



Michael P. Huerta, Administrator  
U.S. Department of Transportation  
Federal Aviation Administration  
800 Independence Avenue, SW  
Washington, DC 20591

June 4, 2015

Dear Administrator Huerta:

I write as one member of the U.S. Commission on Civil Rights, and not on behalf of the Commission as a whole. I also write as a concerned frequent flier who has no desire to find himself appearing as “Victim No. 6” in accounts of an airplane disaster.<sup>1</sup>

Americans have long assumed that when hiring air traffic controllers, the FAA tries to hire the most qualified people for the job. Unfortunately, news reports indicate that the FAA has abandoned or diluted objective standards of evaluating competence, such as having obtained a college degree in air traffic control and obtaining a score of 85 or above on the Air Traffic Selection and Training Exam (AT-SAT).<sup>2</sup>

It is even more troubling that many of these reports suggest that the FAA changed its selection procedures because it wanted fewer white male air traffic controllers. A news report quotes Secretary Foxx as telling Congress, “The FAA took an opportunity to take a broad opening of the aperture if you will to try to get a larger universe of applicants into the program”.<sup>3</sup> I don’t speak jive<sup>4</sup>, but I am fluent in bureaucratese, and this is easy to translate: the FAA didn’t like the racial and gender composition of the people in its pool of potential air traffic controllers. It is hard to imagine a non-rationally motivated reason for jettisoning a pool of people who had already been rated as qualified. Maybe I picked the wrong week to stop using hallucinogens.<sup>5</sup>

---

<sup>1</sup> See generally *Airplane!* (1980).

<sup>2</sup> Adam Shapiro, *Trouble in the Skies*, FOX BUSINESS, May 20, 2015, <http://www.foxbusiness.com/industries/2015/05/20/trouble-in-skies/>; John Hook, *FAA changes hiring practices for ATC, CTI students passed over for jobs despite being qualified*, FOX 10 News, May 7, 2014, <http://www.fox10phoenix.com/story/25448705/2014/05/07/faa-changes-hiring-practices-for-atc-cti-students-passed-over-for-jobs-despite-being-qualified>; Jon Hilkevitch, *2 Illinois lawmakers seek to dump new FAA controller hiring rules*, CHICAGO TRIBUNE, Sept. 19, 2014, <http://www.chicagotribune.com/news/ct-air-traffic-controller-hiring-met--20140919-story.html>.

<sup>3</sup> John Hook, *FAA changes hiring practices for ATC, CTI students passed over for jobs despite being qualified*, FOX 10 News, May 7, 2014, <http://www.fox10phoenix.com/story/25448705/2014/05/07/faa-changes-hiring-practices-for-atc-cti-students-passed-over-for-jobs-despite-being-qualified>.

<sup>4</sup> See, e.g., Jive Lady, *Airplane!* (1980).

<sup>5</sup> Cf. McCroskey, *Airplane!* (1980).



It is particularly odd that the FAA would change its selection procedures when its own studies indicate that one's AT-SAT score is a good predictor as to whether one will successfully complete air traffic controller training.<sup>6</sup> One of the studies indicates that the AT-SAT score is one of two pieces of biodata – the other being age – that are positively associated with successfully completing air traffic controller training at all types of facilities.<sup>7</sup> This study also stated that one reason for the FAA's recent revision of the air traffic controller selection procedures was that women and certain minorities were disproportionately likely to receive insufficiently high AT-SAT scores.<sup>8</sup> As the authors of the study wrote:

However, AT-SAT has been found to be a valid predictor of both training and job performance of controllers. The issue is how to reduce adverse impact and still maintain a valid process for selecting the best-qualified applicants for the job. One such strategy might be to use biodata to supplement cognitive testing in selecting controllers.<sup>9</sup>

Despite this hope, the researchers found that the AT-SAT was the only piece of biodata (other than age) that was a useful predictor of whether an individual would successfully complete air traffic controller training across all types of facilities. This was the case even for biodata that one might think would predict successful completion of air traffic controller training, such as high school GPA and holding a pilot's license.<sup>10</sup> As it

---

<sup>6</sup> Dana Broach, et al., *The Validity of the Air Traffic Selection and Training (AT-SAT) Test Battery in Operational Use*, Civil Aerospace Medical Institute, Federal Aviation Administration, at 6 (March 2013).

