

CREATING CLOUDS TO STOP GLOBAL WARMING COULD WREAK HAVOC

Doyle Rice, USA TODAY Published 4:43 p.m. ET Jan. 22, 2018 | Updated 7:45 a.m. ET Jan. 23, 2018

<https://www.usatoday.com/story/tech/science/2018/01/22/creating-clouds-stop-global-warming-could-wreak-havoc/1054026001/>

The U.S. government office that oversees federally funded climate research has recommended studies into two areas of geoengineering research, marking the first time scientists in the executive branch have formally called for studies in the controversial field. USA TODAY

To counteract global warming, humans may someday consider spraying sulfur dioxide into the atmosphere to form clouds — and artificially cool the Earth.

The idea behind the process, known as geoengineering, is to keep global warming under control — with the ideal solution still being a reduction in the emissions of greenhouse gases.

However, suddenly stopping that spraying would have a "devastating" global impact on animals and plants, potentially even leading to extinction, according to the first study on the potential biological impacts of climate intervention.

"Rapid warming after stopping geoengineering would be a huge threat to the natural environment and biodiversity," said study co-author Alan Robock of Rutgers University. "If geoengineering ever stopped abruptly, it would be devastating, so you would have to be sure that it could be stopped gradually, and it is easy to think of scenarios that would prevent that."

Rapid warming forced animals to move. But even if they could move fast enough, they might not be able find places with enough food to survive, the study said.

"Plants, of course, can't move reasonably at all. Some animals can move and some can't," Robock said.

If stratospheric climate geoengineering is deployed but not sustained, its impacts on species and communities could be far worse than the damage averted.

While animals would be able to adapt to the cooling affects of the spraying, if it's stopped the warming would ramp up too fast for the animals to keep up.

Researchers in the study used computer models to simulate what would happen if geoengineering led to climate cooling and then what would happen if the geoengineering stopped suddenly.

Starting geoengineering then suddenly stopping it isn't necessarily far-fetched.

"Imagine large droughts or floods around the world that could be blamed on geoengineering, and demands that it stop. Can we ever risk that?," Robock said.

The idea behind this type of geoengineering would be to create a sulfuric acid cloud in the upper atmosphere that's similar to what volcanic eruptions produce, Robock said. The clouds, formed after airplanes spray sulfur dioxide, would reflect solar radiation and thereby cool the planet.

Geoengineering takes its cue from the natural experiment that actually had made the only recent dent in global warming's rise in the last few decades — the 1991 eruption of Mount Pinatubo in the Philippines, which blasted more than 15 million tons of sulfur dioxide 21 miles high, straight into the stratosphere.

The stratosphere suspended those sulfur particles in the air worldwide, where the haze they created scattered and reflected sunlight away from the Earth and cooled global atmospheric temperatures nearly 0.7 to 0.9 degrees Fahrenheit in 1992 and 1993,

before finally washing out, according to NASA's Goddard Institute for Space Studies estimates.

But the airplanes spraying the sulfur dioxide would have to continuously fly into the upper atmosphere to maintain the cloud because it would last only about a year if spraying stopped, Robock said. The airplane-spraying technology may be developed within a decade or two, he added.

As detailed in the 2016 Paris climate change agreement, the world's nations have pledged to ensure that global warming stays well below 3.6 degrees above industrial levels.

This method of geoengineering is one of two primary ways humans could counteract man-made climate change, with the other being trying to remove the carbon dioxide that's already in the atmosphere.

Both procedures remain theoretical and untested at this point.

The study was published in the peer-reviewed British journal Nature Ecology & Evolution.

HISTORY OF WEATHER MANIPULATION:

100 years of patents reveal secret history of U.S. weather control programs

Thursday, July 30, 2015 by: J. D. Heyes

https://www.naturalnews.com/050589_geoengineering_patents_weather_control.html

Have the U.S. government and American researchers been toying with the notion of controlling, changing or otherwise adapting the weather? According to this comprehensive and exhaustive list of patents, the answer is yes.

EXTENSIVE LIST OF PATENTS

<http://www.geoengineeringwatch.org/an-extensive-list-of-patents/>

For anyone doubting the existence of the phenomenon of geoengineering/weather modification, please take a minute to read through this extensive list of patents from America on equipment and processes used in just such programs. The evidence is clear.

United States Patent and Trademark Office

WEATHER MODIFICATION HISTORY

<https://weathermodificationhistory.com/>

The most comprehensive Weather Modification and Geoengineering Timeline

Check out our features, maps, and educational resources.
See The Timeline or see all entries!

"Those who forget the past are doomed to repeat it."

Welcome to Weather Modification History (WMH), the world's most comprehensive weather control archive with hundreds of verified historical facts, images, and videos. WMH's compelling evidence is easy to browse, exceedingly accurate, and encyclopedic in scope. This website was crafted by dedicated individuals to help you discern fact from fiction with meticulously organized research that offers the activist community a credible compendium.

Weather Modification History was created to inform the public of the extensive history of weather modification experiments. Our goal is to increase public awareness and debate about the moral and legal implications of today's multi-billion dollar weather control industry and the coming global governance of sunlight-blocking geoengineering schemes. This website will empower you to take action and raise awareness of the little known but lengthy history of weather modification and the men who dare attempt it.

THE HISTORY OF HUMAN WEATHER MODIFICATION

<https://www.youtube.com/watch?v=f8HwK2tDL4Y>

The Daily Conversation

Published on Oct 5, 2015

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From "Cloud Seeding" to hurricane dissipation, this is the history of human weather modification.

Human Weather Modification Attempts

https://en.wikipedia.org/wiki/Weather_modification

Fog Dispersal

https://en.wikipedia.org/wiki/Fog_Investigation_and_Dispersal_Operation

Cloud Seeding

https://en.wikipedia.org/wiki/Cloud_seeding

Project Stormfury

https://en.wikipedia.org/wiki/Project_Stormfury

Operation Popeye

https://en.wikipedia.org/wiki/Operation_Popeye

<https://news.google.com/newspapers?nid=1873&dat=19740519&id=cPYeAAAAIBAJ&sjid=e8wEAAAAIBAJ&pg=2123,1135294&hl=en>

Weather Warfare Banned

https://en.wikipedia.org/wiki/Environmental_Modification_Convention

Nuclear Rain

<http://www.telegraph.co.uk/news/worldnews/1549366/How-we-made-the-Chernobyl-rain.html>

Worldwide Weather Modifiers

<https://www2.ucar.edu/news/weather-modification-multimedia-gallery>

China's Weather Army

<http://www.latimes.com/world/la-fg-rain31jan31-story.html>

<https://www.theguardian.com/world/2009/nov/02/china-snow-beijing>

Stormclouds Out of Thin Air

<https://news.nationalgeographic.com/news/2011/01/110118-abu-dhabi-desert-rain-cloud-seeding-controversy/>

<http://www.dailymail.co.uk/sciencetech/article-1343470/Have-scientists-discovered-create-downpours-desert.html>

GeoEngineering Map:

http://www.etcgroup.org/sites/www.etcgroup.org/files/files/cartoons/worldofgeoengineering_fullsize.jpg

HISTORY CHANNEL DOCUMENTARY ON WEATHER MODIFICATION

<https://www.youtube.com/watch?v=epsINUpui7Q>

Geo Engineering

Published on Feb 18, 2017

The National TV History Channel Finally Admits And Produce An Entire Show Dedicated To GeoEngineering, Chemtrails And Weather Modification!

WEATHER WARFARE DOCUMENTARY (HISTORY CHANNEL)

<http://www.dailymotion.com/video/x24mu8u>

3 years ago

weatherwarfare Weather Warfare Follow

This documentary is for educational purposes only.

