper, but also provide a clear linkage to outline avenues for future research endeavors scholars can pursue that wish to explore the impact and effectiveness of aviation-centric MSNs or nonprofits in general. Since OBAP is a program that primarily achieves its mission and impact through unique programming, the exploration of the effectiveness of each these programs and the change they have on participants warrants further research. An optimal method to explore such an under researched area within the scholarship is a Theory of Change (ToC). This is a theoretical framework or method that explains how a given intervention or set of interventions such as OBAP programs, are expected to lead to a specific development change. The change is later substantiated through causal analysis based on available evidence (United Nations Development Group, 2024).

Due to the STEM-nature of OBAP and aviation/aerospace, the typical ToC may require some massaging to be applied or utilized effectively in this context to ultimately yield the intended outcome. This is because a ToC for a change effort in STEM education can better serve a project and the larger community when it is developed in consultation with theory and research from the scholarly literature (Reinholz & Andrews, 2020). The problem here is that minoritized individuals and MSNs aviation/aerospace have not been centered in research, meaning they are relatively under-researched areas (Johnson, 2023; Johnson, 2024; Lutte et al. 2023). Consequently, there is not much literature that can be leveraged to inform a ToC or change theory initiatives for that matter so scholars would need to exercise due diligence in its application. The overarching goal of the framework derived from the future research would be to demonstrate how OBAP connects minoritized individuals and in particular, Black Americans, to aviation/aerospace opportunities while providing pivotal support structures they need to be successful in the industry. Doing so would effectively build off this manuscript and ideally culminate with a conceptual framework that centers OBAP as an equity intermediary and lends itself to answer research questions focalizing the involvement of the nonprofit sector and MSNs. One befitting question that could guide future

researchers seeking to pursue such an avenue include: 1. What activities (if any), that are either supplemented or complemented by the nonprofit sector, do racially minoritized pursuing aviation/aerospace careers find most beneficial to their development?

Conclusion

At its core, this manuscript centers OBAP and strives to underscore the critical role the organization plays in aviation/aerospace workforce diversification as an equity intermediary. This role is important in addressing the long-standing racial and gender disparities within the industry. To convey and accomplish this, the authors took three positions. These positions consisted of: 1. OBAP plays a key role in the recruitment/retention of minoritized individuals—particularly Black Americans—in the aviation/aerospace industry, 2. OBAP’s programs, namely EA, ACE, and SFA may increase the participation rates of minoritized individuals, specifically Black Americans, in the aviation/aerospace industry because of the exposure, access, and education the programs provide participants. More specifically, involvement in OBAP’s programs may potentially result in an increased interest in academic adjacent areas, enrollment in advanced OBAP programs, improved emotional well-being, obtainment of scholarships, and an increased inclination to pursue an aviation/aerospace career, and 3. OBAP can aid the aviation/aerospace industry in its workforce diversification efforts by providing a population that has existed “in plain sight” for years, but has been overlooked historically. This would be accomplished through OBAP’s programs, which help funnel individuals who traditionally may not consider pursuing a career in the industry to be encouraged to do so as a result of their involvement in OBAP. Consequently, potential pathways into the industry are illuminated for Black Americans and other historically excluded individuals. In short, the manuscript not only responds to the diversity and workforce development needs of the industry but also highlights the power of MSNs in shaping social equity outcomes. Future research must empirically assess OBAP’s impact to further validate its role in transforming the industry’s landscape. Ultimately, the inclusion and amplification of organizations like OBAP are essential to diversifying and sustaining the next generation of aviation/aerospace professionals.

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