

William Flynn Martin

September 19, 2012

The Honorable Dr. Alvin Trivelpiece

Dear Al:

It has been almost thirty years since we started working together during your tenure as Director of the Office of Science at the Department of Energy. Recently, I was with our friend and former Director of Los Alamos, Sig Hecker, and he recalled some of your many achievements. It reminded me that in Washington it is not easy to make any headway in any area and yet your achievements stand out as a testament to your courage, your insight and your longevity in government. We both served a great President, Ronald Reagan. And indeed following your presentation on the SSC Reagan and the Cabinet, I recall that he mentioned that Kenny Stabler, QB for Oakland Raiders, who was asked about the meaning of something Jack London wrote, "I would rather being ashes than dust, etc.," President Reagan said that Kenny replied that it means, "Throw Deep." The President did "throw deep" by approving the SSC project. This was his way giving you the go ahead to launch the SSC. This is but one of the major projects that you initiated and thereby served your country with distinction and in your low key manner, you served humankind in a most extraordinary tenure of nearly eight years at the DOE.

Let me recall our first meeting when I was serving as Executive Secretary of the National Security Council. You visited me in my office at the West Wing and brought to my attention a project with Russia involving cooperation in magnetic fusion. At this time, we had no positive relations with Russia. It was the 1984 period when Reagan had called the Soviet Union, the Evil Empire. You and Evgeny Velikhov (who at the time was Gorbachev's science advisor) crafted an extraordinary concept that the two countries could begin common research in magnetic fusion – but there were those in the government, including the powerful DOD Assistant Secretary Richard Perle, that said it was to Russia's advantage to engage with us and that it would be militarily useful to the Soviets. Basically, he said it was a bad idea and he and the Secretary of Defense, Casper Weinberger were opposed.

You came to me to see what mischief I could do. Recently in my Reagan files I found a memo from Bob Gates – then number 2 at CIA and future Secretary of Defense – that said "Bill, although our evaluation was hurried, we can find no good reason not to go forward with the magnetic fusion project." I then gave my okay for the project and it was the only tangible product agreed upon at the first and historic Geneva Summit of 1985 between Reagan and Gorbachev. I was at the meeting, as you know, and I recall meeting Velihov who was wearing a Princeton tie. Interestingly, the resulting communiqué concludes with the sentence "The two leaders emphasized the potential importance of the work aimed at utilizing controlled thermonuclear fusion for peaceful purposes and, in this connection, advocated the widest practicable development of international cooperation in obtaining this source of energy, which is essentially inexhaustible, for the benefit for all mankind." By the way, I enjoyed our celebration

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with Velihov years later (with Nick and Chris pouring the vodka) when Velihov toasted us as the “fathers of ITER.” Indeed the three of us were the fathers of ITER – especially the two of you!

Another project I remember is the presentation you made to Joe Salgado and me on the reprogramming of DOE funds to start the Human Genome Project. As always, you explained it simply to me and I recall that you had a “3 x 5” chart made especially for me to explain the project. As I have read in other literature, the chart made was the first simplified concept of the Human Genome project and used the name “human genome” for one of the first times. I hope that this poster size briefing someday is placed in the Smithsonian – as your leadership at this early stage laid the foundation for one of the great achievements of mankind. Again, you threw deep.

The final project I recall with fondness is the Super Conductor Super Collider. You told me that one-third of the GNP was due to better understanding of the atom – so it was not a matter of whether we should do this, but rather when we would begin. I recalled briefing a Cabinet Council on this and got agreement. Richard Darman at the time said, “Bill I’ll give you the SSC, if you agree to my plan to double the size of the National Science Foundation funding.” Dick considered that “little” science and the SSC “big science”. I agreed and the next week at the full Cabinet meeting with Ronald Reagan you made the pitch and he agreed. Regrettably, after a good start, Bill Clinton cut funding in the 1990s or surely we would have been way ahead of our European competitors at CERN.

I know you had many other projects, but I think these three projects: ITER; Human Genome; and the SCC were among your most prominent. Recently, at the DOE I noticed that there are descriptions and models of these projects prominently displayed and described in the DOE historical exhibit as one enters the building. I dare say that no DOE team has achieved as much during the 1980s than the Harrington, Martin, Salgado, Trivelpiece team. Not only were scientific achievements on a global scale launched, but the Cold War ended and energy security brought a reduction of prices of more than \$15 per barrel. Not bad or as the French say, pas mal.

I hope your children and grandchildren will read my letter of testimony to you and I know that your partner in this endeavor, your late wife Shirley, was proud of her man. So is a grateful United States and world.

This letter has been too late in coming but dear friend, congratulations on remarkable achievements.



William F. Martin

Executive Secretary of the NSC and Special Assistant to Ronald Reagan (1982 - 1986)
Deputy Secretary of Energy (1986-88)