

**The Week That Was: 2020-04-11 (April 11, 2020)**  
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**The Science and Environmental Policy Project**

**Quote of the Week:** *“In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual.”* – Galileo [International Space Hall of Fame]

In Memory



**S. Fred Singer (Sept. 27, 1924 – April 6, 2020)**

## **A Quest for Knowledge: Show me your best data. (physical evidence)**

Fred Singer's journey through physical science was marked by endless curiosity and the belief that physical evidence (data), not theory, were needed to resolve controversies in science.

At the age of 16 he tackled the difficult Maxwell Equations that are the foundation of electromagnetism, of which visible light is a part. Singer's Ph.D. thesis at Princeton was on then-poorly understood cosmic rays. His advisor was John Wheeler, who had worked with Niels Bohr in explaining nuclear fission with quantum physics. (All Wheeler's students were a very exceptional cadre, including the Nobel laureate Richard Feynman.)

Earlier, Bohr had a noted public dispute with Albert Einstein on quantum physics, after Einstein objected to the probabilistic view used, making precise prediction impossible. Bohr's views are generally accepted and the great admiration he and Einstein had for each other remained. This is an outstanding example of scientists disagreeing publicly, without personal accusations, which are too common today.

Singer was a pioneer in exploration of space, particularly the upper reaches of the atmosphere. He measured characteristics of cosmic radiation in the upper atmosphere, and discovered, or co-discovered, upper-atmospheric ozone, and the equatorial 'electrojet current' which intensifies the geomagnetic field. He predicted geomagnetic radiation, later discovered by Van Allen.

An example of Fred Singer's breadth as a scientist is his conceiving, defining, and then championing an approach to the eventual human exploration of Mars by using the gravity of Mars' moons Deimos and Phobos as a way station during descent to and ascent from surface of Mars. The lesser gravity of the moons reduces the propellants needed and associated costs.

Singer's concern with the earth and humanity was manifested in his establishing operational systems for gathering data by remote sensing of the atmosphere, oceans, and land surfaces, and his leadership as the first director of the National Weather Satellite Center.

His more than 400 technical publications and monographs and more than 200 editorials and articles include editing the book "*The Ocean in Human Affairs*" (1990). The book discusses that our planet is the only one in the solar system with liquid-water oceans, and in particular, how their importance in climate, evolution, and the preservation of life is frequently overlooked.

For example, about 3.5 million years ago plate tectonics closed the Central American Seaway between the Atlantic and the Pacific Oceans, changing ocean circulation and possibly setting up the current period of frequent glaciation in the Northern Hemisphere. These periods of glaciation are interrupted by brief warm periods, the latest one is the period in which now we are living.

Singer recognized that the most important greenhouse gas is not carbon dioxide, but water vapor, the changes in which are too often ignored. Without greenhouse gases, life on this planet would be far different, with most major land masses deeply freezing at night, making complex life on them nearly impossible.

Singer strongly believed that the principles of the scientific method should apply to environmental regulations, especially in eliminating error. In 1990, he formed the *Science and Environmental*

*Policy Project* to use the scientific method to evaluate environmental and energy policies. A number of distinguished scientists joined him in this effort.

Concerned that the UN was presenting a narrow, one-sided view of the extremely complex processes changing the earth's weather and climate, while ignoring the comprehensive temperature trends compiled from satellite data, in 2007 Singer formed the *Nongovernmental International Panel on Climate Change (NIPCC)* to counter the UN view that human emissions of carbon dioxide control climate.

Hundreds of scientists world-wide have participated in NIPCC reports especially in the last series: *Climate Change Reconsidered II; The Physical Science; Biological Impacts; Why Scientist Disagree about Global Warming; and Fossil Fuels*. These reports present extensive data that increasing concentrations of carbon dioxide have an important role in increasing biodiversity and the observed greening of the earth, while have only a minor role altering the planet's temperatures. Nature, natural variation, dominates. All the reports were published by *The Heartland Institute*.