WEATHER CONTROL AS A COLD WAR WEAPON

In the 1950s, some U.S. scientists warned that, without immediate action, the Soviet Union would control the earth's thermometers

By Matt Novak

smithsonian.com

December 5, 2011

<https://www.smithsonianmag.com/history/weather-control-as-a-cold-war-weapon-1777409/?q=>

On November 13, 1946 pilot Curtis Talbot, working for the General Electric Research Laboratory, climbed to an altitude of 14,000 feet about 30 miles east of Schenectady, New York. Talbot, along with scientist Dr. Vincent J. Schaefer, released three pounds of dry ice (frozen carbon dioxide) into the clouds. As they turned south, Dr. Schaefer noted, "I looked toward the rear and was thrilled to see long streamers of snow falling from the base of the cloud through which we had just passed. I shouted to Curt to swing around, and as we did so we passed through a mass of glistening snow crystals! Needless to say, we were quite excited." They had created the world's first human-made snowstorm.

After the experiments of G.E.'s Research Laboratory, there was a feeling that humanity might finally be able to control one of the greatest variables of life on earth. And, as Cold War tensions heightened, weather control was seen by the United States as a potential weapon that could be even more devastating than nuclear warfare.

In August of 1953 the United States formed the President's Advisory Committee on Weather Control. Its stated purpose was to determine the effectiveness of weather modification procedures and the extent to which the government should engage in such activities. Methods that were envisioned by both American and Soviet scientists—and

openly discussed in the media during the mid-1950s— included using colored pigments on the polar ice caps to melt them and unleash devastating floods, releasing large quantities of dust into the stratosphere creating precipitation on demand, and even building a dam fitted with thousands of nuclear powered pumps across the Bering Straits. This dam, envisioned by a Russian engineer named Arkady Borisovich Markin would redirect the waters of the Pacific Ocean, which would theoretically raise temperatures in cities like New York and London. Markin's stated purpose was to "relieve the severe cold of the northern hemisphere" but American scientists worried about such weather control as a means to cause flooding.

The December 11, 1950 Charleston Daily Mail (Charleston, WV) ran a short article quoting Dr. Irving Langmuir, who had worked with Dr. Vincent J. Schaefer during those early experiments conducted for the G.E. Research Laboratory:

"Rainmaking" or weather control can be as powerful a war weapon as the atom bomb, a Nobel prize winning physicist said today.

Dr. Irving Langmuir, pioneer in "rainmaking," said the government should seize on the phenomenon of weather control as it did on atomic energy when Albert Einstein told the late President Roosevelt in 1939 of the potential power of an atom-splitting weapon.

"In the amount of energy liberated, the effect of 30 milligrams of silver iodide under optimum conditions equals that of one atomic bomb," Langmuir said.

In 1953 Captain Howard T. Orville was chairman of the President's Advisory Committee on Weather Control. Captain Orville was quoted widely in American newspapers and popular magazines about how the United States might use this control of the skies to its advantage. The May 28, 1954 cover of Collier's magazine showed a man quite literally changing the seasons by a system of levers and push buttons. As the article noted, in an age of atomic weapons and supersonic flight, anything seemed possible for the latter half of the 20th century. The cover story was written by Captain Orville.

A weather station in southeast Texas spots a threatening cloud formation moving toward Waco on its radar screen; the shape of the cloud indicates a tornado may be building up. An urgent warning is sent to Weather Control Headquarters. Back comes an order for aircraft to dissipate the cloud. And less than an hour after the incipient tornado was first sighted, the aircraft radios back: Mission accomplished. The storm was broken up; there was no loss of life, no property damage.

This hypothetical destruction of a tornado in its infancy may sound fantastic today, but it could well become a reality within 40 years. In this age of the H-bomb and supersonic flight, it is quite possible that science will find ways not only to dissipate incipient tornadoes and hurricanes, but to influence all our weather to a degree that staggers the imagination.

Indeed, if investigation of weather control receives the public support and funds for research which its importance merits, we may be able eventually to make weather almost to order.

An Associated Press article by science reporter Frank Carey, which ran in the July 6, 1954 edition of Minnesota's Brainerd Daily Dispatch, sought to explain why weather control would offer a unique strategic advantage to the United States:

It may someday be possible to cause torrents of rain over Russia by seeding clouds moving toward the Soviet Union.

Or it may be possible — if an opposite effect is desired — to cause destructive droughts which dry up food crops by “overseeding” those same clouds.

And fortunately for the United States, Russia could do little to retaliate because most weather moves from west to east.

Dr. Edward Teller, the “father of the H-bomb” testified in 1958 in front of the Senate Military Preparedness Subcommittee that he was “more confident of getting to the moon than changing the weather, but the latter is a possibility. I would not be surprised if accomplished it in five years or failed to do it in the next 50.” In a January 1, 1958, article in

the Pasadena Star-News Captain Orville warned that “if an unfriendly nation solves the problem of weather control and gets into the position to control the large-scale weather patterns before we can, the results could be even more disastrous than nuclear warfare.”

May 25, 1958 The American Weekly (illustration by Jo Kotula)

The May 25, 1958, issue of The American Weekly ran an article by Frances Leighton using information from Captain Howard T. Orville. The article, in no uncertain terms, described a race to see who would control the earth’s thermometers. The illustration that ran with the piece pictured an ominous looking satellite which could “focus sunlight to melt the ice in frozen harbors or thaw frosted crops — or scorch enemy cities.”

Behind the scenes, while statesmen argue policies and engineers build space satellites, other men are working day and night. They are quiet men, so little known to the public that the magnitude of their job, when you first hear of it, staggers the imagination. Their object is to control the weather and change the face of the world.

Some of these men are Americans. Others are Russians. The first skirmishes of an undeclared cold war between them already have been fought. Unless a peace is achieved the war’s end will determine whether Russia or the United States rules the earth’s thermometers.

Efforts to control the weather, however, would find skeptics in the U.S. National Research Council, which published a 1964 report:

We conclude that the initiation of large-scale operational weather modification programs would be premature. Many fundamental problems must be answered first...We believe that the patient investigation of atmospheric processes coupled with an exploration of the technical applications may eventually lead to useful weather modification, but we emphasize that the time-scale required for success may be measured in decades.

FULL HISTORY OF WEATHER MODIFICATION IN FOUR MINUTES

8 October 2015 11:37 AM

<https://www.skymetweather.com/content/weather-news-and-analysis/full-history-of-weather-modification-in-four-minutes/>

The human race has reached several milestones while rushing through the path of scientific development and technological advancement. Major breakthroughs have been made in different fields of study. Inventions and innovations have helped solve several problems while helping us understand the complexities surrounding us on this planet, and beyond.

Weather too has evolved as a subject over the decades. The science of weather has helped save lives, raised preparedness levels, and has enabled us to avoid large-scale calamities. Weather modification is one such tool which has changed the way we look at the weather.

Intentional manipulation or altering of weather is known as weather modification. This can be done for a number of purposes. The most common form of weather modification is cloud seeding which helps increase rain or snow over a particular region. It can also help prevent damaging weather conditions like hailstorms or hurricanes. Weather modification is also used for economic as well as military warfare.

The history of weather modification stretches from the mid-1940s to present day. It is impossible to pen down the entire history of weather modification in a humble write-up. But thanks to 'The Daily Conversation', an under-4 minute video educates you about the early beginnings and latest developments in weather modification.

(Featured Image Credit: Reuters)

CHEMTRAILS: THE CIA & WEATHER MODIFICATION

https://www.youtube.com/watch?v=_V8Wrt0Yo_4

Newsbud

Published on Jul 8, 2016

In this episode Spiro is joined by James Corbett to discuss Geoengineering (ChemTrails). We cover multiple documented aspects of weather modification. This Video Will Challenge even the most skeptic people out there on this topic. We also talk about CIA Director John Brennan's recent speech before the Council on Foreign Relations (CFR) promoting stratospheric aerosol injection (SAI), and a 2016 study on the health effects of stratospheric aerosols.

