



Technology Bill of Rights Needed to Protect Human and Environmental Health and the U.S. Constitutional Republic

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ABSTRACT

For the protection of humanity and the planetary environment in general, and American citizens in particular, what is needed, we posit, is a set of new Constitutional Amendments that collectively form a second Bill of Rights, a Technology Bill of Rights, to protect our freedoms, health, air, water, agriculture, and the planetary environment from deliberate perversion and alteration. We describe the rationale for said Technology Bill of Rights that would: (1) Prohibit the application of any technique or method for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space; (2) Prohibit the application of any technique, including software-based process or platform or method for violating individuals free speech, censoring, altering, editing, deleting, excluding, blacklisting, or engaging in any activities that potentially bias votes or deceive the public on matters of health and/or environmental harm; and, (3) Prohibit activities of such scale and nature that would intentionally or unintentionally alter the complex but delicate balance in nature by and between myriad biota and their environments that makes our planet habitable for life. Whereas the meaning of (1) and (2) above is clear, (3) necessitates further clarification that may be inferred from the following non-exclusive examples of prohibited activities: • Use of metallic and/or nano-particulate additions to aircraft fuel; • Excessive launching of satellites, numbering in the tens of thousands, whose rocket exhaust might damage the ozone layer; • Excessive exposure of humans and other biota to electromagnetic radiation; • Use of electromagnetic radiation to heat the ionosphere; • Pollution of air, land, water, agriculture, and aquaculture by particulates, toxic chemicals, heavy metals, radioactive nuclides, and bio-toxins; and, • Strict oversight of biotechnology/bioengineering, including prohibition of gain-of-function experiments with potential pandemic pathogens.

Keywords: Environmental warfare; ENMOD; Geoengineering; Pollution; 5G; Ionospheric heater; Weather modification, COVID-19.

INTRODUCTION

Human nature has not changed since the ratification of the United States Constitution in 1788 and the Bill of Rights in 1791. But science and technology have rapidly progressed to the point of being able to cause great human and environmental harm, even to the point of potentially making Earth uninhabitable for life as we know it. Legal progress has lagged behind science and technology, and currently does not provide a substantial basis to protect Americans from the consequences of technology-based assault on human and environmental health and on the free exchange of truthful information necessary to preserve a democratic republic.

From time to time groups have litigated based upon the Public Trust Doctrine that has evolved from Roman law, "*by the law of nature these things are common to mankind- the air, running water, the sea and consequently the shores of the sea*" [1]. But the problems in such cases typically involve questionable *locus standi* [2], improperly deal with a "*political issue*", may be resolvable by Congress or the President, and/or, although not always appreciated, are based on the false doctrine of scientific consensus [3]. The evidence and implications described below serve to demonstrate that the present system of jurisprudence is inadequate to protect Americans from the consequences of science-based actions concomitant with the rapid and potentially global-threatening progress of science and technology. A more fundamental legal basis is needed.

Two hundred twenty nine years ago only the institutions of government were sufficiently powerful to pose truly grave threats to the rights and freedom of American citizens. The Bill of Rights of the United States Constitution obviated that threat by guaranteeing the rights of individuals and placing limitations on state and federal governments. The Founding Fathers, however, never envisioned that even greater threats would subsequently emerge from scientific and technological progress.

Science, and the technological developments springing therefrom, can improve the quality of life on Earth. But, as circumstances presently exist, without fundamental legal safeguards, our individual freedoms, the air we breathe, the water we drink, and our ability to nourish ourselves and protect our health and the health of our families are now under great threat by deliberate, malevolent technology-based activities by "*bad actors*." The entire web of life on Earth is threatened by disruption of the delicate balance by and between myriad biota and their environments [4, 5].

For the protection of humanity and the planetary environment in general, and American citizens in particular, what is needed, we posit, is a set of new Constitutional Amendments that collectively form a second Bill of Rights, a Technology Bill of Rights, to protect our freedoms, health, air, water, agriculture, and the planetary environment from deliberate perversion and alteration. As fundamental as the original Bill of Rights, the proposed second, Technology Bill of Rights would guarantee the rights of individuals against technologically-based threats, and would place limitations on the application of threat-posing technologies. Although intended for Americans, the considerations presented are global in nature and appropriately should serve as a model for other sovereign nations to adopt.

BAD ACTORS OF ENVIRONMENTAL DEVASTATION

Threats to the environment as a consequence of advances in technology are frequently caused or exacerbated by human foibles, ranging from ignorance and self-interest to malice and deceit, invariably motivated by financial gain and/or political control. In principle individuals, especially

the extremely wealthy and/or those in control of powerful technologies, could cause great harm to human and environmental health and/or pervert the mechanisms that are the basis of American democracy. Historically, however, devastating environmental harm results from businesses acting alone or with government and/or military entities.