The current study investigated the validity of AT-SAT as a predictor of achievement of CPC status at the first field facility. The results showed that AT-SAT was a valid predictor of training outcome for the next generation of air traffic controllers. First, the correlation between AT-SAT score and training status was positive and significant. Second, persons with higher scores were more likely to certify at the first assigned field facility than were persons with lower scores as shown by the  $\chi^2$  analysis. Third, logistic regression analysis found the odds of certifying at the first facility increased with AT-SAT score. Taken together, the results of the present investigation and those of the two previous criterion-related validation studies show that AT-SAT is a valid predictor of both OJT outcome (achievement of CPC status) and, more importantly, of on-the-job performance after certification. In other words, the empirical evidence supports the validity of AT-SAT as a personnel selection procedure for the ATCS occupation.

<sup>7</sup> Linda G. Pierce, et al., *Using Biodata to Select Air Traffic Controllers*, Civil Aerospace Medical Institute, Federal Aviation Administration, [http://www.faa.gov/data\\_research/research/med\\_humanfacs/oamtechreports/2010s/media/201408.pdf](http://www.faa.gov/data_research/research/med_humanfacs/oamtechreports/2010s/media/201408.pdf) (Oct. 2014).

A further confidence-shattering blow to Ted Striker is that holding any sort of pilot's license was only positively associated with completing training at an en route facility. Apparently working in a terminal facility is a totally different type of controlling altogether. *See id.* at 9; *see also* Ted Striker, *Airplane!* (1980).

<sup>8</sup> *Id.* at 2.

<sup>9</sup> *Id.* at 2.

<sup>10</sup> *Id.* at 7.



turns out, success in tasks that require a high level of cognitive ability is best predicted by cognitive tests.

Under the FAA’s new procedures, aspiring air traffic controllers are required to take a “biographical questionnaire,” [“BQ”] before taking the AT-SAT.<sup>11</sup> The Chicago Tribune reported, “Some of the 62 questions on the multiple-choice test, which the Tribune reviewed, appear geared toward evaluating the test-taker’s personality and self-image. It included questions about how peers would describe the individual and the age at which the person started to earn money.”<sup>12</sup> FOX Business reported that the BQ asks applicants how many high school sports they played,<sup>13</sup> and an Arizona television station reported that one of the questions is, “What has been the major cause of your failures?”<sup>14</sup> If an applicant’s high school GPA does not accurately predict successful completion of air traffic controller training, it is difficult to be optimistic that the seemingly random questions on the BQ have any predictive power. On the other hand, perhaps I am underestimating the predictive power of the BQ. Maybe Kareem Abdul-Jabbar’s experience with the Lakers was a useful predictor of his ability to co-pilot a plane – provided he avoided eating the fish.<sup>15</sup>

The FAA may claim that successful completion of the AT-SAT is still required to be hired as an air traffic controller. This is true. However, the BQ serves as an initial screening device that applicants must pass in order to take the AT-SAT. There is reason to think that people who would score highly on the AT-SAT – again, the only generally accurate predictor of successfully completing air traffic controller training that the FAA may use – are being screened out by the BQ. In fact, one such person, who had received a perfect score on the AT-SAT, is profiled in the FOX Business report on the new selection procedures.<sup>16</sup>

---

It was somewhat surprising that we did not find high school GPA or having a degree from a CTI school to predict training status. It is possible that by including HS math GPA in this study, which we found to predict training status of en route trainees, we obscured the relationship between training status and high school GPA seen in previous research.

