Whizz-bang suits and aeroplanes:

Memories of pilot medical exams from the letters of Homer Handy

Constance Wallace

When America entered the First World War, they were vastly unprepared for aviation warfare. Far behind the European forces, the American military had to struggle to catch up to Britain and France’s aviation experience and knowledge. As Dr. Bert Frandsen noted in his article “The Birth of American Airpower in World War I,” the America Army only consisted of about 26 qualified aviators.¹ The planes were unarmed and only a few of the pilots had experience within the structure of the 1916 Mexican Punitive Expedition. The duties of this first squadron amount to observation missions and courier services, but no practical combat encounters.²

Part of the “air-mindedness” of the foundations of our modern-day Air Force belong to those daredevils of the early 20th century Aero Clubs in Europe and America. From these ranks, pilots of the early plane educated themselves on flying techniques and held flying exhibitions, as well as promoted the industrialization of aviation.³ But the sport was still racked with safety issues and many men died while attempting to experience flight. Flying one of these new crafts was dangerous and uncertain business. Crash landings and near misses, along with deaths were a hazard of the new machines. One of the more famous deaths of George E.M. Kelly became headline news. The Kelly Field took the namesake of this brave pilot and opened in 1916 as a foundation for future flight instruction.

² Ibid.
³ Ibid, 62.
Shortly after the Kelly Field hosted its first group of potential pilots, the passage of the aviation bill in Congress in 1917 caused Kelly Field to flourish. By May 1917, the field’s population had grown to over 4,000 men.\footnote{“Kelly Field Heritage,” Port San Antonio, accessed January 3, 2018, www.kellyheritage.org/1916-1941era.asp} From there 326 Aero Squadrons were organized. It now became even more paramount for the Army to obtain well-trained pilots to complete their squadrons. It could be stated though, that within this requirement, the military faced some limitation. There existed a boundary of understanding of how to go about the selection of these new pilots as air flight with a plane was new and the military did not have as much experience with planes as those in Europe did. Every young man wanted to fly, but few would be able to endure the challenges that would be faced in the ever-growing technology of flight. How could they screen men? How could the military find able bodied pilots that would fill the ranks of the newly formed aero-squadrons? What types of medical examinations should be performed on the men that would mimic flight?

Fortunately, the memories of a commissioned officer, Homer Handy, give a glimpse of the preparedness of those first months when America had joined in the war. In his letters, Handy wrote a small microhistory of the operations and tests that potential pilot candidates underwent. This paper will highlight these memories of Homer Handy and the medical examinations that he experienced as he enlisted to serve as part of the first American aero-squadrons.

Before diving into Handy’s memory of his experiences at Camp Kelly, it is necessary to introduce this young man from years ago. Homer Handy, nicknamed Sonny, had been a Cashier at the First National Bank of Idaho Springs, Colorado when he enlisted. This fact was documented by a letter dated April 20, 1916, addressed to his mother on the bank’s letterhead. Handy’s name appears at the top left side of the embossment under the Vice-President’s name.\footnote{Homer Handy, letter to his parents, April 20, 1916.}
The collection truly begins though with the next letter dated June 25, 1917. Handy was staying at the Fort Worth, Texas’ Westbrook Hotel. His mood was positive as he had just arrived. “I got in here this morning at seven and found that the ‘Katy Flyer’ was several hours late and would not get me” into the San Antonio area until the late evening. handy stayed in the Fort Worth area until the next train. He explained to his parents that he would have to pay $2.00 that night for a Pullman, because he “could not stand the day coaches.” Two days later he was situated in his company and wrote from Camp Kelly. “It is certainly hot here and we are all sleeping out in tents as the regular barracks are not built yet. Everything is very orderly about camp and very dirty. When the wind blows the dust sweeps down the company streets in clouds and of course gets into everything.”

Handy was most impressed with the airplanes at the Camp. “There are about a dozen machines in the air now and they go roaring along just above out tents as they rise off the ground. No one here even looks up at them for they are such a common sight.” Part of his desire was to become a commissioned officer and pilot. In the next letter, which is undated, he wrote to his parents that he had exciting news. “First of all we received orders yesterday to be ready today to entrain for Toronto, Canada and have everything on board by seven thirty. What do you think of that? This squadron is now the First American Aero Squadron and is under the supervision of the Canadian Royal Flying Corps. Also, has the distinction of being the first American Aero Squadron to land on foreign soil.” Handy finishes the letter with a small sense of pride.
of humor by telling his folks that at the time of his writing, his squadron had left without him. “I was left behind and am now a member of the 44th squadron.”

