**Interview with Leo E. Baldwin, CPS Worker 309**

**regarding his CPS service at The University of Rochester School of Medicine, Rochester, NY during 1945\***

**CPS Unit No. 115, *subunit 14*,** located at the University of Rochester School of Medicine in Rochester, NY, subjected men to physiological experiment to determine how the body reacts when exposed to cold. Leo E. Baldwin was one of four CPS volunteers in the group that began this experiment at the conclusion of their participation in the protein deficiency experiment which concluded in September (See also **CPS Unit no. 115***,* ***subunit 21****)*.

“For the experiment, daily, the men stripped down to their shorts and were stationed on the roof of the hospital for periods of four hours. Thermacouples measured changes in body temperatures and the flow of blood as men fulfilled their assignments. One thermocouple was attached to the forehead, one to the chest, one to the back, and one was inserted into the anus. Rotating positions, each man would assume a motionless position, either standing or erect, sitting on a camp stool, or lying on an army cot, or—the one opportunity to generate kinetic heat—ride a stationary bike. We stayed outside on the roof as long as it didn’t rain or the temperature dropped to near freezing, usually to about 36 degrees Fahrenheit. As temperatures dropped the men would sometimes lose consciousness and have to be revived with the aid of hot showers. The experiment ran from October through mid-December.

What the experiment demonstrated was that as the body is chilled the blood accumulates in the abdomen, keeping vital organs such as the heart, liver, kidneys, etc. warm. Extremities such as hands and feet lose the blood first, and then the head. This explains why people feel little or no pain as they suffer frostbite or freezing; and it explains why people suffering substantial freezing can be resuscitated.

Thermacouple measurements recorded the heat changes that took place. Those who sat on the roof in the cold temperatures passed out first; those standing could last longer before losing consciousness. Those positioned on a cot, would remain conscious for a longer time. Those working out on a bike remained conscious the longest. When we worked out on the bike with the magnetic brake set at about a two percent grade, only two or three of us could continue on the bike for the full four hours at a stretch.

We were told that this experiment would help determine how best to direct the rescue of sailors or others in the northern seas as a result of shipwreck or other disaster. At the time, the researchers knew that people needed to be rescued within 10-14 minutes or they would lose consciousness and drown. Following the experiment, sailors, passengers and others were instructed to keep active in the cold waters to keep blood in the brain. This doubled the amount of time people could remain conscious in the water prior to rescue.

The COs in the group lived in one of the college dorms. However, since I was married, my wife and I along with another couple, the Berle Millers, rented an apartment on the third floor of an old house. While this meant that Berle and I did not experience the same social contacts with the other men in the experiment, the arrangement helped our wives tolerate the situation.”

\*As shared with Rosalind E. Andreas in a telephone conversation on January 31, 2012, February 27, with follow-up on March 1. Mr. Baldwin reviewed the written notes, made edits, and returned them April 2, 2012.