Environmental harm, undertaken solely by business interests, includes familiar activities such as producing and dispersing toxic herbicides and pesticides, accidental or purposeful release of toxic chemicals and radioactive substances into the environment, conducting gain-of-function experiments with potential pandemic pathogens, and introducing nano-particulates and genetically altered organisms into the environment.

Potentially greater environmental devastation is caused by national and international governments and/or military entities acting alone and/or together with contracted business entities. The greater potential harm is the consequence of scale, secrecy, and the perception that government/military activities – whatever they may be – are unaccountable to the public. That perception is a strong argument in favor of our posited Technology Bill of Rights. In the following we describe some of the current and potential threats to the environment and to our freedoms which illustrate the immediate need for a Technology Bill of Rights.

FORMER TECHNOLOGICAL ENVIRONMENTAL ASSAULTS: DEVOID OF LEGAL BASIS; DEVOID OF LEGAL SAFEGUARDS

Life on Earth is possible due to the nature of Earth's composition and physical processes that afford protection from solar radiation, and because of myriad complex interactions by and between biota and their various environments. Any large-scale alteration of Earth's natural environment inevitably will have adverse consequences for life on this planet. One example of this are the global campaigns to eradicate insect vectors of contagions that began in the 1920s, initially through environmental application of Paris Green (the double salt of copper and arsenic) and DDT (dichlorodiphenyltrichloroethane) after 1939 [6-8]. Although implemented with good intentions, their consequences were tragic.

In 1962, Rachel Carson, in her book *Silent Spring* [9], warned that DDT and other pesticides not only killed insects, but progressed up the food chain killing numerous other species. Her revelations of the harmful consequences of DDT received favorable support from the mainstream media, including the serialization of her book by *The New Yorker* magazine and a CBS Reports exposé [10], all of which helped to spawn a modern environmental movement [11]. But over time, whether through fear of losing donations or their tax-exempt status, or for other reasons, the environmental movement she birthed grew to turn a blind eye to environmental trespass potentially more serious than DDT.

Laudable intent, including for peaceful purposes, is never sufficient to justify harming the environment. The environmental harm initially caused by widespread application of pesticides, presumably undertaken for laudable reasons, arguably, might be attributed to ignorance of the adverse consequences. The same cannot be said of the military's assault on human and environmental health. Under aegis of "national defense" the U. S. military has been quick to adopt and test on unknowing American citizens the latest technology for use in warfare. Historical evidence from the 1940s-1970s clearly shows the military's blatant disregard for the environment,

the health of U. S. citizens, and its willingness to compromise the integrity of public health institutions. The age of nuclear warfare dawned with the successful test of the atomic bomb in the desert about 56 km southeast of Socorro, New Mexico, USA, on July 16, 1945, and its use as a weapon of war against the Empire of Japan less than a month later with single atomic bombs dropped on Hiroshima and Nagasaki. Characteristic of the military's desire to maintain a competitive advantage for reasons of "national security," subsequent nuclear technological development was undertaken quickly and thoroughly without regard for human and environmental health [12-15].

Post-WWII nuclear weapons testing, begun in the South Pacific and South Atlantic Oceans, was expensive and inconvenient. So the decision was made to conduct further nuclear testing at a test site in Nevada, USA. More than one thousand nuclear device tests were made at the Nevada Test Site, which involved detonating more than one hundred nuclear devices aboveground [16]. Thousands of military personnel, without being told of the potential health risks, were deliberately exposed to nuclear blasts, including "war game" maneuvers that took place directly beneath the atomic cloud [17]. Local residents likewise were not fully informed of the health risks or told how to minimize those risks [14].

When a nuclear detonation occurs aboveground, it immediately produces a burst of radiation, heat, an atmospheric shock wave, and a cloud of radioactive material from the remains of the nuclear device and whatever matter is sucked up from the irradiated surface [18]. As the radioactive matter in the cloud settles to Earth, or is brought down by rain or snow, it is called fallout. Fallout occurs not only in the area near the nuclear blast, but as winds propel the radioactive cloud across the United States, fallout can occur along the path depending upon weather conditions. Figure 1 shows the known paths of some nuclear clouds produced by aboveground detonations from the Nevada Test Site. There is evidence of cancers and birth defects that were caused by radioactive fallout, but unfortunately there was no systematic recordkeeping by authorities [19].