Show Notes

<http://bit.ly/29mMTXI>

CIA FUNDING GEOENGINEERING TO WEAPONIZE WEATHER - #NEWWORLDCONNEXTWEEK

<https://www.youtube.com/watch?v=L8eO5BYHop8>

corbetteport

Published on Feb 19, 2015

Welcome to New World Next Week — the video series from Corbett Report and Media Monarchy that covers some of the most important developments in open source intelligence news. This week:

Story #1: Spy Agencies Fund Climate Research in Hunt for Weather Weapon

<http://ur1.ca/jrbx6>

CIA Funding Geoengineering to Weaponize Weather

<http://ur1.ca/jrbxd>

Chemtrails Exposed: A History of the New Manhattan Project

<http://ur1.ca/jrbxi>

CIA Accuses Russia Of "Manipulating The World's Weather"

<http://ur1.ca/jrbxk>

Flashback: Operation Popeye - Weaponized Weather During Vietnam War

<http://ur1.ca/jrbxp>

INTERVIEW 1185 – PETER KIRBY EXPLAINS THE NEW MANHATTAN PROJECT

Corbett 07/06/2016

<https://www.corbettreport.com/interview-1185-peter-kirby-explains-the-new-manhattan-project/>

Peter Kirby is the author of the new book Chemtrails Exposed: A New Manhattan Project. Today we tackle the two questions most frequently asked by chemtrail skeptics: Would the government do something like this, and could they do something like this? We also talk about John Brennan's recent call for stratospheric aerosol injection and a 2016 study on the health effects of stratospheric aerosols.

LOCAL NEWS STATION CONFIRMS BARIUM IN CHEMTRAILS

<https://www.youtube.com/watch?v=okB-489I6MI>

thor lawson

Published on Nov 10, 2007

11/9/10 Update: <https://www.youtube.com/watch?v=XOLUHB3Jmq4>

Geo Engineering : This video is a must see if you have any questions about Geo Engineering. The research is extensive and in-depth. I am still dismayed over the lack of questioning and open mindedness

around the subject. So I hope you have some time to watch all 7 episodes and start taking notice.

11/11/09 Update: "Unsolved Mysteries" or proof U.S.A. tested using RAIN to infect AMERICAN

<https://www.youtube.com/watch?v=okv2VEUnkE0>

3/30/09 Update:

Council on Foreign Relations on Planetary Geoengineering: Add more small reflecting particles in the upper part of the atmosphere

<http://cryptogon.com/?p=7709>

I dont think anyone has the complete story on exactly what chemtrails are. I dont doubt that weather modification is a part of it, but take your pick on the rest. Theres almost certainly a biological component to some of the spraying.

6/4/08

Becks new song "Chemtrails"

<https://www.youtube.com/watch?v=BeiFVfyiSiw>

Chemtrails - Beck

Yet another update:(many may find of interest) 3/21/08

Breaking the Nuremberg Code: The US Military Human-Testing Part 1 of Heather Wokusch discussing "Breaking the Nuremberg Code."

Covers Edgewood Arsenal, Project 112/SHAD and Stratton VA.

<https://www.youtube.com/watch?v=FH7WVRJogGY>

Also, here is her website:

<https://www.heatherwokusch.com/?name=News&file=article&sid=137>

Update: 3/18/08

A Doctor Speaks Out About Chemtrails four scenarios

<http://www.americanchronicle.com/articles/viewArticle.asp?articleID=21473>

Also, some may want to change the scary term "chemtrails" to..."cloud seeding." Just read Senate Bill 517.

<https://www.govtrack.us/congress/bills/109/s517/text>

Update:

Germany Admits to Clandestine Chemtrail Ops.

<http://www.chycho.com/?q=Chemtrails>

SHREVEPORT, LA

CHEMTRAILS: Is U.S. Gov't. Secretly Testing Americans 'Again'?

Posted: Nov 9, 2007 07:46 PM EST

Could a strange substance found by an Ark-La-Tex man be part of secret government testing program? That's the question at the heart of a phenomenon called "Chemtrails." In a KSLA News 12 investigation, Reporter Jeff Ferrell shows us the results of testing we had done about what's in our skies.

story by Jeff Ferrell

<http://www.ksla.com/>

Left side, sixth video down, watch it before they take it down...

Also see,

https://www.ncbi.nlm.nih.gov/pubmed?cmd=Retrieve&dopt=AbstractPlus&list_uids=15082100&query_hl=2

Finally, PUBLIC LAW 95-79 [P.L. 95-79] TITLE 50, CHAPTER 32, SECTION 1520 "CHEMICAL AND BIOLOGICAL WARFARE PROGRAM" "The use of human subjects will be allowed for the testing of chemical and biological agents by the U.S. Department of Defense, accounting to Congressional committees with respect to the experiments and studies." "The Secretary of Defense [may] conduct tests and experiments involving the use of chemical and biological [warfare] agents on civilian populations [within the United States]." - SOURCE- Public Law 95-79, Title VIII, Sec. 808, July 30, 1977, 91 Stat. 334. In U.S. Statutes-at-Large, Vol. 91, page 334, you will find Public Law 95-79. Public Law 97-375, title II, Sec. 203(a)(1), Dec. 21, 1982, 96 Stat. 1882. In U.S. Statutes-at-Large, Vol. 96, page 1882, you will find Public Law 97-375.

LOUISIANA TV REPORT FOLLOW-UP ON CHEMTRAIL STORY

From Lorie Kramer

12-2-7

<http://www.rense.com/general79/cchem.htm>

I just received this update done by the reporter who did the Chemtrail story on that local Shreveport tv newscast and which was subsequently posted on Youtube.

This is the link to that original news story by reporter Jeff Ferrell which found enormous amounts of toxic barium coming down after heavy chemtrail spraying...

<http://www.youtube.com/watch?v=okB-489I6MI>

Here, now, is the update (text only) which came with no headline or title, and appears to be a transcript from the Shreveport station's newscast:

A scientist now confirms that the United States military funded research which led to a patent suspected of making so-called "chemtrails" in our skies. In this follow-up report, investigative reporter Jeff Ferrell also discovered a U.S. Air Force manual called "Owning the Weather in 2025," which describes the very same approach.

Ferrell's original report aired on KSLA News 12, the CBS-TV affiliate in Shreveport, Louisiana where he works as a reporter and anchor. The story attracted attention from hundreds of people across the country and Canada. They watched it on YouTube, Google Video and a host of other web sites that posted the story. In turn, those viewers began emailing and calling the station.

While Ferrell immediately began investigating for a follow-up report, the station's interest in the subject waned. So, here's what he found out in his independent research:

Story update by reporter Jeff Ferrell...

"I learned about U.S. Patent #: 5,003,186, titled `Stratospheric Welsbach Seeding for Reduction of Global Warming," better known by chemtrail researchers as "The Welsbach Patent."

The patent describes putting metallic particles like aluminum and barium into jet fuel. Then, exhaust from the jet engine seeds the stratosphere. In turn, those small metallic particles serve a dual purpose by: 1) reflecting incoming light back into space and 2.) helping convert the warmth below into infra-red waves, allowing them to escape from the earth's atmosphere.

"It turned out that it seemed to work and so that's why we had applied for a patent," said patent co-inventor David Chang. Chang confirmed that the U.S. military did fund that research while he worked at Hughes Aircraft, an aerospace giant at the time. It would later downsize considerably and evolve into Direct-TV, which required some of the very same kinds of research and development.

