FAA ATC RECRUITMENT/HIRING/TRAINING BILLIE H. VINCENT MAY 2015

Reviewing the recent FOX Business Program about the FAA's reported actions in changing their recruitment for air traffic control personnel I am reminded of the saying "those that fail to learn from history are doomed to repeat it." In late 1974 I assumed responsibility for the FAA's air traffic control (ATC) training programs and a number of other functions in the FAA's Washington headquarters Air Traffic Service. The existing FAA ATC training program at that time was experiencing up to an 80% failure rate at our more complex ATC facilities. These facilities included places such as our complex twenty Air Route Traffic Control Centers, TRACONS such as O'Hare and LAX, and control towers such as O'Hare, Detroit, JFK, MIA, LAX, SFO, etc.

In the early to mid-1970s the FAA was only selecting candidates from the top of the Civil Service Register for the ATC profession [98 – 105 points (veterans got 5 additional point preference)]. As a consequence all of the selectees were intellectually quite strong for the academics of the FAA's ATC training course in Oklahoma City.

The nature of the FAA's ATC training for journeyman controller status at that time was complicated by the fact that the candidates' backgrounds included former military controllers, pilots, as well as people with no aviation background. The ATC neophytes would enter the FAA's Oklahoma City multi-month basic training program and most would successfully pass the program. They would then enter their assigned ATC facility formal classroom/laboratory training program eventually graduating to on-the-job-training (OJT) under the direct supervision of a controller on a control position. This OJT could last for two to as much as three or more years until they could achieve Journeyman ATC status on all of their assigned control positions – or be judged as being incapable of safely controlling air traffic.

After investing this enormous amount of time in an individual ATC neophyte and then having them fail to achieve journeyman status was an enormous loss to the profession in the expenditure of resources – and an enormous blow to the individuals involved. Moreover, this meant that during this time some Journeyman controller had to devote his/her time attempting to train an individual that was eventually judged to be incompetent. This was a critical waste of FAA ATC resources. The facts are simply that not everyone possesses the ability to become an air traffic controller. The U.S. Congress had become involved as a result of their constituent's complaints that had failed the FAA's ATC training programs. We had to find a solution.

My mandate was to solve this problem. Fortunately I had two individuals on my small staff that had the ATC Terminal (Joseph Kisiki) and ARTCC (William Abernathy) knowledge and experience to address this problem. A third individual later joined the effort – Larry Kotzker (now deceased). I also had an extensive ATC background and had direct experience with the FAA's ATC training systems.

We collectively formed a multi-discipline FAA team of our ATC experts, the FAA's Office of Aviation Medicine psychological PhDs (John Daly and Evan Pickerel), the FAA's Civil Aeromedical Institute (CAMI) scientists, the FAA's Congressional Liaison Office, the FAA's ATC training organization in Oklahoma City, and other organizations. Over an 18 month period we successfully developed and implemented a program where candidates continued to be tested for their intellectual capabilities.

We added a revolutionary "skills" applications test/assessment that had been developed by the FAA's Psychologists. We included a staff of two PhDs in the FAA's CAMI organization (Jim Boone plus one other along with a two-person staff) in Oklahoma City to "track and validate" all of our newly implemented testing systems.

We also re-developed, along with the FAA's ATC Training Academy staff and others, the ATC curriculum for the FAA's basic ATC schools at the FAA's Oklahoma City Academy as well as for the FAA's "Field" facilities. FAA Academy Superintendent Ben Demps and his Deputy Morrie Friolux (both now deceased), and Academy Instructor and course development staff such as George DiLeo were fully involved is the project.

Additionally, the FAA was able to persuade the U.S. Congress to implement an "age discrimination" program for the hiring and employment of air traffic controllers – an unheard of congressionally approved program. To some large degree the U.S. Congress was persuaded by the number of complaints from their constituents that had failed the FAA's ATC training programs. The Members of Congress had been politically traumatized over several years by their inability to adequately respond to their constituents.

Our FAA database proved to the Congress that an individual entering the FAA's existing ATC training program after the age of 31.5 years had a high probability of failure to achieve journeyman ATC status over the next four years of their ATC training program. While we could not specifically identify the cognitive inabilities of individuals to skillfully apply academic ATC knowledge the FAA did prove to the Congress through statistical data that the ATC Journeyman success rate drastically diminished in the 3 or so years after 31.5. This applied to former military controllers as well as direct civilian hires. As a consequence an entrance standard was established at 31.5 years. Based on other FAA data an "active controller status" was established as a maximum of 56 years of age, i.e. a person could not actively control air traffic in the U.S. after that age.

These major, and some other minor changes, resulted in a dramatic reduction in the failure rate of the new ATC recruits under the newly established FAA ATC program. *The new screening test for skills applications eliminated a number of potential ATC entrants that had the intellectual ability but lacked the skills applications capabilities. Most of the remaining ATC failures in the new ATC training system were identified in the initial ATC training and screening program at the FAA's Oklahoma Academy. This resulted in a much higher probability of an ATC trainee subsequently successfully completing the Field Facility formal and OJT ATC training programs. It likewise resulted in fewer complaints to the Congress by individuals failing the FAA's ATC training programs.*

This recruitment and training system was one of the factors that enabled the FAA to quickly hire and train the thousands of new controllers to replace those fired following the Professional Air Traffic Controller Organization (PATCO) strike in 1981.