<sup>11</sup> Jon Hilkevitch, *2 Illinois lawmakers seek to dump new FAA controller hiring rules*, CHICAGO TRIBUNE, Sept. 19, 2014, <http://www.chicagotribune.com/news/ct-air-traffic-controller-hiring-met--20140919-story.html>; Susan Carey, *FAA Closes a Hiring Runway for Air-Traffic Controllers*, WALL ST. J., May 22, 2014, SB10001424052702304655304579551972980383170.

<sup>12</sup> Jon Hilkevitch, *2 Illinois lawmakers seek to dump new FAA controller hiring rules*, CHICAGO TRIBUNE, Sept. 19, 2014, <http://www.chicagotribune.com/news/ct-air-traffic-controller-hiring-met--20140919-story.html>.

<sup>13</sup> Adam Shapiro, *Trouble in the Skies*, FOX BUSINESS, May 20, 2015, <http://www.foxbusiness.com/industries/2015/05/20/trouble-in-skies/>.

<sup>14</sup> John Hook, *FAA changes hiring practices for ATC, CTI students passed over for jobs despite being qualified*, FOX 10 News, May 7, 2014, <http://www.fox10phoenix.com/story/25448705/2014/05/07/faa-changes-hiring-practices-for-atc-cti-students-passed-over-for-jobs-despite-being-qualified>.

<sup>15</sup> See Roger Murdock, *Airplane!* (1980).

<sup>16</sup> Adam Shapiro, *Trouble in the Skies*, FOX BUSINESS, May 20, 2015, <http://www.foxbusiness.com/industries/2015/05/20/trouble-in-skies/>.



I do not know whether having a degree from a CTI school is a valuable screening mechanism, nor is that particularly important in regard to the concerns expressed in this letter. One of the FAA's studies found no relationship between a degree from a CTI school and success as an air traffic controller, but suggested that this may be due to differences in training at CTI schools.<sup>17</sup> It is at least objective, unlike the BQ. You either fulfilled the degree requirements, which include a core curriculum set by the FAA, or you did not.<sup>18</sup> More importantly, the FAA should not strip applicants of already-bestowed "qualified" ratings (which were achieved in part through AT-SAT scores) even if it decides not to use the CTI program in future.<sup>19</sup>

The FAA likely has a legal problem because of its embrace of the BQ. That problem is that it may be violating Title VII's prohibitions against discrimination on the basis of race. Until December 2014, the FAA primarily used degrees from CTI [Controller Training Initiative] schools and AT-SAT scores to determine whether applicants were qualified.<sup>20</sup> The FAA can of course change its selection procedures. However, it did not simply change its selection procedures prospectively. Instead, it removed thousands of people from the hiring pool who had already been found to be qualified based on their AT-SAT scores and CTI degrees and told them that they must pass the BQ in order to be hired.<sup>21</sup>

This set of facts is very similar to that in *Ricci v. DeStefano*. In *Ricci*, the city of New Haven threw out the results of tests for promotions within the fire department because the test had a disparate impact on blacks and Hispanics.<sup>22</sup> It claimed that it feared a disparate impact lawsuit. The Supreme Court held that New Haven had violated the disparate treatment provisions of Title VII. The Court wrote:

---

<sup>17</sup> Linda G. Pierce, et al., *Using Biodata to Select Air Traffic Controllers*, Civil Aerospace Medical Institute, Federal Aviation Administration, at 7, [http://www.faa.gov/data\\_research/research/med\\_humanfacs/oamtechreports/2010s/media/201408.pdf](http://www.faa.gov/data_research/research/med_humanfacs/oamtechreports/2010s/media/201408.pdf) (Oct. 2014).

<sup>18</sup> *Id.* at 7.

<sup>19</sup> Susan Carey, *FAA Closes a Hiring Runway for Air-Traffic Controllers*, WALL ST. J., May 22, 2014, <http://www.wsj.com/articles/SB10001424052702304655304579551972980383170>.

<sup>20</sup> Adam Shapiro, *Trouble in the Skies*, FOX Business, May 20, 2015, <http://www.foxbusiness.com/industries/2015/05/20/trouble-in-skies/>; Susan Carey, *FAA Closes a Hiring Runway for Air-Traffic Controllers*, WALL ST. J., May 22, 2014, <http://www.wsj.com/articles/SB10001424052702304655304579551972980383170>.

