CQ de WA2LQO

Seventy Two Years: 1944 -2016The official independent voice of the Grumman Amateur Radio Club.AUGUST 2016VOLUME 89NUMBER 8

Our Summer Picnic Will Be Held on Aug. 17th See President's Message for Details (This is the 3rd Wednesday of Aug. Our General Meetings are always held on the 3rd

Wednesday of each month)

How Ham Radio Prepared Me to be an Engineer by Bob Wexelbaum, W2ILP

(Continued from July 2016)

Let me begin by explaining why my profile seemed similar to that of Julius Rosenberg. Both of us were NONRELIGIOUS JEWS BORN IN NEW YORK CITY. He in Brooklyn; I in the Bronx. Both of us ATTENDED CCNY's SCHOOL OF ENGINEERING. He graduated with a BSEE degree; I dropped out after one year. Both of us VOLUNTEERED TO ENTER THE US ARMY, PRIOR TO BEING DRAFTED: He as a commissioned officer; I as a Private. Both of us got into the ARMY SIGNAL CORPS He because of his EE degree; I because of aptitude tests. Both of us had WORKED AT EMERSON RADIO CORP IN JERSEY CITY, NJ. He was assigned to work there; first as a US Army inspector and later as a civilian contractor. He had worked in the Top Secret Proximity Fuse LAB; I had worked in the commercial test equipment construction LAB. I had a Confidential clearance that permitted me to enter most labs, but I was never permitted to enter the top-secret fuse lab. There were guards at its doorway to stop all without a "need to know" from entering. Even the Abrams brothers, who owned Emerson, couldn't enter the fuse lab, because they did not have Top Secret Clearance with all their travels to Israel and Europe, and recent contacts with foreign persons. My Mother's grandfather had fled Czarist Russia; in the McCarthy era there was a myth that most non-religious Jews, especially those with Russian roots, were Communists. This was the reason for another witchhunt by the House Un-American Activity Committee (HUAC), inspired by McCarthy, although not run by him. It was directed mainly against Jewish and non-Jewish sympathizers who were Hollywood or TV actors, movie directors, producers, authors and playwrights. Each was asked to incriminate others and many took the Fifth Amendment rather than expose others to "guilt by association", or to cooperate with what they believed was a sham running against innocent patriotic American citizens. This witchhunt did result in actually banning many people from movie and TV jobs. Another similar trial was started by The Subversive Activities Control Board (SACB), a five member committee, under the McCarren Internal Security Act. Truman originally vetoed the act, sending Congress a message that it was a danger to freedom of speech, press and assembly and a mockery of the Bill of Rights. His veto was overridden and the SACB was active for 22 years. Senator Joe McCarthy died on May 2, 1957 at the age of 48, from acute hepatitis, the result of drinking (not just Pepsi). Julius Rosenberg and his wife Ethel were the only humans from the Civil War until the present that were convicted as spies, and executed. The case against them was based on testimony from Ethel's own brother, David Greenglass, and his wife, Ruth Greenglass, who avoided being indicted themselves

