## Tom Marshall's Weekly News, September 8, 2008

How They Taught Weather Forecasting, 1943 (Part 1): Civilian forecasters had come a long way before World War II, but their expertise came largely from knowing the area where they were located and the peculiar weather phenomenon that was likely to occur there. However, a small group of highly technical men, notably at M.I.T. and the University of Chicago, delved deeply into what caused severe storms, rapid temperature changes, etc. Mathematical formulae aimed at seeing what happened to a molecule of air when lifted from the surface to several thousand feet above the ground, and other similar things, formed the basis for six or eight courses taught at these schools about meteorology. These courses relied heavily on calculus, vector analysis, and, to a lesser extent, physics. When we were thrust into the war at the end of 1941, and air power was to play a major role in its outcome, as many as 5,000 inductees were enrolled into one of the weather training programs operated by the Army Air Force and the Navy.

In 1942 it was inevitable that an 18-year-old in good health was going to be drafted unless he enlisted previously. I registered for the draft in the Odd Fellows Hall at Centerville on June 30 and enlisted in something called the Enlisted Reserve Corps in the Coleman du Pont Building at M.I.T. on December 11. Naturally, my parents were anxious to keep me out of active combat, and we learned of the meteorology program, to which those with a few months'college could apply. Those with two years or more of engineering school could apply for "Meteorology A," those with one full year could apply for "B," and those with less could apply for "C." I should have applied for "C," but since I had one term at M.I.T. behind me and had not failed a course, I took a chance and applied for "B." "A" students were promised a commission in eight months (33 weeks of accelerated work), "B" in six months of "Pre-Meteorology," then the eight months of "A," and for those accepted in "C" an additional six months for a total of 20 months. Those accepted into the "C" program early in 1943 never made it to become forecasters, as the Air Force realized by the spring of 1944 that they were soon going to have too many, and except for those scheduled to be commissioned in June that year, the program was wiped out. Fortunately, I was accepted into the "B" program, and my orders came through on March 15, 1943, to report to Brown University, Providence, Rhode Island, "immediately."

The seven units or "flights" at Brown numbered about 225 new recruits, and I was the only one they forgot to provide with basic training. For at least a week, I marched around with my new companions (we had to march everywhere; that's how the army did it, you know), the only one in civilian clothes. I got my uniform along with a high fever from the many inoculations, but then things leveled out, I gained some fine friends, and despite the rigorous academic and military program, we were treated well for the six months at Brown. Bill Schwoebel's uncle, Francis Courtney, then from Philadelphia, was a part of this program. We had several foreign professors who were hard to understand, but I found some of the courses, such as Climatology and Oceanography, quite interesting. We were on an "octile" system, where we were graded from 1 to 8 every three weeks or so, and those who stayed in seven and eight very long were forced out of the program. A weekend pass during this period was from 1:00 P.M. Saturday to bedtime Sunday night, but I came home by train three or four times in the six months. Several of us went to Boston for a Saturday afternoon and evening on at least two occasions. and I went to a Red Sox game at Fenway Park where Babe Ruth and his wife came in and sat down in the stands to the applause of those in attendance. During our one-week break from classes in late June, we were taken by bus to a Navy Rifle Range at Sachuest Point, Rhode Island, where they taught us to shoot a military rifle. I liked that, having been a trapshooter. Except for that trip, every time I left Providence I was on a passenger train, pulled by a steam locomotive—nice! At the end of September, about 150 of us moved on to M.I.T. (and about 15 to Chanute Field, Illinois) for "Meteorology A." (The story will be continued in a future Weekly News).