

## Diversity in Aviation Maintenance

Aviation occupations, although changing, do not mirror the diversity of the overall American work force. Although aviation employees as a group are not dramatically different in sex, race, and ethnic makeup from all employees, the representation of women and racial minorities varies substantially from occupation to occupation. Pilots and senior managers continue to be predominantly white and male; aviation maintenance technicians are less likely to be white but they are mostly men. The aviation work force is still affected by a history of discrimination. Although substantial progress has been made, concerns about discrimination still exist.

As a major training ground for aviation maintenance technicians, the Air Force's aviation-related work force is noticeably more diverse than the civilian aviation work force. Minorities and women are better represented in military aviation specialties than they used to be, but with the exception of minority male technicians, their presence in these jobs is small and still significantly lagging.

In 1993, FAA researchers found that minority students are less aware of aviation career possibilities, training opportunities, and requirements. This is especially true for aviation maintenance and avionics careers where diversity is dismally low. Some of these students simply do not realize that aviation maintenance is a viable and lucrative career possibility. Encouraging minorities from all backgrounds to consider aviation careers will enable the industry to draw from a much larger pool of prospective students and, eventually, have a dramatic effect on diversity in the aviation work force.

Statistics compiled by the FAA suggest that women are making strides toward greater representation in several aviation careers. However, these statistics also suggest that the number of women certified mechanics remains very low. Estimates from December 31, 1995 to December 31, 2000 placed the number of active female aircraft mechanics between 3,914 and 5,047. This represents just slightly more than one percent of active mechanics.

Recent declining enrollments by all populations in aviation technical programs have also been linked to the poor professional status of aviation maintenance careers. Although that perception may be changing, the word mechanic still has negative connotations attached to it. The industry should move away from the grease monkey mentality to one that portrays the professionalism and career potential represented by air carrier and other aviation pursuits. It is important for technical education institutions to instill within their students the pride and ethical roots of this emerging new professionalism.

Some women encountered difficulties in learning certain specialties because of their lack of experience with tools and machinery prior to attending military technical schools. The military had not anticipated this situation and did not make any curriculum adjustments to compensate. The military's attitude was that women would have to adjust to the existing standards the same way men did, whatever the consequences. This attitude did affect the

participation of women, as some dropped out of the specialty, and others were discouraged from even trying.

Without exception, all maintenance schools have subliminal and covert barriers to learning for women. Traditional maintenance training institutions and the industrial work place have been wholly male; women in these environments have fewer, if any designated facilities to support their involvement as maintenance professionals. Even simple amenities such as rest rooms were makeshift, and often lack adequate accommodations such as lockers, and showers.

Despite the obstacles, there are organizations attempting to recruit and retain minorities in aviation. They are Minority Pilot Association/Academy, Women in Aviation International, the International Black Aerospace Council, the Organization of Black Airline Pilots, Inc., and Negro Airman International, which primarily recruit pilots. African Americans are highly responsive to organizations and efforts that give back to the community, viewing such efforts as a gateway to mutual respect.

Women in Aviation International boast having more than 100 females from three aviation programs: aeronautical technology, flight, and administration.

The Association for Women in Aviation Maintenance (AWAM) is a nonprofit organization formed for the purpose of championing women's professional growth and enrichment in the aviation maintenance fields by providing opportunities for sharing information and networking, and education.

Mechanics have long been the airline industry's backbone, invisible to passengers yet indispensable to their flight. Across the industry, many mechanics are leaving their employers and sometimes the profession for better-paying jobs and better hours. General aviation mechanics carry heavy responsibilities regarding safety of flight and airworthiness issues, but they are often not recognized and are not properly compensated for their work. With cultural diversity increasing in the United States at a rapid rate, minorities can be viewed as an untapped resource for the maintenance industry.

-- By Paul M. Foster, Ed.D. (This is excerpted from Dr. Foster's Doctoral dissertation.)