As a sidelight that demonstrates his wide interest in civilization, Singer gave lectures on the ancient languages of the Mid-East, showing parallels in ancient languages such as ancient Greek, Phoenician and other Semantics languages.

Those who knew him will always remember his brilliant, inquisitive mind and his humanity. In the summer of 2019, with his 95th birthday approaching, over 150 professional scientists signed a document reading:

*"We, the undersigned, write to express our deep gratitude for your outstanding leadership in the field of climate science over many decades. We are greatly indebted to you. You have been the 'mentor' to many of us. From you we have learned not only science, but patience and endurance in dealing with others. With praise, affection and love, we say: Thank you, Dr. Fred Singer."*

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### **A Tribute to Fred Singer**

By his friend, William Happer

11 April 2020, Princeton, New Jersey

Fred Singer has fought the good fight, he has run the race, he has kept the faith. Now history will judge him. As the years pass, I am confident that Fred's positive contributions to his generation will be more and more widely appreciated.

Fred did not have an easy journey through life. What he achieved was due to his own intelligence and indomitable spirit. He had no powerful family or patrons. This never bothered him, perhaps because he made so many friends who admired his pluck.

Although he was subject to more than his share of unjust abuse, Fred did not seem to hold grudges. Few of us can forgive and forget the way Fred did.

It seems appropriate to close this brief farewell to Fred with tribute I wrote to honor his 90<sup>th</sup> birthday.

“It is an honor for me to write a few words on the occasion of Fred Singer’s 90<sup>th</sup> birthday. Fred is a fine scientist, a person of great courage, unflagging optimism, and enormous energy.

As an adolescent, Fred Singer escaped Nazi rule of his native Austria. He first found refuge in England. He reached his adopted homeland, the United States of America in the 1940’s, in time to attend graduate school at Princeton University, where he earned a PhD in physics for work on cosmic rays. His thesis advisor, John Wheeler, was a student of Niels Bohr. John Wheeler made important contributions to the development of the hydrogen bomb.

Fred’s PhD dissertation was on cosmic rays that bombard our earth from outer space. And Fred has maintained a lifelong interest in the atmosphere, space and space exploration. He helped to design the first earth observation satellites, including instruments to measure atmospheric ozone. In the past few years, he has focused on how the rates of temperature change depend on altitude in the atmosphere, a particularly awkward area for climate models, which predict much more warming in the mid troposphere than is actually observed. He has also published interesting papers on the origin of the moons of Earth and Mars. On the side, Fred has accumulated expert knowledge of an amazing number of topics – “of shoes and ships and sealing wax, of cabbages and kings.” On one visit to Princeton, Fred introduced me to his old friend, Ephraim Isaac, a distinguished scholar of ancient Semitic languages. Ephraim was born in Ethiopia and received much of his early education there. Fred more than held his own in a debate with Ephraim about three-consonant root words of ancient Akkadian, a Semitic language that has been extinct for several millennia.

Scientists and academics like to boast about their cool objectivity, but in fact, independent thought can come at a high price that few are prepared to pay. According to Plato, Socrates was the “gadfly” of ancient Athens. Fred has been an effective gadfly of the scientific establishment of our generation. A few years after getting to know Fred, during my time as Director of the Office of Energy Research at the US Department of Energy, I invited Fred to give a colloquium on global warming at Princeton University. When the announcement of Fred’s colloquium was published, a Nobel-prize-winning physicist colleague walked into my office and upbraided me with obscene words that I was surprised he knew. This rather diminished my respect for my colleague, who knew almost nothing about the physics of climate, and increased my respect for Fred.