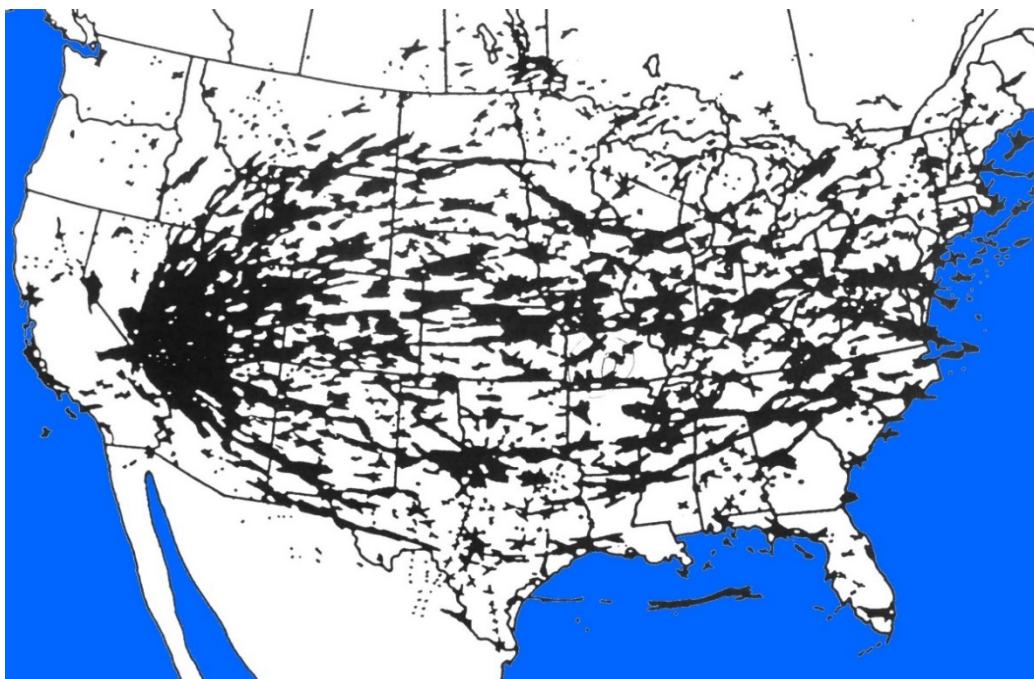


Figure 1. U. S. Department of Energy image showing areas of the continental United States crossed by more than one nuclear cloud from aboveground detonations are indicated in black.

Not only was public knowledge of the potential health risks of aboveground nuclear explosions minimized by both the military and the U.S. Atomic Energy Commission [16], but deliberate exposure of humans to radioactivity within the United States was undertaken without public acknowledgement and without informed consent for perceived military “national security” reasons [15, 20]. Examples include, but are not limited to, injecting patients with plutonium or radioactive polonium [13], telling pregnant women they were receiving vitamins when instead they were being given radioactive iron [15], injecting newborn infants with radioactive iodine-131 [12], surreptitiously feeding human subjects radioactive waste [15], and injecting radioactive uranium salts into patients with good kidney function to determine the concentration which would produce renal injury [15].

Radiation health risks were well known from the atomic bomb detonations at Hiroshima and Nagasaki [21, 22]. Nevertheless, the military and the U. S. Atomic Energy Commission proceeded to expose American citizens and others to radiation and to radioactive material. Moreover, Public Health Service officials were complicit in failing to warn the public of potential health risks during the military’s post-WWII pursuit of nuclear-warfare experimentation [14], and even during non-radioactive, germ warfare tests conducted over populated areas [23]. Willingness by the military to harm its own citizens’ health, and to corrupt their public health institutions, not only in the United States but elsewhere in the world [20, 24], affords an ideal instrument for co-optation by an enemy entity, foreign and/or domestic, to wage covert environmental warfare against their own citizens and national interests [25].

CURRENT TECHNOLOGICAL ENVIRONMENTAL ASSAULTS: DEVOID OF LEGAL BASIS; DEVOID OF LEGAL SAFEGUARDS

The United States Government, as one of the State Parties of a specific United Nations Convention [26], must not only allow, but must contribute to environmental modification for “peaceful purposes” [25, 27] where [26]

“the term ‘environmental modification techniques’ refers to any technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.”

The existence of the United States as a State Party to said United Nations Convention [26] stands as *prima facie* evidence for the need of a Technology Bill of Rights. The all-encompassing definition of environmental modification includes not only modifying the physical environment of Earth and space, but as well ‘*biota*’, modifying biological life-forms, including human beings.

As we have shown through precise legal analysis [27], said United Nations international treaty [26], “Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques,” is a Trojan horse. It not only does not prohibit the use of environmental modification techniques, but said Convention “*shall not hinder use of environmental modification techniques for peaceful purposes*” and, as noted above, mandates participation in unspecified environmental modification activities, by unspecified entities “*for peaceful purposes*.”