In fact, Chang described several other military-funded projects where jet engine exhaust dispersed metallic particles into the atmosphere. "For instance, we were using it to develop targets for laser range finders," continued Chang.

I then learned about that U.S. Air Force document titled, "Owning the Weather in 2025." it details weather modification for war-fighting and describes putting carbon dust into jet fuel for dispersal as the quote, 'most convenient, safe and cost effective method," just as the Welsbach Patent explained. That method is described on page 15 of the Air Force report, originally written in 1996 as a study paper.

In September of 2002, then-Secretary of State Colin Powell even told a United Nations World Summit in South Africa quote, "we are committed to a billion-dollar program to develop and deploy advanced technologies to mitigate greenhouse-gas emissions." Powell never fully elaborated.

And few may remember that the U.S. military used covert weather modification in the past. During the Vietnam War a top secret mission called "Operation Popeye," seeded clouds over the Ho Chi Minh Trail to create floods and wash out the enemy's supply routes. Reporter Jack Anderson is credited with breaking that story back in 1971.

A Discovery Channel program, which first aired in February 2007, investigated so-called Chemtrails, describing them as contrail formations that persist in the skies for hours after a jet passes. But the military refused them access to jet fuel for testing.

"I suspect it may be some sort of weather control," said Stamps, Arkansas resident Bill Nichols in our first report on the subject, which aired on KSLA News 12.

Nichols handed us a mason jar with a sample inside containing water and "other" material collected recently from his back yard. Independent testing at a Shreveport, LA lab did show high levels of barium, a hallmark of other chemtrail testing. Louisiana regulators described such a reading as unusual, but very difficult to prove its source.

Chemtrail skeptics argue barium is used very often commercially for everything from mining to oil drilling. But Chang told me that's 'exactly' why they considered such material safe to use in our skies as a welsbach particle.

But, no one has yet to officially confirm a direct connection between these alleged chemtrails and the U.S. military. Such a discovery is the 'Holy Grail' of chemtrail researchers. Such a revelation, if there is indeed such a covert program in existence at all, would require someone to step forward and potentially risk court martial or legal action. Until then, the guessing and the waiting continue.

WHAT CHEMTRAILS ARE DOING TO YOUR BRAIN - NEUROSURGEON DR.

RUSSELL BLAYLOCK REVEALS SHOCKING FACTS

<https://www.youtube.com/watch?v=X3IW-TGGIk0>

Russell Blaylock M.D

Published on Apr 7, 2013

Linderman Unleashed Radio Show March 28th 2013 Broadcast. Curt Linderman speaks with Dr. Blaylock about the devastating health effects of the chemtrails and geoengineering programs which have been implemented in secret without public consent.

Chemtrails, Nanoaluminum and Neurodegenerative and Neurodevelopmental Effects
By Russell L. Blaylock, M.D.

The Internet is littered with stories of "chemtrails" and geoengineering to combat "global warming" and until recently I took these stories with a grain of salt. One of the main reasons for my skepticism was that I rarely saw what they were describing in the skies. But over the past several years I have notice a great number of these trails and I have to admit they are not like the contrails I grew up seeing in the skies. They are extensive, quite broad, are laid in a definite pattern and slowly evolve into artificial clouds. Of particular concern is that there are now so many -dozens every day are littering the skies.

My major concern is that there is evidence that they are spraying tons of nanosized aluminum compounds. It has been demonstrated in the scientific and medical literature that nanosized particles are infinitely more reactive and induce intense inflammation in a number of tissues. Of special concern is the effect of these nanoparticles on the brain and spinal cord, as a growing list of neurodegenerative diseases, including Alzheimer's dementia, Parkinson's disease and Lou Gehrig's disease (ALS) are strongly related to exposure to environmental aluminum.

Nanoparticles of aluminum are not only infinitely more inflammatory, they also easily penetrate the brain by a number of routes, including

the blood and olfactory nerves (the smell nerves in the nose). Studies have shown that these particles pass along the olfactory neural tracts, which connect directly to the area of the brain that is not only most effected by Alzheimer's disease, but also the earliest affected in the course of the disease. It also has the highest level of brain aluminum in Alzheimer's cases.

The intranasal route of exposure makes spraying of massive amounts of nanoaluminum into the skies especially hazardous, as it will be inhaled by people of all ages, including babies and small children for many hours. We know that older people have the greatest reaction to this airborne aluminum. Because of the nanosizing of the aluminum particles being used, home filtering system will not remove the aluminum, thus prolonging exposure, even indoors.

In addition to inhaling nanoaluminum, such spraying will saturate the ground, water and vegetation with high levels of aluminum. Normally, aluminum is poorly absorbed from the GI tract, but nanoaluminum is absorbed in much higher amounts. This absorbed aluminum has been shown to be distributed to a number of organs and tissues including the brain and spinal cord. Inhaling this environmentally suspended nanoaluminum will also produce tremendous inflammatory reaction within the lungs, which will pose a significant hazard to children and adults with asthma and pulmonary diseases.

I pray that the pilots who are spraying this dangerous substance fully understand that they are destroying the life and health of their families as well. This is also true of our political officials. Once the soil, plants and water sources are heavily contaminated there will be no way to reverse the damage that has been done.

Steps need to be taken now to prevent an impending health disaster of enormous proportions if this project is not stopped immediately. Otherwise we will see an explosive increase in neurodegenerative diseases occurring in adults and the elderly in unprecedented rates as well as neurodevelopmental disorders in our children. We are already seeing a dramatic increase in these neurological disorders and it is occurring in younger people than ever before.

THE CIA DIRECTOR JUST CHEERFULLY CHATTED UP THE CFR ABOUT CHEMTRAILS

<https://www.youtube.com/watch?v=J-U78tSRNVA>

Truthstream Media

Published on Jul 6, 2016

Oh, I'm sorry, I meant "stratospheric aerosol injection"...

DCI John Brennan just excitedly gave the CFR every "in the interest of global security" talking point for why the government should spend the "inexpensive" sum of \$10 billion a year to spray aerosolized sun-reflecting particles into the Earth's atmosphere... but hey, it's all a conspiracy theory cooked up by a bunch of tin foil hatters, right?

US SENATE CONSIDERING ALBEDO MODIFICATION GEOENGINEERING PROPOSAL

Eric Worrall / April 21, 2016

<https://wattsupwiththat.com/2016/04/21/us-senate-considering-albedo-modification-geoengineering-proposal/?iframe=true&preview=true>

Guest essay by Eric Worrall

The US Senate is considering funding for albedo modification geoengineering experiments – pumping particles or aerosols into the stratosphere, to reflect sunlight back into space, and counter the alleged impact of elevated CO2 levels on global climate.

According to ScienceMag;

To fight global warming, Senate calls for study of making Earth reflect more light

Budgetmakers in the U.S. Senate want the Department of Energy (DOE) to study the possibility of making Earth reflect more sunlight into space to fight global warming. Earth's reflectivity is known as its albedo, and the request to study "albedo modification" comes in the details of a proposed spending bill passed by the Senate appropriations committee to fund DOE, the Army Corps of Engineers, and related agencies for fiscal year 2017, which begins 1 October. The bill does not specify how much money should be spent on the research.

Critics argue that albedo modification and other "geoengineering" schemes are risky and would discourage nations from trying to reduce their emissions of carbon dioxide, the heat-trapping gas that comes from the burning of fossil fuels and that is causing global warming by absorbing increasing amounts of energy from sunlight. Still, climate researchers say they should find out what its potential of albedo modification might be.