Many academics are frustrated “philosopher kings,” embittered because society at large does not give them the reverence they think they deserve. Perhaps as a response to this, many look inward, associating only with like-minded academics and treating the rest of society with contempt and even hatred. Group-think is prescribed on various subjects. Academic groupies deplore Fox News, praise the New York Times, and are certain that the continued use of fossil fuels will destroy the planet. It is a rare academic who knows even a fraction of what Fred knows about

climate science, but the groupies have a frenzied certainty that Fred's views on climate are wrong. All of their friends agree with them. It reminds me of Hans Christian Andersen's story about the Emperor's new clothes: "Not only were their colors and patterns uncommonly fine, but clothes made of this cloth had a wonderful way of becoming invisible to anyone who was unfit for his office, or who was unusually stupid." Like many of the rest of us, Fred has had difficulty seeing the new climate clothes that are sacred dogma for the groupies. He has been viciously attacked for pointing out the problems with climate dogma. To his credit he successfully sued one particularly libelous henchman of Al Gore for character defamation. To quote a proverb in Fred's mother tongue, "Mehr Feinde, mehr Ehre," more enemies, more honor.

For many years Fred has informed fellow citizens about developments in climate science with a regular newsletter, "The Week That Was." I still look forward to this newsletter, that include references to new scientific findings related to climate, policy issues related to climate change, and comments by Fred himself and his fellow editor, Ken Haapala. There are many good newsletters and blogs on climate, but "The Week That Was," is exceptional in its stress on sound science. What else would you expect from Fred, an academic grandson of Niels Bohr?

Fred's life is summarized very well by an old folksong, sung by brave anti-Nazi Germans:  
Die Gedanken sind frei, wer kann sie erraten?  
Sie fliehen vorbei, wie naechtliche Shatten.  
Kein Mensch kann sie wissen, kein Jaeger erschiessen,  
Mit Pulver und Blei, die Gedanken sind Frei.

Thoughts are free, who can figure them out?  
They fly past, like the shadows of the night.  
No man can know them, no hunter can shoot them  
With gunpowder and lead; thoughts are free."

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### **Reflections on a Scientific Giant and My Friend, Fred Singer**

By Joseph Bast, The Heartland Institute, Apr 7, 2020

My condolences and deepest thanks go out to Rocky and the staff at the Rockville Nursing Home who took such good care of Fred for the past few years. Diane and I saw it first-hand during our visits to Fred last year. Fred was such a wonderful person, so kind and wise, witty and considerate of others, that everyone who met him knew they were in the presence of a special person, even when they didn't know he was a world-renowned scientist and prominent public intellectual.

Fred Singer was a giant in the field of climate science. His careers in government, the academy, and then in think tanks gave him a breadth of knowledge and experience that mere specialists invariably lack. Most physicists, for example, focus on the behavior of clouds and cosmic rays while neglecting the bigger picture of biological feedbacks, economics, and politics. Most economists focus on cost-benefit analysis and forget that people don't care how much fire extinguishers cost when their house is on fire. Fred understood the physics, biology, economics, and politics of climate change and much, much more. In a dozen books and hundreds of articles he explained virtually every aspect of the climate change issue in terms sophisticated enough to be published in the leading peer-reviewed science journals and so plain-spoken that he could appear in The Wall Street Journal and online at American Thinker.

To me, Fred was a mentor, a true scientist and teacher, and a friend. I first worked closely with him and Dennis Avery on a revised edition of *Unstoppable Global Warming: Every 1,500 Years* in 2007. We discovered, to both our surprise I'm sure, that our patterns of thought and expression were so similar that we made an excellent team. We could, as is said, finish each other's sentences. That partnership led to *Nature, Not Human Activity, Rules the Climate* in 2008, then five volumes in the Climate Change Reconsidered series, and ending with a revised edition of *Hot Talk, Cold Science* (in production).

Fred Singer's contribution to the international debate over climate change cannot be overstated. He was a pioneer, one of the first and most prominent scientists to debate his fellow scientists and criticize the false and exaggerated claims of environmentalists and politicians who claimed to be experts on the subject. Where others stayed silent out of fear of retaliation by activists in government and in universities, Fred was utterly fearless, willing to take the slings and arrows of critics in order to defend real (not political) science.

In addition to being a prolific writer himself, Fred encouraged countless others to write and speak out on the controversial subject of climate change. He was always available to comment on other people's work and to encourage them to submit their work to academic journals or to work with think tanks that would publish and promote their ideas. He had a unparalleled international network of scholars with whom he corresponded frequently, the basis for what became the Nongovernmental International Panel on Climate Change (NIPCC).