<sup>21</sup> Susan Carey, *FAA Closes a Hiring Runway for Air-Traffic Controllers*, WALL ST. J., May 22, 2014, <http://www.wsj.com/articles/SB10001424052702304655304579551972980383170>.

The FAA first informed the schools on Dec. 30 [2013] that it was going to end its practice of keeping "an inventory," or pool of applicants on the preferential list of qualified controller candidates. The last time the agency put out a public call for jobs was in 2009.

<sup>22</sup> *Ricci v. DeStefano*, 557 U.S. 557, 566 (2009).



[We do not] question an employer’s affirmative efforts to ensure that all groups have a fair opportunity to apply for promotions and to participate in the process by which promotions will be made. But once that process has been established and employers have made clear their selection criteria, they may not then invalidate the test results, thus upsetting an employee’s legitimate expectation not to be judged on the basis of race. Doing so, absent *a strong basis in evidence* of an impermissible disparate impact, amounts to the sort of racial preference Congress has disclaimed, and is antithetical to the notion of a workplace where individuals are guaranteed equal opportunity regardless of race. . . .

We hold only that, under Title VII, before an employer can engage in intentional discrimination for the asserted purpose of avoiding or remedying an unintentional disparate impact, the employer must have *a strong basis in evidence* to believe it will be subject to disparate impact liability if it fails to take the race-conscious, discriminatory action.<sup>23</sup> [emphasis added]

Although the FAA is selecting people to be hired, not promoted, the same principle applies. Like the city of New Haven, the FAA bent over backwards to try to reduce the disparate impact effect of the AT-SAT test.<sup>24</sup> As in *Ricci*, it appears that when the selection procedure did not yield the desired racial mix, the FAA threw the results out. The FAA has not alleged there is a strong basis in evidence it would be subject to disparate impact liability if the people already deemed qualified by virtue of their degrees, experience, and AT-SAT scores had been retained on the hiring list.<sup>25</sup>

Furthermore, the FAA cannot claim that it is not discriminating on the basis of race because there is no evidence it is choosing people from the BQ based on their race. First, all accounts of the BQ indicate that it is so opaque as to make it almost impossible to determine how the FAA uses it to choose applicants. Second, the issue in *Ricci* was not that the city of New Haven had decided to promote black or Hispanic firefighters instead of higher-scoring white firefighters. The city had simply thrown out the scores from the

---

<sup>23</sup> *Id.* at 585.

<sup>24</sup> Dana Broach, et al., *The Validity of the Air Traffic Selection and Training (AT-SAT) Test Battery in Operational Use*, Civil Aerospace Medical Institute, Federal Aviation Administration, at 1 (March 2013).

First, significant differences in score distributions by race and sex were observed in the course of validation, with Blacks and Hispanics-Latinos scoring lower than Whites and women scoring lower than men. The FAA re-weighted the AT-SAT subtests to mitigate these group differences without substantially reducing validity. Second, the pass rate was substantially higher than was originally projected. While a pass rate of about 67% was predicted by Wise et al. after re-weighting, the actual pass rate in operational use has been greater than 90%. [citations omitted]

<sup>25</sup> *Ricci* at 585.



original test. That alone constituted racial discrimination. This issue is largely separate from the question of the effectiveness of the FAA's earlier criteria. Having established the rules of the game, the FAA may not then refuse to recognize the winners because their skin is the wrong hue.

It is one thing to select sociology students based on the color of their skin. It is another to pick gravel contractors based on the color of their skin. It is quite another to use skin color to choose air traffic controllers who are responsible for safely guiding thousands of people to their destinations. There is only one possible response to such lunacy:

Surely you can't be serious.

And don't call me Shirley!<sup>26</sup>

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Kirsanow', with a long horizontal flourish extending to the right.

Peter Kirsanow  
Commissioner

---

<sup>26</sup> See Dr. Rumack, *Airplane!* (1980).