"The recommendation is great," says Joyce Penner, an atmospheric scientist at the University of Michigan, Ann Arbor. Albedo modification "is not a solution to global warming, it is only a way to avoid, perhaps, a tipping point in the climate." David Keith, an atmospheric physicist at Harvard University, says, "Ignorance is not a good basis for making decisions, so learning more about this is extremely valuable even if we find out that it will never work." Keith adds, however, that the few existing studies suggest albedo modification could help ameliorate some effects of global warming.

The call for further research comes in a bill that would provide \$5.4 billion for DOE's Office of Science next year. It also builds on the recommendations of a February 2015 report from the National Academy of Sciences (NAS) entitled *Climate Intervention: Reflecting Sunlight to Cool Earth*. That report warned explicitly that albedo modification shouldn't be deployed now because the risks and benefits were far too uncertain. Still, the committee urged further research to find out what those risks and benefits might be.

Read more: <http://www.sciencemag.org/news/2016/04/fight-global-warming-senate-calls-study-making-earth-reflect-more-light>

It is difficult to imagine a more ridiculous waste of taxpayer's money.

The US spends taxpayer's money regulating coal plants, forcing any coal plants which survive Obama's war on energy, to fit expensive scrubbers, to remove particulates from their emissions.

If this measure is passed, the Department of Energy will get to spend even more taxpayer's money, burning sulphur and other compounds, to generate and emit the same types of particulates which the US government previously forced domestic US coal plants to scrub.

INTERVIEW 1189 – SPIRO SKOURAS AND JAMES CORBETT ON CIA GEOENGINEERING

Corbett 07/11/2016

<https://www.corbettreport.com/interview-1189-spiro-skouras-and-james-corbett-on-cia-geoengineering/>

Via Newsbud: In this episode Spiro is joined by James Corbett to discuss Geoengineering (ChemTrails). We cover multiple documented aspects of weather modification. This Video Will Challenge even the most skeptic people out there on this topic. We also talk about CIA Director John Brennan's recent speech before the Council on Foreign Relations (CFR) promoting stratospheric aerosol injection (SAI), and a 2016 study on the health effects of stratospheric aerosols.

STUDY: CLIMATE ENGINEERING ENHANCES GLOBAL WARMING – ICE MELTS

February 11, 2017

<https://chemtrailsplanet.net/2017/02/11/study-climate-engineering-enhances-global-warming-ice-melts/>

A paper Published by J. Marvin Herndon on Jan 29, 2017 provides strong evidence of deliberate and toxic climate manipulation involving chemical melting of arctic ice sheets.

“Evidence of an Intentional Effort to Melt Glaciers and Hasten Global Warming”

PRESS RELEASE: SAN DIEGO, February 3, 2017

On or about February 14, 2016, an oily-ashy substance fell on seven residences and vehicles in Harrison Township, Michigan, USA. The Commander of nearby Selfridge Air National Guard Base in Michigan told the press that the release was not from a military plane. Upon being queried as to whether a government agency or contractor plane was involved, Brig. Gen. John D. Slocum did not respond.

Suspecting that this was an accidental release from a covert geoengineering activity, geoscientist J. Marvin Herndon of Transdyne Corporation “obtained samples of the material from one of the residents whose property was splattered from above and had the material analyzed. The material was also sampled and analyzed by officials from the Michigan Department of Environmental Quality.” In a recent article in the Journal of Geography, Environment and Earth Science International, Dr. Herndon reports that “the results of those analyses provide evidence of a deliberate operation to melt ice and snow, which is consistent with the hypothesis that aerosolized coal fly ash is being used to deliberately enhance global warming.”

(Complete PR PDF)

<https://chemtrailsplanet.files.wordpress.com/2017/02/marvin-herndon-press-release-feb-3-2017-with-figure-1.pdf>

“...the preponderance of agreements over a large number of element ratios is strong evidence that coal fly ash is a component of the air-drop material.”

ARTICLE: An Indication of Intentional Efforts to Cause Global Warming and Glacier Melting. J. Marvin Herndon, PhD (Science Domain, International) <http://www.sciencedomain.org/abstract/17665>

ARTICLE (PDF) : “An Indication of Intentional Efforts to Cause Global Warming and Glacier Melting” by J. Marvin Herndon, PhD <https://chemtrailsplanet.files.wordpress.com/2017/02/marvin-herndon-published-article-feb-2-2017.pdf>

The following article was posted on 2/20/2016 a year before Dr. Herndon’s published article.

Original Post, Feb 20, 2016 by Harold Saive

Note: Recent posts on this site support the presence of coal fly ash as a geoengineering agent. (1) [Passenger Video Reveals Chemtrails From 747 Turbofan Exhaust](#) (2) [Florida Climate Engineering Captured by Satellite and Ground Observer](#) (3) [Coal-Fly-Ash Geoengineering in the Troposphere – Consequences for Public Health.](#)

The following story is no surprise to those who’ve been following the covert dumping of aerosols into the atmosphere, including carbon black ash particulates that can increase the melting rate of arctic ice. We can easily imagine the event described in the story is due to mechanical or pilot error when a load of black ash was accidentally deployed over the population surrounding Selfridge Air Base.

This report reveals that local officials have no policy in place to adequately respond to a potential terror attack, or to determine if unknown substances falling from the sky onto populations below are a HAZMAT concern.

Harrison Township is a boating community located on Lake St. Clair, immediately south of the only available runway at Selfridge Air Base.

With the dumping of black ash landing on the Harrison population, we can easily guess that Lake St. Clair was probably contaminated with the same pollution with the plausible mission of accelerating ice melt

on the lake as a climate engineering objective.

Perhaps not coincidentally, Flint Michigan is ground zero for an ongoing water contamination scandal where terrorists could not have done a better job at poisoning the water supply. (Detroit Free Press)

Note: NASA Worldview images for 2/15/2016 shows complete overcast on all satellite views. (NASA)

Mysterious Tar-Like Substance Coats Homes in Michigan Neighborhood

WXYZ Article – Stevie Borrello – 2/17/2016

<http://abcnews.go.com/US/mysterious-oily-substance-coats-homes-michigan-neighborhood/story?id=37004318>

A dark, oily substance appeared on cars and homes in Harrison Township, Michigan on Feb. 15, 2016. The fire department stated that the substance was not a fire hazard.

The fire department came by on Tuesday and inspected the scene. “It was an ash type of substance with a little bit on an oily consistency to it,” Harrison Township Fire Department Chief Michael Lopez told ABC News.

“It appears to have fallen straight down,” he added, noting that the substance was only found on the roofs of cars and homes, and not splattered across the sides.

This was the first instance of this substance appearing that Lopez could recall.

The fire department did not do any chemical analyses but was able to determine that the substance was not a fire hazard and turned over the situation to the airbase.

Schlutow said he believes the substance might have come from the airbase, as it is only a few miles away. However, in a press release today, the Selfridge Air National Guard Base stated that “there is no

indication that the substance in question came from a military aircraft of any type.”

The statement also noted that the airbase has “been in communication with the Michigan Dept. of Environmental Quality, which was sending a representative to the area in question to review the material.”

“As Michigan’s Hometown Air Force, we take being a good neighbor very serious,” said Brig. Gen. John D. Slocum, commander of the 127th Wing and the Selfridge base commander. “We will continue to work with our local and state partner agencies to resolve this question.”

The Department of Environmental Quality did not immediately respond to ABC News’ request for comment.