Environmental modification is gravely detrimental to the environment; it is not and cannot be deemed peaceful. Said terminology [26] “*for peaceful purposes*” is a sham, a fictional, deceptive

intent and/or justification for a severely harmful activity. Recall the old proverb [28]: *The Road to Hell is Paved with Good Intentions*.

Said deceptively worded [25, 27] Trojan horse Convention [26] was entered into force on October 5, 1978 through concerted efforts of the United States and the Soviet Union [29], and, with consent of gullible or careless members of the United States Senate, was ratified by the United States on January 17, 1980. As an international treaty, the U. S. State Department is responsible for administrating the treaty. Observational evidence, described below, indicates that the assault of Earth's natural environment under aegis of said Trojan horse Convention [26], although began before earlier, ramped-up to unprecedented extent, duration, and geographical range during the tenure of U. S. Secretaries of State Hilary Clinton (2009-2013) and John Kerry (2013-2017).

One over-riding characteristic of the application of said deceptively-worded Trojan horse Convention [26] is the pervasive use of secrecy and disinformation. In the following we first show specific examples of assaults on Earth's natural environment that are clearly undertaken under aegis of said Trojan horse Convention [26], by the U. S. military and its contractors, and others, and with concerted efforts to deceive the public of the risks to human and environmental health. Then we describe further assaults on the environment that justify the need for a Technology Bill of Rights, which may or may not be under said aegis, but conceivably could be according to said definition of "*environmental modification techniques*."

DELIBERATELY POLLUTING THE TROPOSPHERE WITH AEROSOL PARTICULATES

Observations

Concerned citizens have observed jet aircraft emplacing particle trails across the sky at least as early as the 1990s [30, 31]. During that period the geographic range, frequency, and intensity of the aerial particulate-spraying continuously increased, becoming a near-daily, near-global activity. Some examples of the particulate trails are shown in Figure 2. Forensic scientific investigations are consistent with coal fly ash, the toxic waste product of coal-burning, being the main constituent of the jet-sprayed particulates [32-36].



Figure 2. From [37]. Deliberate jet-emplaced particulate trails, clockwise from top left San Diego, California, USA; Karnack, Egypt; London, England; Danby, Vermont, USA; Luxemborg; Jaipur, India.

Disinformation

There has been no public disclosure as to the composition, safety, and intent of the particulate trails, which some refer to as *chemtrails*. However, false information (disinformation) has been intentionally provided. For example, in 2005, the U. S. Air Force published the “contrail” basis for deceiving the concerned public of about the observed aerial trails (AFD-0561013-001). One section of that document, *The Chemtrail Hoax*, states in part: “There is no such thing as a ‘Chemtrail’ ... Contrails are safe and are a natural phenomenon. They pose no health hazard of any kind” [38].

There is only a superficial resemblance between contrails and the aerial particulate trails that some refer to as “*chemtrails*.” Under very cold, very humid atmospheric conditions moisture from aircraft engine exhaust can form ice crystals which typically appear as short white trails which quickly disappear into invisible gaseous water by evaporation [39]. By contrast, in a matter of minutes, the chemtrails’ particles diffuse into the surrounding air, for a brief time resembling cirrus clouds before further diffusing to become a white haze in the sky [40]. *Contrail* disinformation is pervasive [41, 42], but is in conflict with observations [36] and is disputed by scientific evidence [43].

Retired U. S. Air Force Brig. General Charles Jones reportedly issued in part the following statement concerning observed particulate trails in the sky [44]:

“When people look up into the blue and see white trails paralleling and crisscrossing high in the sky little do they know that they are not seeing aircraft engine contrails, but instead they are witnessing a manmade climate engineering crisis facing all air breathing humans and animals on planet Earth.... Toxic atmospheric aerosols [are] used to alter weather patterns, creating droughts in some regions, deluges and floods in other locations and even extreme cold under other conditions....”

Tropospheric Particulates for Weather Modification

The U. S. military has long wanted to control the weather [45, 46]. Early weather modification involved seeding clouds with solid carbon dioxide (dry ice) or silver iodide to stimulate rain or snow [47]. The next stage of development was to emplace – jet-spray – particulates into the troposphere, the region where most clouds form.

- Aerosol particulates inhibit rain or snow until the clouds become so saturated that they release their burden in torrents or storms.
- Aerosol particulates absorb solar radiation, heating the surrounding air that increases local air pressure affecting the movement of weather.
- Certain aerosol particulates, notably coal fly ash [32-35], make atmospheric moisture more electrically conducting [48] which aids in electromagnetic weather movement control.
- Tropospheric particulates make it possible to send electromagnetic transmissions over-the-horizon via ‘tropospheric scatter’ [49] for weather control hundreds of miles away from the transmitters.
- Combined application of tropospheric particulates and electromagnetic radiation can affect the movement of weather systems including hurricanes.