by incriminating Julius and Ethel. They all were involved in a plot to send A-bomb secrets to the USSR and Greenglass said that Ethel had typed a message that went to the Soviets along with a diagram of a part of the A-bomb. In March of 1951 the FBI had learned that a man named Theodore Hall had given the most complete A-bomb secrets to the USSR in 1950, but Hall was never charged with espionage! A sample of Ethel's typing was traced to the typewriter that she owned. Years later when the USSR opened their files to the US, it was learned that there never was a typed message; Ethel's message was hand written and of no use to the USSR, since they had more complete A-bomb documentation from Mr. Hall. However, the information in the letter about the electronics of proximity fuses was of great use. Alexander Feklisov, a Soviet agent, turned over a fully functional proximity fuse to the USSR in a NY Automat restaurant in 1944, possibly with the help of Julius who had worked in the fuse lab. Exempt from any retrial, Greenglass admitted to reporters that he had chosen to incriminate his sister Ethel rather than his own wife. American Jews were ashamed of the spies and the Rosenbergs were sentenced to death by a Jewish judge, who wanted all to know that Jewish citizens were patriotic Americans. Most people believed that the Rosenbergs would be pardoned. They had two small sons, who were left with no parents and initially shifted to relatives who did not want to care for them. The trial of Julius and Ethel Rosenberg along with another spy, Morton Sobell, who had been a classmate of Julius at CCNY, occurred on March 6, 1951 at the same time that I was a senior in High School. I followed news about it but my mind was more focused on ham radio at that time. The Rosenbergs could have been pardoned if Julius had made a confession of guilt. J. Edgar Hoover opposed the death sentence, especially since Ethel was a mother. On December 1952 the Rosenbergs appealed the sentence. Their appeal was denied mainly due to the strong anti-Soviet opinions that arose during the Korean War. The pardoning of a woman was denied by President Eisenhower, who claimed in a letter to his son that if Ethel was pardoned and Julius executed the Soviets would just start recruiting female spies. The Rosenbergs were both executed on June 19th 1953 by electric chair. Julius refused to admit his guilt on the principle that we were never officially at war with the USSR, nor was being a member of any Communist organization a crime. It is interesting that Alexander Feklisov was permitted to function as a Soviet agent and he later conveyed the message to JFK that the USSR would remove their missiles from Cuba if the US would agree not to attack Cuba. The USSR had been our ally during WW2 and there was little doubt that they helped defeat Nazi Germany. McCarthyism had overwhelmed most Americans with exaggerated fears but to my knowledge there is no evidence that the Soviets had ever attacked the US mainland or had ever planned to do so. Both before and after the executions of the Rosenbergs, all media carried opinions from scientists, engineers, historians, politicians, philosophers and intellectuals which generally agreed that the execution of the Rosenbergs was unwarranted. The grown sons of the Rosenbergs brought up this topic again in the 2000s and again all media reminded us about the extreme excesses of the McCarthy era.

PRESIDENT'S NOTE by ED GELLENDER, WB2EAV

Every August we dispense with our regular meeting to have a picnic or dinner out. This year we decided on dinner at LaCasa Cafe, on Long Island Sound at Crab Meadow Beach in Northport, just like we did two years ago. On Wednesday August 17th we will meet at 5PM and sit down to order at 6PM. The club will pick up \$10 for each fully-paid-up member.

Directions: Easiest way is Sunken Meadow Pkwy north to the last exit, SM5W, for Route 25A west. Proceed 4 miles to Waterside Road, turn right and stay on Waterside 2 miles until it ends at the beach. Alternately you can take Larkfield Road all the way north as it becomes Vernon Valley Road, then Waterside Road. A third option is to load "445 Waterside Road, Northport, NY" into your GPS and let it do the navigating.

Nine months ago I started working on a nominal 6 month assignment supervising construction of a new electrical substation that had been powering the Verrazano Bridge and plaza for 50 years. We have finally changed the bridge over to the new substation, but that means that I am finished there. Getting to club functions from there was quite aggravating, and I was hoping that I would (a) get another assignment and (b) that it would be more easily accessible. Well, I hear that I will be starting on another assignment in another month or so, only this one is supervising Hurricane Sandy related renovations in Coney Island. Yes, it is a bit closer but not by much. Oh well. Ed, WB2EAV

GRUMMAN AMATEUR RADIO CLUB MINUTES OF GENERAL MEETING / EXECUTIVE BOARD MEETING 7/20/2016

The meeting was called to order by Gordon at 5:00 PM.

TREASURER'S REPORT – Ed, WB2EAV

Finances are in good shape.

REPEATER REPORT – Gordon, KB2UB

Repeaters are working.

VE REPORT – Ed, WB2EAV

There was no VE Session this month.

GARC NETS: 40 Meters: 7.289 MHz at 7:30 AM EST Sundays

Net Controller: Karen, W2ABK 2 Meters (repeaters) Thursdays: 146.745 MHz (-600 kHz) at 8:15 PM 145.330 MHz (-600 kHz) at 8:30 PM. Tone for both repeaters: 136.5 Hz. GARC Net Controller Karen, W2ABK ARES/RACES NETS: Mondays

NEW BUSINESS

Our August meeting 8/17/2016 will be at the LaCasa Café at 5 PM for attitude adjustment and sit down dinner at 6 PM. The menu can be found at http:// www.lacasacaferestaurant.com/dinner/html We hope that everyone can come. See you soon. *See also President's message*.