2-15-2016: Worldview Terra Satellite reveals overcast conditions on day of chemical air-drop and associated electromagnetic cloud manipulation – Click to Zoom [\(Link\)](#)

WXYZ Original Youtube Videos

[Mysterious substance coats homes in Harrison Township](#)

[Tar-like substance found in Harrison Township](#)

[Mystery gunk in Harrison Township](#)

[Mysterious gunk falls from sky](#)

[WXYZ-TV Detroit – Channel 7](#)

EVIDENCE OF AN INTENTIONAL EFFORT TO MELT GLACIERS AND HASTEN GLOBAL WARMING

<https://chemtrailsplanet.files.wordpress.com/2017/02/marvin-herndon-press-release-feb-3-2017-with-figure-1.pdf>

SAN DIEGO, February 3, 2017 – On or about February 14, 2016, an oily-ashy substance fell on seven residences and vehicles in Harrison Township, Michigan, USA. The Commander of nearby Selfridge Air National Guard Base in Michigan told the press that the release was

not from a military plane. Upon being queried as to whether a government agency or contractor plane was involved, Brig. Gen. John D. Slocum did not respond. Suspecting that this was an accidental release from a covert geoengineering activity, geoscientist J. Marvin Herndon of Transdyne Corporation “obtained samples of the material from one of the residents whose property was splattered from above and had the material analyzed. The material was also sampled and analyzed by officials from the Michigan Department of Environmental Quality.” In a recent article in the *Journal of Geography, Environment and Earth Science International*, Dr. Herndon reports that “the results of those analyses provide evidence of a deliberate operation to melt ice and snow, which is consistent with the hypothesis that aerosolized coal fly ash is being used to deliberately enhance global warming.”

As the article reveals, “the Michigan Department of Environmental Quality noted from microscopic examination” that the air-drop material “consists of a mixture of particles in dark clumps ... that morphologically resembles plant material, including leaves, seeds and fruit skins make up the majority of the sample....When coal fly ash falls to Earth, its typically dark gray color absorbs sunlight and enhances global warming. Three samples of air-drop material were analyzed independently by inductively coupled plasma mass spectrometry (ICP-MS), including one sample of which was collected and analyzed by the Michigan Department of Environmental Quality.” One sample was also analyzed by scanning electron microscopy (SEM) with energy dispersive X-ray (EDX) analysis. These laboratory test results show evidence of coal fly ash and salt in the material dropped from an aircraft over Harrison Township.

Dr. Herndon reports that “patterns of quasi-circular holes, sometimes called ‘cryoconite holes’ are observed on ablating glacier surfaces worldwide; these holes resemble the distribution pattern of the air-drop material.” Due to its dark color, natural cryoconite — windblown dust made up of soot, rock particles and microbes found on glaciers — absorbs sunlight and melts its way into glacier ice. Based on the resemblance between the air-drop material and cryoconite, Dr. Herndon concludes that “the air-drop material is synthetic cryoconite, or proto-cryoconite, whose purpose is to melt glacial ice. That explanation is consistent with the now near-daily, near-global

spraying of a particulate substance, evidenced as coal fly ash, into the troposphere which has the effect of causing global warming....Yet the consequences of this near-global weather/climate modification geoengineering activity have not been taken into account by any of the climate change models evaluated by the United Nations' Intergovernmental Panel on Climate Change (IPCC), a fact that calls into question not only the findings of that organization, but its moral authority as well."

The article recommends that "Scientists worldwide should call for, and indeed demand, a full and open investigation into these covert geoengineering activities whose potential impacts on Earth's climate system, the integrity of Earth's biota, and on human health may prove to be extremely hazardous."

Freely download pdf: <http://NuclearPlanet.com/cryo.pdf>

Reference: J. M. Herndon, J. Geography Environ. Earth Sci. Int. 2017, 9(1)

Scientifically Precise Music Videos (Creative Commons License)

Stop the Spray-Jets, Mr. President <https://youtu.be/lunPb2m3Bpg>

America Once the Beautiful <https://youtu.be/FstShDEVcgl>

Battle Hymn of the Republic 2015 <https://youtu.be/gTVyNQLsrv8>

Source:

J. Marvin Herndon, Ph.D.

Transdyne Corporation

CV <http://NuclearPlanet.com/cv.pdf>

Email: mherndon@san.rr.com

Website: <http://www.NuclearPlanet.com>

UK GOVERNMENT PROPOSED CHEMTRAILS/GEOENGINEERING AS

EARLY AS 1970—WITH U.N. APPROVAL

By T.J. Coles

23 August, 2014.

<http://www.pipr.co.uk/all/uk-government-proposed-chemtrailsgeoengineering-as-early-as-1970-with-u-n-approval/>

Parliamentary records confirm that the British government considered using cirrus clouds as a means of climate modification as early as 1970. In those days, climatologists thought that the climate was cooling and sought ways to warm it. Geoffrey Johnson Smith MP said:

‘to counteract the cooling effect of atmospheric dust the more jets there are in the atmosphere emitting heat-producing carbon dioxide the better, but some scientists, not all, hold the view that jet contrails—vapour trails as we usually call them—because they can lead to the extensive formation of cirrus clouds, could increase the cloud cover and thus effectively cut off the sun’s rays and reduce the earth’s temperature’.¹

The military already had secret devices for creating contrails as early as the 1950s, as the National Archives at Kew reveal. One document is called ‘Artificial Contrail Generator’. It includes information on ‘Artificial vapour trails: contrail suppression equipment; vapour trails from Hunter aircraft at 50,000ft as seen from the ground, and from another aircraft flying at 8,000ft’.²

Think about it. Fake contrails could be made at altitudes as low as 8,000 ft. Disturbingly, the contrail generators were tested at the UK’s biochemical warfare laboratory, Porton Down, which sprayed chemicals on the British public intermittently from 1940 to 1979 in ‘trials’.³

Normal, water-based contrails (with no chemical additives) can only form under certain conditions, in temperatures below -40oc, at altitudes above 24,000 ft. or more, and in relative humidity of 70 percent. As NASA studies dating back to the 1970s conclude, water-

based persistent contrails—or manmade cirrus—only occurred in even more specific conditions: at higher altitudes and lower temperatures. The cirrus lasted for two-hours maximum.⁴

Take a look at the skies today. They are often covered in jet-produced cirrus all year round, in all temperatures and at all altitudes. The clouds last all day and occlude clear skies. That is because the Anglo-American governments are involved in a programme called ‘owning the weather’, which got Congressional funding in 1997.⁵

In 2010, the Minister of State for Energy and Climate Change, Joan Ruddock, admitted in a Parliamentary hearing that the UK government were financing sulphur-based ‘low level cloud development’.⁶

The vast majority of jets generating persistent trails are not commercial jets. They are specially-built with afterburners designed to raise the relative humidity of the atmosphere to make persistent trails easier to form. Nanoparticles are released in vaporised form for the water particles to adhere to.⁷

In the preceding years, the government received proposals from engineers and scientists. John Gorman, Chartered Engineer, wrote: ‘it would be nice to investigate the possibilities of injecting the fuel/additive mixture into an afterburner’, referring to submicron silica particles. Scientist John C.D. Nissen suggested three geoengineering proposals to the government, two of which are: ‘1) creating stratospheric clouds – using precursor injection to generate aerosols; 2) creating contrails – using an additive to aircraft fuel’.⁸

Were their ideas rejected because the military are already doing it with the ‘owning the weather’ programme? A UK Ministry of Defence paper out to the year 2040 states: ‘Weather modification will continue to be explored’.⁹

Most frightening is the fact that governments have the United Nations (UN)’s approval to do these things, as long as they pretend it is not for warfare purposes. In 1962, over a decade before the UN attempted to ban weather warfare, General Assembly Resolution 1721 stated:

'The General Assembly,

Noting with gratification the marked progress for meteorological science and technology opened up by the advances in outer space,

Convinced of the world-wide benefits to be derived from international co-operation in weather research and analysis,

1. Recommends to all Member States and to the World Meteorological Organization and other appropriate specialized agencies the early and comprehensive study, in the light of developments in outer space, of measures;

(a) To advance the state of atmospheric science and technology so as to provide greater knowledge of basic physical forces affecting climate and the possibility of large-scale weather modification'.10

NOTES

1. Geoffrey Johnson Smith, 'Environmental Pollution', HC Deb, 21 July, 1970, vol. 804 cc286-396 286,
http://hansard.millbanksystems.com/commons/1970/jul/21/environmental-pollution#S5CV0804P0_19700721_HOC_382

2. Ministry of Defence, 'Aircraft Contrail Generator', 1959-63, AIR 2/15391, <http://discovery.nationalarchives.gov.uk/details/r/C2643259>

3. Antony Barnett, 'Millions were in germ war tests', Guardian, 21 April, 2002,
<http://www.theguardian.com/politics/2002/apr/21/uk.medicalscience>

4. R.G. Knollenberg, 'Measurements of Growth of the Ice Budget in a Persistent Contrail', Journal of the Atmospheric Sciences, October, 1972, volume 29, pp. 1367-74.

