Gabriel's Trumpet Part 1 -Bluebeard's door

"The false trumpet concealing madness will cause Byzantium to change its laws" **Michele de Nostradame**

At the time of this writing, preparations are being made for the **first official geoengineering experiment** in 2018, over Arizona, to disperse reflective materials into the upper atmosphere by means of a balloon, with **the approval of high-level members of the Trump administration**.

"While geoengineering received little favour under Obama, high-level officials within the Trump administration have been long-time advocates for planetaryscale manipulation of Earth systems."

Trump presidency 'opens door' to planet-hacking geoengineer experiments

These people behind the arch-clown have been advocates of climate manipulation for a very long time, perhaps longer than they would care to admit.

Rex Tillerson, the **US secretary of state**, was the **CEO of Exxonmobil** during the period that the corporation's scientists were **leading developers of geo-engineering technologies.**

This is the same Exxonmobil, founded by the Rockefellers and a major arm of Big Oil, that had known about climate change and the role of fossil fuels in bringing it about, as far back as 1970 whilst funding the denial of such a role until at least 2007.

ExxonMobil under investigation over claims it lied about climate change risks

Now, Harvard engineer and architect of the project, **David Keith**, is at great pains to point out that this is the most tentative of interventions:

"The amount of material we would release is tiny compared to everyday activities. For example, if we tested sulphates, we would put less material into the stratosphere than a typical commercial aircraft does in one minute of flight. Our material of choice for the first flight? Frozen water. Later flights might include tiny amounts of calcium carbonate or indeed sulphates."

Fear of solar geoengineering is healthy – but don't distort our research

It would seem that the Geoengineering door has been opened just a crack, but is this door, like the forbidden one to Bluebeard's cellar, an opportunity to glimpse a dark secret? Putting aside for one moment the remarkable statement that commercial aircraft are **already** putting vast quantities of sulphate into the stratosphere, let us consider the effects of adding frozen water, namely ice.

As many readers will be aware, the addition of ice to a region of the atmosphere was one of the early methods of **cloud seeding**.

There is type of cloud that can be found in the stratosphere, but only in the higher latitudes. These are, unsurprisingly, called **Polar Stratospheric Clouds** (PSCs) or **Nacreous clouds**.



Polar Stratospheric Clouds

These are very similar in nature to cirrus clouds except that they form in the stratosphere. They form at temperatures of -78°C, on ice nuclei such as mineral dust, from water supplied by convection, the breakdown of methane, and now officially, **geoengineering**. They have a **net-warming** effect and **minimal albedo** due to forming in polar night regions.

Sloan and Pollard: Polar stratospheric clouds: A high latitude warming mechanism in an ancient greenhouse world

PSCs themselves also act as sites for the enhanced destruction of ozone molecules.

"Their surfaces act as catalysts which convert more benign forms of man-made chlorine into active free radicals (for example ClO, chlorine monoxide)."

"Cloud formation is doubly harmful because it also removes gaseous nitric acid from the stratosphere which would otherwise combine with ClO to form less reactive forms of chlorine."

Since 1979, in the Arctic stratosphere, there has been a correlation between **cooling**, an increase in **PSCs**, and **ozone loss**.



Arctic ozone depletion and stratospheric temperature

This seems to be somewhat of a chicken and egg conundrum whereby, a reduction in stratospheric temperature due to the trapping of heat in the region below by greenhouse gases and upper level clouds, can lead to an increase in PSCs, which in turn, can lead to ozone depletion. Ozone, which normally traps ultra-violet (UV) radiation, when depleted, will further cool the stratosphere and the positive feedback cycle is renewed.

This would also add significantly to the amount of short wave radiation that is converted by the earth into long wave, heat. Although ozone is a major greenhouse gas, its place would be taken by PSCs which plug the gap left by the ozone hole, trapping the extra heat, whilst allowing the incoming UV through.

PSCs have been increasing in frequency and encroaching into the lower latitudes according to Gavin Pretor-Pinney, writing for the Guardian.

"The most beautiful clouds of all were **once** only commonly visible to those at the highest latitudes, such as Mawson station, in Antarctica. **Now, across much of Britain, we too can watch the legacy of our troubled relationship with the atmosphere** played out in glorious, mesmerising Technicolor. Emphasis mine "Though nacreous clouds are officially known as "polar stratospheric clouds", they are now common over Scotland, and have been observed as far south as the Midlands." Emphasis mine

"More nacreous clouds appear during colder winters, which lead to a greater subsequent depletion of ozone. The general increase in observations of these clouds is considered by some scientists as linked to man's contribution to global warming." Emphasis mine

To be precise, it is **stratospheric** temperatures that need to get colder for PSCs to occur. The **colder stratosphere** and the **warmer**, **underlying troposphere**, are inextricably **linked**.

"Everyone is now familiar with the way all the CO2 we have introduced into the atmosphere since the industrial revolution has a tendency to **trap the sun's heat into the lower atmosphere**." Emphasis mine

Not everyone is familiar with the way higher clouds, particularly artificial ones, have the tendency to do the same.

"Perhaps less commonly understood is that, by keeping more of the heat below, increased levels of greenhouse gases also tend to cool the atmosphere above. Lower average winter temperatures in the upper atmosphere might explain why nacreous clouds seem to be appearing with increased frequency and distribution." Emphasis mine

Even less commonly understood is that **clouds in the upper troposphere**, which have **also** increased along with greenhouse gases, **also cool the atmosphere above by trapping heat below**.