For several years, Fred Singer almost single handedly sustained a debate over whether or not enough is known, or can be known, about the causes and consequences of climate change to justify the regulations and taxes being proposed by many partisans on the left. Thanks to his example, integrity, leadership, and generosity, he soon was not a lone voice in the debate, but instead created a movement — call it climate realism — that today dominates informed (if not academic) discussion of climate change. That perspective, now embraced by President Donald Trump and most Republicans in the United States, is saving countless lives and fueling global prosperity.

God bless you, Fred Singer. May you rest in peace knowing you changed the world for the better and left behind generations of thinkers and doers inspired by your example and nurtured by your friendship.

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### **We grieve the loss of Dr. S. Fred Singer**

By Michael Limburg, European Institute for Climate and Energy (EIKE)

(Translated, edited by P. Gosselin), No Tricks Zone, April 8, 2020

Yesterday, our mentor and good friend, the outstanding scientist S. Fred Singer passed away — peacefully and quietly at the age of 95. Without the constant encouragement we received from this outstanding scientist from the very beginning, the founding of EIKE and our commitment to the dissemination of the scientific facts on climate change would not have been possible here in Germany.

### **Distinguished career spanning 7 decades**

Dr. Singer was the keynote speaker at our very first Climate Change Conference in Berlin in 2007 at the premises of the Institute for Entrepreneurial Freedom (IUF) on May 30, 2007, immediately

after our founding. And he remained loyal to us in all subsequent years, even though in recent years his physical condition made the long journeys from his home in Virginia increasingly difficult.

But his unrestrained desire not to let science degenerate into a water-boy for politics, which was particularly evident in the increasing appropriation of environmental science by politics, allowed him to marshal all the strength his body could muster.

Fortunately for us all, he was able to do so for almost one and half decades. No one would have been more predestined than him to see exactly this monopolization, because he came directly from science and always worked there in outstanding positions. A short and partial look at his extraordinary curriculum vitae shows.

### **Father of U.S. weather satellites**

His scientific work has also been published over 200 times in leading scientific journals. In 1954, President Eisenhower even awarded him a special prize from the White House for his work.

Without any exaggeration it can be said that S. Fred Singer can be called the father of the US weather satellites. Atmospheric physics was his domain.

### **Politicization of science “highly dangerous for democracy”**

Because he saw that the emerging environmental movement was striving for a symbiosis with politics in particular, which was highly dangerous for democracy, he founded the Science and Environmental Policy Project (SEPP) in 1990 and the Nongovernmental International Panel on Climate Change (NIPCC) in Vienna in 2008. Both institutions were active in the collection and dissemination of scientific facts, against the increasing ideologization of the environmental idea – and the emerging panic-mongering about supposedly man-made climate change.

### **Over 200 scientific publications, wealth of books**

A wealth of scientific books (*Climate Change Reconsidered*, or *Unstoppable Global Warming, Every 1,500 Years*, together with Dennis Avery) and many works written during this fruitful period, many of them with the support of [Independent Institute] and Heartland and [distributed by] CFACT, bear eloquent witness to this.

### **Escaped Nazi Germany, “unspeakable cruelty”**

Our friend, my good friend S. Fred Singer, was also a living example of the unspeakable division and cruelty our continent saw in the last century. Born in Vienna in 1924 as the child of a Jewish family, he left his home country at the early age of 14 after the annexation of Austria by Nazi Germany in 1938, fled first to the Netherlands, where he was apprenticed to an optician, and from there emigrated further via England to the USA.

After serving in the U.S. Navy, Fred received a degree in electrical engineering at Ohio State University and a doctorate in physics at Princeton. In addition to English, Fred spoke German, Swedish and Dutch.

### **Defamed by environmental activists who spread lies**

However, neither his resume nor his extraordinary scientific merits kept the growing opposition from the green-left camp from attacking him using unspeakable defamation and lies instead of scientific debate. The German WIKIPEDIA issue offers readers an example of this. Among other

things, the lie is repeated that Singer would have let himself be bought by the tobacco lobby because he – himself a lifelong non-smoker and chairman of a non-smoker’s association – had truthfully stated that the carcinogenic effect of passive smoking could not have been scientifically proven.