5. The Federal Plan for Meteorological Services and Supporting Research: Fiscal Year 1997, June 1996,
<http://www.ofcm.gov/fedplan/fp-fy97/text/toc.htm>

6. House of Commons Science and Technology Committee, 'The Regulation of Geoengineering', Fifth Report of Session 2009–10, HC 221, 18 March, 2010, London: Stationary Office, pp. 38, EV 28, <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/221/221.pdf>

7. On afterburners, see: Gray, W. M., W. M. Frank, M. L. Corrin, and C. A. Stokes, 1974, Weather modification by carbon dust absorption of solar energy, Department of Atmospheric Science Paper 225, Colorado State University, Fort Collins, CO, <http://typhoon.atmos.colostate.edu/Includes/Documents/Publications.html> On nanoparticles and cloud formation, see: Reinhard Niessner, 'Nanoparticles Acting as Condensation Nuclei – Water Droplet Formation and Incorporation', http://www.springer.com/cda/content/document/cda_downloaddocument/9783642103179-c1.pdf?SGWID=0-0-45-906848-p173946520

8. British Parliament, Innovation, Universities and Skills Committee: Geoengineering Inquiry (Geoengineering Case Study): Memoranda of Evidence, 'Memorandum 16 [also listed as 115]: Submission from John Gorman, Chartered Engineer', September, 2008, <http://www.parliament.the-stationery-office.co.uk/pa/cm200809/cmselect/cmdius/50/50w3e18.htm> and 'Memorandum 13 [also 152] Submission from John C.D. Nissen', <http://www.parliament.the-stationery-office.co.uk/pa/cm200809/cmselect/cmdius/50/50w3e14.htm>

9. Ministry of Defence, 'Strategic Trends Programme: Out to 2040', 4 February, 2010 (4th), p. 156, <https://www.gov.uk/government/publications/dcdc-global-strategic-trends-programme-global-strategic-trends-out-to-2040>

10. United Nations General Assembly, 'International co-operation in the peaceful uses of outer space', 1721 (XVI), 1085th plenary meeting, 20 December, 1961, http://www.oosa.unvienna.org/oosa/SpaceLaw/gares/html/gares_16_1721.html

HOUSE OF COMMONS SCIENCE AND TECHNOLOGY COMMITTEE THE REGULATION OF GEOENGINEERING

Fifth Report of Session 2009–10

<https://publications.parliament.uk/pa/cm200910/cmselect/cmsctech/21/221.pdf>

Report, together with formal minutes, oral and written evidence
Ordered by the House of Commons to be printed 10 March 2010.

HC 221

Published on 18 March 2010

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London: The Stationery Office Limited

£0.00

116 pages

HARVARD'S SOLAR GEOENGINEERING RESEARCH PROGRAM

<https://geoengineering.environment.harvard.edu/>

Overarching goals

Produce research that advances solar geoengineering's science and technology frontier, publishing high-impact papers, and disseminating ideas that are taken up by other researchers and government research programs.

Take an active stance on research with a unique mandate to develop new path-breaking technologies that might improve solar geoengineering's effectiveness and reduce its risks.

Employ Harvard's convening power to bring together scientists, environmental leaders, and government officials to discuss the technology and its governance.

Advance science and technology, assess efficacy and risks, and lay out governance options and social implications.

Track 1: Advancing Science and Technology

Harvard's Solar Geoengineering Research Program will develop methods that might reduce the risks and improve the efficacy of solar geoengineering when compared to the injection of sulfates into the stratosphere, which has been the standard proposal since the 1970s. Specific examples include:

Develop novel solid aerosols that might:

reduce or even reverse ozone loss by neutralizing stratospheric chlorine,

have optical properties that greatly reduce stratospheric heating compared to sulfate aerosol.

Develop methods to accurately estimate the radiative forcing from solar geoengineering using existing observing systems and, where appropriate, perform conceptual development of new observing systems.

Develop field experiments that could enable in situ tests of chemistry and aerosol dynamics.

Track 2: Assessing Efficacy and Risks

Harvard's Solar Geoengineering Research Program will devote most of its effort to scientific research to improve the understanding of the risks of solar geoengineering (e.g., health impacts) and of its efficacy in reducing climate risks (e.g., reducing sea level rise or extreme events). Specific examples include:

Understand the interaction of solar geoengineering with the carbon cycle.

Understand historical analogs such as the impact of volcanic eruptions on extreme precipitation or on the mass-balance of the Greenland icecap.

Understand the environmental risks that arise once materials are introduced into the stratosphere descend into the lower atmosphere.

Understand the extent to which solar geoengineering reduces extreme temperatures and to quantify the resulting health and welfare benefits.

Track 3: Laying out Governance Options and Social Implications

The largest challenge for solar geoengineering is not the technology itself, but rather the governance of its testing and possible deployment in a divided, multipolar world. Hargard's Solar Geoengineering Research Program will support a diverse range of research in the social sciences. Examples include:

Research public perceptions and risk attitudes; e.g., use survey methods to explore how knowledge about solar geoengineering influences people's willingness to commit to emissions reduction.

Address concerns that solar geoengineering could reduce incentives to mitigate; e.g., explore the possibility of novel "Climate Clubs," in which a coalition of nations requires members to commit to major emissions reductions as a condition of participating in the decision-making process regarding whether and how much solar geoengineering should be deployed.

Fund at least two country studies to engage scientists and decision-makers in the Philippines and one other developing country in research on the risks, benefits, and governance of solar geoengineering.

Crosscutting principles

Open access: Full transparency with open-access publications and liberal data sharing. Discourage patents and any form of IP protection.

Collaborative: Work with researchers within Harvard and across the world. Continue the successful visiting scholars program that facilitates outside collaborators, and encourage SGRP researchers to spend time abroad.

Public Engagement: Inform the public in ways that empowers citizens to engage in the discussion around solar geoengineering.

Policy-relevant: Actively work on policy-relevant research questions and then 'translate' the resulting research into publicly accessible documents.

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<https://geoengineering.environment.harvard.edu/Forum-US-Solar-Geoengineering-Research-DC-March-2017>

Forum on U.S. Solar Geoengineering Research
March 24, 2017

The Conference Center at the Carnegie Endowment for International Peace

1779 Massachusetts Ave NW, Washington, DC 20036

Co-hosted by the Solar Geoengineering Research Program at Harvard University and the Emmett Center on Climate Change and the Environment at the University of California, Los Angeles. Funded through a generous grant by the Alfred P. Sloan Foundation.

Report

The following document was originally prepared as background for participants at the Forum on U.S. Solar Geoengineering Research. It now includes reflections written after the Forum. Moving forward, we hope it proves useful for anyone seeking to gain background information on solar geoengineering.

Download PDF of Report

Citation: Burns, Elizabeth, David Keith, Edward Parson, and Gernot Wagner, eds. "Report on the Forum on U.S. Solar Geoengineering Research," Washington, D.C., March 24, 2017.