Research activities are limited in time, scope, and geographic range. These are not research activities. The tropospheric aerial particulate emplacement over the past decade has become a near-daily, near-global activity, undertaken with great secrecy and disinformation [35, 36, 38, 41, 42, 50-53].

Dangers to Human Health from Aerosol Particulates Aerosol particulates emplaced into the troposphere, such as shown in Figure 2, is deliberate air pollution. Said air tropospheric pollution particulates – especially, the toxic waste product, coal fly ash [32-35] – have a variety of known adverse consequences for human health, perhaps some others yet unknown. Air pollution particles are known to be the leading environmental cause of sickness and death [54, 55], which are increasing at a disconcerting rate [56]. Extensive studies [57] exist of the adverse health effects of

air pollution particles $\leq 2.5\mu\text{m}$ across ($\text{PM}_{2.5}$), approximately the same particle-size range as aerosolized coal fly ash [58]. Air pollution is a major contributor to stroke, heart, and neurodegenerative disease [59-63], including Alzheimer's Dementia later in life [64]. Air pollution spherical magnetite particulates, similar to those found in coal fly ash [65], were found in the brains of persons with dementia [61, 66]. Furthermore, reactive iron magnetic particulates were recently found in abundance in hearts of persons from highly polluted areas [59].

Air pollution is also a contributor to lung cancer [67], COPD [68], respiratory infections [69], and asthma [70]. Particulate air pollution is a risk factor for cognitive decline [64, 71-73], decreased male fertility [74], and increased premenopausal breast cancer [75]. Particulate air pollution is also a risk factor for Autism Spectrum Disorder in children [76, 77], and for children having cognitive defects [72, 73].

Atmospheric convection disperses the environmental-modification aerosol pollution particulates throughout the troposphere including into the air we breathe. Inhaled, the tiny particles settle deep in terminal airways producing many toxic effects including decreased host defenses, tissue inflammation, altered cellular redox balance toward oxidation, and genotoxicity [68]. Ultrafine particles and nanoparticles are small enough to pass through lung tissue directly into the bloodstream [78, 79].

Inaction by Medical and Public Health Communities

The essential public health functions and critical components of *The Precautionary Principle* [80] include the proper diagnoses and investigations of health hazards in the community [81]. But on the subject of the jet-emplaced tropospheric particulate matter, there exists a deeply ingrained institutional *omertà*, a code of silence.

Recently, a third-world medical journal published our perspective warning of the public health risks of the jet-emplaced particulate trails [82] after it was rejected without peer-review by the Bulletin of the World Health Organization, Environmental Health Perspectives (published by the U. S. National Institutes of Health), *The Lancet*, the *Journal of the American Medical Association*, and the *New England Journal of Medicine*, none of which to our knowledge has published any article warning of the health risks of the deliberate jet-emplacement of tropospheric particulates.

Dangers to Environmental Health from Aerosol Particulates

The pervasive environmental modification by jet-emplaced tropospheric aerosol particulate spraying is harmful to virtually all life on Earth by causing global warming [40, 83, 84], disrupting habitats [35], enabling pestilence [85], contaminating the environment with mercury [86], decimating populations of insects [87], bats [88], and birds [89], as well as killing forests [90], exacerbating wildfires [36], enabling harmful algae in our waters [91], and destroying the ozone layer that shields surface-life from the sun's deadly ultraviolet radiation [92].

Some Potential Motives for Jet-Emplacing Aerosol Particulates

The fundamental motives underlying the pervasive jet-emplacement of particulates into the troposphere, we posit, are morally debase: financial gain and political control. In the following we list some, but not all, of the potential motives.

- Causing global warming to play into the United Nations' Intergovernmental Panel on Climate Change (IPCC) hoax falsely claiming global warming is primarily caused by anthropogenic carbon dioxide, while ignoring the jet-emplaced aerosol particulates that cause local and global warming [40, 83, 84].
- Melting polar ice to get at underlying natural resources [93].
- Waging covert environmental warfare on the United States and elsewhere by damaging agriculture, blighting citizenry with numerous diseases, and destroying the natural environment [25, 27, 94].
- Providing an opportunity for the perpetrating entity (Deep State?) to exert widespread control over organizations and institutions by coercing compliance of local, state, national organizations, news and social media, health, scientific, education, entertainment, and other institutions to deceive the public as to the nature and human and environmental health risks of the tropospheric aerosol particulate emplacement.
- To further produce an unaware and compliant citizenry, consistent with the statement of Bill Ivey to former U. S. Secretary of State Hillary Clinton in a 2016 email [95]: *"And as I've mentioned, we've all been quite content to demean government, drop civics and in general to conspire to produce an unaware and compliant citizenry."*
- To become financially wealthy from American taxpayer-provided money squandered on this highly expensive, wasteful, and destructive endeavor.
- To play God with the forces of nature, for example, by causing devastation through droughts and directing the paths of hurricanes, presumably for political purposes.