My last e-mail contact with him is dated October 8, 2019, when we, the board of directors of EIKE, congratulated him on his 95th birthday. We didn’t get an answer to that, his mind was still alert, as we know, but his body refused to go on.

Farewell, good old friend, rest in peace. You have done so much for this society. I am very proud to have had you as my friend.

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### **Book Dedication**

*“Scared Witless: Prophets and Profits of Climate Doom,”*  
By Larry Bell (2015)

This book is dedicated most particularly to Dr. Fred Singer, along with tens of thousands of other highly principled researchers and writers who are passionately committed to high standards of science essential to restore badly compromised public trust.

Courageous willingness to challenge ideological orthodoxy and politically-driven policy agendas impose severe risks and costs. Included are character assassinations – accusing those who speak out as “climate change deniers” who don’t care about the environment; false branding as shills for Big Oil, tobacco companies or other non-existent sponsors; severe professional career penalties including unwarranted exclusions of significant research findings by scientific journals; lost research funding and promotion opportunities; employment terminations, and sometimes, even threats upon their personal safety and lives.

Dr. Singer, one of the world’s most distinguished astrophysicists [atmospheric physicists], is an exemplary hero to those of us who honor his unwavering commitment and enormous contributions to advance honest and informed science. In doing so, he has often fearlessly and effectively challenged the orthodoxy, just as open inquiry and adherence to sound scientific methods demand. Yes, and he has paid the price for such audacity, responding to disparaging attacks with quiet dignity and well-reasoned factual rebuttals.

Fred Singer generously honors me as well; this is made evident through his unfailing willingness to cross-check my article facts and frequently challenge my punctuation decisions. Here again he is also unfailingly correct in both regards.

Dear friend, thank you.

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**Fred Singer — A giant of science has passed**  
By Craig Rucker, CFACT, April 7, 2020

It is with a heavy heart that we at CFACT share sad news with you today.



Dr. S. Fred Singer, a giant in the field of science and a good CFACT friend, passed away quietly yesterday at the age of 95.

His loss will be deeply felt not just by myself and those of us at CFACT, but by all of our friends and allies engaged in the cause of promoting sound science and liberty.

Dr. Singer's accomplishments are truly legendary, but his life wasn't always easy. Born to a Jewish family in Austria in 1924, Fred had to escape with his life as a young boy to England when Adolf Hitler invaded the country in 1938. During the war, he immigrated to the U.S. where he joined the U.S. Navy, later obtaining a Ph.D. from Princeton. From there his years were to be marked by a number of high achievements.

Among these would include serving in the U.S. Embassy in London as a scientific liaison officer (1950-53), serving as one of 12 members of the American Astronautical Society of the nation's top 300 scientists (1954-56), director of the Center for Atmospheric and Space Physics, University of Maryland (1953-62); first director of the National Weather Satellite Service (1962-64); founding dean of the School of Environmental and Planetary Sciences, University of Miami (1964-67); deputy assistant secretary for water quality and research, U.S. Department of the Interior (1967-70); deputy assistant administrator for policy, U.S. Environmental Protection Agency (1970-71); vice chairman of the National Advisory Committee for Oceans and Atmosphere (NACOA) (1981-86); and chief scientist, U.S. Department of Transportation (1987-89).

Dr. Singer was also published over 200 times in leading scientific journals, and even received a White House Special Commendation award by President Eisenhower in 1954 for his work.

Yes, he was a remarkable man. But he was also a humble man.

When David Rothbard and I met him in the late 1980's, Fred was already becoming controversial for his outspoken criticism of many far-Left Green crusades. I recall sharing the podium with him at a "food irradiation" press briefing in Washington in 1988. He and I were on the same side, naturally, supporting the technology (though to this day it has not actually been realized). After that briefing, David and I got together with him and began to get to know him better through infrequent lunches and meetings that took place near his office in Fairfax, Virginia.

