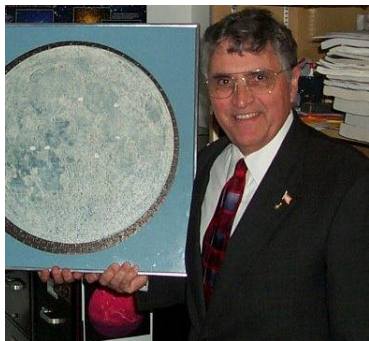


WITH Harrison Schmitt, *Geologist*



Harrison Schmitt, PhD is an American geologist, university professor, former NASA astronaut, and former U.S. Senator. He is the twelfth and last person to walk on the Moon. In August 1975, Schmitt resigned from NASA to seek election to the United States Senate representing New Mexico. He won and served one term. Since then he has been a consultant in business, geology, space, and public policy. Schmitt served as chair of the NASA Advisory Council, whose mandate is to provide technical advice to the NASA Administrator. He is currently adjunct professor of engineering physics at the University of Wisconsin – Madison. He is also the founder and serves as chairman of Interlune Intermars Initiative Inc., an organization whose goal is to advance the private sector's acquisition and use of lunar resources. Dr. Schmitt was a speaker at the Heartland Institute's 4th International Climate Change Conference held in Chicago May 16-18th, 2010. The Frontier Centre was one of 64 international co-sponsors of this event which profiled the work of 73 scientists, economists and policy experts from 23 countries.

Frontier Centre: Can you tell us a little about your professional background, specifically how you became interested in the climate change issue?

Harrison Schmitt: I'm a geologist and the climate has had an awful lot to do with geology. I guess that's where it all starts.

FC: For the record, has the Earth been getting warming over the last half century?

HS: The Earth has been getting warmer since the Little Ice Age and also for the last 10,000 years since the last major Ice Age. It depends on what proxies you use but since about 1660 the rate of increase has been about 0.5°C per hundred years. So yes, the Earth naturally has been warming through that time. Now it oscillates but the overall trend is to get slightly warmer. How long that will last I can't tell you. In the past it hasn't lasted forever.

FC: Which of the various theories that have been put forward to explain recent changes in temperatures do you find the most compelling?

HS: I think the correlations are strongest with solar activity. The one hypothesis that intrigues me is that as solar activity wanes so does the solar magnetic field and therefore we get more cosmic grey interaction and cloud formation in the Earth's atmosphere. That in turn will cause cooling because of reflective energy. That's a hypothesis and it will have to be tested and it is in fact being tested by some of the people here at this conference.

FC: In your opinion, do greenhouse gas emissions have any impact whatsoever on global temperatures or are they entirely irrelevant?

HS: Carbon dioxide and methane and water all of which are components of the atmosphere are indeed greenhouse gases. The question is: are there feedbacks that naturally prevent them from becoming extraordinarily adverse? There is no indication historically yet, in my estimation, that the increase in carbon dioxide that has resulted from human activity has yet had a measurable effect on global temperature. It still appears that natural processes, particularly solar activity, are the dominant influence. Again, we haven't been looking at it very long. From a geological point of view 100 years is not very long when you start to look at the history of the Earth.

FC: Canada and the United States are both considering enacting cap and trade policies to lower our national greenhouse gas emissions. Others have imposed a carbon tax instead. If such policies were enacted in the United States what would be the likely impact on global temperatures in the coming decades?

HS: I think there would be absolutely no impact. There is no scientific evidence that they would have any impact in the foreseeable future. But they would have a tremendous adverse economic impact, not only on our national economy but, on individuals within those economies. Taking that kind of step to raise taxes, to increase regulations, to reduce liberty I think would be a very, very serious mistake. Particularly in light that the science is hardly clear that this will have any effect whatsoever.

FC: You say there are big questions around the constitutional legality of cap and trade and regulating greenhouse gases in the United States. Could you elaborate?

HS: I think the Constitution is very clear. The Constitution of the United States of America was conceived as a limit on government power not a document that would give government infinite power over the people of the United States. Although it has been abused for the last 200 years in many ways, it still offers a very clear guidance on what the government should be working on and what it shouldn't and what the states should be working on and what they shouldn't. So I think the Constitution is a good place to start in determining whether or not government does have the power to regulate greenhouse gases or energy which are not mentioned in the Constitution.

FC: Does it have the power?

HS: It depends on whether it takes that power and whether the people allow it to have that power. Certainly if you look at the Constitution as a constraint it doesn't. But governments tend to take power unto themselves and that's what the founders were worried about. They saw government as necessary but very dangerous.

FC: Where do you see this whole thing going?

HS: I think the way it's trending right now is that, at least in the United States, the American people are waking up and getting educated. I think the election this year in Congress

will be an important milestone. We'll see if the people are awake enough about the loss of their liberty in various ways, not just climate, they are many other ways where liberty is being restricted. They may take their government back. We'll just have to wait and see not only in 2010 but in 2012.

FC: Do you see the Environmental Protection Agency regulating CO₂ in five years?

HS: I don't think so. I think that will be stopped.

FC: How about cap and trade?

HS: I don't think there will be cap and trade either. But I didn't think the healthcare bill would pass so... And if they do then there will have to be major constitutional challenges created in order to do something about it.

FC: Much has been said and written about the so-called Climategate leaked e-mail scandal. Some have described it as among the worst scientific scandals of

our time whereas others, like Al Gore, have dismissed it as completely irrelevant. Do you feel that the Climategate e-mails are important? If so, in what way?

HS: The e-mails illustrate for everybody to see what many in the climate community have known for a long time - that there is something rotten in that particular sub-discipline of science. That political beliefs have overwhelmed people's scientific rationale. That they have biased their data. They've biased what they've published and not published. And they've worked in order to prevent other people from publishing. The e-mails just document that. That's been known by the community for a long time. In that particular sub-discipline of science, namely climate science, needs to get control of itself and police itself much better than it has in the past. The Climategate e-mails just illustrate the severity of the problem.