DELIBERATELY POLLUTING THE STRATOSPHERE WITH AEROSOL PARTICULATES

The stratosphere is the portion of Earth's atmosphere that extends from top of the troposphere to the edge of space. Since its formation, the United Nations' Intergovernmental Panel on Climate Change (IPCC) has promoted the concept of 'solar radiation management,' i.e., placing particulates into the stratosphere. The idea is to block sunlight from reaching Earth's surface, supposedly to compensate for supposed global warming supposedly caused by greenhouse gases. Thousands of articles have been written on the subject [96], and there are concerted efforts to address potential governance [97-99], all of which, to our knowledge, involves systematic failure to mention the near-daily, near-global ongoing tropospheric jet-emplacement of particulates and its risks to human health [32, 35, 62, 67, 68, 82, 94] and environmental health [36, 86, 87, 89-92]. Said systematic failure to mention is *prima facie* evidence of corruption and/or ignorance undertaken in concert with the IPCC's anthropogenic greenhouse-gases global warming hoax.

The stratosphere is essentially without convection. The residence time of particulates in the stratosphere is months, rather than days, typical of the residence time of tropospheric aerosols [100-104]. As stratospheric aerosol particulates fall to ground, for a time during transit they become tropospheric aerosols.

There are inherent risks associated with the placement of aerosol particulates into the stratosphere, including, but not limited to the following:

- Destruction of the ozone layer that shields surface life from the sun's deadly ultraviolet radiation.

- Disruption of the sun-Earth radiation balance resulting in global cooling, which in the extreme might trigger onset of a new planetary-scale ice-age.
- Similar adverse human and environmental health consequences as tropospheric particulates, discussed above, but with the additional adverse consequences of ultraviolet radiation on eye damage [105], skin cancer [106], and immune system suppression [107].

DELIBERATELY POLLUTING THE EARTH WITH ELECTROMAGNETIC RADIATION

Radio waves, microwaves, x-rays, sunlight, gamma radiation – these are some examples of electromagnetic radiation – that differ from one another by their wavelength (or frequency) as illustrated in Figure 3.

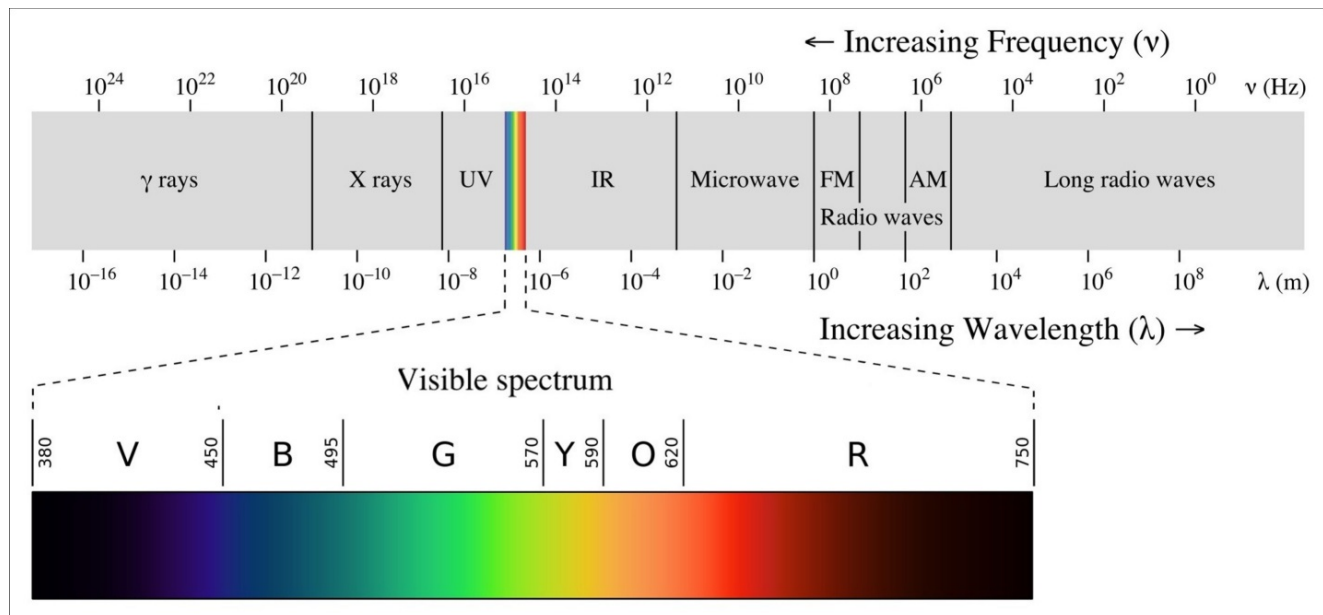


Figure 3. Representation of the electromagnetic spectrum (Wikimedia commons). Important conversion factor: (1 GHz = 1 X 10⁹ Hz).