During those get-togethers, Fred would often express his concern that "junk science" in the name of environmentalism was infiltrating his field of science. This was a great concern for him – as it was for us. A bond was formed. For the remainder of his life, Fred would commit himself to fighting back to protect his cherished profession from those who would soil it for political purposes. He invited us to take part in his campaign.

Like two hobbits commissioned by Gandalf, we eagerly accepted the quest.

In 1990, Fred established the Science and Environmental Energy Project (SEPP). This was to become his baby to push back against climate alarmism. We at CFACT worked closely with SEPP many times through the years, sharing many adventures.

In 2001, Fred helped us organize a student protest against the Kyoto treaty right in Bonn, Germany at COP 6. This event, which brought 50 students from around the nation together,

garnered huge media and led to the creation of CFACT's Collegians program on American campuses.

In 2003, Fred helped us organize another briefing, this time in the Austrian parliament to challenge climate alarmism. He also took us around his hometown and showed us the sites! In 2009, Fred worked with CFACT to conduct a series of briefings in Germany, Denmark and the EU parliament to try and convince European leaders to avoid recrafting a Kyoto II agreement. Again, a big media hit.

In 2015, Fred flew over to attend the "red carpet" premier of Climate Hustle in Paris, France — an event that also received much media attention and was even protested by climate activists.

Our last joint project of sorts was when Marc Morano and I presented Dr. Singer with CFACT's "Dauntless Purveyor of Climate Truth" lifetime achievement award in 2018. Despite all his accomplishments, he seemed actually touched by this humble acknowledgement on our part to try and say "thank you" for all he has done. When we saw him at his 95th birthday party this past October, he still had it placed near his bed at his care center in Maryland. We were touched.

So how can one sum up our deep respect and feelings toward this man who was an incredible inspiration and kind friend? Not easily. He was a person that almost defies words. We could say that he was warm, good humored, kind, and spunky ... but he was also deeply intelligent and wise. He would no doubt want us to carry on his fight, and that we intend to do.

Thank you, Fred, for the leadership, inspiration and courage you've given our freedom movement. But thank you even more for the memories we've shared and the adventures we've had through the years working together.

Rest in peace, dear Gandalf.

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**Dr. S. Fred Singer, R.I.P.**

By James Taylor, The Heartland Institute, Apr 7, 2020

Atmospheric physicist S. Fred Singer, one of the true giants of modern-day science, passed on last night at the age of 95. Singer's impacts on the world of science will live on long after this generation also passes on.

A summary of his scientific accomplishments would take hours to read. A few of the highlights include pioneering earth observation satellites in the early 1960s, creating the National Weather Bureau's Satellite Service Center, serving as the founding dean of the School of Environmental and Planetary Sciences at the University of Miami, serving as the chief scientist for the U.S. Department of Transportation, and serving as deputy assistant administrator at the U.S. Environmental Protection Agency. [See his long and impressive bio on Heartland's website here.]

Supplementing those and many other accomplishments, Singer was a leading voice for realism regarding global warming. Singer founded the Science & Environmental Policy Project to address climate change issues. He authored dozens of books and studies regarding climate change issues. His 2006 book, *Unstoppable Global Warming, Every 1,500 Years*, coauthored with Dennis Avery,

was one of the most influential and widely read climate science books ever written. His work with the Nongovernmental International Panel on Climate Change (NIPCC), for which he served as lead author of the *Climate Change Reconsidered* series of comprehensive climate science summaries, was instrumental in providing authoritative scientific support for climate realism.

For many, Singer will be most remembered for his annual appearances at The Heartland Institute's International Conference on Climate Change (ICCC) events. Singer not only gave compelling science presentations at the climate conferences, but he became an influential mentor to attending scientists and a beloved friend to Heartland Institute staff, conference attendees, and fellow scientists.

The field of science will miss Fred Singer very much, as will the many, many people who were fortunate enough to get to know the man.

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### **Sampling of Comments SEPP Received:**

Fred Singer has gone.