The FAA's ATC recruitment and training program was changed to a College oriented program (CTI program) in the late 1980s or early 1990s – and I am unfamiliar with the reasons for this change - or the merits or demerits of the CTI program. However, given the reports I have seen it appears to have been a successful recruitment and initial ATC candidate screening program. Mr. Joseph Kisiki can provide background information and the policy reasons for the FAA's adoption of the CTI recruitment, testing, and pre-employment ATC screening system if I correctly recall as he was the FAA's head of all training at that time.

The key issue in the 2015 FAA ATC recruitment and screening debate raised in the recent FOX Business program seems to beg the question: "what motive is behind the FAA's change?" Is that motive meritorious, e.g. was it prompted by some deficiency(ies) in the current ATC recruitment and training system? For instance, is/do the questions on the qualifying tests better identify successful candidates, notwithstanding their seemingly inaneness? It is difficult to analyze the FAA's motive driving their change to the ATC recruitment and hiring program given the dearth of data they have released regarding the changes.

If the FAA's changes are simply for an ulterior motive, e.g. an attempt at achieving a more diverse ATC workforce without due regard for the safety consequences of their actions then it is clearly non-meritorious. The limited data available to me suggests that the FAA may have launched itself into a non-technical meritorious venture for political correctness purposes in its new ATC recruitment process. Having spent 30 years in the FAA I know that, unfortunately, as a U.S. Government institution that they are capable of making a non-meritorious decision at the political level.

A contest at the Texas A & M University once defined political correctness as:

"Political correctness is a doctrine, fostered by a delusional, illogical minority and rabidly promoted by an unscrupulous mainstream media, which holds forth the proposition that it is entirely possible to pick up a Turd by the clean end."

To this background I make the following observation "Controllers are Type A personalities. A skilled manager of controllers needs to know how to harness that energy rather than fight against it." Controllers are, for the vast majority, extroverted personalities that are always looking for "what have you done for me today – what you did yesterday doesn't matter!" Said another way it is impossible to satisfy the controller simply by giving them what they want – because that is frequently not what they need. Given that most of the executives in the FAA, DOT, and the rest of the higher-up in the government hierarchy do not understand this unique personality type they continue to make bad decisions when it involves controllers.

I make these observations because the current 2015 FAA ATC recruitment process smacks of an ulterior motive of diversity recruitment at the expense of a meritorious technical talent seeking program. The consequence of such an action have both short-term as well as long-term consequences – neither of which bodes well for the safety of the U.S. ATC system. The short-term consequences include the probability of a major burden on the current ATC staff once again having to expend scarce resources attempting to train individuals unsuited to the ATC profession.

The long-term consequences are even greater as a recruitment program focused on diversity at the expense of strong ATC technical talent can result in a failure of the U.S. ATC safety system. While it is difficult to contemplate any current journeyman ATC controller certifying an incompetent individual as a journeyman controller, pressure by an FAA non-ATC background Executive may result in exactly that happening. The FAA senior executive has been drastically impacted by this lack of knowledge and understanding of the ATC system at times in the past and appears to once again be in that situation.

Finally, the foregoing is complicated by the U.S. Government being engaged once again in at least the fourth and perhaps the fifth iteration of their hiring of ATC personnel in my knowledge and experience. The first happened in the 1930s and continued through WWII. A second happened in the post-WWII period with the dramatic expansion of civil aviation (I was hired in the early 1950s in the middle of that

phase). A third happened with the emergency replacement of the 1981 PATCO strikers, and the FAA is now in the fourth or fifth such hiring processes to replace the controllers hired after the 1981 PATO strike. The FAA and the U.S. Government is once "behind-the-power-curve" recruitment for replacement controllers.

Over the past 60+ years of my experience in aviation I have observed this FAA ATC "behind-the-powercurve" recruitment phenomenon twice. The FAA ATC types recognize the need for replenishment of the ATC staff about 5 - 6 years in advance of the actual need. They know this because they know that it takes about that minimum time to recruit, bring candidates on-board, and train them to journeymen level controllers. So, the FAA organization submits their ATC personnel needs on their budget request based on their knowledge of this advance need. The FAA administrative and budget executives (who are frequently not ATC types) look at the FAA's ATC staffing and deny the staffing requests saying "you are already fully staffed."

A year or two later the FAA ATC types successfully get their additional staffing request through the FAA officials only to get it denied by the DOT officials – or the President's Office of Management and Budget (OMB). This process is repeated for a couple of years before the DOT/OMB finally recognizes "oh my GOD, we need more FAA ATC personnel this year" – let's put a priority request in to the Congress for the budgetary authority and authorization. That's where the FAA sits today – well behind the power curve in its recruitment for replenishment ATC types.

Unfortunately we seem to be doomed to repeat this process every couple of decades, i.e. we never seem to retain this institutional knowledge within the U.S. Governmental budgetary system.

One final observation given the FAA's new recruitment and hiring program: you cannot tell someone anything that already knows everything, i.e. we can hire for diversity and it will not impact the quality of the ATC profession technical competence.

This nonsense will destroy the U.S. ATC system.

Best wishes to all – Billie H. Vincent – May 2015