zero bias – a CQ editorial

BY RICH MOSESON,* W2VU

Could RF Be GOOD for Your Health?

Two interesting medical studies crossed my desk in the week after I returned from the Dayton Hamvention®, and both of them got me thinking about something I'd noticed while at Dayton. The first was reported in my local newspaper with the headline, "Study is inconclusive on cell phones, cancer." The second, reported by *Science Daily*, said new evidence suggests that caffeine may slow the progress of Alzheimer's Disease and other types of dementia.

The cell phone study, the largest ever undertaken to date, was conducted by the International Agency for Research on Cancer, a part of the United Nations' World Health Organization. As with every other study on supposed health risks from radio frequency (RF) radiation, this one was unable to establish that cell phones cause cancer. In fact, one part of the study suggested that brain cancer rates were lower among cell phone users than the general population, but the researchers dismissed that finding as being based on "implausible values of reported use."

This brings up two questions: (1) If one set of data is "implausible," then how reliable is the rest? (2) What if that dismissal reflects researcher bias more than an anomaly in the data? In other words, what if the data are actually correct? True, that would go against the widely-held assumption that RF exposure is bad for you, but the purpose of a scientific study is to objectively test such assumptions rather than to try to either confirm or refute them.

Take, for example, the second study. For years, we've heard that caffeine is bad for you and that intake should be limited. Now the *Journal of Alzheimer's Disease* reports on a study conducted in Portugal which suggests that caffeine may actually provide protection against cognitive decline associated with Alzheimer's Disease. Then there's chocolate. Bad for you, right? Well, except that current research is showing that some amount of chocolate, especially dark chocolate, eaten regularly, may actually have health *benefits.*

So … what if the widely-held assumption about the health effects of RF is wrong (like the previously widely-held assumptions about caffeine and chocolate)? What if the researchers are approaching their studies from the wrong angle? I'd like to suggest a study on the potential *positive health effects* of long-term exposure to RF energy!

Look around at your next club meeting or hamfest. How many hams do you see who have had many years of exposure to RF energy and who remain active and involved well into their 80s and even 90s? How many hams do you know with Alzheimer's Disease? There are some, to be sure, but I'm willing to bet that the percentage is significantly lower than in the general population, even though we have a large number of older people in our population.

I started thinking about this at Dayton, where author Walt Maxwell, W2DU, spent several hours at the CQ booth signing copies of his newly-published book, *Reflections III*, in which he completely revised and updated *Reflections II* and added about 100 pages of new text. Walt is 91 years old and sharper mentally than I've ever been.

Walt's fellow *CQ* book author, Jerry Sevick, W2MFI (SK), was likewise fully "with it" and active on the air until just before his passing late last year at age 90. As we went to press, we learned that *CQ* contributor, propagation authority, and University of California at Berkeley Professor Emeritus of Physics Bob Brown, NM7M, who has an article in this issue ("Over Coffee and Cognac," page 18), had also become a Silent Key, on May 23, at age 87. While Bob developed physical limitations, his mind was sharp as a tack until the end. We at *CQ* will miss him and his insatiable curiosity.

Nonagenarian Walt Maxwell, W2DU, autographing books at the 2010 Dayton Hamvention®. Could long-term exposure to RF energy have health-enhancing *effects? (Rachel Moseson photo)*

I'm sure your own club or circle of ham radio acquaintances is similarly populated with a fair number of people who are well on in years and perhaps physically limited, but still mentally sharp and active on the air. Is it possible that decades of RF exposure have somehow given these people *added* longevity and perhaps some sort of protection against ailments such as Alzheimer's Disease?

Of course, the greater likelihood is that the continued mental acuity of so many hams is more closely linked to the fact that so many of us are insatiably curious, never stop learning, and keep our brains active. It is well established that brain health, like physical health, is best maintained and enhanced through regular exercise. But that does not account for the fact that a very large number of hams live well into their 80s and 90s. Is the percentage greater than the general population? If so, what accounts for it? It would make an interesting study.

Dayton Musings

Dayton itself was its usual three days of semi-organized chaos. A couple of us were observing that the Hamvention® is somewhat like ham radio itself—no matter how hectic and disorganized it may appear to the observer, somehow or other it always works. It's not always clear how or why it works, but it does. This year, it seemed that attendance was up a little over last year, which in turn was up a little over the previous year. Most of the vendors we talked to reported higher sales, some significantly so. Without getting overly optimistic, it appears that both the overall economy and the ham radio economy may have turned the corner and begun to recover. We certainly hope it lasts! My thanks to our columnists, award managers, and contest directors who helped out at the CQ booth. And congratulations again to CQ Publisher Dick Ross, K2MGA, who was honored in front of his peers at the CQ industry reception with the Hamvention's 2010 Special Achievement Award in recognition of his 50 years of leadership of the ham radio hobby and industry. 73, W2VU

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