We have all lost a great man who was a great scientist and an immense human benefactor. I and many others have lost a good friend.

I value the memories of Fred reminiscing about his work to get V2 rockets from Germany to America, his work with Van Allen to discover the radiation belts, how he established the first weather satellites, and etc. I treasure the joy of the car journey when Fred, Gerd Rainer Weber and I shared jokes and laughs on our way to conduct a successful public meeting at an IPCC COP [Conference of Parties]. I consider it to be a great compliment that the egregious Michael Mann called me "One of Fred Singer's Hired guns", but Fred did not hire anybody because he did not need to and he lacked funds to do it: the honour of working with Fred was more reward than any payment could have been..

Shalom Fred.  
Richard Courtney, UK  
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Fred was a gentleman in this era of demonization. He had called a couple of months ago, but I was unable to understand him and help him with his questions. He always was a questioning fellow - as a good scientist should be. We shall miss him.

John Christy,  
Director, Earth System Science Center  
Professor, Atmospheric Science  
Alabama State Climatologist  
The University of Alabama in Huntsville  
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Fred was a trailblazer in several areas, including in my very first claim to fame: He gathered and published the first aircraft-based microwave radiometer measurements to explore the possibility of precipitation measurements from space.

As John said, a finer gentleman we will never see again in our business.

Roy Spencer  
National Space Science and Technology Center  
The University of Alabama in Huntsville  
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We have had a great loss. I have had the honor of hearing presentations by Dr. Singer as well as having dinner with him on a few occasions. Magnificent scientist and delightful person.

Jim Peacock  
Acting Chairman of The Right Climate Stuff (TRCS) Team  
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Fred was the epitome of open-mindedness, imagination, honesty and courage.  
Richard Lindzen, MIT, Professor emeritus  
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Many thanks for the very sad news  
On the other hand, What a Life Fred had  
and What Wonderful Achievements in Science  
and What Deep Inspiration to Others.

Yes, it will be a Terrible Hole in Science  
which no one can fill

but All His Wonderful Work will Remain  
for years and years to come

A Good Man is Gone  
and this is very Sad

We will miss Him very much

“Niklas” in morning

Nils-Axel Mörner  
Former head of the paleogeophysics and geodynamics department at Stockholm University.  
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His thesis discussed extensive cosmic ray air showers.

Although Wikipedia hated him for his stance on Global Warming, they provide a reasonable summary of his many accomplishments.

Many of us remember Fred from his visit to Portland a few years ago. He came to speak at the invitation of a professor of physics at Portland State University. But PSU did everything they could to make it difficult for him to give his talk, including "losing" his Power Point presentation and being very disrespectful towards him. I was able to retrieve a copy of his presentation from my email as he was standing on stage. The graduate students who were supposed to help him just snickered. Fred carried on as though nothing had happened.

Everyone who knew Fred will miss him. He was quite a scientist and quite a character.

Gordon J. Fulks, PhD  
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RIP: Award-Winning Atmospheric Scientist Dr. Fred Singer Dies – Pioneering Scientist & The Dean of Climate Skeptical Scientists

I have known Fred Singer for almost two decades. He was as kind as he was brilliant. He had an encyclopedic knowledge of people, facts, institutions, and science. I was honored to be his friend and attend Fred's 95th birthday in the fall of 2019. In 2018, Craig Rucker and I presented Fred CFACT's 2018 "Dauntless Purveyor of Climate Truth" Lifetime Achievement Award. I traveled with Fred to the UN Paris climate summit in 2015 and we met up at many international destinations to fight the UN's corruption of climate science. My condolences to Fred's family and my condolences the world of science. You lost a great one. Rest in Peace Fred, you earned it. Cheers to an honorable man of science and a life well-lived. You will be missed Fred.