In further detailing his woe at being left behind, he wrote:

I took my physical exam last Tuesday and passed with an almost perfect score when four men out of nine fell down. So I guess Sonny isn’t such an invalid as you all thought and let me tell you it was some exam. They started in on us at eight in the morning and kept it up until the middle of the afternoon without a pause to eat or anything. The only thing against me was that slight indication of rupture and he said nine men out of ten had it, otherwise I am physically PERFECT. He said I had an excellent pair of eyes & would never have any trouble with them. Yesterday afternoon while I was packing up my stuff & getting ready to go out today for Canada with my squadron an orderly rode up from Headquarters with an order to transfer me to the 44th which is staying here so then I knew I had passed. You son is now in a fair way towards getting a commission as First Lieutenant.

Handy remained at Camp Kelly to complete the work towards his commission and to enter training as a pilot, a tough position to be in during the First World War. To understand the difficulty of those first years of America’s aero-squadrons pilots, one only needs to understand the structure of the first planes. Contrary to the jets of today, with their heavy metal and computerized consoles, those first planes were “light, flimsy craft built of painted cloth stretched over wooden frames braced with metal wire.” The design held no shelter for the men in the open cockpits, as the bi-planes’ engines and propellers were heavy and constricted the craft from a clean take-off. All in all, they were open to the elements, enemy gunfire, and birds.

Handy even mentions in one of his letters to his parents about a crash that had happened at the Camp in October of 1917 during some training at night.

12 Ibid.
13 Ibid.
It certainly was a pretty sight. Moon flashing on the glossy, varnished sides of the machine and little flames of gas shooting out of the engine exhaust ports on each side. Two or three more came up and they flew around until I got tired watching them. Just as I was about ready to go to bed one of them came down the field and I stepped out to watch him. He came down even with the tent, banked his machine up at an angle to make a short turn. He banked her too much and she started to side slip. He turned her on around in the effort to catch her but it was too late. She got her nose down and started a nose spin. As he was only about 150 ft. up he did not have time to dive and then catch her up. Well, I yelled ‘He’s down,’ and just then he hit the earth with a crash. Everyone came running out of their tents and away we went over the field. By the time we got there the pilot, Lieut. Connell, (who is my commander) was just crawling out of the wreckage. He had a little cut on his chin but outside of that was unhurt. The observer who sits in front was pinned under the machine but we boosted her up and pulled him out. He was bruised & cut a bit but not badly hurt.

But say, that machine sure was a wreck. The hood was turned around and jammed in between the wings. The body was broken in the two just back of the hood and the tail rammed down.\textsuperscript{15}

The apparent peril that Handy faced as a new pilot did nothing to deter him from his goal. In his letters, he mentioned that he was more afraid of the impending physical examination than anything else. “Until the last few days I have never had the slightest doubt that I could pass the physical examination” he assured his parents. Yet he seemed apprehensive as he further explained, “I have been getting a little nervous about it since I have been talking with some of the other fellows who have been examined and all failed to pass. Some of them were big husky looking fellows who looked as though they could pass any physical examination in the world and yet every last one of them flunked.”\textsuperscript{16} Certainly Handy had reason to be doubtful. If “big husky fellows” who were healthy had not passed the physical examination for pilots, then what did this mean for him?

\textsuperscript{15} Homer Handy, letter to his parents, October 1, 1917.
\textsuperscript{16} Homer Handy, letter to his parents, July 30, 1917.
In the First World War, big and husky would not be the best fit for the new aeroplanes. The small cockpits were sometimes a two-seater aircraft, and carried both a pilot and an observer. Perhaps more disconcerting was the fact that gasoline tanks were sometimes fitted under the pilot’s seat.\(^{17}\) To be a big and husky fellow in the pilot’s seat may not be the most advantageous arrangement especially when adding a gasoline tank. Handy, in order to make his parents understand the complexity of what the physical examination would consist of, and why these husky fellows had flunked, described what the doctors would do to test these potential pilots.

One thing they do is to pour a gallon of ice water in each ear through a small funnel and it gives you every sensation of sea sickness, so they tell me, and every often it gets the same results. Two of the fellows vomited and fell over in a faint afterwards. After pouring in the water they tell you to stand up quickly, throw your head back and look at the ceiling which appears to the one on examination to be turning around about fifty miles an hour. They put you on a piano stool or something like that which is turned mechanically very fast for forty turns. Then you must stand up and walk a straight line which you can imagine is very hard to do. Also put one foot with the toes on top of the toes of the other foot and your ankle holding the heel then shut your eyes and balance yourself.\(^{18}\)

Handy ends the description with a suggestion that his parents try it for themselves.

Two weeks passed before another letter was sent out. In correspondence dated August 15, 1917, Handy writes to his father about his experience with the pilot’s physical examination.