As we discuss below, there are a number of dimensions to the problem of massively inflecting electromagnetic energy on humans and Earth's natural environment. The fundamental motives, we posit, are the same as those underlying the pervasive emplacement of particulates into the troposphere, morally debased financial gain and political control.

Electromagnetic Pollution for Communications

On February 24, 2011, Italy's Supreme Court upheld the criminal conviction of Cardinal Roberto Tucci, former Vatican Radio president, finding that Vatican Radio broadcasts [108] exceeded the limits of caution, translating into permanent and invasive harassment [109]. Between 1997 and 2003, children aged 1-14 who lived 6 – 12 km from Vatican Radio's powerful short wave (.003 – 0.3GHz) and long wave (.0003 – .003 GHz) radio transmitter antennas [108] developed leukemia, lymphoma, or myeloma at eight times the rate of children who lived further away [110].

Electromagnetic energy is directly proportional to frequency.

Although powerful, the Vatican's transmitters operated at much lower, safer, frequencies than most current wireless communications which produce electromagnetic radiation in the range 0.1 – 6 GHz

[111]. Many people are concerned about the potential adverse health consequences of frequent exposure to electromagnetic radiation in this range of frequencies [112-114]. Telecommunications-connected individuals downplay or deny the existence of adverse health risks [115, 116]. But there are health risks [117-120]. For example, Pall [119] reviewed numerous literature citations of adverse health risks of electromagnetic radiation in this frequency range that include causing oxidative stress, sperm/testicular damage, neuropsychiatric effects including EEG changes, apoptosis, cellular DNA damage, endocrine changes, and calcium overload.

A new global “Fifth Generation” or 5G telecommunications system is presently being put into operation at lightning speed. The spectral range 6 – 100 GHz is currently under consideration [121], although in the future that range might be extended up to 300 GHz [122]. The rapid roll-out and implementation of 5G is taking place despite the fact that there are virtually no systematic medical and biological studies on the adverse health effects of long-term pervasive exposure to electromagnetic radiation in this frequency range. The sporadic results so far reported [123-126] should be taken as a warning that humanity is being placed at risk by a technological onslaught undertaken without concern for human and environmental health. In addition to risks from electromagnetic radiation, the tens of thousands of rocket launches of 5G-satellites inevitably will damage Earth’s ozone layer that protects surface life from the sun’s ultraviolet radiation.

But there are even more worrisome concerns than human health. As precisely stated [127]: The aim of 5G systems is to provide anywhere and anytime connectivity for anyone and anything. The dark side of the 5G potential is that it allows tracking, monitoring, and control of all humans everywhere.

All totalitarian regimes in modern times employed secret police with the latest technology to track, monitor and control their citizens with disastrous consequences and much human suffering [128-130]. Seemingly respectable individuals readily make technology available for those ends. For example, IBM president, Thomas J. Watson, willingly made available to Nazi Germany state-of-the-art punch-card equipment used to organize, systematize, and accelerate Hitler’s anti-Jewish program [131, 132]. Currently, Microsoft founder, Bill Gates is instrumental in funding activities aimed at creating the technology to implant in each human a unique digital identifier that can be remotely read [133].

Given that great human and environmental harm is currently being allowed to take place with great secrecy and disinformation, presumably under aegis of said Trojan horse treaty [26], there is no reason to expect that 5G will be used beneficently. Quite the contrary. At some point it may even be possible to control humans’ brain activities, moods, emotions, and/or behaviors with electromagnetic radiation.

Electromagnetic Assault on the Environment

As noted above, the near-daily, near-global tropospheric jet-emplacement of coal fly ash, impedes rainfall in addition to heating the atmosphere and making atmospheric moisture more electrically conducting to facilitate electromagnetic manipulation of weather. Figure 4 shows an example of such electromagnetic weather manipulation. This combined assault on the environment also causes global warming, climate chaos, agricultural harm, and human and environmental health problems.



Figure 4. Example of electromagnetic radiation being used for weather manipulation.

