

Todd. F. Butler
Narrator

Wayne Clark
Interviewer

April 16th, 2010
Malta New York

WC: This is the 16th of April 2010 we are at the Malta New York Community Center Library. My name is Wayne Clark I'm with the New York State Military Museum and Veterans Research center. Sir, for the record will you state your full name and your date and place of birth?

TB: Todd. F. Butler. Troy New York. September 4th 1928.

WC: Did you attend school in Troy?

TB: Yes. Public school and then R.P.I.

WC: What year did you graduate from high school? What high school?

TB: Joy High School, June 1945

WC: Let me go back a little bit, do you remember where you were when you heard about the attack on Pearl Harbor?

TB: I remember Roosevelt's speech the next day, when it came over the radio; we only had a radio in our house at that time.

WC: How did life change for you during World War II?

TB: We got involved in scrap drives. We got involved in all kinds of efforts to support the troops. My father worked at a blast furnace in Troy, NY and boy those were busy times. They were producing as much iron as they possibly could all through the whole war. They never shut down the blast furnace.

WC: Did your family experience any sort of shortages?

TB: Oh, everything was coupons for your meats, gasoline, gasoline was rationed. There was a serious shortage of a lot of things.

WC: Did your family have a car?

TB: Yes, my father had a car but during the war the only thing he would do was take him and his friends to work and back. That's all and they had to do a sharing of the car because of gas rations.

WC: Do you have any family members in the service?

TB: Yes, I had a brother-in-law and cousins in the service.

WC: What was it like in Troy when the war ended? Was it a lot of celebration?

TB: Oh it was a big day with a lot of celebration. (Big smile) They had parades and all kinds of things going on.

WC: After you graduated from high school in 1945(confirmed with a nod) did you go directly to college?

TB: Yes, I went to RPI. RPI was on an accelerated schedule because of returning veterans . They had a huge enrollment. So you kept going right through the summer time from one term to the next you just kept right on going.

WC: What was it like with the veterans there?

TB: It was a big transition for some of the veterans to go back to college life. But they were covered with the GI Bill. And a lot of them ended up down at the development division at the Watervliet Arsenal, because when they got out they were committed. They got a good education.

WC: Did you have a scholarship at RPI?

TB: No, I didn't. But the tuition was 125 dollars a year.

WC: That was still a lot of money for back then. (Confirmed with joint laughter)

WC: Did you have a part-time job?

TB: I started working for GE in 1946,in the steam turbine department. They had a coop work program so you could work any time you had time, You could work all the hours you wanted they had more orders...RPI, Union and GE were always kind of affiliated.

WC: What course of study did you pursue at RPI?

TB: Mechanical engineering

WC: Did you find the course of study demanding?

TB: It was always a tough school. We had to spend some hours on the books late at night to try and keep up. I made it! I continued to work for GE straight up until I graduated and then they put me on their test engineering program immediately.

WC: Do you want to tell us about that program? Was that program in Malta?

TB: It was in Malta and it was part of the Aeronautics and Ordnance division in Building 28 in Schenectady. I served a three month period in Schenectady and then they sent me to Malta and I stayed there.

WC: Where were you living when you were sent to Malta?

TB: I lived on the farm with my mother and father in Troy.

WC: How did you commute back and forth?

TB: There were so many people at the site, 450 at the site, 550 at the production plant and another 150 at the race track and 200 people at White Sands Missile Range all on this operation. There was too much congestion, the army had buses that took everyone from GE in Schenectady to the Malta site. So I use to meet the bus at Clifton Park hotel, there were a bunch of us who met there.

WC: Do you want to tell us about the site anything you want to discuss?

TB: Well see, I came later The first rocket firing was in 1945. But you got to do the aerial survey out of Schenectady. You see, they needed a one mile safe zone, calculations determined that if one of these rockets exploded the shrapnel would go at least a mile. We never really experienced the whole safety.

WC: Were these actual German Rockets?

TB: These German rockets came into Schenectady, the V2's, and were assembled in Schenectady and then went to White Sands Missile Range for the test firing program run by GE.

WC: While Sands was where?

TB: New Mexico. That was just the German hardware, the hardware developed her, the A1, was built per German designs, it was changed to S.A.E standards. It was the A1 that sat at Hermes Rd. and Dunning St. and was first. This was all a U.S army effort, paid for by the U.S Government and that A1 is now in The Smithsonian Institute. There is one at Red Stone and another at White Sands, but they never saved one for the site. Then the A3 was a next generation missile designed by G.E and manufactured here in Schenectady by those 500 people I told you about and shipped off to White Sands. Now the A1 and the A3 were only part of the program, the army also wanted work on High Energy Fuels, superfuels. Guyborine, and Penaborine plant was in building 20 back here and was funded by Olin-Mathieson Corporation They had a bad explosion there and while the fuel seemed to have everything the army wanted, it was too hazardous to handle. There was whole bunch of monopropellants the army was interested in like Dourine. And then the Hydrazine Nitrates for Guns and Ammonium Nitrate which was the last one here.

Then there was the ramjet project.

WC: Do you want to explain what that program entails?

TB: Once get an airframe up to sufficient speeds you don't a jet engine compressor, the air itself compresses and fuels the ramjet propulsion. It was a big complex for the air supply, as you needed a lot of air for the ramjet. That was in building 21 and under a fellow named Walter Dancoff. He was in a NASA facility out on in Cleveland, don't know if he is still alive.