Marc Morano, Climate Depot.  
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I forget if I mentioned it, I first began corresponding with Dr Singer in 2005, at the time when I was challenging the mayor of Seattle about the logic of battling AGW, and I wanted Dr Singer to confirm what I heard about my Viking ancestors living in Greenland during the MWP. In 2009 when Dr Singer came to Phoenix to visit the Idsos, he asked if I could arrange for meetings with local elected officials and at Senators McCain's and Kyle's office. As further proof that he was not swimming in Exxon money, Dr Singer asked me if I could drive him from the hotel to the airport to save the cost of a taxi fare. Not every day that an ordinary citizen like me gets to chauffeur an internationally famous person like him - it's a cherished memory. Al Gore and his mob disliked Dr Singer for a very specific reason.

Russell Cook  
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I met Fred Singer many years ago at a Heartland Conference. I believe he was a great American and a great scientist who did not hesitate to run against the crowd. I wonder who will take his place. Maybe he is one of those irreplaceable people God has raised up for a particular time.

Jim Hollingsworth, Idaho  
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Thank you for sending the sad news of Fred's passing. He was, and remains, an inspiration to me. It was my great fortune to have known him. Please pass on my condolences to his family.

Charles Battig, MD  
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Fred had one of the greatest minds of the past century and was one of its most accomplished scientists.

Adam Wildavsky, Zurich, author and software engineer including Google Earth  
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So sorry to hear this. Fred's book was the first thing I read when I started my journey of researching global warming/climate change prompted by Al Gore's pronouncements about 17 years ago. Terrible loss.

Jerry Katell

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I learned of Fred's death first from a message from Vijay Jayaraj, our man in India, who read of it on Climate Depot. I'll be writing a tribute to him for Cornwall's blog. He was one of the kindest, most brilliant, most generous men I've ever known and had a huge impact on me personally. Truly one of the greats of science—and a huge loss to the field.

In Christ,

E. Calvin Beisner, The Cornwall Alliance for the Stewardship of Creation

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Fred Singer was indeed wonderful in so many ways, including his ability to carry on despite constantly shabby treatment from climate fanatics. That may have been why they hated him so much. He was a great scientist who rarely displayed any anger towards those who treated him badly.

Sad to hear of Fred's passing. He will be sorely missed and my thoughts to all at SEPP and to his family.

He was helpful to me a few years back in getting a piece published at Energy and Environment and I appreciated his comments.

Kind Regards

Dennis Ambler (UK)

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YES, God bless this wonderful man!

Gordon Fulks (Again)

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Gordon: I second everything you said. Fred Singer was a very intelligent, practical scientist, who used his skills in the ways he knew could make a difference. And like you, he preferred to work with real experimental data to validate scientific opinion and conjecture, not just theoretical assumptions that have not been validated with real data.

This is something that has been lost in today's world of corrupted climate science, where most of the participants hide behind failed models that have no hope in the near term to ever be able to accurately predict the earth's climate, but yet, they represent them as though they have this predictive skill and use the results to scare the public into submission into feeling carbon taxes and other such atrocities are necessary to "cure" a problem which has only been "proven" to exist with falsified data and records. And then these disgusting individuals want monetary rewards as they all pat themselves on the back and declare among each other that they have all done a wonderful job in helping humanity save itself from the fake disaster they proclaim from the failed models is coming....just give it another 50 years.

Climate science is in a disgraceful state, and Fred Singer tried as best he could to keep the climate cabal honest.

Chuck Wiese

Meteorologist

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Thanks for your thoughtful encomium of Fred Singer.

I have a couple of fond memories of Fred Singer. As Lorraine Yapps Cohen says “way back when Roger (Cohen) and some others had spoken at meetings of the Lynceans about global warming...” Having been one of the “others”, I was fortunate to meet Fred both before and after his talk to the Lynceans during which, I remember, a couple of impertinent whippersnappers from Scripps Institution sought to accuse Fred of “cherry-picking data.” He disposed of them swiftly. Over one lunch, I remember he put me on the spot a couple of times in his quiet way.....but, a pragmatist, he was happy to welcome me as a financial supporter of his Science and Environmental Energy [Policy] Project.

As others have noted, a giant has passed.

Hugh Kendrick, degrees in mechanical and nuclear engineering from the Imperial College of Science and Technology, the California Institute of Technology, and the University of Michigan.

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