There is an even more devastating electromagnetic assault on the portion of the atmosphere, 60 – 1,000 km altitude, called the ionosphere, that is ionized by charged particles from the sun and outer space. Said assault involves heating and ionizing ionospheric matter with powerful focused beams of electromagnetic radiation. That affected matter then spirals around geomagnetic lines of force to be further guided with additional electromagnetic radiation. This directed energy can be used as a weapon or to serve other purposes, such as redirect jet streams which disrupt stable weather patterns that make possible agriculture, create and or move hurricanes, trigger earthquakes, disrupt global communications, destroy the ozone layer, and reveal subsurface structures [94, 134-139].

It is also conceivable that pumping electromagnetic radiation into the ionosphere might lead to the collapse of Earth's magnetic field [140]. Some of the potential consequences of a geomagnetic collapse and/or reversal on our global technologically-based infrastructure, include the following: Widespread communications disruptions, GPS blackouts, satellite failures, loss of electrical power, loss of electric-transmission control, electrical equipment damage, fires, electrocution, environmental degradation, refrigeration disruptions, food shortages, starvation and concomitant anarchy, potable water shortages, financial systems shut-down, fuel delivery disruptions, loss of ozone and increased skin cancers, cardiac deaths, and dementia. It is likely that a geomagnetic field

collapse would cause much hardship and suffering, and potentially reverse more than two centuries of technological infrastructure development [141].

TECHNOLOGICAL ASSAULT ON THE U. S. CONSTITUTIONAL REPUBLIC

Initially, there was great hope that the Internet and, especially, social media platforms, would lead to lively exchanges and debates, and ultimately to a better-informed electorate. However, it was naïve to believe that any of the so-called “silicon valley mafia” who control that wide-reaching technology would not use it to deceive the electorate, and hence pervert the American election process. They do in fact deceive the public on matters of political concern [142, 143] and public health [144], which pose very real threats to the U. S. Constitutional Republic. For example, Google can subliminally manipulate votes by biased, deceptive search engine results, search suggestions, arbitrary tagging, editing, or deleting posted comments and videos, and other politically-oriented techniques that bias votes or limit understanding with no accountability and no paper trail.

NEEDED: U.S. CONSTITUTION TECHNOLOGY BILL OF RIGHTS

The United States Constitution likely would not have been ratified if the ten amendments, referred to as the Bill of Rights, had not been added to guarantee the rights of individuals and to place limitations on state and federal governments. The Founding Fathers never envisioned the circumstances we describe above, namely, the *perfect storm* convergence of mega-scale legal and technological corruption that poses grave threats not only to Americans’ “*life, liberty, and the pursuit of happiness*,” but globally to humanity and environmental health. The protections granted by the United States Constitution and Bill of Rights are inadequate. A more fundamental legal basis is needed.

What is needed, we posit, is one or more Constitutional Amendments that collectively form a Technology Bill of Rights that would: (1) Prohibit the application of any technique or method for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space; (2) Prohibit the application of any technique, including software-based process or platform or method for violating individuals free speech, censoring, altering, editing, deleting, excluding, blacklisting, or engaging in activities that have the effect of potentially biasing votes or deceiving the public on matters of health and/or environmental harm; and, (3) Prohibit activities of such scale and nature that would intentionally or unintentionally alter the complex but delicate balance in nature by and between myriad biota and their environments that makes our planet habitable for life.

Whereas the meaning of (1) and (2) above is reasonably obvious in its meaning, (3) necessitates further clarification that may be inferred from the following non-exclusive examples of *prohibited activities*:

- Use of metallic and/or nano-particulate additions to aircraft fuel;
- Excessive launching of satellites, numbering in the tens of thousands, whose rocket exhaust might damage the ozone layer;
- Excessive exposure of humans and other biota to electromagnetic radiation;
- Use of electromagnetic radiation to heat the ionosphere;

- Pollution of air, land, water, agriculture, and aquaculture by particulates, toxic chemicals, heavy metals, radioactive nuclides, and bio-toxins; and,
- Strict oversight of biotechnology/bioengineering, including prohibition of gain-of-function experiments with potential pandemic pathogens.

There is, we posit, an urgent need for the United States to adopt a Second Constitutional Technology Bill of Rights, and for other sovereign nations to adopt similar fundamental measures if humanity, and our own children, are to live free and have a viable future. There must be an immediate end to global technological methods including climate and weather intervention/control if there is any hope of salvaging Earth's remaining life support systems like the protective stratospheric ozone layer. Deceptive international agreements like ENMOD [26] that secretly mandate participation in or at least allow this type of geoengineering technology to proceed are tantamount to all-out war on the planetary Earth System and the entire web of life [25, 27, 37].

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