MEETINGS

Board Meetings of the GARC are held on the 3rd Wednesday of each month, starting at 5:30 PM they are combined with General Meetings that start at 6:15 PM, at the Ellsworth Allen Park in Farmingdale.

WEBSITE

The GARC web site can be found at http://www.qsl.net/wa2lqo. Webmaster is Pat Masterson, KE2LJ. Pictures of GARC activities, archives of newsletters, roster of members, and other information about the GARC may be found there. The membership roster has not been updated to delete Silent Keys and to enter new e-mail addresses for remaining members and friends. Please inform Pat Masterson if you want to update or edit roster information.

How Do Waves Know What Photons Don't Seem to Know?

Many years ago I wrote an article in this newsletter about Richard Feynman, one of the world's foremost physicists. I read his book "Surely You're Joking Mr. Feynman" and watched his DVD lecture series "Six Easy Pieces." They are still in my library. Also, I saw a lecture that Dr. Feynman gave to a group of scientists in New Zealand on the Internet, where Feynman placed a sheet of glass into a tank of water and sent a beam of coherent light (of one color frequency) from a laser, perpendicular to the glass sheet. He observed that a certain fixed percentage of light was reflected by the glass and a certain fixed percentage went through the glass. He finished with a question which both he and his audience were unable to answer: How do the photons know which ones of them were to be reflected by the glass and which ones were to go through the glass? I commented in my article that Feynman does not seem to understand what Maxwell implied about electromagnetic waves. The problem can be explained by comparing the glass sheet and water tank experiment to a beam antenna array that is designed to efficiently radiate and direct radio waves of a specific frequency or small band of frequencies. There can be a resonant driven element connected to the RF source, and ahead of the driven element there can be shorter director elements, while behind the driven element there can be longer reflector elements. No ham would ask: How do the waves know which waves will be directed and which waves will be reflected? In my opinion the waves know nothing other than what their resonant frequency is and what Maxwell's physical partial differentials of space (height, width and length) and time portend. Now I bring up this subject again after reading Max Tegmark' book and trying to make real sense about some of the stuff that he is saving. I admit that I am no expert physicist and I don't completely understand modern quantum mechanics, the big bang, dark holes, dark matter so although I remain skeptical about stuff that I cannot blame any god for, I humbly can express my ignorance as I do on page 6.

PUZZLE

This month's question is:

Who had first hypothesized the Uncertainty Principle?

- A. Erwin Schrodinger
- B. Werner Heisenberg
- C. Stephen Hawking
- D. Niels Bohr

Last month's question was:

What theory was Albert Einstein given the Nobel Prize for?

- A. Special Relativity
- B. General Relativity
- C. Photoelectric Effect
- D. Special gravitation Effect

Answer: The correct answer is C.

Page 4

CQ DE WA2LQO **August 2016** Number 8 **GARC Officers** President: Ed Gellender, WB2EAV 516-507-8969 wb2eav@yahoo.com Vice President: Gordon Sammis, KB2UB Retiree 631-666-7463 sammigo@verizon.net w2abk@aol.com Secretary: Karen Cefalo, W2ABK 631-754-0974 Treasurer: Ed Gellender, WB2EAV (see above) WA2LQO Trustee: Ray Schubnel, W2DKM Retiree schubnel@optonline.net Board Member: Jack Cottrell, WA2PYK Retiree 516-249-0979 jjcottrell2@verizon.net ab2efdl@gmail.com Board Member: Dave Ledo, AB2EF wb2bed@arrl.net Board Member: Jack Hayne, WB2BED

Newsletter

CQ de WA2LQO is published monthly by the Grumman Amateur Radio Club for its members and friends. Editor: Bob Wexelbaum, Retiree 631-499-2214 rwexelbaum@verizon.net. Contributing writers: All GARC members (we hope). To submit articles or ham equipment advertisements contact the editor. Articles will only be edited when permission is granted by the author.