WC: How many building were back there?

TB: They were all numbered and went to 27. Now some were small but some were a good size, the main office was building 14 and if you walked through 14 you could find out what was going on in the other building. There was a High Pressure Gas plant to support the rockets, the A1 and A3 were 3000 psi, nitrogen driven. I talked a little about the propellants and the propellants are what Hitler decided, a long while ago to use. We were so behind them on these things. At that time the U.S army didn't have any rockets that could compare.

WC: Were there any German scientists there?

TB: Look at Project Paperclip, which is the regional GE involvement with the German Program. They came mostly out of the G.E Experimental Labs in Schenectady and went over to Germany to interrogate. The German scientists were sent to Fort Bliss, then they were moved to Red Stone Arsenal, and they actually became the backbone of the projected at Red Stone Arsenal. There were a few German Scientists and you could ask them a few questions and they would explain why they did things the way they did and could ask them a few questions and they would explain why they did things the way they did. Hitler decided he didn't want anything messing with his main army fuel requirements, so he decided what we are deciding now. The main propellants were Ethanol Alcohol and Liquid Oxygen.

WC: Were the Russians doing the same thing we were? We there more advanced or did we have edge

TB: I have to say they were ahead of us, they beat us into with Sputnik. We were close but...

WC: Was there permanent military installation here?

TB: We were under the Rochester Ordinance Sector and all the plans were done by the Army Corps of Engineers. The Corps of Engineers basically replicated a German facility.

WC: Did that facility rone 24/7 365 days a year?

TB: They kind of pushed the whole thing , we were working overtime. We were working Christmas day

WC: When did they move from rocketry to guns?

TB: in 1964 the commanding officer at the Watervliet Arsenal decided we could use some of the Facilities there. They continued to work with us until we closed the doors?

WC: Was there any underground testing?

TB: The only way could calm down some of the noise with earth cover, or blast tunnels.

WC: Were there any serious accidents?

TB: Yes, quite a few. I mentioned the diborane plant explosion that killed a few people , we had several explosions. There was one last one in 1994 that is still on trial.

WC: What happened?

TB: They were scrapping a rocket and the propellants exploded, killing two and seriously injuring others.

WC: Who bought the company?

TB: The test site was owned by the U.S army, the Watervliet Arsenal passed up on the offer and it was declared excess to the needs of the Department of Defense and the General Authority sold it to the Atomic and Space Development association. GE was the contractor, we did testing work, firing work, they wanted a space business, it didn't quite work out.

WC: The last company you mentioned here was Wright-Malta correct?

TB: We also did a hydro mechanical transmission for army tank automotive command .It was done for several years, there is a test track out back for tanks. Once it was produced GE decided not to keep it in the woods and moved the whole operation to Pittsfield. And we were all told to pack up and move. Gene Wright and some of the engineering people said, hey, we still have a test facility here, let's start a company and put it to use. Finally that building was sold to General Dynamics, and they are still making transmissions for all kinds of tracked vehicles.

WC: And you stayed from 1972 to 1994, what was the site like then?

TB: Well, there was the gun testing work for the Watervliet Arsenal. Then along came the Hydro Propelled Gun testing program.

WC: Did the workload increase during Desert Storm?

TB: When Vietnam came along, contracts increased. When Desert Storm came along it was business as usual, the weapons they had developed at Watervliet were now being put into use. We never got involved with the testing with them. Our main agency was the Benet lab and the production of new weapons, tanks guns, mortars... whatever their charter was at Watervliet arsenal we'd get. It turned out to be lucrative business, towards the end as good as rockets. The

end of the liquid gun program came when there was an explosion in the middle of the night; the chemicals were far more dangerous than even we knew. They decided that no matter stabililants, they were not safe for the field

WC: Was there a problem with hazardous waste at this facility?

TB: Back in the 40's dealing with haste was different than when the EPA got involved. Some of this stuff we buried in the ground. It cost around 3 to 4 million dollars; you can find the records in the Round Lake Library. It was all excavated and shipped away.

WC: Do you think they did a good job cleaning up?

TB: Yes, a very good job. The EPA came in with an underground radar, so you couldn't hide anything. We did have contaminated wells back there with CCl₄ which we used to clean the oxygen system and then dumped in the ground, which got into the water system. So built a tower to remove the CCl₄ from the water, it's basically an aeration process.

WC: Were you there until the end?

TB: I retired before the site went up for auction. The state paid 371,000 for the site.

WC: What have you been doing since you retired.

TB: The Malta Old-timers meet up for a luncheon every three or four months, but we've had bad attrition, were down to twelve people. (giggles)

WC: Were there any health effects, cancer etc., from those who worked on the project.

TB: I was operated on for Colon Cancer 5 years ago and there is a class action law suit that's going on. It's a long term thing going on now with the PCB's and the CCL₄.

WC: Anything else you want to touch on?

TB: I guess, I talked to you about the armies real interest back in the 40's (he reiterates the history of the program). The army looked at this like a long range gun, emulating the Germans. They were way ahead of their time. If you really want to study it in detail GE has archives and so does the Corps of Engineers and some of the hardware is at White Sands and the Smithsonian.

WC: Anything else?

TB: We had a lot of our own services, whatever you needed the army make sure you had, it was an interesting time.

WC: Well, thank you for your interview.