Agenda

8:45 – 9:00 a.m.

Setting the Stage

Lizzie Burns – Fellow, Harvard John A. Paulson School of Engineering and Applied Sciences

Edward A. (Ted) Parson – Dan and Rae Emmett Professor of Environmental Law; Faculty Co-Director, Emmett Center on Climate Change and the Environment, UCLA School of Law

Gernot Wagner – Research Associate, Harvard John A. Paulson School of Engineering and Applied Sciences; Lecturer, Environmental Science and Public Policy; Associate, Harvard University Center for the Environment

Part I: The Science

9:00 – 10:15 a.m

Social Science: What we know, and what we ought to know

Edward A. (Ted) Parson [Moderator] – Dan and Rae Emmett Professor of Environmental Law; Faculty Co-Director, Emmett Center on Climate Change and the Environment, UCLA School of Law

Scott Barrett – Lenfest-Earth Institute Professor of Natural Resource Economics, Columbia University

Holly Buck – Doctoral Candidate, Development Sociology, Cornell University; Faculty Fellow, Forum for Climate Engineering Assessment, American University

Rose Cairns – Research Fellow, SPRU – Science Policy Research Unit, University of Sussex

Kate Ricke – Assistant Professor, Scripps Institution of Oceanography and the School of Global Policy and Strategy at University of California San Diego

Download transcript

https://geoengineering.environment.harvard.edu/files/geoengineering/files/social_science_panel_transcript.pdf

Forum on U.S. Solar Geoengineering Research: Social Science Panel

<https://www.youtube.com/watch?v=iygJgOM68nE>

10:30 a.m. – 11:45 a.m.

Natural Science: What we know, and what we ought to know

Doug MacMartin [Moderator] – Senior Research Associate, Cornell University

Thomas Ackerman – Professor of Atmospheric Sciences and Director of the Joint Institute for the Study of the Atmosphere and Ocean (JISAO), University of Washington

David Keith – Gordon McKay Professor of Applied Physics, Harvard John A. Paulson School of Engineering and Applied Sciences; Professor of Public Policy, Harvard Kennedy School

Joyce Penner – Ralph J. Cicerone Distinguished University Professor of Atmospheric Science, University of Michigan

Alan Robock – Distinguished Professor, Department of Environmental Sciences, Rutgers University

Daniel Schrag – Sturgis Hooper Professor of Geology, Professor of Environmental Science and Engineering, Harvard University; Director, Harvard University Center for the Environment; Director, Harvard Kennedy School Program on Science, Technology, and Public Policy

Download Transcript

https://geoengineering.environment.harvard.edu/files/geoengineering/files/natural_science_panel_transcript.pdf

Forum on U.S. Solar Geoengineering Research: Social Science Panel

<https://www.youtube.com/watch?v=205N5SZE01M>

11:45 a.m. – 12:45 p.m. Lunch

Part II: Policy and Politics

12:45 – 2:00 p.m.

State of Play

Jesse Reynolds [Moderator] – Postdoctoral Researcher, Faculty of Law, Economics and Governance, Utrecht University, The Netherlands

Peter C. Frumhoff – Director of Science and Policy, Union of Concerned Scientists

Steven P. Hamburg – Chief Scientist, Environmental Defense Fund

Joseph Majkut – Director of Climate Science, Niskanen Center

Janos Pasztor – Senior Fellow, Carnegie Council for Ethics in International Affairs; Executive Director, Carnegie Climate Geoengineering Governance Initiative (C2G2)

Janie Wise Thompson – Vice President, Cassidy & Associates

Download Transcript

https://geoengineering.environment.harvard.edu/files/geoengineering/files/state_of_play_panel_transcript.pdf

Forum on U.S. Solar Geoengineering Research: State of Play Panel

<https://www.youtube.com/watch?v=JMSD9yx1x6E>

2:15 – 3:30 p.m.

The Path Forward

Oliver Morton [Moderator] – Senior Editor, Essays and Briefings, The Economist

Anna-Maria Hubert – Assistant Professor, Faculty of Law, University of Calgary; Associate Fellow, Institute for Science, Innovation and Society (InSIS), University of Oxford

Peter Kareiva – Director, Institute of the Environment and Sustainability, UCLA; Former Chief Scientist and Vice President, The Nature Conservancy

Andrew Light – Distinguished Senior Fellow in the Climate Program, World Resources Institute; University Professor, George Mason University

Jane C. S. Long – Lawrence Livermore National Lab (ret)

Kelly Wanser – Principal Director, Marine Cloud Brightening Project

Download Transcript

https://geoengineering.environment.harvard.edu/files/geoengineering/files/path_forward_panel_transcript.pdf

Forum on U.S. Solar Geoengineering Research: The Path Forward Panel

<https://www.youtube.com/watch?v=1KUtW51RCxw>

3:30 – 3:45 p.m.

Conclusion & Next Steps

Gernot Wagner – Research Associate, Harvard John A. Paulson School of Engineering and Applied Sciences; Lecturer, Environmental Science and Public Policy; Associate, Harvard University Center for the Environment

THE CHEMTRAIL CONDITIONING

<https://www.youtube.com/watch?v=Ww0ZgeuqxOg>

NWOResistance HereAndNow

Published on May 25, 2014

In this video you will see how they condition us to accept chemtrails. They put them in every possible place, from cartoons and video games to commercials and ads. We need to ask ourselves, why are they so desperate to make us believe that chemtrails are a normal phenomena?

CHEMTRAIL PROGRAMMING: VIDEO GAMES, CARTOONS, TV, MOVIES

53 videos Last updated on Apr 2, 2017

<https://www.youtube.com/playlist?list=PLR4tzX66mqxWSwMijwlyuaBAaDOdkgxpX>

WHAT IN THE WORLD ARE THEY SPRAYING? (FULL LENGTH HD VERSION)

https://www.youtube.com/watch?v=xFQ2_0QNiks

CutMyFlix

Published on Aug 5, 2011

This is the wildly successful, ultimate documentary on the subject of stratospheric aerosol geoengineering. Some refer to this as Chemtrails. I was the editor and motion graphics designer on this movie as well as the follow up video "Hawaii Revisited." We cut the film in 1280x720 HD/ 5.1 Dolby, using media from 7 different cameras; from "pen type" spy cams to HD rigs and everything in between. Enjoy the show and spread the link... Please purchase the DVD from seller WITWATS on AMAZON. Produced in the studios of Cut My Flix. <http://cutmyflix.com>

"WHY IN THE WORLD ARE THEY SPRAYING?" DOCUMENTARY HD (MULTIPLE LANGUAGE SUBTITLES)

<https://www.youtube.com/watch?v=mEfJO0-cTis>

Truthmediaproduction

Published on Aug 18, 2012

<http://www.whyintheworldaretheyspraying.com/>

People around the world are noticing that our planet's weather is dramatically changing. They are also beginning to notice the long lingering trails left behind airplanes that have lead millions to accept the reality of chemtrail/geoengineering programs. Could there be a connection between the trails and our severe weather? While there are many agendas associated with these damaging programs, evidence is now abundant which proves that geoengineering can be used to control weather. In this documentary you will learn how the aerosols being sprayed into our sky are used in conjunction with other technologies to control our weather. While geoengineers maintain that their models are only for the mitigation of global warming, it is now clear that they can be used as a way to consolidate an enormous amount of both monetary and political power into the hands of a few by the leverage that weather control gives certain corporations over the Earth's natural systems. This of

course, is being done at the expense of every living thing on the planet. Directed/Produced by Michael J. Murphy and Produced/Edited by Barry Kolsky.. Written by Michael J. Murphy and Barry Kolsky.