GARC Webmaster

Pat Masterson, KE2LJ Retiree 813-938-4614 Pat-Masterson@tampabay.rr.com **GARC VE Exams**

Board Member: George Sullivan, WB2IKT

We normally proctor exams for all classes of ham licenses on the second Tuesday of each month, starting at 5:30 PM. The exams may be given at various locations. Ham Exams are – Technician: Element 2, General: Element 3, and Amateur Extra Class: Element 4. Time and location may be changed, and sessions may be cancelled if no applicants make appointments. The fee for 2016 is \$14. All applicants must pre-register with Ed Gellender wb2eav@yahoo.com All new applicants should be aware that they must write their Social Security number on the application form if they have not gotten an FRN number. Applicant for an upgrade must bring both their present license and a photo copy of it. All applicants should bring picture ID such as a driver's license. Study material may be obtained from ARRL-VEC at http://www.arrl.org, W5YI-VEC at http//www.W5YI.org or other VECs. All VECs use and update the same Q&A pools.

Editorial

I again want to emphasize that I will not discuss present day politics here, although I am continuing to discuss political history when it coincides with my own history. Next month I will continue my autobiography by telling about my journey to Korea. Like everything that I get into, it was quite involved and aggravating to say the least. I hope that you will read about it, at least for laughs....but surely I'm not joking.

I want to explain why Dowling College was destined to be closed. While attending Dowling myself, I wrote an essay expressing my prediction that it was destined to lose its reputation, accreditation and financial support. It was well received by a very experienced psychology professor, but I'm sure that it would have been denied by many of the Liberal Arts Education course professors and adjuncts that I had the misfortune of being exposed to. I'll say no more about Dowling now, except to say that my objections about teaching reading by phonics rather than whole word recognition and my skepticism about the fad of speed reading have now been acknowledged by more learned professionals than had been at the time that I made them. The same may be said about Briarcliffe College. Although I did not attend it myself I knew some of the instructors who worked there and heard some of the foulmouthed comments from students who went there only to get financial aid payments for their time. Briarcliffe stopped teaching basic electronics courses when they found that few of their students were prepared or motivated to take them. Decisions...Decisions...

--When you come to a fork in the road, take it. -- Yogi Berra--

73 de w2ilp (Incompetent Local Professionals) Tell kids to avoid taking Math and Science Courses and avoid taking any tests when they can be avoided... so as to help the incompetent teachers avoid being evaluated and thus avoid any quality control. Look Ma no tests...Look Ma no difficult courses...Look Ma no College.

Volume 89

Grumman Amateur Radio Club 215 Birchwood Park Drive Jericho, NY 11753

> FIRST CLASS MAIL Do Not Delay

A BOOK REPORT Continued from July 2016

I had highly recommended that you all read a book titled "Our Mathematical Universe – My Quest for the Ultimate Nature of Reality" by Max Tegmark. I'm now only 3/4 through the book. I'm not so sure that this is the best book for you if you want to learn about quantum mechanics, which you need to have some understanding about before you tackle the most recent observations that have been found by the use of the largest and most expensive cyclotron that is in use today. I have physics textbooks from my first attempt to learn physics in 1951, and my later attempt in 1975. What do we know now that we did not know then? We now know that our universe is between 13.7 and 13.8 billion years old, rather than the old belief that it was about 10 or 20 billion years old. After you read what Max has to say, it may be time for you to read more theories about the latest theoretical multiple universes published in recent editions of "Scientific American" or "IEEE Spectrum". Max tells us lots about himself as well as about the other mad scientific students he met at Berkeley. Max tells us that his father called himself Max Shapiro when he was in Sweden, because there weren't any Shapiros there, but when he came to the US he changed his name to Max Tegmark, after his mother's maiden name. There were lots of Shapiros at Berkley but no Tegmarks. All of which tells us that Max wants to show people that he is different from the majority. He desperately wants to discover new theories, but it is difficult these days because all of the craziest ones seem to have already been proposed by others, and it takes lots of imagination to be original while searching for reality mathematically. Max asks: How big is SPACE? In my opinion this is a foolish question because the concept of real space is the blank absence of everything that may exist. Without any points of reference within it, there is no way to measure or conceive of the total size of space itself. Its size is a blank although we do know its local characteristic impedance. Next I believe that the dimension of TIME itself is undetermined until we relate it to reality. We cannot ask when time itself began - or may end - just as we cannot ask how old a person is if the person is fictional or never existed. Enough of this topic. I cannot continue here because I'm running out of space and -w2ilp (I Like Physics)--Page 6 time.