In fact, **aerosol induced PSC and cirrus cloud formation entraining water from the surrounding atmosphere, in line with the record of upper atmospheric humidity**, revealing a **decline**, **counter to a CO2 induced warming, is a better fit for the observed reality.**



We can infer thus far that, rather than cooling the atmosphere, David Keith's interventions may in fact produce the **opposite** effect.

Let us now return to the remarkable statement that commercial aircraft are **already** putting vast quantities of sulphates into the stratosphere.

Firstly, we can establish that commercial aircraft do indeed fly at the levels of the stratosphere from Krishna Kumar Subramanian, Aircraft Engineer, Aircraft Systems Educator:

"Commercial airliners typically cruise at altitudes of 9–12 km (30,000–39,000 ft) which is in the **lower reaches of the stratosphere in temperate latitudes**." Emphasis mine

So, in the mid and higher latitudes, the levels of the stratosphere and upper troposphere are already saturated with sulphates, and have been for some time, yet **no significant cooling** has been observed. In fact, sulphates themselves, also play a minor role in the formation of **cirrus clouds**, and most likely, PSCs, very similar in nature in that they are made up of ice crystals formed on inorganic seeds and have a **net-warming** effect.

Now, David Keith, earlier suggesting aluminium as an alternative option to sulphates, was famously put on the spot by Dane Wigington when questioned as to the wisdom of dumping megatons of toxic metal particulates into the sky.

"Climate engineering is not a "proposal", it has long since been a lethal reality. This reality cannot be hidden in plain site for much longer as the cataclysmic consequences from the ongoing climate engineering / weather warfare assault manifest in every conceivable way."

Trump Administration Backs Geoengineering, Full Disclosure Of The Climate Engineering Atrocities Grows Near

Dane holds that these aerosol-spraying operations and the concomitant, artificially produced cirrus clouds are, although a reality occurring now, in alignment with geoengineering proposals, for the purpose of **mitigating** global warming. According to him, at the cost of **short-term cooling** comes an overall, **long-term warming** and other disruptive climatic and weather events.

Another prominent figure in this field of concern, **Clifford Carnicom**, holds a different view:

"... The problem that developed was that the claim of 'cooling the planet' by using aircraft to disperse aerosols did not fit the facts of observation. They did not fit them then, and they do not fit them now."

"High, thin "clouds", including those that originate from an introduced aerosol base, do not cool the planet; they heat it up."

A Clash of Evidence: The Realities of Solar Radiation Management (SRM)



Image source : scied.ucar.edu

Clifford refers to that giant of the atomic age, the figure who is also usually credited with this idea of a wall in the sky:

"Edward Teller does indeed propose various schemes for cooling the earth's temperature, including the introduction of aerosols or particulates into the atmosphere. The issue, however, is WHERE in the atmosphere he proposes to do this, and the answer to this question is very relevant to the cause and purpose of this paper."

He argues that **this scheme cannot work unless the aerosols are placed higher** in the stratosphere and other regions of the upper atmosphere, preferably in space.

This is to ensure the heat captured by the particles is not re-radiated back. Also, I would add that there is increasingly less moisture at higher altitudes and so PSC formation is, correspondingly, also less likely to occur.

It is of particular relevance that Edward Teller was **not**, in fact, the originator of this idea. For that we have to take a step back even further in time to back to **1965**, when a Presidential advisory panel to Lyndon Johnson:

"...suggested that if greenhouse effect warming by carbon dioxide gas ever became a problem, the government might take countervailing steps. The panel did not consider curbing the use of fossil fuels. They had in mind what later came to be called "geoengineering" schemes — spreading something across the ocean waters to reflect more sunlight, perhaps, or sowing particles high in the atmosphere to encourage the formation of reflective clouds."

Later, in **1974**, the most prominent soviet climatologist, Mikhail Budyko calculated:

"that if global warming ever became a serious threat, we could counter it with just a few airplane flights a day in the stratosphere, burning sulfur to make aerosols that would reflect sunlight away."

One would be forgiven for assuming that the general consensus of scientists during this period was that the earth was warming due to carbon dioxide. This was not so, in fact, this view was held by a small minority of scientists.

This can be confirmed from an interview held in 1990 between Spencer Weart and Budyko.

Weart:

"May I ask, by the way, do you remember when you first heard of the greenhouse effect? Is it possible to remember that?"

Budyko:

"The possibility of this effect was well known to me in the 1960s."

Weart:

"So do these scientific reasons, there was no one time when it became —"

Budyko:

"The impact of the greenhouse effect on climate was comparatively old idea. That is long story. My position is different in only one way. I could, after lot of difficulties, more or less systematically explain now to practically everybody that such effect will take place. And now we have 99 and maybe more percent of consensus in this field. People who have such ideas earlier had absolutely no support. Everybody forgets the earlier proposals of such kind. Scientific ideas usually had a few attempts"

In **1971** there was a scientific meeting of climatologists in Leningrad, the largest in the history of this field. Virtually all the leading scientists from the US and Western Europe were present. Just before the end, Budyko presented the idea that global warming was unavoidable. There was an uproar. Everybody seemed to be in strong disagreement with him.

Budyko did not believe this would be a catastrophe, however, **nor that anything should be done to prevent it**. When the proposal was first made in Toronto that greenhouse gas emissions should be curtailed, he argued against it but without success.

What was behind Budyko's reluctance to do anything about this issue? He seemed to believe, **like Arrhenius**, that it would be a **boon to mankind**, **benefiting agriculture and food production**.

In part 2 we shall delve further into the history of climate modification and the real intentions of its proponents.