Mother asked if my exam was as bad as I thought it would be. Well, I should say so. When we went to the hospital we were all sent down on the basement where the exam rooms are. There were three physicians in white suits there and enough shiny instruments to run a field hospital. None of the three seemed very glad to see use but one of them finally came over to me with a look as tho’ he was wondering how much I was worth on the hoof. He told us to strip & we did. I never saw such an ugly looking bunch

\(^{17}\) David Norris, “The Knights of the Air,” 1.
\(^{18}\) Homer Handy, letter to his parents, July 30, 1917.
especially the feet. One of them picked on me and slipped up behind me with a rubber hammer & soaked me five times before I could get aways and then told me to turn around quickly and say, ‘oh ah.’ I did and he hit me again in the chest.

Then he made me hop around on one foot and I hopped over chairs, tables and everything in sight. He ran a ramrod in my ears & swabbed them out. Looked down my throat at my insides and grunted as tho’ the scenery was poor.

Every few minutes a man would come up and put a thing on my chest with a tube attached and one of the white coats would listen and look startled as though he heard something loose. I thought it was all over when they told us to dress but it had just started. They put me in a pretty little white chair and told me to hand on & how it did whirl. I was leaning over with my hands clasped on my knees and my head on my hands with eyes closed. The chair stopped with a jerk he said ‘sit up straight’ and it was mighty hard to do with your eyes closed. They whirled me again sitting up and when I opened my eyes he started a stop watch and looked closely at my eyes. When they stopped flickering he looked at it and sang out ‘16 seconds, very good son!!’ Considering that I was older than he I started to say ‘What do you mean, ‘son’?’ but thought better of it.

Then they held a post mortem over my remains and decided to give me some more. They stuffed a hose in my ear and poured the arctic ocean in the other end and then the next moment poured a kettle of boiling water in. That made my eyes shoot from side to side like a hungry soldier in a pie factory with ten cents in his pocket. Next they gave me a telescope and held up a card with some pictures on it and asked me if all the pictures looked the same distance away. I guessed a church to be about two miles away and missed by about a mile and one half. Next time I guessed on a saloon and must have come within about six feet for they looked surprised and pleased. They gave me a card with bits of yarn on it and said to punch holes beside all the pink and blue bits. That was easy. They put bella-donna in my eyes to enlarge the pupils and made me as blind as a bat. In fact I think they went over muscle & bone in my body. We were there from 745 until 230 without stop and when they finished and folded up our papers I knew if I passed that exam that I was some man.19

19 Homer Handy, letter to his parents, August 15, 1917.
Handy did become ‘some man’ as his letter of August 29 advised his parents that he had been placed in charge of the 85th. “…I am nominally the commanding officer of the 85th for the time being.” He also thanks his parents for the money loaned so that he could pay for his wireless buzzer outfit and assures them that for continuous flying duty he will receive a 25% pay increase and would be more than able to repay them.²⁰

The Air Force has come a long way in its examinations of potential pilots. Today, there are specific standards that have been put in place for screening and testing prospective airmen. The bi-planes of stretched canvas have been replaced with steel and jet fuel, and thus guidelines have been constructed to make sure that future flyers have the ability to handle multi-million-dollar machines, safely and efficiently.

Pilots today do not have “artic” water and hot water poured into their ears or whirled around on a chair. While Handy was given the once over by the three doctors in white coats after his spin and then told to determine distance by glancing at a picture card in front of him, the Department of Defense has created a definitive process for application and examination for future pilots. One can see that steps are recommended for candidates that include a fitness assessment and specific requirement on height and weight, as well as eye sight limitations. Major surgeries, illnesses and childhood injuries are taken into consideration of the potential candidate in order to maintain strict guidelines on any pilot that may have any medical problems that could possibly become an issue while flying.²¹

²⁰ Homer Handy, letter to his parents, August 29, 1917. The wireless buzzer outfit refers to the special uniform that he would wear as he trained on the new technology of wireless radio. This would become an important element for pilots.

Flying has changed since Homer Handy’s experience in the First World War. The planes have upgraded from the bi-plane of yesterday to the steel jets of today. Pilots are trained in flight through simulation in a computerized device that mimics the aerobat of aircraft. Many contemporary Air Force pilots have logged hours in the flight simulator before advancing to flight in the actual aircraft, and new technology, such as the drone, has changed the role of pilot to an observer and controller of the craft through distance. The First World War had much to teach America about flight, but Handy’s recollections illustrated the uncertainty of aeroplanes and the demands on pilots in the early 20th century. The military has advanced its own screening and medical procedures to accommodate new aircraft and through Handy’s memories, we find the first foundations of these examinations and discover the distance the Air Force has come in its training and examination of pilots.
Bibliography


